

Clarksville-Montgomery School System  
**HAZARD COMMUNICATION PROGRAM**  
OSHA Standard - [29 CFR 1910.1200](#)

**1.0 SUMMARY**

The Tennessee Hazardous Chemical Right-To-Know Law was passed May 23, 1985. The primary objective of this law is to train employees about the hazardous chemicals that they work with or may be exposed to in a foreseeable emergency. In order to comply with this law, CMCSS established its own Hazardous Communication Program.

Chemicals and chemical processes are used to manufacture materials, packaging, fuels and even medicines. Many of the chemicals you work with every day can be hazardous, causing injuries, illness or even death. Currently Maintenance, Custodial, and Food Service employees are being trained on Hazardous Communications each year. It is very important that employees understand Safety Data Sheets (SDS). These are available online at [Safety Data Sheets](#) and contain information on chemicals that individuals may come in contact with. The information contained on an SDS includes emergency procedures, such as what to do if someone ingests a specific chemical or gets it in their eyes. These SDS sheets are available online at [Safety Data Sheets](#).

You can protect yourself from chemical hazards by knowing proper chemical safety procedures such as:

- Identification
- Storage and Handling
- Personal Protection
- Emergency Response

**2.0 PURPOSE**

The purpose of the Clarksville-Montgomery County School System (CMCSS) Hazard Communication Program is:

- To provide the information needed to manage potentially hazardous materials in an environmentally sound, healthful and safe manner.
- To comply with pertinent CMCSS standards of practice for the management of hazardous materials (e.g. OSHA Hazard Communication Standard, etc.).

**2.0 SCOPE**

This document is the CMCSS written Hazard Communication Program. The written program is edited to meet local organizational, regulatory and language requirements.

Where required by, a Chemical Hygiene Program is established and maintained to manage the use of chemicals in laboratories. For example in the U.S., OSHA requires a formal Chemical Hygiene Program in materials testing and research laboratories. A Chemical Hygiene Program is not required for production oriented quality control laboratories. However, quality control laboratories are included in the scope of the CMCSS Hazard Communication Program and the New Material Review Process.

**3.0 DEFINITIONS**

- Article: A manufactured item other than a fluid or particle: 1) which is formed to a specific shape or design during manufacture, 2) which has end use functions dependent in whole or in part upon its shape or design during end use, and 3) which under normal conditions of use does not pose a significant risk to the environment, or employee health and safety. Examples: Mechanical tools, metal drums, glass windows.
- Biological agent: A microorganism present in the workplace potentially associated with adverse health effects. Example: Legionella bacteria

- By-product: A material generated by an industrial process where the material can be recycled or beneficially utilized in another industrial process (e.g. "Revert" metal). Process by-products shipped for disposal are waste materials.
- Chemical agent: An organic or inorganic substance present in the workplace potentially associated with adverse health effects. Examples: Potassium hydroxide, welding fume, carbon monoxide.
- Chemical Hygiene Program: A laboratory health and safety program required by the US School System agency, OSHA. The elements of a Chemical Hygiene Program are: 1) A written program, 2) a designated Chemical Hygiene Officer, 3) laboratory local exhaust ventilation to control airborne exposures to volatile chemicals (with performance testing), 4) employee training on prudent laboratory practices, including first aid, and no food, beverages, tobacco or cosmetics in the workplace, and 5) access to SDSs for reagents and other chemicals.
- Commercial product: A material manufactured for sale to customers (e.g. alloys, castings, ceramics, etc.).
- Consumer products: Household janitorial, office and maintenance supplies sold in retail markets.
- Container: Any bag, barrel, bottle, box, can, cylinder, drum, vessel, chamber, storage tank or the like which contains a material. For the purposes of this program, pipes, hoses and vehicular operating systems (e.g. fuel tanks, engines, etc) are not considered to be containers.
- Environmental agent: A chemical, physical or biological agent.
- Environmental agent specific education and training: Instruction directed at helping employees acquire the appropriate knowledge, skill and motivation to follow safe job procedures, appropriately wear personal protective equipment, and appropriately respond to an accidental release of a hazardous material.
- Exposure assessment: The evaluation of the health risks associated with workplace exposures to chemical, physical or biological agents. The health risks for a Similar Exposure Group are judged to be either, insignificant, significant, unacceptable or uncertain.
- Hazard: An exposure associated with an unacceptable risk for illness or disease.
- Hazardous chemical: Any chemical which is a physical hazard or a health hazard.
- Health hazard: A chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term "health hazard" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes.
- Material: A chemical or mixture of chemicals, including raw materials, process additives, products, by-products, waste materials, maintenance related materials, and laboratory chemicals.
- Safety data sheet (SDS): A document addressing the Risk Management aspects of a material. The document addresses the material's chemical constituents (and associated exposure limits), physical properties (e.g. vapor pressure), physical hazards (e.g. flammability, corrosivity, reactivity), health hazards, routes of exposure, precautions for safe handling and use, emergency and first-aid procedures, and control measures. SDS's for products or materials used by CMCSS employees can be found on the CMCSS website.

