

# CHEMICAL HAZARD COMMUNICATION PROGRAM

\_\_\_\_\_  
[name of unit]

\_\_\_\_\_  
[completed by]

\_\_\_\_\_  
[date]

## **General Policy**

In accordance with Washington Administrative Code [WAC 296-800-170](#), Hazard Communication Standard, this program has been developed and implemented by:

\_\_\_\_\_  
[unit name]

The general purpose of this program is to ensure that you are informed and trained on the Hazard Communication Standard, the location and hazardous properties of the chemicals used in the workplace, and the protective measures required.

The program applies to all locations where you might be exposed to hazardous chemicals during normal working conditions or an emergency situation. The unit administrator and/or designee \_\_\_\_\_ has overall responsibility for

\_\_\_\_\_  
[position or person]

the program. A copy of this program and the safety data sheets (SDS) will be available in \_\_\_\_\_ for employee review. SDS will be readily available

\_\_\_\_\_  
[location]

when employees are at work.

## **Chemical Inventory List**

The \_\_\_\_\_ will maintain a list of the hazardous chemicals used  
[position or person]

by the unit, and update the list as necessary. The list will be updated immediately upon receipt of any chemical. The identity of each chemical on the list must match the name on the container label and the name on the SDS. The chemical inventory list is located at the end of this program.

## **Container Labeling**

The \_\_\_\_\_ is to ensure that all primary and secondary  
[position or person]

containers of hazardous chemicals in their area are properly labeled.

Labels on containers from the manufacturer are to list the following:

- Product identifier (product or chemical name);
- Signal word (Danger or Warning)
- Hazard statement(s)
- Pictogram
- Precautionary statement(s); and
- Name and address of the chemical manufacturer, importer, or other responsible party.

All secondary containers are to be labeled. Information on secondary labels must include the chemical identity and the hazard information from the manufacturer's label.

For labeling assistance see \_\_\_\_\_.  
[position or person]

### **Safety Data Sheets (SDS)**

A safety data sheet is a written document describing the identification of the common name(s) of the product, chemical substances, physical and health hazards, entry route(s), permissible exposure limit, and any general precautions or controls for safe handling. The document also includes emergency first aid procedures; the date the SDS was prepared; and the name, address, and telephone number of the chemical manufacturer or importer.

The \_\_\_\_\_ is responsible for obtaining safety data  
[position or person]

sheets for the unit. SDSs are required when new chemicals are procured. SDSs may be obtained from Environmental Health and Safety. The supervisor or designee reviews incoming SDSs for safety and health information and conveys any new information and training to affected employees.

SDSs are located \_\_\_\_\_ and are available for  
[location]

all employees to review during each work shift. If SDSs are not available, immediately contact your supervisor.

Safety data sheets are defined as an employee exposure record and therefore must be retained for 30 years. SDSs for chemicals no longer used by the unit will be retained and maintained. Refer to the section entitled "Employee Exposure Records" for additional information.

### **Employee Information And Training**

\_\_\_\_\_ is responsible for conducting employee  
[position or person]

training. Prior to starting work, employees using, or potentially exposed to, hazardous chemicals receive initial training on the Hazard Communication Standard and the safe use of those chemicals. Additional training will be conducted when a new chemical hazard is introduced into the workplace. Training will be conducted before any chemical is used. Employee training should be documented on the form in [appendix C](#).

The training and information provided consists of the following:

- A summary of the standard and the purpose, location and availability of the written program, the list of hazardous chemicals, and associated safety data sheets. A summary of the standard is at the back of this program.
- Informing employees of any operations in their work area where hazardous chemicals are present.
- How to read chemical labels and review SDSs to obtain appropriate hazard information. The glossary at the end of this program lists some common SDS terms.
- The physical and health hazards of the chemicals in the work area, including the likely symptoms or effects of overexposure. The glossary at the end of this program lists some common physical and health hazard terms.
- The methods and observation techniques used to determine the presence of a hazardous chemical release. Detection methods may include monitoring devices, visual appearances or odor.
- The physical, health, simple asphyxiation, combustible dust, pyrophoric and other hazards of chemicals in the work area.
- The measures employees can take to protect themselves, including procedures the unit has implemented to minimize employee exposure to hazardous chemicals. These measures may include engineering controls, the use of personal protective equipment, and specific work practices employees must follow to minimize chemical exposure.
- The emergency procedures to initiate in the event an employee is exposed to a hazardous chemical.

