

**California State University
Fullerton**

REFERENCE GUIDELINES

for the

DEPARTMENT SAFETY

COORDINATOR

Prepared by

Environmental Health & Instructional Safety

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I. INTRODUCTION

Cal State Fullerton's most important resource is the faculty, staff and students who work within the university's facilities. Thousands of individuals are involved in research, administrative and educational endeavors. Many of these persons work with hazardous materials as part of their job. Others perform their duties in environments where serious injuries or possible exposures to dangerous substances could occur. Many research and educational pursuits use chemicals, radioactive isotopes, biohazardous agents, cleaning solvents, energized equipment, and so on, as routine tools in their operations. Even office environments contain hazards which must be recognized. All personnel working or learning in such environments must be well informed about hazards to which they may be potentially exposed. They must also learn to recognize and correct unsafe physical conditions and to clearly understand correct methods of personal protection to be incorporated into their activities. Cal State Fullerton is under ever-tightening regulatory scrutiny by governmental agencies and the general public to safeguard the welfare of all personnel and the environment directly affected by its operations.

The university is required by California state law to maintain an effective accident prevention program (SB198) which protects its employees and students. The responsibility to implement the university's program lies at the departmental level where there exists the greatest control of policies, procedures, facilities and personnel. This guide has been developed by the Office of Environmental Health & Instructional Safety to provide Department Safety Coordinators and other key parties with an overview of campus resources, regulatory guidelines and recommended safe work practices which must be interwoven to provide a strong and effective departmental safety program. As time progresses, many more state and federal regulations will certainly be instituted which will have a direct effect on campus operations. EH&IS will continue to keep departments and coordinators informed of these new requirements as they unfold in the future.

This guide is divided into a number of discussion areas which include campuswide policy statements, personnel rights/ responsibilities, hazard assessment guidelines for the work place, implementation of accident prevention procedures, employee training/education and a reference list of resource services available to the departments to draw upon as needed. It is the goal of this publication to incorporate divergent information into a format that is easily understood and managed by the departmental individuals who do not have an extensive background in occupational safety. Any questions concerning this publication should be directed to the EH&IS Office for clarification. Any feedback or suggestions concerning issues discussed herein are encouraged and should also be forwarded to EH&IS for inclusion into future updates of this publication. If there is information you feel is necessary and has been left out, please let us know.

II. CSUF SAFETY DIRECTORY

A. Emergency Services Extensions

Campus

Fire	911
Police.....	911
Medical.....	911

On any campus phone, dial 911 for emergency services. Emergency phones (with blue lights on top) are also located throughout the campus. They have a direct line to University Police.

B. Safety Services

Many of these safety services overlap or have coverage by more than one specialist. If you are not able to reach the person indicated, please feel free to request information from any of the professionals in the respective safety offices.

General Information : Environmental Health & Instructional Safety 7233 Radiation Safety and Chemical Hygiene 7233

Laboratory Safety	Skip Hines	5938
Fire Prevention	Tom Whitfield	4346
Hazardous Waste Pickup	Skip Hines	4345
	Curtis Plotkin	5938
Industrial Hygiene	Scott Bourdon	3083
Pest Management	Co Wilkins	4347
Laser/Radiation Safety	Sue Fisher	2507
Sanitation	Scott Bourdon	3083
Building Plan Review	Tom Whitfield	4346
Chemical Safety/Toxicology	Curtis Plotkin	4345
	Skip Hines	5938
Respiratory Protection	Scott Bourdon	3083
Biosafety	Sue Fisher	2507
	Scott Bourdon	3083
Indoor Air Quality	Scott Bourdon	3083
	Co Wilkins	4347
Safety Inspections	Co Wilkins	4347
	Scott Bourdon	3083
	Skip Hines	5938
	Sue Fisher	2507
Emergency Preparedness	Co Wilkins	4347

Building Marshal Program	Co Wilkins	4347
Ergonomics	Co Wilkins	4347
Training	Kenna Schoenherr	4561
Emergency Management- University Police	Quentin Frazier	3572
Risk Management--Workers' Compensation	Alisha Brown	2428
Employee Assistance Program	Human Resources	2425

Note: All safety office telephone numbers are personally answered during regular business hours. Feel free to leave a message on the office's 7233 voice mail. Contact the University Police for 24-hour emergency assistance.

