Part II: Campus Programs Summary

Regulations and codes noted in the previous section underlie campus programs, manuals, policies and procedures. These are summarized in this section and the complete programs are found on the EH&S website, and/or within this binder. A programs overview:

General *(Applicable to all departments. Typically coordinated by Dept. Safety Rep)*

- Injury & Illness Prevention Program
- Campus Emergency Operations Plan and Department Emergency Operations Plans

Technical *(Applicable to certain supervisors/departments. Typically the direct responsibility of affected supervisors, with minimal involvement by DSR)*

- Hazardous Materials Management
  - Training/Inspections
  - Chemical Hygiene Plan
  - Fire Code
  - Hazardous Waste
  - Environmental Health Programs
  - Food Safety and Sanitation
  - Asbestos and Lead Abatement
  - Pool Safety and Sanitation
  - Material Safety Data Sheets (Hazard Communication Program)
  - Personal Protective Equipment
  - Respiratory Protection Program
  - Indoor Air Quality
  - Fume Hoods
  - Integrated Pest Management
  - Hazardous Materials Business Plan
  - Radiation Safety Program
  - Laser Safety Program
  - Biological Safety Program
  - Bloodborne Pathogens Program
  - Hazardous Materials Response Team
  - Door Placard Program
  - Emergency Showers and Eyewashes
- Building Safety: Plan Review, Construction and Maintenence
- Diving Safety Program
- Ergonomics Program
- Policies

Injury & Illness Prevention Program

Purpose

The UCSB *Injury & Illness Prevention Program* (IIPP) serves as the foundation for all health and safety programs. Cal-OSHA administers the IIPP regulation and has fined employers for non-compliant programs. The OSHA-required written IIPP plan and associated forms are provided in Part IV of this binder.

Employer Responsibility

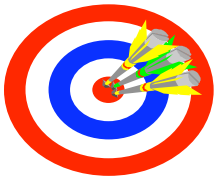
To have a compliant IIPP the University is required to:

- survey and correct unsafe/unhealthy work conditions as soon a possible;
- encourage workers to report unsafe conditions without fear of reprisal;
- communicate safety issues in a way that is understandable to workers;
- ensure that workers are trained in and comply with safe work practices; and
- maintain documentation of all safety training and inspections;

The law covers University employees in all job classifications, including student employees, academic and administrative staff. This legislation extended to "...all other workers who the employer controls or directs and directly supervises on the job to the extent these workers are exposed to worksite and job assignment specific hazards." Volunteer workers and outside contractors are thus subject to the above program requirements.

Implementation

All departments must have a complete and active IIPP in place. The written IIPP plan/template is provided in Part IV of this binder. Although individual supervisors have the primary duties related to the IIPP, the initial steps in instituting a local IIPP program are generally are performed by the Department Safety Rep. **See item #1 under *DSR Action Items* in Part I of this binder.**



The Campus Emergency Operations Plan and Department Emergency Operations Plans

Purpose

In the next section/tab is the template for developing *Department Emergency Operations Plans* (DEOP). Your DEOP is designed to work in conjunction with the *Campus Emergency Operations Plan* to provide basic guidelines/procedures for emergency planning and response. These plans were mandated by Cal-OSHA in 1981.

Implementation

Each campus unit/department is expected to have a functional DEOP in place. Each Department Safety Rep, in coordination with their unit's administration, are responsible to use the DEOP template (next section) to develop their local plan and implement as described therein.

Hazardous Materials Management

Purpose

Given the diversity of campus operations, there are numerous regulations (OSHA, EPA, Fire Code, CA Health and Safety Code, etc.) that can apply to the use of hazardous materials. These regulations primarily affect campus labs, but are also relevant to certain operations within Physical Facilities, campus shops, etc. As with all health and safety requirements, the supervisor of affected employees, and his/her department, have direct responsibility for compliance with pertinent regulations/programs.