- New Material Risk Management: A Risk Management evaluation of the planned use of a material to determine whether or not the material should be introduced into the department, and if so, to identify and provide for appropriate practices to ensure the material will be used in accordance with Risk Management standards
- Occupational Exposure Limit (OEL): A criterion for differentiating acceptable from unacceptable exposures. For example, the OELs for carbon monoxide are 25 ppm as an eight hour time-weighted average, and 200 ppm as a Short Term Exposure Limit.
- Physical agent: Mechanical or electromechanical energy present in the work environment associated with potentially adverse health effects. Physical agents include noise, heat, vibration, ionizing and non-ionizing radiation.
- Process intermediate: A material generated by one element of an industrial process and consumed by a subsequent element of the process (e.g. core transfer material).
- Product: A commercial product process by-product, or waste material.
- Project Manager: A member of the CMCSS staff who manages the planning, design or installation of a new or modernized process, facility, equipment or operation.
- Similar Exposure Group: A group of workers having the same general exposure profile for the environmental agent being assessed because of the similarity and frequency of the tasks they perform, the materials and processes with which they work, and the similarity of the way they perform the tasks. A Similar Exposure Group is commonly identified by the process, job, task and environmental agent.
- Waste material: A process by-product that is shipped for disposal.

#### **4.0 RESPONSIBILITIES**

- Safety and Health Director: (or his / her designee) is responsible for administering the Hazard Communication Program, including the management of the Materials Inventory, Safety Data Sheets, Product labels, New Material Risk Management Reviews, and training.
- Employees: Employees are responsible for knowing what hazardous materials are in use in their work areas and the associated hazards, how to recognize and respond to leaks or spills, and where to obtain SDSs for additional information.
- Receiving Employee: The department receiving employee is responsible for controlling the purchase of new materials and including standard Risk Management terms and conditions with purchase orders and contracts. This employee is also responsible for monitoring incoming shipments to verify that 1) the materials are on the Materials Inventory, and, 2) the quality of the container labels is satisfactory. Discrepancies are reported to the Safety and Health Director.
- Supervisors: Supervisors are accountable to ensure employees handle hazardous materials in accordance with safe job procedures. The supervisor is responsible for compiling a Materials Inventory, as directed by the Safety and Health Department.

#### **5.0 MATERIALS INVENTORY**

A Materials Inventory, performed by the department supervisor, or his/her designee, is compiled by conducting a physical inspection to identify all materials on-site. The Materials Inventory is updated as deemed necessary by the Safety and Health Department, by conducting a physical inspection to identify changes in the inventory (i.e. new materials, materials no longer in use). The Materials Inventory includes all materials utilized or stored on-site. Table 1 provides example categories of materials.

- The materials inventory includes commercial products, process intermediates, process by-products (e.g. carbon monoxide associated with vehicle emissions, ozone associated with welding emissions) and waste materials.
- Articles are not included in the Materials Inventory.
- Consumer products are not included in the Materials Inventory unless the duration and frequency of use results in exposures significantly greater than the exposures that could reasonably be experienced by consumers. For example, the quantities associated with using a paint solvent in an environment may greatly exceed the quantities of use in a household environment.

