

Chemical Hygiene Plan Quick Reference Guide

This document is intended to be consistent with OSHA Standards; however, better professional safety practices and legal safety standards are recommended in all situations including those municipalities and states that do not operate under OSHA regulations

Essential Chemical Hygiene Plan Contents

- a. Designation of pertinent personnel, including the assignment of a Chemical Hygiene Officer and, if appropriate, establishment of a Chemical Hygiene Committee, with relevant contact information by the employer. Further information would be designation of whom would be responsible for implementing and partaking in annual evaluation of the Chemical Hygiene Plan and relevant Safety Data Sheets (SDS). Specific measures [i.e., engineering controls, the use of personal protective equipment (PPE), and hygiene practices] that the institution will implement to protect laboratory workers from harm due to hazardous chemicals.
 - i. Personal protective equipment (PPE) and the training in the proper use of, which includes but is not limited to:
 1. Eye and Face protection (ANSI/ISEA Z87.1-2015) ANSI/ISEA Z87.1-2015, the American National Standard for Occupational and Educational Personal Eye and Face Protection Devices, is the latest edition of the standard for eye and face protection.
 2. Foot Protection (ANSI Z41.1-1991) The American National Standards Institute's Z41 Committee on Personal Protection-Protective Footwear has merged into ASTM International's Committee F13. With this merger, F13 oversees the redrafting of ANSI Z41 performance requirements and test method standards for safety footwear.
 3. Hand Protection (ANSI/ISEA 105) The American National Standard for Hand Protection rates gloves and other cut resistant protective clothing on a consistent numeric rating scheme for mechanical, thermal, chemical, dexterity, and other performance criteria. Therefore, the availability of appropriate gloves of various sizes should be made based on the chemicals encountered (vinyl, nitrile, heat-resistant, etc.).
 - ii. Functional and routinely checked fume hoods and/or glove box to ensure adequate performance, based on manufacturer's recommendations.
 - iii. Procedures for safe removal of hazardous waste along with pertinent waste containers.
 - iv. Detailed requirements for chemical labels, including any prepared solutions, and labeling requirements for secondary containers.
 - v. Decontamination procedures.
- b. Standard Operating Procedures (SOPs) that are relevant and applicable for the corresponding activity involving the use of hazardous materials.
- c. Emergency Procedures Guide that includes but is not limited to: how notifications are made to the site, safety map with locations of public access AEDs and emergency phone

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systems, and the explicitly stated staff with contact information associated with Emergency Management.

- d. In acknowledgement of the federal Superfund Amendments and Reauthorization Act (SARA) – Title III, also known as the Right-to-Know Act, information is to be provided to all lab personnel, support staff, and guests that should include:
 - i. Contents of standard and its appendices
 - ii. Location and availability of institution Chemical Hygiene Plan
 - iii. Recommended and Permissible Exposure Limits (PELs) for OSHA regulated substances
 - iv. Upon exposure to hazardous materials, explicitly stated signs, symptoms and treatment thereof for the chemicals used in the laboratory listed within the SDS
 - v. The location and availability of reference materials including the respective SDS for the safe handling, storage, and disposal of hazardous materials
- e. The identification of designated areas which include but are not limited to: laboratory storage and chemical preparation rooms with the corresponding room number in each respective buildings.
- f. The identification of operations that require prior employer approval.

Training

A Chemical Hygiene plan should clearly state:

- a. How all employees and support staff should be trained in methods to detect the presence of the release of hazardous materials.
- b. The physical and health hazards of chemicals in the work area.
- c. How all employees and support staff should be made aware of how to protect themselves including but not limited to: appropriate work practices, emergency procedures, and personal protective equipment to be used.
- d. Details of the employer's written Chemical Hygiene Plan.

Medical Consultation

- a. The institution must provide all employees and support staff an opportunity to receive proper medical attention if an incident occurs or if signs or symptoms associated with a hazardous material which they may have been exposed to present.
- b. If exposure monitoring reveals an exposure level routinely above the action level (or in the absence of an action level, the PEL) for an OSHA regulated substance for which there are exposure monitoring and medical surveillance requirements, medical surveillance must be established for the affected worker(s) as prescribed by the particular standard.
- c. When a safety incident takes place in the work area (e.g. spill, leak, explosion or other occurrence) resulting in the potential of a hazardous exposure, the affected worker(s) must be provided an opportunity for a medical consultation to determine the need for a medical examination.

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- d. All medical examinations and consultations must be performed by or under the direct supervision of a licensed physician and be provided without cost to the worker, without loss of pay and at a reasonable time and place.

Annual Review

The employer must review and evaluate the effectiveness of the CHP at least annually and update it as necessary.

Students

Although only employees are covered under OSHA standards, students should also follow the Laboratory standard components, given they help to secure a safer working environment not only for themselves but also for employees (teachers, etc.).

Additional Information

For additional information on CHP components, consult the following sources:

Laboratory safety standard at the OSHA Web site, www.osha.gov.

Appendix A of 29 CFR 1910.1450 provides non-mandatory recommendations to help in developing a CHP.

OSHA Fact Sheet: Laboratory Safety Chemical Hygiene Plan (CHP) -
<https://www.osha.gov/Publications/laboratory/OSHAfactsheet-laboratory-safety-chemical-hygiene-plan.html>