This written chemical hygiene plan is intended only to serve as a sample, a means of assisting you in devising your own plan. The Lab Manager should complete all of the relevant sections. Use of this sample does not guarantee compliance with all state and federal standards. Your plan must be tailored to the specific conditions and situations encountered in your workplace. In addition to the general Standard Operating Procedures (SOP’s), you must also develop your own lab specific Standard Operating Procedures and add them to the Sample Chemical Hygiene Plan. Such a plan is required by OSHA Standard 29 CFR 1910.1450. By attempting to provide a written program for your employees, you will be demonstrating a “good faith” effort toward safeguarding the health and safety of your employees.
INTRODUCTION

This document describes the Chemical Hygiene Plan for (Company Name/Facility) of (Company Address/Location) as required by OSHA's Occupational Exposure to Hazardous Chemicals in Laboratories Standard. 29CFR1910.1450.

In order to comply with the Standard, (Company Name/Facility) has established a plan to ensure our workplace is capable of protecting employees from Health Hazards associated with Hazardous Chemicals in the laboratory, and capable of keeping exposures below the Permissible Exposure Limits (PEL) specified in 29CFR1910 Subpart Z. Questions regarding this plan should be directed to (Name of responsible person/department).

This plan is made readily available to the employees of (Company Name/Facility), employee representatives & upon request by the Assistant Secretary for the Occupational Safety & Health Administration.

A review and evaluation of this program is conducted on an annual basis and updated as necessary.

The person responsible for implementation of this plan is (Name of responsible person/department). The assigned Chemical Hygiene Officer is (Name). This facility has established a Chemical Hygiene Committee comprised of the following personnel:

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STANDARD OPERATING PROCEDURES

For laboratory work at (Company Name/Facility) which involves the use of Hazardous Chemicals, standard operating procedures (SOP) have been addressed in order to reduce potential Safety and/or Health Hazards caused by such
use. These procedures include various engineering control measures such as laboratory fume hoods, maintenance procedures for these engineering controls including testing proper function of such equipment, the use of appropriate Personal Protective Equipment (PPE) and maintenance of such equipment.

The SOP’S implemented by ______________ (Company Name/Facility) are as follows:

[These are general procedures of laboratory operation which you likely already have in effect. Section E of Appendix A of 1910.1450 lists the following General SOP’S:]

- Accident, spills
- Avoidance of routine exposure
- Choice of chemicals
- Eating, drinking, smoking, etc.
- Equipment and glassware
- Exiting
- Horseplay
- Personal housekeeping
- Personal protection
- Planning
- Unattended operations
- Use of hood
- Vigilance
- Waste disposal and storage
- Working alone

[Section F of Appendix A of 1910.1450 includes additional SOP’S:]

- Corrosive agents
- Electrically powered laboratory apparatus
- Fire, explosions
- Low temperature procedures
- Pressurized and vacuum operations
- Compressed gases
- Chemical Storage

NOTE: ADD YOUR LABORATORY SPECIFIC SOP’S TO SECTION F.
CRITERIA FOR USE OF CONTROL MEASURES TO REDUCE EMPLOYEE EXPOSURE TO HAZARDOUS CHEMICALS

______________________(Company Name/Facility) makes an initial determination of employee's exposure to any substance regulated by an OSHA Standard (29CFR1910.1001 through 29CFR1910.1050) which requires monitoring if there is reason to believe exposure levels for substances routinely exceed the Action Level or in the absence of an Action Level, the Permissible Exposure Limit (PEL). If initial monitoring discloses employee exposure over the Action Level and/or Permissible Exposure Limit, exposure monitoring and cessation of monitoring shall be in accordance with the relevant OSHA Standard.

______________________(Company Name/Facility) notifies employees of exposure monitoring results in writing either individually or by posting results in __________ (Accessible Location) within fifteen (15) working days after receipt of monitoring results.

Control Measures

• The following operations shall be performed in LABORATORY FUME HOODS:

• The following operations shall be performed in BIOLOGICAL SAFETY CABINETS:

• The following operations shall be performed in GLOVE BOXES:

• Where the use of respirators is determined to be necessary to maintain exposure below permissible limits, appropriate respiratory protection shall be provided at NO COST to employees. Respirators shall be selected and used in accordance with the respiratory protection policy of ______________________(Company Name/Facility), and with the requirements in 29CFR1910.134. This policy and associated documentation is filed___________________(Location) for employee review.

