
HAZARD COMMUNICATION PROGRAM (HazCom)

2011

Grossmont-Cuyamaca Community College District

TABLE OF CONTENTS

	<u>Page</u>
GENERAL INFORMATION	3
EMPLOYEE INFORMATION AND TRAINING	3
TOXICITY AND EXPOSURE	5
LABELS AND OTHER FORMS OF WARNINGS	6
PERSONAL PROTECTIVE EQUIPMENT	8
HANDLING AND STORAGE OF HAZARDOUS SUBSTANCES	8
NON-ROUTINE TASKS	9
OUTSIDE CONTRACTORS	9
HAZARDOUS WASTE DISPOSAL PROCEDURES	10

APPENDIX A- Hazardous Substances/Chemical Inventory Form

HAZARD COMMUNICATION PROGRAM (HazCom)

GENERAL INFORMATION

The Hazard Communication regulations were established to ensure the identification of hazards associated with substances used in the workplace and the communication of that information to employers and to all affected employees through a comprehensive Hazard Communication program. The Grossmont-Cuyamaca Community College (District) has developed a Hazard Communication Program (HazCom) to provide employees who use, or who may be exposed to, hazardous substances the necessary information to safely work with those substances.

This program includes information on Material Safety Data Sheets (MSDS), container labeling, health hazards, physical hazards, employee information and training, and warnings concerning any hazardous substance present in the workplace. The regulations require every employer to have a written HazCom plan available to its employees and to any contractor personnel working at the facility. The regulations also require that an employee training program be implemented to ensure that the information is communicated to and understood by the employees. The HazCom regulations apply to any hazardous substance known to be present in the workplace to which employees may be exposed under normal working conditions or in a reasonably foreseeable emergency. The regulations can be found in California Code of Regulations, Title 8, Chapter 4, Subchapter 7, Article 110, Section 5194 (<http://www.dir.ca.gov/title8/5194.html>).

A copy of the District's written Hazard Communication Program can be found online at www.gcccd.edu. This plan, in conjunction with the employee training program, is an important tool in providing information concerning hazardous substances used at the facility. If you have further questions concerning HazCom, please contact your supervisor or Employee & Labor Relations for additional information.

EMPLOYEE INFORMATION AND TRAINING

All employees using chemicals or hazardous substances are required to attend training on the HazCom regulations at least annually. Information provided to the employees will consist of the following at a minimum:

- A. Informing employees of the requirements in this program.
- B. Informing employees of any operations in their work area where hazardous substances are present.
- C. Employee training in the methods and observations that may be used to detect the presence or release of hazardous substances in the work area

(such as monitoring or area inspections, visual appearance or odor detected when released, etc.).

- D. Informing employees of the physical and health hazards of the substances in the work area and the measures they can take to protect themselves from these hazards. The District has implemented specific procedures to protect employees from exposure to hazardous substances such as appropriate work practices, emergency procedures and personal protective equipment to be used.
- E. Training employees on container labeling requirements, Material Safety Data Sheets (MSDS), and how employees can obtain and use the hazard information.
- F. Informing employees:
 - 1. They have the right to receive information regarding substances to which they may be exposed, according to the provisions of this section;
 - 2. The right for personal physicians or collective bargaining agents to receive information regarding substances to which the employee may be exposed according to provisions of this section;
 - 3. The right against discharge or other discrimination due to the employee's exercise of the rights afforded pursuant to the provisions of the Hazardous Substances Information and Training Act.
- G. Whenever the employer receives new or revised MSDS sheets, the information will be provided to employees (on a timely basis, not to exceed 30 days after receipt) if the new information indicates significantly increased risks to or measures necessary to protect employee health as compared to those stated on a material safety data sheet (MSDS) previously provided.
- H. Employees are required to comply with all safety rules and regulations implemented by the district for the purchase, storage, handling, use and disposal of hazardous substances or wastes. Failure to comply with these rules and regulations may result in disciplinary action in accordance with the district's practice and policy. Any disciplinary action taken shall not violate the employee's rights as defined under law.