If an employee has been exposed to a hazardous chemical refer to the "Chemical Exposure Incident Procedure" section of this program for instruction.

### **Chemical Spills**

The unit will manage chemical spills in such a manner as to prevent injury or illness to cleanup workers. Chemical spills are to be reported by calling 911 or 6140 if the spill is of unmanageable size or toxicity. Only employees who are specifically trained in spill management techniques and who are trained to wear appropriate PPE may manage spills. Only spills incidental to normal work practices may be cleaned up by employees.

### **Personal Protective Equipment (PPE)**

Supervisors or designees are to perform hazard assessments of each work task to determine if hazards, including *chemical hazards*, are present, or are likely to be present, that require the use of PPE. Refer to the PPE section of the [Accident Prevention](#)

Program. Supervisors evaluate chemical hazards and select suitable PPE using information from the SDSs, container labeling, Environmental Health and Safety (867-6111) and other resources as necessary. The Personal Protective Equipment Hazard Assessment and Certification Guidelines in appendix F can be used to perform and document hazard assessments. Employees will be trained to use, and will use properly fitted PPE. Employee PPE training can be documented using the form provided in the guidelines.

### **On-Site Contractors/Other TESC Units**

Contractors and other TESC units may work within and around this unit's facilities. The \_\_\_\_\_ will inform contractor(s) and other TESC units of any [position or person] hazardous chemicals present in the workplace, the availability of the unit's SDSs and any required protective measures.

Contractors and other TESC units in the course of their work may expose this unit's employees to hazardous chemicals. \_\_\_\_\_ will request SDSs for [position or person] chemicals used by contractors or other TESC units by contacting Environmental Health and Safety (867-6111).

### **Hazardous Non-Routine Tasks**

Periodically, employees may be required to perform non-routine tasks involving hazardous chemicals. Prior to starting work on any non-routine task, affected employees will be given information and training by their supervisor or designee. This information and training includes:

- The specific hazards related to the non-routine tasks
- Protective measures required
- Steps the unit is taking to reduce chemical hazards
- Emergency procedures

### **Hazardous Substances In Unlabeled Pipes**

Employees required to work on or near unlabeled pipes will be informed of the substances in the pipes, any potential hazards and protective measures.

### **Chemical Exposure Incident Procedure**

In the event an employee may have been overexposed (inhalation, ingestion or physical contact) to a hazardous chemical, after the necessary medical care has been provided, the supervisor must complete an [accident report form](#). The following information should be included on the form: the specific chemical(s), the duration of the exposure, the type of exposure (inhalation, ingestion, skin contact), and personal protective equipment used.

Refer to the Accident Reporting and Accident Investigation sections of the [Accident Prevention Program](#). Environmental Health and Safety retains this form for 30 years as an employee exposure record.

### **Employee Exposure Records**

Washington Administrative Code (WAC) 296-800-180 defines SDSs as an employee exposure record, which must be preserved for 30 years. The SDSs for chemicals no longer used by the unit will be retained and maintained.

In accordance with WAC 296-800-180 each unit supervisor or designee will provide to their employees, at the time of initial employment and annually thereafter, the following information:

- The existence, location and availability of the inactive SDSs.
- The supervisor or designee is responsible for maintaining and providing access to the SDSs.
- The employee has the right to access the SDSs.

## Chemical Inventory List

[illegible]

## **Chemical Hazard Communication Standard Summary**

The Hazard Communication Standard is based on a simple concept - that employees have both the need and right to know the identities and hazards of the chemicals they are potentially exposed to when working. They also need to know what protective measures are required. This knowledge should reduce work-related injuries and illnesses caused by chemical exposure.

The Hazard Communication Standard establishes uniform requirements to assure that the hazards of all chemicals imported, produced or used in U.S. workplaces are evaluated. The hazard information and associated protective measures are to be transmitted to affected employers and potentially exposed employees.

Chemical manufacturers and importers must convey the hazard information they learn from the evaluations to employers by labels on containers, safety data sheets (SDSs). All covered employers must have a hazard communication program to convey this information to their employees through container labeling, SDSs and training.

## **Glossary**

**Carcinogen:** A substance or agent capable of causing or producing cancer.

**Combustible Liquid:** A liquid having a flashpoint at or above 100<sup>0</sup> F and below 200<sup>0</sup> F.

**Corrosive:** A chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the site of contact.

**Flammable Liquid:** A liquid having a flashpoint below 100<sup>0</sup> F.

**Flashpoint:** The minimum temperature at which a material ignites when exposed to a source such as flame or spark.

**Hazardous Chemical:** Any chemical whose presence or use is a physical or a health hazard.

**Health Hazard:** A chemical for which there is 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.

**Irritant:** A chemical, which is not corrosive, that causes a reversible inflammatory effect on living tissue by a chemical action at the site of contact.

