

CHEMICAL CARCINOGENS

I. REFERENCES

- A. California Health and Safety Code
- B. California Code of Regulations, Title 8, General Industry Safety Orders
- C. California Code of Regulations, Title 26, Department of Health Services
- D. National Institute of Health, National Toxicology Program (NTP), Annual Report on Carcinogens
- E. International Agency for Research on Cancer (IARC) Monographs on the Evaluation of Carcinogenic Risk of Chemicals to Humans
- F. *UCSD Laboratory Safety Guide*

II. POLICY

The use of chemical carcinogens shall be planned and performed in a manner to ensure that a safe and healthful environment is maintained. Acquisition, use, storage, and disposal of chemical carcinogens shall be in compliance with the applicable provisions of State and Federal law and UCSD policy and procedures. The objective of this policy is to reduce employee and environmental exposures to chemical carcinogens used at UCSD to the lowest practicable level. For the purposes of this policy, chemical carcinogens include chemical carcinogens regulated by standards promulgated by the California Occupational Safety & Health Administration (Cal/OSHA); and chemical substances that pose a potential occupational carcinogenic risk, as classified by the International Agency for Research on Cancer Monographs (IARC) and the National Toxicology Program (NTP).

III. PROCEDURES

A. Acquisition

Prior to initial usage of a Cal/OSHA chemical carcinogen in a laboratory, Environment, Health and Safety (EH&S) must be notified so the location can be registered and procedures established that will ensure the health and safety of lab personnel, and also conform to the legal requirements. Written emergency procedures and decontamination methods will have to be established before the carcinogen is acquired.

B. Storage

See the *UCSD Laboratory Safety Guide* for specific storage and labeling requirements. In general, chemical carcinogens are to be obtained in quantities as small as practicable. The chemical should be stored in a closed, labeled container as described in the *UCSD Laboratory Safety Guide*. Carcinogens should be kept in a secured, placarded location. An inventory must be maintained showing the amount of each classified carcinogen, the date and amount of each usage, as well as the name of each user.

C. Training

All employees directly involved or associated with areas in which chemical carcinogens are present shall be trained in the safe use, storage, and disposal of chemical carcinogens. The Principal Investigator is responsible for providing adequate and appropriate training. Training shall include all required elements of the Laboratory Specific Chemical Hygiene Plan, Standard Operating Procedures for the use of Chemical Carcinogens, and Hazard Communication Program. See the *UCSD Laboratory Safety Guide* for specific training requirements. In addition, carcinogen users shall be provided training that includes:

1. The possible sources of exposure;
2. Adverse health effects (carcinogenic and other) associated with exposure;
3. Laboratory practices and engineering controls to limit exposure;
4. Environmental and medical monitoring procedures used to measure the effectiveness of control procedures and the health status of workers;
5. Employee responsibilities for following proper laboratory practices to reduce risk to themselves and fellow employees; and
6. Information to aid employees in recognition and evaluation of carcinogen release.

Suggested training reference materials are Standard Operation Procedures, Chemical Hygiene Plan, and Material Safety Data Sheets. Other appropriate written information describing the relevant toxic, physical, and chemical properties of carcinogens used or stored in the laboratory should also be included.

Training shall be provided before each user's initial contact with the carcinogen. Review of the Standard Operation Procedures and safety procedures must be completed annually.

D. Medical Surveillance

See the *UCSD Laboratory Safety Guide* for specific Medical Surveillance requirements. An offer to initiate medical evaluation and surveillance at no cost to employees must be made following exposure to a regulated carcinogen. Consideration should be given to employing methods of medical surveillance for those employees who use a particular carcinogen on a regular basis. Evidence of employee exposure requires investigation and possible revision of the laboratory practice that may have contributed to employee exposure.

IV. RESPONSIBILITIES

- A. The Chemical Safety and Surveillance Committee (CSSC) is advisory to the Chancellor on all matters relating to the safe use of hazardous chemicals. The primary charge to the Committee is to reduce risks associated with hazardous chemicals and establish policies and procedures which meet or exceed applicable norms; monitor new regulations; and implement adopted policies and procedures for hazardous chemicals. Should there be a willful or negligent violation of UCSD's established chemical safety practices and procedures, the Committee has the authority to impose disciplinary measures which are subject to review and/or modification by the Chancellor or his/her designated representative. See the *UCSD Laboratory Safety Guide* and Charter to the Committee for specific CSSC responsibilities.
- B. Environment, Health and Safety is responsible for providing evaluation of facilities, workpractices, and investigation of potential exposure situations or events. EH&S is to provide general, specific, and technical guidance to the chemical user regarding the safe

handling and storage of hazardous materials including chemical carcinogens. EH&S is responsible for registering regulated chemical carcinogens with the California Division of Occupational Safety and Health as required by law. EH&S shall maintain records relating to chemical carcinogens use, storage, and registration information. EH&S shall be the reporting body to the state and local agencies relating to use and reportable incidents involving regulated chemical carcinogens. Should there be, in the opinion of EH&S, an imminent hazard of personal injury, serious exposure, or property damage, the EH&S Director or the Chemical Hygiene Officer has the authority to impose restrictive measures on the operations of concern. These restrictions are subject to review by the CSSC. See the *UCSD Laboratory Safety Guide* and the UCSD Policy and Procedures Manual for Chemical Safety, Industrial Hygiene, Hazard Communication, and Training for related supporting information.

- C. The Principal Investigator's primary responsibility is to ensure that good work practices, containment systems, engineering controls, and medical surveillance are fully implemented as appropriate when chemicals are used, stored, or handled. Each Principal Investigator or supervisor is responsible for the safety of facilities under his/her jurisdiction and operational procedures of personnel supervised. A laboratory specific Chemical Hygiene Plan and Standard Operating Procedures must be developed by each Principal Investigator if chemicals, including carcinogens, are used. The Principal Investigator or supervisor will provide or secure consultation and/or training as necessary and will enforce personnel compliance with established campus safety procedures and legal requirements.
- D. Each carcinogen user is responsible for knowing and complying with safety guidelines, regulations, and procedures required for the task assigned; reporting unsafe conditions to the Principal Investigator, immediate supervisor, or EH&S; and reporting to the Principal Investigator or immediate supervisor all facts pertaining to every accident resulting in exposure to chemical carcinogens.