C. OFF-CAMPUS SERVICES

Cal/OSHA Consultation	(562) 944-9366
Cal/OSHA Compliance	(714) 558-4451
Poison Control Center (UC Irvine)	(800) 876-4766
Cal EPA Information	(916) 551-1313
HESIS (Hazard Evaluation System & Information Service)	(510) 620-5757
Hotline, Information on Safety and Health Hazards--- www.dhs.ca.gov/ohb/hesis	
SCAQMD (South Coast Air Quality Management District)	(800) 288-7664
Smog Alert Message (CSUF is in Area 16)	
Orange County Household Hazardous Waste Hotline	(714) 834-6752

III. RESOURCES

This section identifies both campus and off-campus resources available to departments for use in implementation of their respective accident prevention programs.

A. ON-CAMPUS

The following presents an overview of the broad safety services available on campus.

Radiation Safety - The Radiation Safety Officer (ext.2507) monitors the proper use of all lasers, radiation producing machines and radioactive materials used in research and educational applications on campus. Working in conjunction with the Radiation Safety Committee and guidelines approved in the university's broad scope license with the State, the Radiation Safety Officer administers the radiation safety program to ensure that all exposures to radioactive sources are kept to a level as low as reasonably achievable for all individuals using ionizing and non-ionizing forms of radiation.

Education & Training - A broad array of safety programs are available from the EH&IS staff to assist departments in meeting their training obligations. Presentations may be conducted in the department. Programs incorporate the use of videos/DVDs, demonstrations and written materials. Topics range from general subjects on fire and earthquake safety to specialized sessions on confined space operations, respiratory protection, ergonomics laboratory safety, etc.

Environmental Sanitation - EH&IS is responsible for conducting inspections of all Commercial food operations and student food sales on campus to ensure that operations and facilities are in conformance with state and local public health codes. EH&IS has recommended guidelines available for safe campus food preparation and handling. In addition, the purity of all drinking and swimming pool water is monitored by this office to guard against the presence of harmful bacteria.

Safety Inspections - In addition to annual inspections, EH&IS staff conduct periodic worksite inspections for the purpose of identifying potentially hazardous situations before injuries occur. Inspections are performed to help departments realize where unsafe conditions exist and how to provide effective protection for all staff. Arrangements can be made for an inspection by contacting EH&IS.

Industrial Hygiene - EH&IS performs personal monitoring and environmental testing in work areas where toxic or hazardous substances are routinely being used. Personal monitoring (asbestos, noise, etc.) is conducted to ensure that individuals are properly protected.

Fire Safety – In the absence of an on campus State Fire Marshal, the Director of EH&IS is designated as their campus representative. The fire safety program ensures that all campus facilities conform to the state fire codes and that the campus is always ready to deal with fires, explosions, and other emergency situations in an informed manner. EH&IS coordinates the fire extinguisher program, Physical Plant coordinates the fire alarm systems, and emergency notification system on campus. Evacuation Drills are coordinated through University Police. All plans for remodeling of campus space must be reviewed by the State Fire Marshal for approval or by EH&IS if necessary.

Pest Control - The indoor pest control program manages the problem of insect and rodent infestation of work areas. Physical Plant's Landscape Services contracts with an off-campus vendor to provide indoor pest control.

Biosafety - The biosafety program provides consultation and technical information to research groups who use pathogenic microorganisms to ensure that all necessary precautions are taken to protect personnel and the environment from possible exposure. Proper disposal of biological waste is included in this program. EH&IS coordinates this program for academic departments and is an advisor for the Student Health & Counseling Center.

Hazardous Waste Management - EH&IS, manages the campus hazardous chemical and biohazard waste program. All hazardous materials such as discarded chemicals are picked up as necessary and taken to a special waste handling facility and stored for packaging and shipment.

Chemical Safety/Toxicology - The Chemical Hygiene Officer provides consultation to individuals utilizing chemicals in the lab including information on methods of safe handling and storage of reactive and toxic substances, as well as personal protection. Available information includes permissible exposure limits to certain chemicals, as well as the effects of chemical overexposure.

Laboratory Safety - EH&IS, particularly the Chemical Hygiene Officer conduct walk-through surveys of lab spaces for the purpose of advising the research staff about physical and chemical hazards routinely found in research lab settings. Problems connected with chemical storage, waste management, earthquake preparedness, electrical hazards, personal protection, etc. are focused upon.

Office Safety - EH&IS staff perform routine office inspections which address common problems such unanchored shelf systems, poorly designed work areas, use of unsafe electrical devices, improper storage of office chemicals, inadequate ventilation and lighting, etc.

Respiratory Protection - EH&IS coordinates the campuswide program which provides proper fit-testing and approved respirators for all persons working in areas where exposure to harmful levels of dusts or chemical vapors occur.