General Responsibilities

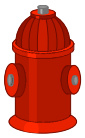
Training (*Website: Programs/Lab Safety/Training Classes)*
Supervisors (PIs and staff) are responsible under the law and by campus policy to provide documented safety training to their employees. Generic training checklists are provided in the IIPP Appendices (4th tab). Also, to assist supervisors in meeting training requirements, EH&S regularly offers a number of free hazmat safety-related classes. Depending on the nature of the work, some of these classes are mandatory (e.g. Radiation). All workers in chemical-using labs are expected by their departments to attend the general EH&S Lab Safety Class, or equivalent Web-based training.

Inspections *(Website: Programs/Lab Safety/Lab Inspection)*
Per OSHA, supervisors are required to: "*… include procedures for identifying and evaluating work place hazards including scheduled periodic inspections to identify unsafe conditions and work practices.*" Also, both SB County Fire and the CA State Fire Marshal expect that labs do regular inspections and corrections of safety problems.

Accordingly, supervisors and departments are responsible for performing regular workplace inspections. Generic inspection checklists (e.g., Laboratory Self-Inspection Checklist) are provided in the IIPP Appendices. EH&S performs it's own inspections on a periodic basis, but these do not relieve supervisors of their hazmat inspection responsibilities.

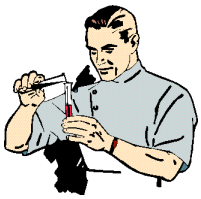
Specific Programs

Chemical Hygiene Plan *(Website: Programs/Lab Safety/Chemical Safety/OSHA CHP)*
Chemical-using labs are subject to the OSHA standard titled: *Occupational Exposure to Hazardous Chemicals in Laboratories.* The major requirement for labs is to develop a written, *Lab-specific Chemical Hygiene Plan* (CHP) which addresses the policies and Standard Operating Procedures, etc. that ensure that employees are protected from harm due to chemicals. Template forms for developing a CHP are on the EH&S website. There is also an associated CHP binder which has been distributed to lab supervisors.



Fire Code *(Website: Programs/Fire Safety)*
The CA Fire Code is a complex and detailed document that can apply to hazardous materials use in many areas, e.g. toxic gases, flammable liquids, chemical storage, fire extinguishers, etc. To begin addressing these issues, consult one of the workplace self-inspection checklists (e.g. Laboratory Self-Inspection Checklist) in the IIPP Appendices. However, these checklists should not be considered a comprehensive list of all possible fire code issues - if in doubt, contact EH&S.

Hazardous Waste *(Website: Programs/Hazardous Waste)*
Chemical waste generators must comply with campus policies and procedures as to labeling, training, packing, etc. Regulated wastes now include electronics wastes such as computer monitors and batteries. Sharps waste (e.g. syringes) and some biological wastes must also be handled per campus procedures. Disposal of household wastes can be done at the EH&S facility on weekends through a program run by Santa Barbara County and the Community Environmental Council.



Environmental Health Programs *(Website: Programs/Environmental Health)*
A variety of campus programs in this area are coordinated by EH&S and/or Facilities and other campus entities: Air Toxics; Asbestos and Lead; Environmental Assessement/Due Diligence; Reclaimed Water; Recycling; Storage Tanks; Storm Water; Waste Water; Water Quality; Food Safety and Sanitation; Pool Safety and Sanitation (see below)

Food Safety and Sanitation *(Website: Programs/Environmental Health/Food Safety…)*
Individuals, departments, organizations, and groups interested in distribution of food on campus need to comply with campus food safety policies and procedures.

Asbestos and Lead Abatement *(Website: Programs/Asbestos and Lead)*
Asbestos and lead-containing construction materials in campus buildings are removed and disposed of per OSHA requirements to minimize exposure. Abatements are generally performed by outside contractors under the direction of EH&S and Facilities Management.

Pool Safety and Sanitation *(Website: Programs/Environmental Health/ Pool Safety…)*
Campus swimming pools must operate in a safe and sanitary manner. They are classified as public swimming pools, and therefore subject to the swimming pool code. Patrons of the campus pools are expected to follow basic sanitary and hygiene guidelines in order to prevent the possible transmission of diseases and illnesses.

