



University of California
San Diego

UCSD's Hazard Communication Program

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Introduction

Program Description

UCSD has developed a Hazard Communication Program (HCP) in response to the Hazard Communication Standard to help ensure the health and safety of all University employees working with or around chemical substances.

The Hazard Communication Standard, California Code of Regulations, Title 8, General Industry Safety Order 5194 (part of the federally approved California Occupational Safety and Health Act (Cal/OSH Act)), requires all employers in California using hazardous materials to establish, implement, and maintain an HCP. For the remainder of this document we will refer to the HCP exclusively, understanding that this Program satisfies the regulation.

The HCP is intended to:

- Identify all hazardous materials used in a workplace
- Determine those employees using or exposed to these materials
- Train these employees in the hazards of the materials and provide access to hazard summary sheets for each material (Material Safety Data Sheets)

Additionally,

- All hazardous materials must be properly labeled
- A written HCP must be available and reviewed by all employees

Approach

The HCP establishes uniform requirements to ensure all chemicals used in California workplaces are evaluated for hazards. The purpose of this HCP is to establish guidelines and policies to ensure all members of the UCSD community are apprised of the chemical hazards they may be exposed to, and provide a foundation of knowledge to permit employees to make informed decisions about these materials. The safe conduct of work with potentially hazardous chemicals is dependent upon the value the institution places on protecting health and the environment, and on the motivation and good judgment the individual chemical user exercises. Therefore, it is the responsibility of departments, supervisors, staff, and students, etc., to adhere to the specifics and the intent of the HCP in order to reduce risk to the University community as a whole and promote safety as a value in the UCSD culture.

The intention of the UCSD HCP is to transfer knowledge and capabilities into each department where it must be in order to be effective. UCSD has adopted an approach to implementing and maintaining the HCP by having each department head designate and support one individual in his or her department as the Department Safety Coordinator. The Department Safety Coordinator (DSC) will be trained by Environment, Health & Safety (EH&S) to a degree that will enable them to conduct their responsibilities. The DSCs are then responsible for implementing the program within their departments under the direction of their department heads. Each DSC will implement the program based on the specific needs of the department. These needs will vary according to hazardous materials used, number of employees, resources, and other variables. Each supervisor will bear the direct responsibility for compliance with the program requirements.

Environment, Health & Safety has oversight responsibility for the Program. In this role EH&S functions as a technical resource to the departments. EH&S will advise the DSCs, department heads, and managers as to the requirements of the HCP and other health and safety units, interpret specific situations and problems, provide updates on information and legislation, and serve an oversight role in regards to general compliance issues. Departments requiring technical evaluations shall direct requests to EH&S.

Written HCP

This document, the UCSD HCP, fulfills the requirement of the regulation for a written program, as well as serving as the overall program and policy document for the University; therefore, additional written programs are not required. It is the intent of this plan to assist and guide the Department Safety Coordinators in their efforts to implement the program within their department, as well as to establish a consistent approach for all University departments in addressing this program.

Scope

The Hazard Communication regulation applies to all California employers whose employees may be exposed to hazardous substances. All hazardous substances found in the workplace under normal or reasonably foreseeable emergency conditions (i.e., spill or release of a chemical) are included, with the following exceptions:

- Tobacco products
- Wood products or wood dust)
- Articles (manufactured items; not excluded are hazardous substances used in the articles)
- Food, drugs and cosmetics used by employees
- Retail trade establishments (except for processing and repair work areas)
- Pesticide use regulated by the California Department of Food and Agriculture (although similar requirements exist under the jurisdiction of the Agricultural Commissioner's Office)
- Consumer products sold at retail, unless employee exposure is greater than exposure to the ordinary consumer (e.g., cleaning products in the workplace are regulated by Hazard Communication)

Also, additional labeling is not required on hazardous materials for:

- Pesticides
- Food, drug and additive products
- Alcoholic beverages
- Consumer products

Note: The provisions of the HCP apply to any hazardous substance known to be present in the workplace, with the exception of specific research and teaching activities within laboratories. The HCP regulation **has been superseded by the Cal-OSHA regulation on Laboratory Safety** through the Chemical Hygiene Plan. The Chemical Hygiene Plan applies to most activities performed by research and teaching laboratory workers. The full scope of the HCP applies to all non-research or teaching uses of chemicals conducted within laboratories.

Consumer products packaged for and used by the general public, and used in a manner that will not result in significantly greater exposure than that of the general consumer, are excluded from the program.

I. Responsibility

The UCSD program establishes responsibility for the implementation of the HCP.