All safety services are available to department personnel by contacting the EH&IS office during regular working hours (x7233). For the most part, these services are free to the university community. EH&IS staff will work closely with department staff to maximize the effectiveness of their accident prevention program.

Other Safety Services Available from EH&IS:

- Chemical Spill Response**
- Emergency Preparedness Planning**
- Workplace Hazard Evaluation**
- Department Emergency Response and Training**
- Interaction with Regulatory Officials**
- Incident/Accident Investigation**
- Chemical Storage Evaluations**
- Air Contamination Monitoring**
- Construction Safety - Project Design**
- Hazard Communication**
- Indoor Air Quality Assessment**
- Job Safety Analysis**
- Cal-OSHA/Fire Code Compliance**
- Personal Protective Equipment**

B. OFF-CAMPUS

1. **Cal/OSHA** - The agency is divided into several units. The two most likely to provide services to the university are:

- a) Consultation Division - provides free workplace inspections and written materials to businesses in an effort to help them understand and comply with the occupational safety codes for California. This division cannot, by law, issue any citations unless there's an immediate, life-threatening situation occurring. They are strictly an advisory group which can provide a wealth of reliable information upon request.
- b) Compliance Division - acts as the enforcement arm of the agency. This group conducts inspections of work areas with the task of ensuring that the business is operating in complete conformance to all of the applicable Title 8 Occupational Safety codes. They're required, by law, to check IIPP programs during each visit. Problem areas found during a compliance inspection result in citations being issued against the university and the department with orders to have the problems corrected within a fixed time frame. Compliance investigations are also conducted after serious accidents occur or at the request of an employee. EH&IS should be contacted immediately whenever a Compliance Inspector arrives in your area.

IV. POLICY

The following Cal State Fullerton policy statement on Environmental Health & Instructional Safety has been approved by the President's Advisory Board.

"It is the policy of the California State University, Fullerton, to maintain, insofar as it is reasonably within the control of the university to do so, a campus environment for students, faculty, staff, and visitors that will not adversely affect their health and safety nor subject them to avoidable risks or accidental injury. No employee shall be required to perform any task which is unsafe or hazardous."

V. RESPONSIBILITIES

A. UNIVERSITY PRESIDENT & THE PRESIDENT'S ADMINISTRATIVE BOARD (PAB)

The President is ultimately responsible for the implementation of CSUF's Injury and Illness Prevention Program at all facilities under campus control.

B. VICE PRESIDENTS

The appropriate Vice Presidents are responsible for implementation and enforcement of the Injury and Illness Prevention Program in all facilities and operations within their respective jurisdictions.

C. DEANS, DIRECTORS and DEPARTMENT HEADS

All Deans, Directors and Department Heads are responsible for establishing and maintaining programs in their areas which will provide a safe and healthy work and living environment. Initial and ongoing responsibility for establishing and maintaining a safe and healthy environment for its employees, students, volunteers, and visitors remains at the department level.

D. DEPARTMENT SAFETY COORDINATORS

Appointed by the Department Head/Dean/Director, the Coordinator liaisons with EH&IS and other service organizations to assist departmental personnel in developing and maintaining the Department's accident prevention program.

E. PRINCIPAL INVESTIGATORS and SUPERVISORS

All principal investigators and supervisors are responsible for compliance with this policy as it relates to operations under their control. Specific areas of responsibility include employee safety training, identification and elimination of hazardous conditions and recordkeeping.

F. EMPLOYEES/STUDENTS

Each individual is responsible for following procedures and guidelines provided by their supervisor/instructor, as well as identifying hazardous conditions in the workplace. Moreover, each employee/student must attend training sessions, as required, to understand the hazards in their workplace. Individuals are also responsible for asking questions of their supervisors when concerned about an unknown or hazardous situation or substance.

G. OFFICE OF ENVIRONMENTAL HEALTH & INSTRUCTIONAL SAFETY (EH&IS)

EH&IS is responsible for managing the university's safety program and monitoring compliance with the IIPP. In cases of life safety or imminent danger to life or health, the Director of EH&IS or his/her designee has the authority to order the cessation of the activity until the hazardous condition is abated or adequate measures are taken to minimize exposure to campus personnel from such a condition.

VI. STATE CODES & REGULATIONS

The California Code of Regulations (CCR), Title 8, promulgated by the California Occupational Safety and Health Standards Board (Cal/OSHA), has been written to set forth guidelines which govern occupational safety for all employees working within the state. The university is legally mandated to follow these regulations.