Material Safety Data Sheets
MSDS are manufacturer-provided summaries of the health hazards of a chemical and recommended safe work practices associated with the material.

Lab Chemical Users *(Website: Programs/Lab Safety/Chemical Safety)*
Per the *Chemical Hygiene Plan* program above, OSHA says lab workers must:

- be aware of what an MSDS is and its relevance to your health and safety
- know how to access relevant MSDS – electronic access is acceptable (e.g. via the EH&S website)
- maintain MSDSs that are received with incoming chemical shipments

Non-Lab Chemical Users (*Website: Programs/Industrial Hygiene/Haz.Com.)*
Operations such as Physical Facilities, shops, etc. are also required to have and use MSDS, but these areas fall under the *OSHA Hazard Communication Standard* rather than the Chemical Hygiene program. In addition to the above requirements, other key elements of the Hazard Communication program include:

- develop and follow the requirements of your department's Hazard Communication Program written plan (see DSR Action Items – Sec. I)

- develop and maintain an inventory of all chemicals in the workplace and have MSDS readily accessible to employees (e.g. via the EH&S website)

Personal Protective Equipment *(Website: Programs/Lab Safety/Eyewear, Gloves…)*
The University is required by OSHA to provide any eyewear, gloves, respirators, etc. that are needed by workers to safely and legally perform their work. EH&S can be consulted regarding the selection of appropriate PPE (see also Respiratory Protection Program).

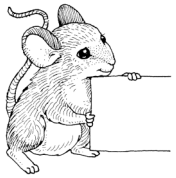
Respiratory Protection Program *(Website: Programs/Industrial Hygiene)*
The *UCSB Respiratory Protection Manual* addresses the policies and procedures that allow for the safe and legal use of respirators. Respirator use is strictly regulated by OSHA and overseen on campus by the EH&S Industrial Hygiene Program. Respiratory protection

includes protection from air-borne hazardous materials and work in oxygen-deficient atmospheres. Campus users include Physical Facilities and some lab research personnel.

Indoor Air Quality *(Website: Programs/Industrial Hygiene/Indoor Air Quality)*
This program investigates and corrects any respiratory discomfort or adverse health effects suffered by building occupants. Contact EH&S at x8787 or x3194 to investigate odor compliants, mold-related health complaints, or other IAQ issues.

Fume Hoods *(Website: Programs/Ind. Hygiene,* and *Programs/Lab Safety/Chem Safety)*
Use of volatile hazardous materials should always be done in a fume hood or other local ventilation device. To meet OSHA requirements, fume hood performance is checked by EH&S on an annual basis and requests for repairs forwarded to Facilities.

Integrated Pest Management *(Website: Programs/Indust. Hyg./Integrated Pest Mgmt.)*
IPM is an effective and environmentally sensitive approach to pest management that relies on a variety of common-sense practices. IPM utilizes a combination of tactics such as habitat modification, exclusion, sanitation and monitoring. The IPM committee meets regularly to develop campus policies and procedures.



Hazardous Materials Business Plan
UCSB is required to report large quantity chemicals to SB County Fire. EH&S regularly audits the campus for the presence of bulk chemicals via a questionnaire that goes to each affected supervisor. Also, per this law, all chemical users must know the proper emergency procedures to follow in case of spill, leak, fire, etc.

Radiation Safety Program *(Website: Programs/Radiation Safety)*
The Radiation Safety Manual describes UCSB's management of ionizing radiation, i.e., radioactive isotopes and radiation producing machines. The campus operates under a radioactive materials license and is therefore subject to regular state oversight. Individual PIs are authorized for use via an *Ionizing Radiation Authorization* as issued by the EH&S Radiation Safety Officer and the campus Radiation Safety Committee. Documented training of all radiation users is mandatory.

