

SECTION 1

Introduction

A. Purpose of this document

The Chemical Hygiene Plan is a document designed to express the policies and procedures adopted by the Davenport Community Schools, and relating to the safe operation of the school instructional laboratories. The document is derived from the Laboratory Standard³, a set of codes developed and presented in the Occupational Safety and Health Act. The Laboratory Standard addresses the goal of providing a safe laboratory workplace by including the requirements of the Occupational Safety and Health Act Standard on Occupational Exposure to Hazardous Chemicals.

The OSHA Laboratory Standard requires that employers protect workers through the development and implementation of a Chemical Hygiene Plan tailored to the individual laboratory workplace. The purpose of the Laboratory Standard and of this Chemical Hygiene Plan is to protect the employee from harm due to exposure to hazardous chemicals while working in the laboratory. The Davenport Community Schools will identify appropriate guidelines within this chemical hygiene plan for students.

Many policies and practices may not be part of the Chemical Hygiene Plan as such, and yet they are crucial to the planning process that must be part of maintaining a safe environment for employees and students. Such items as the number of students per class or the amount of physical space available to each student are examples of policies and practices that impact establishment of a safe environment, but which are not required by OSHA to be part of the Chemical Hygiene Plan.

B. Application of the OSHA Laboratory Standard⁴

The Occupational Safety and Health Act is administered as part of the US Department of Labor, and its full text is found in the Code of Federal Regulations (CFR) under Title 29, section 1910 (cited as "29 CFR 1910.1450").

One requirement of the Laboratory Standard is that the school district must have a Chemical Hygiene Plan and a Chemical Hygiene Officer.

1. What Is Covered by the Laboratory Standard?

Laboratories are defined as facilities where the "laboratory use of hazardous chemicals" occurs. "Laboratory use of hazardous chemicals" refers to the handling or use of such chemicals in which all of the following conditions are met:

"Hazardous Chemicals" are those which pose a health hazard, defined by OSHA as any substance for which there is statistically significant evidence, based on at least one scientific study, showing that acute or chronic harm may result from exposure to that chemical. Health hazards include carcinogens, toxic or highly toxic agents, reproductive toxins, irritants and corrosives.

"Employees" who are addressed by this document are those individuals employed in the laboratory workplace who may be exposed to hazardous chemicals in the course of the individual's assignment. This includes employees who actually work in the laboratory (instructors and aides) and those who simply must be in the laboratory to perform their assigned responsibilities (maintenance and custodial personnel, etc.)

“Laboratory scale” means work with substances in which the containers used for reactions, transfers and other handling of substances are designed to be easily and safely manipulated by one person.

2. What Is **NOT** Covered by the Laboratory Standard?

The Laboratory Standard does not apply to:

- [a] Students. Because students are not employees, they are not formally covered by provisions of the Chemical Hygiene Plan. However, there are recommendations in this document that suggest appropriate student rights and responsibilities related to issues of chemical safety. The Davenport Community Schools has identified those guidelines appropriate for students in this document.
- [b] Uses of hazardous chemicals which do not meet the definition of “laboratory use” even if such use occurs in a laboratory. The Davenport Community Schools has clearly identified the appropriate chemicals and equipment to be used in the classroom/laboratory.
- [c] Laboratory uses of hazardous chemicals which provide no potential for employee exposure, such as procedures using chemically impregnated test media.
- [d] Commercially prepared kits such as those used in performing nitrogen tests in which all of the reagents needed to conduct the test are contained in the kit.

The occasional visitor to the laboratory, such as a guest or administrator, who, because he/she is not included in the definition of employee does not need to be addressed in the Chemical Hygiene Plan. It is recommended that such persons be offered the same protection offered to students, and they conform to the same expectations as students in the laboratory. The Davenport Community Schools requires all visitors to follow designated safety protocol outlined in this Chemical Hygiene Plan.

C. Summary of the Chemical Hygiene Plan

In compliance with the Laboratory Standard, the district has prepared and implemented the Chemical Hygiene Plan. Adherence to the Plan will assure that employees, students, and visitors will be:

1. protected from health hazards associated with hazardous chemicals in the laboratory.
2. exposed to regulated substances at a level that will not exceed the permissible exposure limits.

The Chemical Hygiene Plan is organized into the following sections:

1. This Introduction, which states the goal and basis for the Chemical Hygiene Plan.
2. General Principles, which outline the guidelines for working with laboratory chemicals.
3. Standard Operating Procedures for Laboratories, the implementation of which will help the Chemical Hygiene Officer and all employees in meeting the goal of the Chemical Hygiene Plan.
4. A District Organization responsible for various aspects of the Chemical Hygiene Plan and its implementation.

5. Requirements for Records, record keeping, and procedures for reporting items related to laboratory health and safety.
6. Laboratory Safety Procedures.
7. Procedures for Inspections of laboratories and reviewing of the Chemical Hygiene Plan.
8. A description of the situations where Specific Exposure Control Measures must be used by employees.
9. Information regarding Training Opportunities for employees.
10. A description of Emergency Prevention and Response Procedures.
11. Appendices which provide a variety of reference materials and other useful information that may be referenced in the test of the Chemical Hygiene Plan.