

Chemical Hazard
Communication (HazCom)
Program



UPDATED JANUARY 2016

1. Purpose, Applicability and Scope

- a. Purpose - The purpose of this program is to ensure that the hazards of chemicals used in the workplace are evaluated, and those hazards are communicated to both employers and employees. In addition, the purpose is also to minimize hazardous exposure to chemicals and to provide information to emergency personnel, as required by OSHA's Hazard Communication Right-to-Know Standard and the Occupational Exposure to Hazardous Chemicals in the Laboratory Standard.
- b. Applicability - This program shall apply to all departments where employees are exposed or potentially exposed to a hazardous chemical hazard(s).
- c. Scope - This program applies to all chemicals known to be present in the workplace, such that employees can be exposed under normal conditions of use or in a foreseeable emergency.

2. Abbreviations, Acronyms and Definitions

CFR - Code of Federal Regulations

GHS - Global Harmonization System

HMIS - Hazardous Materials Information System
OSHA - Occupational Safety and Health Administration
SDS - Safety Data Sheets
NFPA - National Fire Protection Association

OSHA - Occupational Safety and Health Administration

PPE - Personal Protective Equipment

SDS - Safety Data Sheets

Hazard Communication - Means through which employers inform their employees about hazards in the workplace (i.e. training and SDS), which are regulated by the OSHA Hazard Communication Standard, 29 CFR 1910.1200

Hazard Communication does not apply to:

- Cosmetics
- Tobacco products
- Wood or wood products
- Food or alcoholic beverages
- Drugs
- Biological hazards
- Radiation hazards
- Pesticides
- Articles, as defined in 29 CFR 1910.1200(c)

3. Roles and Responsibilities

- a. Chemical Users (employees) shall :
 1. Be trained before they work with, use, or handle hazardous chemicals upon initial employment and when new hazardous chemicals are introduced. Refresher training shall be conducted annually and documented appropriately for all employees.
 2. Stay informed about the hazards of any chemicals known to be present in their workplace, and work with those chemicals in a safe manner.
 3. Know how to protect themselves from adverse effects of chemicals.
 4. Ensure all containers are properly labeled.
 5. Notify their supervisor as soon as possible after exposure to a hazardous chemical in the workplace.

- b. Department Heads (Employers) who have employees who use hazardous chemicals shall:
 1. Ensure their employees are trained on the Hazardous Right-to-Know Standard, the Oak Harbor Chemical Hazard Communication procedure, and that they post adequate notification informing the employees of their rights under the OSHA Hazardous Right-to-Know Law by providing a copy of the "You Have a Right to a Safe and Healthful Workplace" OSHA poster.
 2. Determine the required personal protective equipment (PPE) needed in their work area and ensure their employees are properly trained in the use of that equipment.
 3. Ensure that the proper PPE is made available to their employees.
 4. Ensure that all hazardous chemicals that enter or leave the workplace are properly labeled, tagged, or marked in a manner which complies with the Hazardous Right-to-Know Law, and does not conflict with any other regulation pertaining to hazardous materials.
 5. Develop safe procedures for work in their areas, as well as written procedures for emergencies.
 6. Ensure that a procedure exists to review and update label information.
 7. Ensure that a current chemical listing (inventory) is maintained. The inventory must include the chemical name, the CAS number, and the location of where the chemical is used or stored.
 8. Ensure all employees have access to SDS and are informed of any hazards related to chemicals they will use in their workspace. This can be done by either hard copies, or via a computer, fax, etc., as long as the employees are properly trained; there is assurance they can operate the system and they have access to the SDS at all times.
 9. Ensure that any contractors, sub-contractors, vendors, salesperson(s), or visitors are informed of any hazardous chemicals used in the areas being visited, or where a person will be working. These people will be provided, or required to provide, personal protective equipment for their safety.
 10. At least once per year, the employer will forward a statement to Human Resources (HR) certifying that all applicable employees have been properly

trained, and will maintain all training records for at least 30 years.