Laser Safety Program *(Website: Programs/Radiation Safety)*
The Laser Safety Manual assists researchers in conducting work with laser systems in a safe manner and is based on the *American National Standard for the Safe Use of Lasers*, ANSIZ136.1. The EH&S Laser Safety Officer (LSO) and Laser Safety Committee also

advise the campus on matters relevant to laser safety. PIs are responsible for laser safety in their operations and for notifying the LSO when a laser is acquired, transferred or significantly modified.

Biological Safety Program *(Website: Programs/Biosafety)*
This program manages the campus use of potentially infectious organisms and certain recombinant DNA work. Use of Biosafety Level II and above organisms must be authorized by the campus Biosafety Committee per the guidelines of the Center for Disease Control and the National Institute of Health. Therefore, PIs must notify the EH&S Biosafety Officer (BSO) before obtaining any human pathogens. The BSO oversees the campus program and coordinates the activities of the Biosafety Committee.

Bloodborne Pathogens Program *(Website: Programs/Biosafety)*
To protect individuals from bloodborne pathogens such as HIV and hepatitis, OSHA regulates potential occupational exposures through mandated training, safe work practices, engineering controls and personal protective equipment, etc. Campus populations "reasonably anticipated to be at risk" include physicians, nurses, public safety personnel (fire, police, etc.), physical activities instructors and researchers dealing with human or primate fluids/tissues and cell lines. Any work with these materials is automatically classified at Biosafety Level II and therefore requires an authorization – see above.

Hazardous Materials Response Team (*Website: Programs/Lab Safety/Emergency Response/Spill Cleanup Procedures)*
Periodically there are hazardous materials spills on campus that are beyond the capabilities of employees to cleanup, but are not an immediate threat to life and health that would require a response from County Fire. For these incidents, EH&S maintains a HazMat response team that can handle minor to moderate level events. The team can be accessed 24 hours a day at x-3194, but they can not do immediate responses like the fire department.

Door Placard Program *(Website: Programs/Lab Safety/Emergency Response)*
Door placards are on doors to campus areas which contain hazardous materials. They describe the basic hazards of the room and provide emergency contacts. They are primarily for emergency responders such as County Fire. EH&S initiates an annual update of these, but asks that individuals contact EH&S anytime that updates are needed.

Emergency Shower/Eyewash *(Website: Programs/Lab Safety/Emergency Response)*
Per OSHA, emergency eyewashes and showers are required to be within 10 secs. of an area where chemicals are used that could cause skin/eye damage upon exposure. The units are run/checked by the custodial staff on a monthly basis.

Building Safety: Plan Review, Construction and Maintenance

Plan Review

All campus buildings have some combination of life safety systems in their infrastructure: fire alarm systems; fire sprinkler and hydrant systems; emergency exits/lighting; emergency shower/eyewashes, toxic gas monitoring/alarm systems, etc. These systems are approved for installation by EH&S to meet current code requirements – see *Regulations* and *Codes* in the Introduction section. The EH&S Fire Safety Division is the authorized representative of the California State Fire Marshal on campus. As such, they must review and approve all construction projects for compliance with the California Fire Code and associated codes.

Construction

This program exists to protect contractors and maintenance workers from the hazards of the surrounding environment, but also to safeguard the campus community from the hazards created by construction and maintenance activities, e.g. asbestos, lead, mold, noise, dust, chemicals, etc. All general contractors employed by UCSB for specific projects are required to communicate safety requirements to all subcontractor employees and ensure they are being met. These are generally addressed in the contract specifications for a particular job. Contractors are also responsible for ensuring that all safety requirements, whether noted by UCSB or not, are followed in accordance with regulations as well as standard industry practice. Project Managers in Facilities are responsible for reviewing with contractors the safety requirements for construction activities conducted on campus, and for informing them of existing hazardous situations they might encounter during the course of their work. Outside contractors and UCSB maintenance employees who work in occupied rooms/buildings containing hazardous materials (e.g. labs) are of special concern. General guidelines for work in these areas can be found on the EH&S website: *Programs/Lab Safety/Miscellaneous Documents*

Maintenance

The life safety systems noted above are tested and maintained by Facilities Management, in cooperation with EH&S. Building fire alarm systems are generally tested annually as part of a general evacuation drill.