The following data describing the identity and use of each material are captured in the standard Departmental Materials Inventory List providing equivalent features:

- Product name
- Manufacturer
- Location where Material is Stored

## **6.0 SAFETY DATA SHEETS & LABELS**

- Safety Data Sheets and labels are maintained for commercial products (e.g. alloys, ceramics, waxes, etc.), process intermediates (e.g. core transfer material), process by-products (e.g. revert) and waste materials (e.g. spent shell, spent wax, dust collector materials, etc).
- The Safety Data Sheets and labels are authored by the product manufacturer and is acquired by the department supervisor. If the same material is purchased from more than one manufacturer, a SDS is acquired from each manufacturer.
- SDSs for commercial products, by-products and waste materials are provided to the recipients prior to or with the initial shipment, and prior to or with the first shipment following a revision to the SDS.
- The containers for commercial products, by-products and waste materials are labeled in accordance with CMCSS and School System standards of practice.
- The department supervisor copies and submits each SDS to CMCSS Safety and Health Department for entry into the Material Inventory List, thereby providing the capability to search the list for chemical constituents.
- Employees are provided convenient access to Safety Data Sheets via electronic access at <http://www.cmcss.net/departments/humanresources/sdsindex>.
- Suppliers affix labels to material containers identifying the name of the material, hazard warnings and name / address of the manufacturer. The labels on incoming containers of purchased materials are not removed or defaced. Incoming shipments of materials are not to be relabeled.
- The department supervisor submits the current SDS for incoming materials to the Safety and Health Department to be added to the Materials Inventory. If an incoming material is not on Materials Inventory, it is held in the department pending notification and review by the Safety and Health Director.
- The department supervisor checks incoming materials to be sure they are properly labeled. If a container is not properly labeled, it is held in the department pending notification and review by the Safety and Health Director.
- Newly acquired SDSs are checked against the department SDS file. If a newly acquired SDS represents a newer version than the SDS in the department SDS file, the SDS will be forwarded to

the Safety and Health Department. The Safety and Health Department reviews the new SDS and addresses the Risk Management implications of the revisions (e.g. change in handling, storage, exposure assessment, etc.).

## **9.0 LABELS & SIGNS**

- Labels are generated and affixed to all secondary (filled on-site) stationary containers (e.g. tanks, vessels), and secondary portable containers (e.g. drums, bottles) to identify the content, hazards and reference to the SDS.
- Signs, placards, process sheets, batch tickets and operating procedures may be used in lieu of container labels. The alternatives must effectively communicate the hazards.
- Labels are not required on solid or flexible piping systems, and vehicular operating systems (e.g. fuel tanks, engines, etc).
- Labels are inspected at least annually by the department supervisor.
- Precautionary signs or placards are used to designate the perimeter of areas requiring personal protective equipment (e.g. hearing protection).

## **11.0 HAZARD COMMUNICATION TRAINING**

The department supervisor organizes hazard communication training for all employees.

Basic training is provided in conjunction with new employee safety training and annual refresher training is provided to applicable departments.

Hazard communication training addresses:

- A summary of the Hazard Communication Program, the New Material Risk Management Review Process, and how to access copies of the written programs.
- Identification of, and access to, relevant CMCSS regulations.
- General physical hazards associated with hazardous materials: Flammability, corrosivity, and reactivity.
- General health hazards, routes of exposure, and a general explanation of occupational exposure limits.
- How to access the location's Materials Inventory identifying the materials used in each department.
- How to read, utilize and access Safety Data Sheets
- An explanation of labeling systems: Supplier and in-house labels, including instruction on the importance of labeling secondary containers.
- The identity and location of the most significant hazardous materials in the workplace.
- The hazards of non-routine jobs.
- Methods and observations used to detect the presence or release of hazardous materials in the workplace (e.g. visual appearance, odor, etc.)