11. Ensure that HR is receiving hardcopies of SDS for any new chemicals ordered in their work area.
12. Make sure that specific training is provided for non-routine tasks.
13. Deal with employee exposure to hazards immediately and take steps as necessary to provide medical evaluation, monitoring or treatment.
14. Ensure that all employees have been trained on the new GHS standards that OSHA has incorporated into the Hazard Communication Standard by December 2013.

c. Facility Manager shall:

1. Serve as a technical resource for questions and comments regarding the Hazard Communication standard.
2. Coordinate, audit and determine compliance of Oak Harbor's Chemical Hazard Communication procedure.
3. Maintain a backup library of hardcopy Safety Data Sheets and provide ready access to SDS during an emergency (accidental release).
4. Provide the Fire Chief with a copy of the chemical inventory and SDS, and the names and phone numbers of the representatives who can be contacted for information during an emergency situation.
5. Submit necessary reports to regulatory agencies.
6. Provide classroom and on-line Hazard Communication training to employees.
7. Revise Oak Harbor's written Hazard Communication Policy.
8. Manage the Chemical Inventory computer system.

d. Visitors shall:

1. Be provided, or required to provide, their own safety and personal protective equipment.
2. Notify the department heads of the hazards of any chemicals they are delivering or using while visiting.
3. Disclose health hazards and fire protection information for any trade secrets, which will be protected.
4. Comply with OSHA's Hazard Communication Standard and with Oak Harbor's Hazard Communication Procedure.

4. Procedure

In 1983, OSHA adopted the Hazard Communication Standard. The HazCom Standard is often called the "Right-to-Know" law, or HazCom. Under the HazCom Standard, all employees have a right and a need to know:

- What chemicals they are exposed to
- The hazards of working with these chemicals
- What steps employees can take to protect themselves and those they work with

Integration of GHS:

In March 2012, OSHA integrated components of the GHS (Global Harmonization System) with the existing Hazard Communication (HazCom) Standard. The GHS Standard was developed by the United Nations and is already used in several countries around the world. OSHA incorporated portions of the GHS into the HazCom Standard so that container labeling, SDS (formerly MSDS) content and format, and chemical hazard determinations are standardized and consistent from workplace to workplace.

Components of HazCom (1910.1200)

There are five components of the HazCom Standard (1910.1200) that the City of Oak Harbor must comply with. These include: chemical inventory, labeling, written program, training and SDS. Below is a detailed description of each of the 5 HazCom components and the changes to these categories due to GHS.

a. Chemical Inventory

An electronic and paper copy of a chemical inventory of each hazard chemical normally used or stored in the workplace must be compiled, maintained, located in the administrative area of each City department and in division works areas. The inventory must be updated at least annually and any time revised information is made available. The currency of the information will be checked at a minimum of once per year. All employees who are using or exposed to any hazardous chemicals on the inventory must have access to the inventory. The inventory must include both containerized and non-containerized hazardous substances (i.e. dusts, exhaust fumes, etc). If the chemical is not hazardous, then it should not be included in the chemical inventory. Please refer to Oak Harbor's procedure on chemical inventories for more information.

b. Written Program

Oak Harbor's written Hazard Communication Program covers how the program will be implemented. This program ensures that all aspects of HazCom have been addressed. Oak Harbor's written Hazard Communications Program can be found at each City Department Administration area and at the Human Resources Department. In addition, all department heads and employers are required to maintain an up-to-date Chemical Hygiene Plan, which should include a comprehensive set of basic rules and procedures for the safe use of hazardous chemicals established and documented for their specific work area.

c. Labels

OSHA's HazCom Standard requires that hazard warning labels must be placed on every container of hazardous chemicals in the workplace. Labels must be legible, in English, and prominently displayed.