Diving Safety Program

Purpose

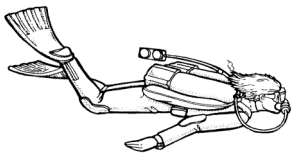
The Diving Safety Program was established to ensure that all diving under the auspices of the University is conducted in a manner that minimizes occupational illness or injury. This program also serves to set forth rules, regulations and standards for training and certification which allow a working reciprocity between campuses engaged in scientific diving. The *Diving Safety Manual* which is on the EH&S website (*Programs/Diving*), sets forth the basic underwater diving safety policy, organization, regulations and procedures.

Employer Responsibilities

UCSB is responsible for providing surveillance over the health and safety aspects of all campus diving programs (instructional, scientific, recreational, etc.) in accordance with policies, regulations and standards. The University is also responsible for maintaining and auditing all diving program records pertaining to safety. The Diving Safety Manual describes the authority and responsibility of the Chancellor, Environmental Health and Safety, the Diving Control Board and the Campus Diving Officer, as well as technical diving safety information.

Implementation

The Diving Control Board is composed of experienced divers, including the Campus Diving Officer, and a representative of EH&S. The Board introduces or recommends changes in policy, standards, training programs, diving locations, equipment, diving techniques and equipment inspection procedures. The Campus Diving Officer is responsible for supervising the overall operation of the diving program, including the coordination, instruction, evaluation and documentation of all training programs, and the testing and surveillance of equipment and equipment maintenance programs



Ergonomics Program

Purpose

Ergonomics refers to the science of designing job tasks, workstations, and equipment to fit the worker. It relates to the reduction/elimination of injuries in several types of common job duties: repetitive motion at office work stations; manual material handling (e.g., lifting, carrying, pulling); use of hand tools, etc. The Ergonomics Program is now based in Business Services and not at EH&S. The Ergonomics @ Work Program Coordinator can be contacted at x-3283, or check the Business Services website.

Scope

Ergonomic areas that are commonly addressed include: office work station evaluation and redesign; Grounds and Custodial workers; dining commons employees and all other campus ergonomic issues. Another goal of the program is to comply with state/federal legislation regarding the administration of a comprehensive ergonomics program.

Training

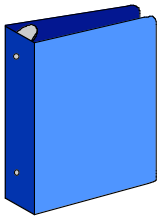
The program has trained a Departmental Ergonomic Evaluator Team (EEV) of over 100 campus volunteers. They provide ergonomic support to new employees and have been trained to orient employees to their office workstation environment using a self-help tool. In addition to the EEV training, group and departmental training can be scheduled by contacting the Ergonomics @ Work Program Coordinator.

Other Program Elements

- Provide overview at New Employee Orientation that includes ergonomic contact and resource information
- An ergonomic resource center for employees to demo reviewed and recommended ergonomic products prior to purchase
- Coordinate research studies, pilot ergonomically reviewed products and training tools, and provide an annual Ergonomic Fair
- Share best practices system-wide via the UC Ergonomic Committee
- Utilize Business Services and Human Resources to address Worker's Compensation and Vocational Rehabilitation issues

Policies

Beyond the campus health and safety programs described above, there are also some formal campus policies on specific issues as noted below. These are generally based upon current regulations, standards and accepted good practice. All of these can be found on the EH&S website along this path: *Documents and Forms/Documents/EH&S Policies.*



Formal Policies

5400 Environmental Health and Safety General
5405 Biological Safety
5410 Use of Biological Materials
5415 Dogs on Campus
5420 Electrical Service Extension Safety (UNDER REVISION)
5425 Burning and Open Fires on UCSB Property
5430 UCSB's Hazard Communication Program
5435 Use of Pesticides
5440 Respiratory Protection
5445 Seismic Hazard Reduction
5450 Skating and Skateboarding
5455 Small Boat Operations
5460 Smoking in University Facilities
5465 Welding, Cutting, and Hot Work Operations
5465 Attachment A (Hot Work Permit)