In addition to Cal/OSHA requirements, the university is regulated by many other federal, state and county agencies.

State Fire Marshal - Fire code compliance

City of Fullerton - Emergency response, underground tanks

South Coast AQMD - Air quality, pollution control, ride-sharing, carpools.

Department of Health Services - Radiation

Cal/EPA & Dept of Toxic Substances Control- Hazardous Materials/Waste

Federal EPA - Asbestos, PCB's

Orange County Sanitation - Sewer disposal

State Department of Food and Agriculture - Pesticides

VII. INJURY & ILLNESS PREVENTION PROGRAM

The university has written an Injury and Illness Prevention Program (IIPP) to be in compliance with Title 8 Section 3203 (see university program). Departments must also have their own program specific to their work area. *Attachment A* outlines the basic information needed for the Department IIPP. The following is an overview of the general requirements of an IIPP.

A. HAZARD IDENTIFICATION AND CORRECTION

Definition: A hazard is any existing or potential condition in the workplace which, under the right circumstances, could result in death, injury (major or minor) or property damage.

In your department there are several categories of hazards. There are those inherent to the job or work area, such as work on ladders, with hazardous

materials or around electricity. There are also those that have developed due to circumstances such as tripping hazards, frayed electrical cords or a hazardous materials spill. Although some jobs appear to expose workers to more hazards, it does not lessen the need to recognize those areas or procedures which could, under the right circumstances, cause an illness or injury.

1. Hazard Identification

Hazards are identified by safety inspections (see Section C), reports from other persons (EH&IS, department personnel, students, etc.) or identified by yourself as having the potential to cause injury or illness. If the following examples have been mitigated by policy or procedure, injuries or illnesses will be negligible:

Office Areas

- Evacuation procedures from department.
- Electrical extension cord use.
- Storage of chemical/flammable materials
- Proper seating at computer work stations.
- Emergency preparedness.

Shops/Labs

- Proper use of protective equipment.
- Use of hazardous materials.
- Use of eyewash/safety showers.
- Use of hazardous machinery.
- Use of hearing protection.

Your responsibility as Department Safety Coordinator is to identify those hazardous procedures, situations or equipment that have the potential for injury or illness. From this list, you will be able to develop a list of training needs for your department.

2. Hazard Reporting

ALL DEPARTMENT PERSONNEL MUST FEEL FREE TO REPORT HAZARDS WITHOUT FEAR OF REPRISAL OR OTHER JOB DISCRIMINATION FOR EXPRESSING ANY CONCERN, COMMENT, SUGGESTION OR COMPLAINT ABOUT SAFETY RELATED MATTERS.

- a. Hazards, should be reported to the employee's immediate supervisor or Department Safety Coordinator. Serious hazards should also be reported to Environmental Health & Instructional Safety. Call, email or use [Campus Safety Report](#).

- b. Obtain a complete description including location and the nature of the hazard.
- c. Record the incident.

3. Correction of Hazards

Many hazards can be easily corrected on the spot such as removing a tripping hazard or cleaning up a spilled cup of coffee. Some, however, will require a call to Physical Plant Work Order Control or direct intervention by Health and Safety. In either case, notify EH&IS for the best approach.

Imminent and **serious hazards**, where there is a reasonable certainty that an accident or injury is possible, should be given top priority and corrected **immediately**. A good example is a spill of hazardous material. If serious hazards can't be corrected immediately, they must be reduced to a lesser hazard such as barricading a hazardous spill and evacuating the area. Use your own judgment in evaluating the severity of the problem and don't hesitate to call EH&IS if there is any question.

4. Recordkeeping

A record of the hazard and its correction should be kept for three years. See ***Attachment B*** for a recommended form to use.

B. EMPLOYEE SAFETY TRAINING

Effective dissemination of safety information lies at the very heart of a successful accident prevention program. Section 3203, Title 8, CCR requires the department to provide safety training for its employees in the following areas:

"general safe work practices" and "specific instructions with respect to hazards unique to the employee's job assignment."

The purpose of providing safety training to employees is to help them clearly understand the risks or hazards they face on the job and to provide information concerning methods of personal protection which will safeguard them while performing those tasks.

EH&IS has developed a multitude of training programs which meet the "general safe work practices" requirement mentioned above. Programs include fire and earthquake safety, preventing back injuries, recognizing office hazards, safety

handling of chemicals, food sanitation, defensive driver, fire extinguishers and many others. Most program material is general by design so as to be applicable to a greater number of departments.