• Appropriate protective apparel compatible with the required degree of protection for substances handles shall be used. ______________________(Name of responsible person or department) will advise employees on glove, gown, eye protection, barrier creams, etc. use. Permeability charts are available (Location).
• Employees will be instructed on the location and use of eye wash stations and safety showers. (Name of responsible person or department) is responsible for this instruction.

• Employees will be trained (Insert how often, example annually) on the use of fire extinguishers and other fire protection systems.

MAINTENANCE OF FUME HOODS AND OTHER PROTECTIVE EQUIPMENT

FUME HOODS will be inspected every __________ month (at least once a month) by _______ (Name of responsible person or department); adequacy of face velocity will be determined by __________ (Insert method); reports of hood inspections are filed __________ (Insert location/department) for employee review.

[Repeat the above for each additional major category of protective equipment, such as BIOLOGICAL SAFETY CABINET, VENTILATION OF STORAGE CABINETS, INTERLOCKS ON HIGH VOLTAGE EQUIPMENT, SAFETY SHOWERS, EYEWASH STATIONS, etc., including how often they are inspected, by whom, what is measured, and where the inspection records and checklists are filed.]

EMPLOYEE INFORMATION & TRAINING REQUIREMENTS

______________ (Company Name) provides employees with information and training on hazardous chemicals in their work area, at the time of initial assignment, and prior to assignments involving new exposure situations to ensure employees are apprized of the hazards of chemicals present in their work area. Initial information and training sessions for new employees are conducted by __________ (Name of responsible person or department).

The following information is conveyed to employees:

• The contents of the Occupational Exposure to Hazardous Chemicals in Laboratories Standard 29CFR1910.1450 and its appendices;

• The location and availability of the Chemical Hygiene Plan;

• The signs and symptoms associated with exposures to hazardous chemicals used in the laboratory;

• Information on OSHA permissible exposure limits (PELs) where they exist, and other recommended exposure limits; and
Location and availability of known reference material on the hazards, safe handling, storage and disposal of hazardous chemicals found in the laboratory including, but not limited to, Material Safety Data Sheets (MSDS) received from chemical suppliers.

In addition to above information, employees are trained on the following:

- Methods & observations which may be used to detect the presence or release of a hazardous chemical in the work area (monitoring methods and devices, visual appearance and/or odor, etc.);
- The physical and health hazards of chemicals in laboratory work areas; and
- The measures to protect employees from these hazards, including:
  - Standard operating procedures
  - Work practices
  - Emergency procedures
  - Personal protective equipment
  - Details of the chemical hygiene plan.

The outline for the training material is located (list where the training materials are located). [Employer should list here if training will be conducted using videotapes, written material, etc. Also, the employer should indicate who is responsible for conducting the training as well as the qualifications of the trainer(s).]

(Name of responsible person or department) is responsible for developing the standard operating procedures (SOPs). (Name of responsible person or department) is responsible for the portion of training on standard operating procedures.

PRIOR APPROVAL FOR SPECIFIC LABORATORY OPERATIONS

Certain laboratory procedures which present a serious chemical hazard require prior approval by (Name of responsible person or department) before work can begin. For this facility, these procedures include:

- Work with select carcinogens;
- Work with reproductive hazards;
- Work with neurotoxins; and
- Work with acutely hazardous chemicals (Consider the physical hazards as well as the health hazards in the determination).

The chemicals include: (insert a list of the acutely hazardous chemicals, e.g., cyanide)
ADDITIONAL PROTECTION FOR WORK WITH SELECT CARCINOGENS, REPRODUCTIVE TOXINS, AND CHEMICALS WITH HIGH ACUTE TOXICITY

When any of these chemicals are used, the following provisions shall be employed where appropriate:

- Establishment of a designated area;
- Use of containment devices such as fume hoods or glove boxes;
- Procedures for safe removal of contaminated waste; and
- Decontamination Procedures.

[Appendix A of the standard has detailed programs for working with these chemicals. If you are using them, refer to Appendix A as a guide for your detailed procedures.]