The Chancellor is responsible for ensuring that the applicable operations of the University are conducted in accordance with these provisions.

Environment, Health & Safety (EH&S) responsibilities include:

- Overall program development and oversight
- Serving as a central repository for applicable hard copy MSDSs
- Provision of general hazard communication training
- Program coordination and technical guidance

Individual departments, shops, and studios are responsible for designating a Department Safety Coordinator (DSC) to implement the HCP program for their area. The DSC may work through an Area Safety Coordinator to accomplish this goal. The DSC will be the liaison with Environment, Health & Safety for all HCP issues. The DSC's role in the HCP will vary depending on the needs of each department. However, for all departments it will be the DSC's responsibility to actively implement the program within the department, assess its status, delegate tasks, and advise departmental management on compliance. This includes:

- Development and maintenance of an inventory of hazardous materials (supplied by EH&S)
- Ensuring MSDSs are readily accessible either electronically or by hard copy for their hazardous material inventory
- Ensuring chemical containers are properly labeled
- Ensuring employees of the department who work with or are exposed to hazardous material receive documented training

Chemical users are responsible for:

- Maintaining familiarity with the materials they use
- Using the materials in a safe and responsible manner
- Seeking supervisory support before using new materials or using materials in unusual situations

II. List of Hazardous Chemicals

Inventory management is the cornerstone of the HCP because it is the basis for all training requirements. A compiled inventory of materials stored on the main UCSD campus, the UCSD Medical Center, and Scripps Institution of Oceanography is maintained by EH&S.

Complete, accurate and up-to-date inventories are essential to protect the worker from the hazardous properties of the chemical, as well as to protect the supervisor from potential liability by failing to warn and train the employee. It is important to recognize that

inventory management is a dynamic process. Hazardous materials inventories are necessary for many different regulatory purposes today. The basic concept of hazardous materials-related legislation is to reduce risk by reducing inventory. Therefore, it should be emphasized at every opportunity by those either coordinating or conducting an inventory survey that elimination of materials from on-hand supplies is to be promoted. It is necessary to assure that any hazardous waste generated by reducing inventories is handled correctly.

The hazardous chemical list will be updated upon receipt or removal of hazardous chemicals from the site. Many materials such as cleaning agents, adhesives, copying supplies, art materials, paints, strippers, solders and welding supplies, fertilizers, pesticides, and compressed gases contain hazardous materials and must be included on the inventory. Materials used as a household consumer product are excluded from this program (see list of excluded products in Section I, Scope).

Hazardous substances, as defined by the regulation, include:

A. Those hazardous substances listed by:

- The hazardous substance list at 8 CCR 339
- MSDSs
- 29 CFR 1910 Subpart Z, federal regulations for toxic and hazardous substances
- 8 CCR 5155, "Air Contaminants"
- 22 CCR 12000, "Chemicals Known to the State to Cause Cancer or Reproductive Toxicity" (Proposition 65)
- Monographs, International Agency for Research on Cancer (IARC), World Health Organization
- Threshold limit values for chemical substances as determined by the American Conference of Governmental Industrial Hygienists (ACGIH), 2003
- Tenth Annual Report on Carcinogens, National Toxicology Program (NTP), 2002
- Any other substances shown by scientific evidence to present physical or health hazards

B. Any other substances that present a personal hazard(s) as determined by scientific evidence.

The lists cited in Section A are relatively static and do not generally undergo significant or rapid change. Recognizing this, however, the regulation was written so as to incorporate advancing knowledge of what constitutes a hazardous chemical to workers, as evidenced by the generic description in Section B. Given

the difficulty of each supervisor individually determining the potential hazard of each chemical or product, it is clear that a simpler approach must be undertaken. **In practical terms, therefore, essentially all chemicals used in the workplace must be regarded as potentially hazardous.**

Considering all chemicals and products to be potentially hazardous simplifies the approach even though it may unnecessarily include a few materials that are essentially non-hazardous. For those chemicals that are necessary and hazardous, use the least toxic chemical necessary to do the job. Used campus wide, a "least toxic" philosophy can greatly reduce the campus-wide inventory of hazardous material.