All containers containing hazardous materials must be properly labeled or marked

with the following required information:

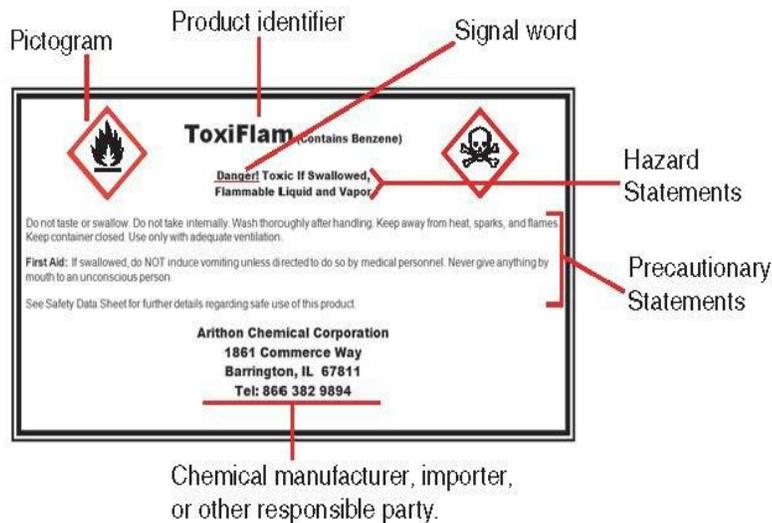
1. Product Identifier: name or number used on the label and the SDS. It can be a chemical name, a product name, or some other identifier that helps locate the SDS quickly.
2. Signal Word: used to alert the user to a potential hazard and is determined by the hazard class and category of the chemical. There are two signal words used:
 - Danger-more severe hazards
 - Warning-less severe hazards
3. Hazard Statements - standardized phrases assigned to a specific hazard class and category. They are used to describe the nature and the degree of hazard. Examples include: "causes serious eye damage" and "fatal if swallowed".
4. Precautionary Statements - standardized phrases assigned to a specific hazard class and category. There are four types of precautionary statements, covering prevention, response in case of accidental spills and exposure, storage and disposal. Examples include: "wear protective gloves/protective clothing" and "store locked up".
5. Supplier Information - refers to the name, address and telephone number of the chemical manufacturer, importer, or other responsible party.
6. Pictograms - a symbol on a white background with a red border that conveys specific information about the hazards of a chemical. There are a total of nine pictograms:

Below is a list of all 9 GHS Pictograms and their meanings:

GHS Pictograms

Explosive Self-Reactive Organic Peroxides		Flammables Self-Reactive Pyrophorics Self-Heating Emits Flammable Gas		Oxidizers Organic Peroxides	
Corrosives		Carcinogen Respiratory Sensitizer Reproductive Toxicity Target Organ Toxicity Mutagenicity Aspiration hazard		Environmental Toxicity	
Gases under Pressure		Acute Toxicity (severe)		Irritant Dermal/Skin Sensitizers Acute Toxicity(harmful) Transient target organ effects (narcotic or respiratory)	

Below is an example of the components of a GHS label:



Departments receiving containers without appropriate form of warning should take action to have the material returned or obtain a label from the manufacturer, importer or purchase a label.

Portable or secondary containers do not have to be labeled if it is intended only for immediate use (on that shift), will be used up by the employee who transfers the chemical from one container to another container, and the container remains in his/her custody at all times. If all three criteria are not met, the container must be appropriately labeled. Labels must be cross-referenced with the SDS and the chemical inventory entry, and must be written in English. They must be placed on a prominent area of the container. Employers can label the container in another language, but the information must be presented in English as well. HR recommends the use of GHS labels on secondary containers, but this is not a requirement, as long as the required information is labeled. Regardless of the type of labeling system selected, the employer must ensure that employees are fully aware of the hazards and understand the labeling system.

Other labeling and signage may be required to communicate hazards in the work areas, such as NFPA diamonds, HMIS (Hazardous Chemicals Identification System) labels, door placards (see Facility Manager's policy for more information), and other postings.

d. Training and Information

The Department head / designee shall provide information to chemical users about this policy, including deadlines and format for submittal. Each person who handles or uses hazardous chemicals shall be trained before they work with, use, or handle hazardous chemicals, upon initial employment and when new hazardous chemicals are introduced. Refresher training shall be conducted annually and documented appropriately for all employees. All training must be documented by each department and Human Resources Department.

