



Colorado Department
of Public Health
and Environment

GUIDELINES FOR THE DEVELOPMENT OF A CHEMICAL HYGIENE PLAN

These recommendations are provided by the Colorado Department of Public Health and Environment, Division of Environmental Health & Sustainability, as guidance for the development of a Chemical Hygiene Plan for schools and school districts as required by the *Rules and Regulations Governing Schools in the State of Colorado*. Additional information about the rules and regulations may be obtained by calling 303-692-3645, or visiting the division's web page – www.cdphe.state.co.us/cp/

1. General Rules and Procedures

- a. Personal hygiene guidelines: Established procedures to avoid unnecessary exposure to chemicals by any route.
- b. Policy for choosing chemicals appropriate for the available ventilation system.
- c. Policy regarding eating, drinking and smoking in chemical areas.
- d. Procedures for safe use and handling of glassware.
- e. Policies on laboratory conduct, i.e., avoiding practical jokes and horseplay.
- f. Policy regarding personal apparel in the laboratory or whenever chemicals are used.
- g. Protective clothing requirements: eye protection, glove use, etc.
- h. Procedure for handling unattended operations.
- i. Procedures for hood use.
- j. Waste disposal procedures for each operation that utilizes hazardous materials.
- k. Policy on working alone.
- l. Housekeeping rules.

2. Spill and Accident Procedures

- a. A written policy for responding to accidents and spills, including first aid procedures for eye contact, ingestion, skin contact and clean-up.
- b. A procedure for alerting all people in the building.

3. Chemical Procurement, Distribution and Storage Procedures

- a. A plan for keeping the chemical inventory updated.
- b. A current inventory of all chemicals, including amounts and locations.
- c. A schedule for an annual examination of the chemical stores, for replacement, deterioration and chemical integrity.
- d. Procedures for labeling compounded chemicals.
 - i. contents
 - ii. date
 - iii. concentration
 - iv. hazard information
 - v. name of the responsible person
- e. Specifies personnel responsible for ordering chemicals and accepting shipments.
- f. Procedures for labeling chemicals with the purchase date.
- g. Guidance documents for storing in chemically compatible families.
- h. Procedures for labeling storage shelves and cabinets.
- i. Identified personnel who are authorized to be in the chemical storage area(s).
- j. Compressed Gas storage and handling procedures, if applicable.
 - i. Protecting the cylinder valve stem.
 - ii. Storage away from heat and direct sunlight.

- iii. Method of securing gas cylinders in place to prevent them from falling.
 - k. Flammable chemicals handling procedures, if applicable.
 - l. Identification of dedicated cabinets.
 - m. Assurance that storage temperatures are in the 55° - 80° F range.
 - n. Storage away from sources of ignition, including direct sunlight.
 - o. Storage away from oxidizers.
 - p. Provision of explosion-proof refrigerator, if required.
 - q. Corrosive materials handling and storage instructions, if applicable.
 - i. Provision and identification of corrosives cabinets.
 - ii. Requirement for storage in original containers, e.g., acids and bases are stored in the special styrofoam shipping cubes.
 - iii. Requirements for eye protection when using corrosive materials.
 - iv. Schedule to inspect acid cabinet shelves and shelf supports for corrosion.
- 4. Protective Apparel and Equipment**
- a. Evaluation of all hazardous materials to assess protective equipment needs.
 - b. Schedule and procedure for testing safety equipment, e.g., eyewash stations, safety showers and fire extinguishers.
- 5. Information and Training Program**
- a. Content and location of the Chemical Hygiene Plan.
 - b. Potential hazards involved in using chemicals.
 - c. Signs and symptoms of overexposure to chemicals.
 - d. Location and availability of the chemical MSDS.
 - e. Understanding of the permissible exposure limits (PELs) used in the school.
 - f. Proper use and location of all safety equipment.
- 6. Procedure-specific Safety Rules and Guidelines**
- a. Identification of chemicals that require use of a fume hood.
 - b. Requirement to use a fume hood for all carcinogens, mutagens, teratogens, allergens, and toxic, corrosive, flammable and noxious chemicals.
 - c. Specifies small amounts of flammable solids and the safety precautions for their use.
 - d. Specifies the storage method for water-reactive solids.
 - e. Procedures for handling dust-like materials, which may form explosive mixtures with air.
 - f. Disposal requirements for chemical waste, outdated chemicals, and/or chemicals that have degraded.
- 7. Exposure Evaluation Procedures**
- a. How does the school handle suspected overexposures to chemicals?
- 8. Medical Evaluation Policy**
- a. How does the school provide information to a physician if an overexposure has occurred or was suspected to have occurred?
- 9. Policy on monitoring**
- a. How does the school determine if monitoring is necessary?
- 10. Emergency Evacuation Plan**
- a. Is the policy planned, written, posted and communicated in advance?