**LEL, or LFL:** Lower Explosive Limit, or Lower Flammable Limit, of a vapor or gas; the lowest concentration that will produce a flash of fire when an ignition source is present.

**Mutagen:** A substance or agent capable of altering the genetic material in a living cell.

**Oxidizer:** A chemical that initiates or promotes combustion in other materials, causing fire either by itself or through the release of oxygen or other gases.

**PEL:** Permissible Exposure Limit.

**Physical Hazard:** A chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas explosive, flammable, an oxidizer, pyrophoric or water-reactive.

**ppm:** Parts per million is the concentration of a gas or vapor in air - parts (by volume) of the gas or vapor in a million parts of air.

**Pyrophoric:** A chemical that will ignite spontaneously in air at a temperature of 130<sup>0</sup> F or below.

**Sensitizer:** A chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical.



Specific Gravity: A chemical that is weighed against the weight of an equal volume of water. If a material cannot be dissolved and floats on water it has a specific gravity less than one. If the number is greater than one it will sink.

STEL: Short Term Exposure Limit

Teratogen: A substance or agent which can cause malformations in the fetus.

TLV: Threshold Limit Value










TWA: Time Weighted Average

UEL, or UFL: Upper Explosive Limit, or Upper Flammable Limit of a vapor or gas; the highest concentration that will produce a flash fire when an ignition source is present.

Vapor Density: The weight of a vapor or gas compared to the weight of an equal volume of air. Materials lighter than air have vapor densities less than 1.0. Materials heavier than air have vapor densities greater than 1.0.

Water-Reactive: A chemical that will react to water to release a gas that is either flammable or presents a health hazard.

### Hazard Communication Standard Pictograms and Hazards

<b>Health Hazard</b> 	<b>Flame</b> 	<b>Exclamation Mark</b> 
<ul style="list-style-type: none"> <li>• Carcinogen</li> <li>• Mutagenicity</li> <li>• Reproductive Toxicity</li> <li>• Respiratory Sensitizer</li> <li>• Target Organ Toxicity</li> <li>• Aspiration Toxicity</li> </ul>	<ul style="list-style-type: none"> <li>• Flammables</li> <li>• Pyrophorics</li> <li>• Self-Heating</li> <li>• Emits Flammable Gas</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>	<ul style="list-style-type: none"> <li>• Irritant (skin and eye)</li> <li>• Skin Sensitizer</li> <li>• Acute Toxicity (harmful)</li> <li>• Narcotic Effects</li> <li>• Respiratory Tract Irritant</li> <li>• Hazardous to Ozone Layer (Non Mandatory)</li> </ul>
<b>Gas Cylinder</b> 	<b>Corrosion</b> 	<b>Exploding Bomb</b> 
<ul style="list-style-type: none"> <li>• Gases under Pressure</li> </ul>	<ul style="list-style-type: none"> <li>• Skin Corrosion/ burns</li> <li>• Eye Damage</li> <li>• Corrosive to Metals</li> </ul>	<ul style="list-style-type: none"> <li>• Explosives</li> <li>• Self-Reactives</li> <li>• Organic Peroxides</li> </ul>
<b>Flame over Circle</b> 	<b>Environment (Non Mandatory)</b> 	<b>Skull and Crossbones</b> 
<ul style="list-style-type: none"> <li>• Oxidizers</li> </ul>	<ul style="list-style-type: none"> <li>• Aquatic Toxicity</li> </ul>	<ul style="list-style-type: none"> <li>• Acute Toxicity (fatal or toxic)</li> </ul>

## **Required format for Safety Data Sheets**

- Section 1. Identification
- Section 2. Hazard(s) identification
- Section 3. Composition/information on ingredients
- Section 4. First-Aid measures
- Section 5. Fire-fighting measures
- Section 6. Accidental release measures
- Section 7. Handling and storage
- Section 8. Exposure controls/personal protection
- Section 9. Physical and chemical properties
- Section 10. Stability and reactivity
- Section 11. Toxicological information
- Section 12. Ecological information
- Section 13. Disposal considerations
- Section 14. Transport information
- Section 15. Regulatory information
- Section 16. Other information, including date of preparation or last revision