Sessions can be scheduled for presentation to department employees/students as needed. All new employees are scheduled for a general safety orientation within a month of their hire. Programs are coordinated by EH&IS technical staff and incorporate the use of Powerpoint slides, videos/DVDs, hands-on demonstrations and written materials.

Specialized training sessions dealing with an employee's unique job assignment must be developed by his/her supervisor. It is the supervisor's responsibility to understand his/her employee's job tasks and its related hazards. EH&IS can serve as a resource of information to supervisors gathering safety information for their employees. California state labor and occupational safety codes are quite specific about the role and responsibility of supervisory personnel with respect to informing their employees about hazards they face on the job.

A long-range departmental training plan should be developed that sets priorities for training. Consideration should also be given to the frequency required for retraining purposes. These refresher programs should be incorporated into the long-range plan.

Complete documentation records of all training activities of employees who have taken EH&IS safety training classes are kept electronically in the Employee Training Center. Any other training by the employee off campus related to safety must be maintained at the department. The record should show the participant's printed name and signature, date of presentation, topic discussed, as well as an outline of the material presented. These records will be reviewed by Cal/OSHA and other agencies during routine worksite inspections. See **Attachment C** for the recommended form.

C. SAFETY INSPECTIONS

Section 3203, Title 8 of the California Code of Regulations specifies that scheduled periodic inspections to identify and eliminate unsafe conditions and work practices must be conducted for all departmental areas. The purpose of these inspections is to identify and correct potential problems before employees become injured or property is damaged. This is one of the components of a good accident prevention program which helps to maintain a greater safety awareness among all departmental personnel.

EH&IS provides annual walk through inspections of all labs, shops and other high-hazard areas as part of its service commitment. However, the number of EH&IS staff is not large enough to provide the frequency needed for all areas on campus. Therefore, a regular and systematic inspection program must be

scheduled in all departmental areas as outlined in *Attachment D*. EH&IS recommends that all areas be inspected annually, therefore you will receive notice in January of each year to begin safety inspection of your departmental areas. Problems noted in the walk through should be addressed immediately by you and supervisory personnel. EH&IS can be contacted for assistance in resolving problems. *Attachment D* contains inspection forms and an explanation of their use.

D. COMMUNICATION

Good communication within the department is essential to promote knowledge of safety issues and problems for all department personnel.

1. Posters

The following posters are required to be displayed in high visibility areas within the department.

SAFETY AND HEALTH PROTECTION ON THE JOB

Published by Cal/OSHA, this poster reviews the rights and responsibilities of all employees working the State under the Cal/OSHA Act of 1973. This legislation grants all individuals (1) the right to refuse to work under unsafe conditions, (2) immediate access to personal exposure/medical records and (3) the right to have a Cal/OSHA inspector visit their job site and work with them towards resolution of safety problems.

SUMMARY OF OCCUPATIONAL INJURIES & ILLNESS

Completed annually by Risk Management/Worker's Compensation, this poster/reporting form (Log 300A) outlines Cal State Fullerton's employee injury occurrences for the past year in terms of frequency and days lost due to job-related injuries on campus. This information is reported to Cal/OSHA periodically for analysis. These forms will be distributed for a February 1-April 30 posting.

ACCESS TO EXPOSURE RECORDS & MATERIAL SAFETY DATA SHEETS

This bright yellow poster, explains employee rights under Cal/OSHA Regulation 3204 which guarantees each individual access to his/her medical or personal exposure records. It also reminds employees that they have a right to be informed about hazardous materials to which they may be exposed while on the job. It also has a space to record the location of departmental MSDS files.

ASBESTOS NOTICE TO EMPLOYEES

Required by the Connally Act, this notice provides information about the location of asbestos found in building materials at CSUF. The listing is published in January each year and provides the campus locations where asbestos containing material have been found.

EMERGENCY PROCEDURES FLIP CHART

This flipchart lists emergencies which could happen at CSUF and the procedure to follow for each. It must be displayed somewhere in the department office where employees regularly gather. We also recommend the flip chart be posted in employee lounges, stockrooms and labs.

EMERGENCY INFORMATION

The orange and blue poster gives a quick summary of emergency procedures. It also gives employees information on how and where to report safety hazards. We recommend that they be posted in all departmental locations including classrooms and offices.

Each of these six posters must remain displayed at all times. Copies are available from EH&IS. Additional safety notices will be provided as needed. Departments may also provide additional safety notices as they feel are necessary.