TOXICITY AND EXPOSURE

A toxic substance is a health hazard only when it has entered the body. Toxic substances or chemicals are considered toxic if they can cause either short-term or long-term health effects. There is no substance or chemical that is completely nontoxic. Toxicity is dependent on several factors, including route of entry, degree of exposure, length of exposure, concentration of chemical and a person's susceptibility. Toxicity is also affected by human factors such as age, diet, heredity, lifestyle and exposures to other chemicals. The entry point of a toxic substance is commonly referred to as the "route of entry."

Because no substance has the same "route of entry", it is important for employees to review MSDS to become aware of the entry routes for the chemicals they may be working with. Exposure to toxic substances may occur through the following routes: (1) absorption, (2) ingestion, (3) inhalation or (4) injection.

1. Absorption: This is the most common of the four routes of entry. Absorption takes place as the chemical comes in contact with the skin and destroys some of the protective outer layer, thus allowing the toxic chemical to come in contact with the inner tissues and possibly the bloodstream.
2. Ingestion: A toxic material, when ingested, is absorbed through the stomach and intestines into the bloodstream. The bloodstream may carry the toxic substance to the liver, which may or may not be able to detoxify all of the toxic materials.
3. Inhalation: Toxic substances can create dusts, fumes, mists, vapors and smoke that can become airborne. The toxic substance is allowed to enter through the respiratory tract through the nose and mouth and move downward through the windpipe and into the lungs.
4. Injection: Exposure to toxic chemicals by injection occurs very seldom. However, injection can occur as the result of puncturing the skin with glass, metals or other materials that are contaminated by toxic substances, or when syringes contain toxic substances.

Exposures to toxic substances are the result of many factors, including:

- A. Lack of qualified personnel
- B. Insufficient training
 1. Not following safety procedures
 2. Not using proper personal protection equipment
- C. Failure or misuse of personal protection equipment
- D. Failure to decontaminate after a spill or splash

The concentration of the toxic substance is based on the dose a person receives over a specific time. The effect of a substance is a result of the dose received and the toxicity of the substance. The concentration and effect of toxic substances has prompted OSHA to issue and enforce Permissible Exposure Limits (PEL). The list of PELs for hazardous substances can be found in Code of Federal Regulations (CFR 29, Section 1910.1000)

http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=9992.

LABELS AND OTHER FORMS OF WARNINGS

Any container in the workplace that holds a hazardous substance is required to have a proper identification label. Any container into which a hazardous substance has been transferred to a secondary container from a properly labeled container must also bear the appropriate label. Employees should not use substances from unlabeled containers. A label on any container received from the manufacturer or supplier should include the following information:

- A. Identify of the hazardous substance(s)
- B. Manufacturer's or supplier's name and address
- C. A list of the hazardous ingredients
- D. The appropriate hazard warnings

Labels and other forms of warning must be legible, in English, and prominently displayed on the container. If there are employees in that work area who speak languages other than English, it will be up to the supervisors to decide if additional information will be provided in the employees' native language. If a substance is transferred from its original container to another container, a label must be affixed to that new container. This label must contain the following information:

- A. Identify of the hazardous substance(s)
- B. Appropriate hazard warnings

The Supervisor, Department Chair or Dean is responsible for ensuring that when containers are received from the manufacturer or supplier that they are properly labeled. Department supervisors are responsible for ensuring that the containers in their work area remain properly labeled and that the employees understand the labels.

Containers of flammables, toxic materials, corrosives and oxidizers must always be labeled with a hazard warning, which may be in the form of a written statement or a symbol. There are some hazardous substances that are exempt from container labeling requirements. Products packaged under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) are exempt along with others, including most consumer products (which are products packaged or intended for use by the general public). However, the district will attempt to obtain an MSDS

for any consumer product for which employee exposure will significantly exceed exposure under normal consumer use.