III. Material Safety Data Sheets (MSDS)

The objective of a [Material Safety Data Sheet](#) (MSDS) is to concisely inform you of the hazards of the materials you work with or may be exposed to so you can protect yourself and respond to emergency situations. UCSD has available an online MSDS database that provides access to thousands of MSDSs that are currently being used at UCSD. EH&S will maintain an MSDS library of hard to find substances on the list of hazardous chemicals at UCSD (e.g., proprietary blends, etc). Each department, lab, shop, or studio will show that they have access to the UCSD MSDS database or maintain an MSDS library on every substance on their list of hazardous chemicals. The DSC will ensure that the MSDS program is in place for each hazardous material used in his or her area. MSDSs must be readily accessible to employees working in remote or field locations. Appropriate MSDSs will be maintained in a binder in each vehicle, on each job site, or immediately accessible by phone and fax. Alternatively, MSDSs may be accessed electronically (i.e., via computer locally or via Internet). MSDSs are accessible online via the World Wide Web and the [MSDS page](#). MSDSs must be readily available to all employees, EH&S, and Cal/OSHA inspectors upon request. MSDSs must be received at the facility either prior to or at the time of receipt of the first shipment of any potentially hazardous chemical purchased from a vendor. If materials are received for which no MSDS is available in the area of use, the supervisor shall contact the vendor for the necessary MSDS.

IV. Labels and Other Forms of Warning

The DSC must ensure hazardous chemicals in their area are properly labeled. However, if a label is falling off or deteriorating, it is everyone's responsibility to take action so that the identity of a material is not lost. Labels on incoming containers should not be defaced while they contain the indicated material. Labels on these primary containers should list the chemical identity, appropriate hazard warnings, and the name and address of the manufacturer, importer, or other responsible party.

Secondary containers (those containers into which material is transferred) must be labeled with the name of the material as it appears on the MSDS, and an appropriate hazard warning.

An abbreviation sheet containing the chemical or product name, an appropriate hazard warning, and a key to link it to an abbreviation or a code displayed on the secondary container may be used. Chemical users must be trained in the recognition and purpose of the abbreviation if one is used in the area. Abbreviation sheets are frequently used in laboratories on small containers and squeeze bottles. Common "immediate use" containers (those in which the hazardous substance will be under the control and used only by the person who transfers it from a labeled container and within that work shift) do not require labeling.

V. Training and Information

Each employee who works with or is potentially exposed to hazardous chemicals must receive initial training on the Hazard Communication Standard and the safe use of those hazardous chemicals followed by annual refresher training available on-line.

EH&S will perform general HCP training as part of formal [Injury and Illness Prevention Plan training](#). The supervisor or their designate must conduct hazardous chemical training. Additional training will be provided for employees whenever a new hazard is introduced into their work areas. The training will emphasize these elements:

- A summary of the standard and this written program.
- Hazardous chemical properties and methods that can be used to detect the presence or release of hazardous chemicals, including visual appearance and warning properties (i.e., odor).
- Physical and health hazards associated with potential exposure to workplace chemicals.
- Procedures to protect employees and visitors against hazards (e.g., personal protective equipment, work practices, and emergency procedures).
- Hazardous chemical spill and leak procedures.
- Where MSDSs are located, how to [understand their content](#), and how employees may obtain and use appropriate hazard information. This includes computer-based access when appropriate.
- The procedures for conducting non-routine tasks involving hazardous materials.
- Supervisory personnel must maintain accurate records on all safety training. Records should include: the employee name, date of training, topic covered, employee signature, and name of instructor.

EH&S will provide assistance with the development of departmental programs upon request.

VI. Contractor Employers

The project manager will advise outside contractors of any chemical hazards that may be encountered in the normal course of their work at UCSD facilities. Chemical inventories and MSDSs must be maintained on site during the duration of the project.

VII. Non-Routine Tasks and Work in Laboratories

Periodically, employees may be required to perform hazardous non-routine tasks. Any employee contemplating a non-routine task involving possible chemical hazards (e.g., acid washing bricks, chlorine line repair) will contact their supervisor or manager. The supervisor will ensure employees are informed of:

- Specific hazards associated with the performance of these tasks
- Protective measures to use
- Measures the department has taken to lessen these hazards such as ventilation, personal protective equipment, or the presence of another employee
- Specific emergency procedures to be used in the event of an accident or injury

All laboratories may house potential hazards from used and stored chemicals. All work should be coordinated with the laboratory staff to identify and minimize potential hazards in the work area. No work should be conducted that requires entering the fume hood body or moving laboratory equipment or stored chemicals without the supervisor's permission.

Review UCSD's Contractor Guidelines available on-line.

VIII. Additional Information

Further information on this written program, the HCP, is available at Environment Health & Safety, (858) 534-3660. The MSDS master file for UCSD is located at 10280 N. Torrey Pines Road, Suite 450, La Jolla, CA.