2. Safety Meetings

Departments must develop their own system for communication of safety information. EH&IS recommends that each department meeting have a standing agenda item for safety. If not all department members attend the meeting, minutes must be made available for their review. Remember to document these meetings.

3. Safety Newsletter

Ensure each department member is provided with a copy of the safety newsletter, 'Safety Matters' put out by EH&IS.

4. Safety Committees:

Departmental safety committees are optional and can provide for broader planning and implementing capabilities. A safety committee should be

made up of representatives from all areas within the department, plus the Chair or Director. Safety issues can be discussed and minutes made available to all department members. Several campus departments successfully utilize committees to share in program development responsibilities, as well as serve as a review panel for dealing with compliance issues. Additional guidelines for setting up a safety committee is available by contacting EH&IS.

E. HAZARDOUS MATERIALS MANAGEMENT

Title 8, Section 3203 CCR requires the university to maintain an effective accident prevention program which includes identification of hazardous materials being used in the work place. The term "hazardous" refers to any substance or material which could cause personal harm or injury to persons who may become exposed to the substances. Substances such as chemicals, radioactive isotopes, cleaning solvents, inks, etc., are all potentially hazardous types of material which are routinely used on campus.

There are an estimated one-half million registered chemicals in this country. More are being synthesized every day to meet highly specialized needs in research, medicine and industry. These substances are being produced far more quickly than safety and toxic guidelines covering the usage. Safety information may be slow in being published as it often takes years of studies to clearly identify long-term health affects from chronic exposure. It is recognized that many chemicals are toxic or dangerous, even in small quantities. Some are known to cause cancer in lab animals and humans after chronic, long-term exposure. Others are powerful acids and bases which can cause irreparable damage to the body after a single accidental exposure. Many offer possible risks to developing fetuses or possibly cause genetic alterations which could affect offspring of future generations. These types of chemicals are referred to as carcinogens (cancer-causing), mutagens (causing genetic changes), or teratogens (affecting embryos and fetuses).

During the late 1970's, the federal government, recognizing the need to ensure that the American working population was informed about the hazardous materials to which they were being exposed on the job, passed new legislation called the Hazard Communication Standard or the "Worker's Right to Know Law." It requires that manufacturers of hazardous materials provide their customers with Material Safety Data Sheets (MSDS) which contain guidelines identifying the toxic components of their product(s), as well as effective methods of personal protection to safeguard persons using the material.

California adopted the federal program, enacting the California Hazard Communication Standard of the "California Worker's Right To Know Program" in late 1981. Under the original state programs, universities, including Cal State Fullerton, were granted an exemption from compliance. In 1986, the regulations

were revised removing the exemption, thus placing the university under compliance responsibility of the Standard. CSUF's Hazard Communication Program was developed by EH&IS shortly thereafter and sent forth to all campus departments for implementation.

The implementation of Cal State Fullerton's Hazardous Materials Programs is mandated under California law. It is an integral component of every departmental accident prevention program in which hazardous materials are being used. For the sake of brevity and review, only the major components are presented in this Guide.

1. Hazard Communication

The Hazard Communication Program has two primary goals - (1) to clearly identify hazardous substances being used in the work place and (2) to thoroughly inform employees about the hazardous properties of those substances, as well as methods of personal protection that will ensure their well-being while handling the material while on the job.

The Program addresses four broad areas:

- *Hazardous Substance Identification
- *Inventory
- *Material Safety Data Sheets
- *Labeling

a. Hazardous Substance Identification and Inventory

By definition, the term "hazardous substance" refers to any material which is known to be a physical or health hazard or is included in any one of a number of federal and state toxic chemical lists. Departments using hazardous chemicals were requested to report the type and amount of usage to EH&IS for incorporation into the campus' Business plan (beginning in December, 1989). This plan is compiled from all departmental data and submitted to the City of Fullerton Fire Department annually. The information is used by emergency response agencies to more safely deal with major problems such as fire or hazardous material spills which may occur at Cal State Fullerton in the future.

In order to ensure we receive material safety data sheets from the manufacturer, and that our inventories are accurate, EH&IS has developed a "Regulated Materials Purchase Requisition" for ordering

all chemical, radioactive and biohazardous materials only. These will also be used to locate materials specifically targeted for regulation by OSHA, EPA, AQMD, etc. See *Attachment E*.

The university is required to place National Fire Protection Association (NFPA) placards on all buildings to identify the hazards to fire response personnel. See *Attachment E* for an explanation of these placards.

b. Inventory

As directed by recent state and federal legislation, a full inventory of all hazardous chemicals must be maintained by the department. The inventory must include each chemical's name, manufacturer and quantity on-hand. Each hazardous chemical may be potentially hazardous and therefore requires special precautions in its usage.