[Note that according to the standard, a SELECT CARCINOGEN means any substance which meets one of the following criteria: (i) it is regulated by OSHA as a carcinogen; or (ii) it is listed under the category, “known to be carcinogens”, in the Annual Report on Carcinogens published by the National Toxicology Program (NTP) (latest edition); or (iii) it is listed under Group 1 ("carcinogenic to humans") by the International Agency for Research on Cancer Monographs (IARC) (latest editions); or (iv) it is listed in either Group 2A or 2B by IARC or under the category, “reasonably anticipated to be carcinogens” by NTP, ...]

MEDICAL PROGRAM

__________ (Company Name) provides all employees who work with hazardous chemicals an opportunity to receive medical attention, including any follow-up examinations which the examining physician determines to be necessary, for the following circumstances:

- Whenever an employee develops signs or symptoms associated with a hazardous chemical to which the employee may have been exposed in the laboratory, the employee is provided an opportunity to receive an appropriate medical examination. The employee shall contact the Chemical Hygiene Officer to initiate the medical program.

- Where exposure monitoring reveals an exposure routinely above the action level, or in the absence of an action level above the Permissible Exposure Limit (PEL), for an OSHA regulated substance for which there are exposure monitoring and medical surveillance requirements. Medical Surveillance shall be established for the affected employee as
prescribed by the particular OSHA Standard. (Medical Surveillance & Exposure requirements as per 29CFR1910.1001 through 29CFR1910.1052)

Currently our laboratory uses:
- (e.g., Benzene)
- (e.g., Formaldehyde)
- (List other substances covered)

Whenever an event takes place in the work area such as a spill, leak, explosion or other occurrence resulting in the likelihood of a hazardous chemical exposure, the effected employee(s) is provided an opportunity for a medical consultation. This consultation is for the purpose of determining the need for a medical examination. An appropriate medical examination is provided as necessary.

All medical examinations and consultations are performed by or under direct supervision of a licensed physician, are provided at NO COST to employees without LOSS OF PAY and at a reasonable time and place.

**Information Provided to Healthcare Professional**

__________ *(Name of responsible person or department)* will provide the physician the following information:

- The identity of hazardous chemical(s) to which the employee may have been exposed to;
- A description of the conditions under which the exposure occurred including quantitative exposure data, if available; and
- A description of the signs and symptoms of exposure the employee is experiencing, if any.

**Healthcare Professional’s Written Opinion**

A written opinion from the examining physician for a medical examination or consultation which is required by the Standard is obtained. This opinion shall include:

- Any recommendation for further medical follow-up;
- The results of the medical examination and any associated tests;
- Any medical condition that may be revealed in the course of the examination which may place the employee at increased risk as a result of exposure to a hazardous chemical found in the workplace; and
- A statement that the employee has been informed by the physician of the results of the consultation or medical examination and any medical condition that may require further examination or treatment.
The written opinion shall not include any findings/diagnoses which are not related to an occupational exposure.

HAZARD IDENTIFICATION

With respect to labels and Material Safety Data Sheets (MSDS), (Company Name) assures labels on incoming containers of hazardous chemicals are not removed or defaced and Material Safety Data Sheets that are received with incoming shipments of hazardous chemicals are maintained and readily accessible to laboratory employees.

For chemical substances developed in the laboratory, the following procedures have been implemented for the following circumstances:

- For known composition for chemical substances produced exclusively for laboratory use which is determined to be hazardous, the appropriate training is provided;
- For unknown composition of chemicals produced as a by product, the substance is assumed to be hazardous and the appropriate standard procedures under Section (2) of this plan are implemented;
- For chemical substances produced for another user outside of the laboratory, (Company Name) complies with the Hazard Communication Standard 29CFR1910.1200, including the requirements of preparation of Material Safety Data Sheets and labeling.

EMERGENCY RESPONSE

[There are two additional OSHA standards which interface with the Chemical Hygiene Plan; 1910.38 Employee Emergency Plans and Fire Prevention Plans, and 1910.120(p) and (q) Hazardous Waste Operations and Emergency Response (developed in response to SARA Title III). Please review these standards and develop appropriate emergency procedures for your facility if your facility is covered by one of these standards.]

RECORDKEEPING

(Company Name) establishes and maintains for each employee an accurate record of any measurements taken to monitor employee exposure and any medical consultation and examinations including tests or written opinions as required by the Standard. These records are kept, transferred, and made available in accordance with 29CFR1910.20, Access to Employee Exposure and Medical Records.