- General facility hazardous material emergency procedures, including how to safely respond to a leak or spill, personal protective equipment and first aid.
- The hazards of materials contained in unlabeled pipes and hoses (e.g. hydraulic lines, etc).
- Health risk information associated with air emissions, off-site water or waste-water discharges, ground contamination and / or waste materials are communicated to the community as required by CMCSS regulations or where such emissions may pose a risk to the members of the community or the environment.

### 13.0 **RECORD KEEPING**

The department Supervisor maintains the following documentation:

- Written Hazard Communication Program
- Materials Inventory List
- Safety Data Sheets – Active department file for employee access
- Inquiries made to manufacturers seeking SDSs: Clarifications / improvements/ updates, etc.
- Hazard communication training: Content and attendance
- Supervisors maintain safe work instructions for handling hazardous materials.

**TABLE 1**  
**EXAMPLE CATEGORIES OF MATERIALS THAT SHOULD BE INCLUDED IN A MATERIALS INVENTORY**

- |                                 |   |
|---------------------------------|---|
| • Wax                           | • Fuel  |
| • Die coating                   | • Resin (e.g. epoxy, etc)   |
| • Core compound material        | • Surface coating (e.g. paint)                                    |
| • Shell ingredient              | • Solvent   |
| • Mold wrap                     | • Process lubricant (e.g. machining coolants)                     |
| • Alloy                         | • Mechanical lubricant (e.g. greases)                             |
| • Hot top additive              | • Heat treat materials  |
| • Core / shell removal chemical | • Adhesive  |
| • Etching chemical              | • Compressed gas  |
| • Abrasive – wheel / belt       | • Cleaning agent  |
| • Abrasive – granular blast     | • Welding material: rod, wire, flux, etc.                         |
| • Fluorescent penetrant         | • Insecticide or herbicide  |
| • X-ray developing chemical     | • Laboratory reagent  |
| • Refractory                    | • Water treatment chemicals                                       |
| • Insulation                    | • Wood products chemically treated or subject to sawing, cutting. |

Associated Documents: [Safety Data Sheets](#)

# Clarksville-Montgomery County School System

## EYEWASH AND EMERGENCY SHOWERS PROGRAM

### 1.0 **PURPOSE**

This Standard Practice provides minimum requirements for performance, use, installation, and testing of equipment that is used for emergency drenching and/or flushing of the eyes and body.

### 2.0 **POLICY**

It is Clarksville-Montgomery County School System (CMCSS) policy that suitable drenching and/or flushing equipment be provided in areas where there is reasonable potential for exposure to injurious corrosive materials.

### 3.0 **SCOPE**

This Standard Practice applies to all CMCSS Personnel. Contractors are responsible for supplying their own suitable drenching and flushing equipment.

### 4.0 **DEFINITIONS**

- **Combination Unit**: An interconnected assembly of drenching and flushing equipment that is supplied by a single flushing fluid source.
- **Corrosive Chemical**: A corrosive chemical for the purposes of this Standard Practice is a chemical that causes visible destruction of or irreversible alterations in living tissue by chemical action at the site of contact.
- **Emergency Shower**: An assembly that utilizes a valve that remains open during use to enable the user to have water cascading over the entire body while the hands are free.
- **Eye/Face Wash**: A device used to irrigate and flush both the face and the eyes.
- **Flushing Fluid**: Potable (drinkable) water or other medically acceptable solution.
- **Hand-Held Drench Hose**: A flexible hose connected to a water supply that is used to irrigate eyes, face, and body areas.
- **Personal Eyewash**: supplementary eyewash that supports plumbed or self-contained eyewash equipment by delivering immediate flushing for less than 15 minutes.
- **Plumbed Eyewash**: An eyewash unit permanently connected to a source of potable water.
- **Self-Contained Eyewash**: An eyewash device that contains its own flushing fluid that must be refilled or replaced after each use.