Annually, EH&IS will request a copy of the inventory to include in reports being sent to governmental agencies which regulate the use of all hazardous materials at CSUF.

c. Material Safety Data Sheets (MSDS)

Manufacturers of chemicals are required by law to develop Material Safety Data Sheets (MSDS) for each of their products. An MSDS is a standardized document which contains fourteen areas of safety information including methods of personal protection, flammability, reactivity, special handling instructions, spill cleanup information, waste disposal requirements, etc. Most manufacturers routinely include the MSDS with their product as it is shipped to the campus. Companies must also provide an MSDS for their products upon request. *Attachment E* explains how to read an MSDS.

Once the departmental chemical inventory is compiled, an MSDS must be secured for each chemical item and readily available to anyone who works in the area where that chemical is stored and used. Thousands of MSDS's are available from <http://csuf.chemwatchna.com/>.

d. Labeling

Primary labels affixed to manufacturer's original containers must be in good condition. Labels must state the manufacturer's name, address, identification of the substance, appropriate health warnings and physical hazards. While not required, a date will help determine the age of the chemical, in case it has begun to deteriorate.

All secondary containers into which hazardous substances are transferred must be adequately labeled with information which provides the chemical's name, date of preparation (if in solution) and appropriate hazard warning statements (i.e., "May cause lung damage if inhaled"). Secondary containers holding small quantities of hazardous material intended for use within one day need not have labels.

Labels must be clearly written in English and permanent in nature.

2. Chemical Waste Disposal

Cal State Fullerton guidelines provide direction to ensure maximum safety for university personnel handling hazardous waste, as well as to promote consistent, orderly methods for its handling and disposal.

NEVER DISPOSE OF ANY SOLID OR LIQUID CHEMICAL OR OTHER HAZARDOUS MATERIALS IN THE GENERAL TRASH OR DOWN THE DRAIN. All chemical waste must be transferred to EH&IS Chemical Hygiene Officer for disposal.

All waste disposal requests will be accepted on a "Hazardous Waste Disposal Request" form. See ***Attachment E***. To avoid delay in having waste materials picked up, it is important that your form be concise and clear. Hazardous waste is required to meet various transportation compatibility requirements. It is important that the size and number of containers be clearly identified on the waste disposal request.

a. Storage of Waste

Each department should have a designated location in which to store hazardous materials to be discarded. This location should be out of the way of normal activities, but easily accessible by EH&IS staff.

b. Labeling

To avoid delays in having lab waste picked up, each container must be properly labeled with the contents.

Chemical names must be specific. Labels with nonspecific names such as "organic waste," "waste solvents," "acid waste," etc. must be properly labeled before they will be picked up.

c. Containers

The size of the container should correspond with the quantity of materials being discarded. For example, it is not cost effective to ship 50 milliliters of material in a 4 liter container, etc.

Containers must be leak-proof. Liquids must be in a screw capped container that will not leak if tipped over. If the lids are cracked or broken and cannot be securely fastened, request lids from the Chemical Hygiene Officer.

Solids must be in sealable containers suitable for transportation.

Contaminated labware such as glass, gloves, paper towels, etc. must not have liquid in them. They must be placed in double plastic bags and properly labeled.

Labware such as tubes, pipettes, stirring bars, etc., may not be present in bottles containing liquid waste. Many liquids are transferred to drums and must be poured or pumped. Bottles containing such items must be re-packaged before they can be picked up.

The material must be compatible with the container - acids or bases cannot be transported in metal containers, hydrofluoric acid cannot be transported in glass containers, etc.

d. Compatible Material

Every effort must be made to separate halogenated solvents from the non-halogenated.

Cyanides and corrosives will not be picked up together. If disposal of these items is necessary, they must be carefully separated. Arrangements must be made to pick up each item on a separate day.