The National Fire Protection Association (NFPA) developed a standard system for identifying the hazards associated with the hazardous substances we use today. The NFPA 704 diamond placard label system is used by most fire departments to quickly identify the hazards within a building so that proper response action is undertaken. The system was designed to communicate health (toxicity), fire (flammability) and reactivity (stability) information in an easy-to-see diamond shape that is affixed to the outside of the building and, if necessary, to containers and transportation vehicles. These placards should be placed if required by the local fire authority. http://safety.nmsu.edu/programs/chem_safety/hazcom_NFPA_labels.htm

Inventory of Hazardous Substances in Use or Stored

An inventory list of the hazardous substances known to be used at each District site shall be developed and kept current on an annual basis. A copy of the most current inventory list for this site can be found in the areas where the hazardous substance is in use and with the Employee & Labor Relations office.

Purchasing Requirements for Hazardous Substances

An effectively managed hazardous materials program begins with the appropriate purchasing controls. Because disposal of hazardous substances is becoming increasingly costly, substances used by all departments should only be purchased in quantities necessary to do a job. Quantities ordered should not exceed what is expected to be used in any one school year. Current MSDS's will be requested from the vendor with each order. District purchasing office reviews all orders.

If a substance outside the ordinary use is requested, Employee & Labor Relations and the Department Chair or CHO shall review such request to determine it's safe. If it is determined that all safety rules for its use can be met, the substance may be purchased. An MSDS should be requested with all orders from the vendor. If subsequent findings determine the substance is not being used according to the rules set, the privilege to use it will be immediately revoked. The quantity purchased for this type request will be no more than what can be used during one school year.

Material Safety Data Sheets

In accordance with the regulations the District will provide employees with specific information on the hazardous substances in their work areas. This information is contained in the Material Safety Data Sheets (MSDS) which are provided by the manufacturer of a product containing a hazardous substance. All MSDS will be kept in a location readily accessible to the employee's work area and Supervisors will ensure that employees are aware of the location of the MSDS and the information they contain. Employees are required to review all MSDS prior to using

hazardous substances, and if needed, request information from their Department chairperson, Supervisor or Dean for safe use, storage and handling guidelines. If an employee is unable to locate the appropriate MSDS, he/she is to immediately notify the supervisor so that one may be obtained as soon as possible.

The District will make all reasonable attempts to ensure that MSDS are available for the hazardous substances purchased, stored, used or handled by its personnel. To accomplish this, the following guidelines will be implemented:

- a) The Supervisor, Department Chair or Dean is responsible for ensuring that each department has the appropriate MSDS for the substances handled in that area.
- b) If District employees determine that an MSDS is missing, he/she will inform the Supervisor, Department Chair or Dean. When an MSDS is received by the warehouse with a shipment, they will distribute one copy to the area receiving the chemical/hazardous substance and another copy to the department where it is shipped for use.

PERSONAL PROTECTIVE EQUIPMENT

Employees using hazardous substances should review the respective MSDS for information on required personal protective equipment (PPE) and precautions that should be taken to ensure against exposure. Employees should also be aware of a substances routes of entry so that they understand how overexposure can occur. This knowledge should encourage employees to:

- Maintain good personal hygiene
- Use proper hand, eye and face protection
- Use proper respiratory protection
- Make sure proper ventilation procedures are followed (proper ventilation helps reduce overexposure to hazardous substances).

Employees should not work with or use hazardous substances for prolonged or repeated periods unless the proper precautions have been taken to keep exposures to safe levels. Therefore, it is important that supervisors instruct all employees in their area to follow the manufacturer's guidelines regarding a chemical's use and its required ventilation. If employees are not using a chemical in a properly ventilated area, they should protect themselves by wearing the appropriate respiratory equipment.