### 5.0 **RESPONSIBILITIES**

The Safety and Health Department is responsible for:

- Assisting departments on the need and placement of equipment.
- Conducting periodic audits to ensure that drenching and flushing equipment inspections are occurring at least at the frequency called for in this Standard Practice.
- Providing checklists (upon departmental request) that can be used to record flushing/testing activities for emergency drenching and flushing equipment.
- Coordination of training regarding the use and testing of emergency drenching and flushing equipment.

Managers/Supervisors are responsible for:

- Making sure all personnel who may need to use emergency drenching and flushing equipment are trained on its location and use.
- Making sure that the necessary emergency drenching and flushing equipment called for in this Standard Practice is provided or, if such equipment is not available, that any work requiring the availability of the equipment is not performed until the equipment is available.
- Requesting immediate repair for malfunctioning emergency drenching and flushing equipment.
- Making sure flushing/inspection of equipment occurs as outlined in this Standard Practice.

Affected individuals are responsible for:

- Following the requirements of this Standard Practice.
- Utilizing appropriate personal protective equipment such as goggles, face shields, and chemical resistant garments as a means of defense against splash from injurious corrosive materials.
- Becoming familiar with the location and operation of the nearest emergency drenching and flushing equipment.
- Using emergency drenching and flushing equipment as appropriate.
- Reporting incidents that require the use of emergency drenching and flushing equipment to their supervisor as soon as the emergency has been brought under control.

### **Use of Emergency Drenching and Flushing Equipment:**

Immediate and proper use of emergency drenching and flushing is essential to minimizing injury upon injurious corrosive chemical contact. The following guidelines should aid in minimizing injury due to contact with corrosive materials:

- Flush eyes and/or skin for at least 15 minutes. Never use home-made neutralizing solutions to flush chemicals from the body.
  - Immediately remove contaminated clothing. Do this while under the shower when gross contamination has occurred. Have someone assist with clothing removal when possible.
  - Hold eyelids open with fingers so flushing fluid can fully irrigate the eyes.
  - Note: People may not always be able to flush their eyes on their own because of intense pain. Nearby helpers should be prepared to assist with holding the eyelids open. Other helpers may need to assist with keeping the person under the flushing fluid for at least 15 minutes.
  - Seek medical attention after flushing the areas of contact for at least 15 minutes.
  - Notify supervisor as soon as the emergency has subsided.
- An assistant may use a fire blanket or uncontaminated article of clothing as a shield to provide privacy for someone who needs to remove their clothes while under an emergency shower, and for body coverage while seeking medical attention.

## **6.0 FLUSHING/INSPECTIONS**

Each department is responsible for making sure that flushing, inspection, and repair of the emergency drenching and flushing equipment within its area(s) occurs. This responsibility includes changing flushing fluid in portable units at the frequencies recommended by the manufacturer.

Flushing requirements:

- Plumbed eyewash and eye/face wash stations must be activated and flushed for at least three minutes.
- Inspect eyewash and eye/face wash stations while flushing to make sure that water rises to approximately equal heights, and that fluid flow is sufficient to flush both eyes simultaneously while at a velocity low enough to be non-injurious to the user.



- Each personal eyewash station/unit must be reviewed to make sure components are in place, the station/unit is readily accessible, and that flushing solution has not passed its expiration date. Also verify that bottles with seals/tamper indicators are sealed, replacing those that are not.

Other flushing requirements:

- Plumbed emergency showers and drench hose stations must be activated and flushed.
- Each eyewash, shower, or drench hose unit not passing inspection or requiring repair, must be signed to warn people that the emergency flushing station is not functioning properly. Repair of defective units must be expedited.
- Records of each flush/inspection must be kept. These records may be recorded on tags that are attached to drenching and flushing equipment, by means of a checklist, or by both.

## **7.0 REPAIRS**

Whenever an eyewash station is non-functional, a portable eyewash station or equivalent must be available if work with injurious corrosive materials cannot be delayed.

Each department is responsible for ensuring that drenching and flushing equipment not passing inspection is repaired in a priority manner. When emergency drenching and flushing equipment is non-functional, it must be clearly tagged/signed as being out-of-service.

Associated Documents: none