



ADMINISTRATIVE PRACTICES MANUAL

SAFETY MANUAL: CHEMICAL HYGIENE PLAN:

1.0 Scope and Application

Dane County has developed the following program to protect the safety and health of employees who are involved with the laboratory use of hazardous chemicals. This policy complies with Chapter SPS 332 (Public Employee Safety and Health) of the Wisconsin Administrative code as promulgated by the Wisconsin Department of Safety and Professional Services and 29 CFR 1910.1450 (Occupational Exposure To Hazardous Chemicals In Laboratories) promulgated by the U.S. Occupational Safety and Health Administration.

2.0 Responsibilities

Risk Management: Support and management of this policy.

Department Heads: Implementation of policy and development of specific chemical hygiene plan for their operation(s).

Supervisors: Ensure policy is adhered to by all employees.

Employees: Follow policy requirements.

All employees are responsible for complying with the requirements contained in this policy. Failure to abide by these requirements may subject the employee to disciplinary action, up to and including discharge.

3.0 Departmental Polices and Requirements

This policy represents minimum chemical hygiene planning requirements for the laboratory use of hazardous chemicals. Departments having laboratory type operations that fall under the definition of "laboratory use of hazardous chemicals" are required to develop and implement their own specific chemical hygiene plan that must include all of the following requirements contained in this policy.

4.0 Definitions

Laboratory use of hazardous chemicals means handling or use of such chemicals in which all of the following conditions are met:

- (i) Chemical manipulations are carried out on a "laboratory scale;"
- (ii) Multiple chemical procedures or chemicals are used;
- (iii) The procedures involved are not part of a production process, nor in any way simulate a production process; and
- (iv) "Protective laboratory practices and equipment" are available and in common use to minimize the potential for employee exposure to hazardous chemicals.

The following activities are not considered to be laboratory use of hazardous chemicals, even if such use occurs in a laboratory and as such, the requirements of this policy do not apply:

- Laboratory uses of hazardous chemicals which provide no potential for employee exposure.
- Procedures using chemically-impregnated test media such as Dip-and-Read tests where a reagent strip is dipped into the specimen to be tested and the results are interpreted by comparing the color reaction to a color chart supplied by the manufacturer of the test strip.
- Commercially prepared kits such as those used in performing pregnancy tests in which all of the reagents needed to conduct the test are contained in the kit.



ADMINISTRATIVE PRACTICES MANUAL

5.0 Training

Department Heads are required to ensure that affected employees are provided with information and training to ensure that they are apprised of the hazards of chemicals present in their work area. Such information shall be provided at the time of an employee's initial assignment to a work area where hazardous chemicals are present and prior to assignments involving new exposure situations. The frequency of refresher information and training shall be determined by the Department Head.

Employees will be instructed in the following:

- The contents of the OSHA standard and its appendices which must be made available to employees.
- The location and availability of the Department's Chemical Hygiene Plan;
- The permissible exposure limits for OSHA regulated substances or recommended exposure limits for other hazardous chemicals where there is no applicable OSHA standard.
- Signs and symptoms associated with exposures to hazardous chemicals used in the laboratory.
- The 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 received from the chemical supplier.

Affected employees shall also receive training in the following subject areas:

- Methods and observations that may be used to detect the presence or release of a hazardous chemical (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.).
- The physical and health hazards of chemicals in the work area.
- The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.
- The applicable details of the Department's written Chemical Hygiene Plan.

6.0 Documentation Requirements

Department Heads shall establish and maintain for each employee an accurate record of any measurements taken to monitor employee exposures and any medical consultation and examinations including tests or written opinions required by this standard.

Records of all training and instruction provided under this policy shall be maintained within the Department.

7.0 Employee Exposures

For laboratory uses of OSHA regulated substances, the Department Head shall ensure that laboratory employees' exposures to such substances do not exceed the permissible exposure limits specified in 29 CFR part 1910, subpart Z.