Do not combine solvents with metals. For example, waste such as acetone and mercuric chloride are extremely difficult to dispose of. Chromium, lead, arsenic, thallium, selenium are other examples of hazardous waste that pose difficult disposal problems. **Please call EH&IS for assistance if you use such components.**

Every effort should be made to segregate waste streams, such as acids, bases, aqueous metals, organic solids, inorganic solids, halogenated solvents, nonhalogenated solvents, pyrophorics and water reactives. If

you have any questions as to how to separate your waste or about different waste requirements, please call the Chemical Hygiene Officer.

e. Empty Containers

Contact EH&IS for specific instructions.

f. Unknowns

Unknowns will be accepted by EH&IS on a case-by-case basis. They must be labeled as an "unknown."

g. Sharps

In academic labs, syringes, glass pipettes and other sharp material contaminated with chemical materials must be placed in a specifically designated rigid container. Sharps contaminated with biohazardous material must be segregated from chemical contaminated sharps. EH&IS will pick up the container and dispose of it as hazardous materials when full.

h. Chemical Substitutions

Lab personnel should substitute non-hazardous materials for hazardous materials, whenever possible.

i. Office Waste

Office waste that is considered hazardous waste include:

Toner Cartridges (note: laser printer cartridges are recyclable and should be returned to the manufacturer)

Glues

Paints and thinners

Cleaning Fluids

Batteries

F. ACCIDENTS/INJURIES

All employees are covered by Cal State Fullerton's Worker's Compensation program which provides for payment of lost wages and medical costs incurred as a result of a job-related accident or injury. Employees suffering any type of work-related injury should report the occurrence to Worker's Compensation by

submittal of a Report of Employee Injury form. Additional information about the Worker's Compensation Program is available from the Risk Management Office.

The following procedures must be followed when an employee has suffered a job-related injury or illness.

1. Seek medical attention as necessary.
 - a. Serious injuries where there has been a significant loss of blood, loss of consciousness, difficulty breathing, chest pains, exposure to a hazardous material or a disabling injury (possible broken bone), dial 911. Campus police will determine if it's necessary to call paramedics.
 - b. Less severe injuries should be sent to either the Student Health & Counseling Center or St. Jude Heritage Medical Group, Department of Occupational Services on Harbor Blvd. North of Bastanchury in Fullerton. All costs are paid by the university.

Note: Employees who wish to receive treatment from their own personal physician for on-the-job injuries, must file the name of their physician with Risk Management/Worker's Compensation Manager. Unless a specific request for outside treatment is already on file at the time of the injury or illness, an employee must be treated by the university selected physicians for the first thirty days.

- c. Minor scratches, cuts and burns are required to be treated on site. All departments are required to have a first aid kit available for these first aid emergencies. Each September, EH&IS sends a list of supplies available through a local vendor for restocking department kits. Departments may also purchase these supplies at local stores.
2. A job related injury or illness must be reported within 24 hours to the employee's supervisor. A *Medical Service Order* must accompany the employee to either the Health Center or St. Jude. A *Report of Employee Injury* and the *Employee's Claim for Workers' Compensation* must be completed by the Department and sent to Risk Management. Forms are available from Risk Management and should be kept on hand in the department office. See **Attachment F** for information on filling out injury forms.
3. Log in the injury. See **Attachment F**.
4. If the injury needs further investigation, either due to the severity or circumstances, EH&IS will conduct, or ask that you conduct, an accident investigation. See **Attachment F**.

G. RECORDKEEPING

All matters pertaining to employee/student health and safety concerns must be fully documented by supervisors, the department and/or EH&IS. Written records of activities, such as development of special departmental safety policies and/or procedures, training sessions for managers and employees, minutes of safety meeting and so on, must be maintained at the appropriate level as specified in the following:

1. EH&IS is responsible for:

- a. Documenting all training programs provided to departments by EH&IS staff, including a participant list, date of presentation and topic discussed. Hard copies of records are maintained for three years. Electron records are kept active for the length of employment.
- b. Managing the personnel exposure records for individuals using respirators. Any time an EH&IS Industrial Hygienist performs a personal monitoring test for an individual, the exposure findings are maintained in EH&IS files for thirty years after termination of employment or retirement.
- c. Maintaining records on all occupational medical examinations required of those persons who may be routinely subjected to asbestos removal operations, handling regulated carcinogens or wearing personal respirators. The actual medical records are maintained by the health care facility.

2. Department is responsible for:

- a. Maintaining records concerning employee injuries, incident reports, grievances involving safety matters, etc.
- b. Documenting any training programs provided to departmental employees from any source including supervisors, vendors, or EH&IS.
- c. Records must be maintained for three years.
- d. Maintain MSDS's for 30 years.

3. Supervisor is responsible for:

Documenting any exchange of safety information with employees occurring through formal presentations and/or one-to-one meeting at the work site.

Sample training record form(s) are included in the appendix.

Records of all safety matters are subject to periodic review by EH&IS, Cal/OSHA and other applicable agencies conducting workplace inspections. They should be maintained in a clearly identified, central file within the department for ease of access.

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