HANDLING AND STORAGE OF HAZARDOUS SUBSTANCES

Each hazardous substance should be handled, used and stored in accordance with the information provided by the manufacturer through its container labels, MSDS and other standards of practice. Hazardous substances should be handled only with proper protective equipment and only under the proper conditions. If a chemical is specified to be used only in a

specific manner, then it must only be used in that manner. Following safety procedures will ensure that accidents are kept to a minimum.

The proper storage of hazardous substances is as important as their proper handling. Inadequate storage space can result in overcrowding and the storage of incompatible chemicals. Shelf-stored hazardous substances should be visually checked on a regular basis. This visual inspection will help identify those substances that may be:

- Leaking
- Have corroded caps
- Have crystalized
- Have developed other problems which indicate that they should be immediately disposed of according to Federal and State regulations.

All containers must be properly labeled at all times. Storage shelves and cabinets should have sufficient lips, edges or restraints to prevent bottles or other containers of hazardous substances from falling.

NON-ROUTINE TASKS

Department supervisors shall determine if their employees might be involved in non-routine tasks. These tasks will be identified when assigned and additional training regarding health and safety shall be conducted prior to the beginning of the task.

OUTSIDE CONTRACTORS

To ensure that outside contractors and their personnel work safely within the District, Facilities and Purchasing departments will notify contractors whether they may be exposed to any hazardous substances and where the MSDS binders are kept for the areas in which they are working. In addition, outside contractors must provide a list and MSDS for any hazardous substances they will be using at any facility to complete their work obligations. The outside contractor is responsible for having trained his or her employees in understanding MSDS, proper label identification and the appropriate safety precautions necessary to prevent any harmful exposures. The contractor shall also be notified that he or she (as part of their contract) must remove and properly dispose of any hazardous waste and/or substance they generate.

Hazardous Waste Disposal Procedures

To prevent injury, minimize environmental health hazards, and meet regulatory requirements, campus hazardous waste generators must comply with strict chemical waste disposal procedures. Please read this carefully and become familiar with the information so that campus waste can be disposed of in a safe, efficient, and legal manner.

- Do not dispose of chemicals via sink or trash cans
- Do not use fume hoods to intentionally evaporate chemicals
- Do not store waste outside work area
- Do not abandon hazardous materials and waste

Minimize Initial Generation by:

- Reviewing each experimental protocol to assure that hazardous and radioactive reagents are used efficiently and that excess purchases are minimized
- Conducting processes to minimize hazardous materials used and generated
- Using substances which can be neutralized or stabilized, either physically or chemically
- Whenever possible, use radioactive materials which can be practically stored for decay
- Substituting less hazardous materials
- Always plan ahead (budget, supplies, storage, etc.) with regard to hazardous waste disposal

Comply with Requirements for Waste Storage:

- Store chemicals in appropriate containers designed for chemicals.
- Containers must be completely sealed to prevent spillage (no open-top glassware!).
- Liquid waste must be in screw top containers only, and must not be filled over 80%.
- Outside surfaces of containers must be clean and free of any contamination.

- Gas cylinders and lecture bottles must have regulators removed.
- Red Biohazard bags are for *Biohazardous waste only*.
- Sharps must be stored in puncture-proof containers.
- Store chemical waste in a designated location (low traffic, safe, secure, contained, etc.)
 - ✓ Label this storage area as "Hazardous Waste Storage Area"

Properly Segregate Hazardous Waste Chemicals:

- Segregate solids, liquids, and gases.
- Segregate chemicals into the following categories:
 - Halogenated organics - Strong oxidizers
 - Non-halogenated organics - Peroxide-forming chemicals
 - Acids of pH <2 (do not mix) –Do not combine with organics
 - Alkaline solutions of pH >12.5 (do not mix) – Do not combine with organics
 - Alkali metals and other water reactives - Unstable chemicals
 - Heavy metal solutions and salts - Other toxic materials
 - Radioactive waste
 - Bio-hazardous material

Accumulation Time

- Chemical wastes shall not be accumulated for longer than five month or 150 days.
- Each container shall be labeled with an accumulation start date and chemical constituents when waste is first added to the container.