Department Heads shall ensure measurement of the employee's exposure to any substance regulated by a standard which requires monitoring if there is reason to believe that exposure



ADMINISTRATIVE PRACTICES MANUAL

levels for that substance routinely exceed the action level (or in the absence of an action level, the Permissible Exposure Limit). If the monitoring described above shows and employee's exposure level to be over the action level (or in the absence of an action level, the PEL), the Department Head shall immediately comply with the exposure monitoring provisions of the relevant standard. Monitoring may be terminated in accordance with the relevant standard or if allowed, when exposure monitoring data shows the employee is not being overexposed to any hazardous chemical above safe limits as prescribed by OSHA and ACGIH. Department Heads shall ensure that within 15 working days after the receipt of any monitoring results, the employee is notified of these results in writing either individually or by posting results in an appropriate location that is accessible to employees.

8.0 Chemical Hygiene Plan

- a) A written Chemical Hygiene Plan (CHP) shall be developed by each affected Department. Each plan shall be capable of protecting employees from health hazards associated with hazardous chemicals in that laboratory and be capable of keeping exposures below any applicable limits.
- b) The Chemical Hygiene Plan shall be readily available to employees and employee representatives.
- c) The Chemical Hygiene Plan shall include each of the following elements and shall indicate specific measures that will be taken to ensure laboratory employee protection:
 - Standard operating procedures relevant to safety and health considerations to be followed when laboratory work involves the use of hazardous chemicals.
 - Criteria that will be used to determine and implement control measures to reduce employee exposure to hazardous chemicals including engineering controls, the use of personal protective equipment and hygiene practices.
 - Particular attention shall be given to the selection of control measures for chemicals that are known to be extremely hazardous.
 - A requirement that fume hoods and other protective equipment are functioning properly and specific measures that shall be taken to ensure proper and adequate performance of such equipment.
 - Provisions for employee information and training.
 - The circumstances under which a particular laboratory operation, procedure or activity shall require prior approval before implementation.
 - Provisions for medical consultation and medical examinations for exposures.
 - Designation of personnel responsible for implementation of the Chemical Hygiene Plan including the assignment of a Chemical Hygiene Officer, and, if appropriate, establishment of a Chemical Hygiene Committee.
- d) Provisions for additional employee protection for work with particularly hazardous substances are to be contained in the written Chemical Hygiene Plan. These include "select carcinogens," reproductive toxins and substances which have a high degree of acute toxicity. Specific consideration shall be given to the following provisions which shall be included 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.



ADMINISTRATIVE PRACTICES MANUAL

- e) The Department Head shall review and evaluate the effectiveness of the Chemical Hygiene Plan at least annually and update it as necessary.

9.0 Medical Consultation and Medical Examinations

- a) Employees who work with hazardous chemicals shall receive an opportunity to receive medical attention, including any follow-up examinations which the examining physician determines to be necessary, under 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 shall be provided an opportunity to receive an appropriate medical examination.
 - Where 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 shall be established for the affected employee as prescribed by the particular standard.
 - 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 exposure, the affected employee shall be provided an opportunity for a medical consultation. Such consultation shall be for the purpose of determining the need for a medical examination.
- b) All medical examinations and consultations shall be performed by or under the direct supervision of a licensed physician and shall be provided without cost to the employee, without loss of pay and at a reasonable time and place.
- c) The following information shall be provided to the physician:
- The identity of the hazardous chemical(s) to which the employee may have been exposed.
 - A description of the conditions under which the exposure occurred including quantitative exposure data, if available,
 - A description of the signs and symptoms of exposure that the employee is experiencing, if any.
- d) Department Heads shall obtain a written opinion from the examining physician for any examination or consultation provided. The written opinion must include the following:
- Any recommendation for further medical follow-up.
 - The results of the medical examination and any associated tests.
 - Any medical condition which 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 workplace.
 - 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.
- e) The written opinion shall not reveal specific findings of diagnoses unrelated to occupational exposure.

10.0 Hazard Identification

With respect to labels and material safety data sheets, employees shall ensure that labels on incoming containers of hazardous chemicals are not removed or defaced.

Department Heads shall maintain any material safety data sheets that are received with incoming shipments of hazardous chemicals, and ensure that they are readily accessible to laboratory employees.



ADMINISTRATIVE PRACTICES MANUAL

11.0 Respirators and Personal Protective Equipment

Where the use of respirators and personal protective equipment is necessary to maintain exposure below permissible exposure limits, employees will be provided with the proper respiratory equipment in accordance with the County's Respirator and Personal Protective Equipment Policy.

End Policy