At a minimum, the training agenda will include the following topics:

1. Defining the hazard communication standard, the reasons why the standard was written, and the employees' rights under the standard.
2. Explanation of the existence of the written plan and how each employee has a right to review the document.
3. The chemical container labeling requirements to include:
 - a. chemical name(s)
 - b. hazards
 - c. protection requirements
 - d. improper handling
 - e. first aid treatment
4. Explanation of the requirement for conducting periodic chemical inventories.
5. Explanation of the requirement that a Safety Data Sheet (SDS) be procured for each hazardous chemical. Advising where the sheets are kept in the unit and exactly how an employee can arrange to review the sheets. An orientation relative to the information available from the SDS.
6. A discussion of the types of questions to which a properly trained employee should be able to effectively respond. Examples of the questions typically asked by an OSHA inspector during an evaluation of a chemical hygiene program is:
 - a. Do you work with any hazardous chemicals?
 - b. Do you know what the Hazard Communication (Right-To-Know Law) is?
 - c. Can the chemicals you work with hurt you?
 - d. What could they do to you?
 - e. What precautions have been made to protect you against the hazards of the chemicals?
 - f. Have you had any training?
 - g. Do you know what an SDS is?
 - h. Do you know who to contact if you wish to review the written Hazard Communication Program or review an SDS?
 - i. Do you know that if you complain to your supervisor about your working conditions that the City cannot reprimand you?

All employees should be trained about the changes in the Hazard Communication Standard with the addition of GHS.

Employees with potential for exposure to hazardous chemicals shall receive job-specific training in addition to that previously listed including:

- Special emphasis on chemicals listed as carcinogenic.
- Methods/observations used to detect the presence or release of hazardous chemicals.
- Procedures, techniques and protective equipment to prevent exposure.

The training format selected to present the orientation and review sessions will

be selected such that maximum effectiveness of communication is achieved. Depending on the evaluation of the comprehension capability of the group to be trained, an appropriate combination of training modes to include audiovisuals, classroom instruction, small group discussion, one on one individualized instruction, on-the-job demonstrations, etc. will be employed.

Specific training for non-routine tasks will be dictated by the situation and evaluated thoroughly in accordance with past experience and knowledge of that situation.

e. Safety Data Sheet (SDS)

The SDS must be readily available at all times to all personnel using hazardous chemicals. If there is difficulty in obtaining an SDS, the requestor must contact the supplier and/or manufacturer for the SDS. The department head must request the SDS in writing from the manufacturer or distributor within five (5) business days. If the SDS is not made available, the employee has a right to refuse to work with that hazardous chemical without retaliation. A person in the work area should be designated as the responsible person to ensure there are copies of SDS for every chemical used and stored in the workspace.

The policy of the City of Oak Harbor is to maintain a file of Safety Data Sheets (SDS) in each work unit that corresponds to the inventory of hazardous chemicals in that respective work area. SDS may be maintained in a notebook or electronically, as long as: reliable devices are readily accessible, workers are properly trained in the use of those devices, there is an adequate backup system and the system is part of the overall Hazard Communication Program. A master file of all Safe Data Sheets made available will be maintained. This master file of SDSs will be made available upon request during normal working hours by each Department. During an emergency situation and at times other than normal working hours, individuals can contact **ICOM at 911** who will have available a current listing and organizations capable of providing emergency management assistance and information.

The Safety Data Sheets are designed to provide information concerning the physical and health hazards of chemicals found in the workplace. OSHA now requires that all SDS must follow a specified 16-section format. An SDS is composed of the following sections, which should be covered in employee training:

1. Identification
2. Hazard(s) identification
3. Composition/information on ingredients
4. First-aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure controls/personal protection
9. Physical and chemical properties

10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information
15. Regulatory information
16. Other information

f. Recordkeeping

The City of Oak Harbor's archived chemical inventories shall be kept for at least 30 years. These records may be kept in electronic or hard copy form.

Safety Data Sheets must be kept indefinitely.

An individual training record shall be maintained for each employee and kept for period of employment +5 years. This should contain:

- List of each chemical used or handled by the employee.
- Date of training on hazardous chemicals.
- A signature of the employee showing training on each chemical used or handled by that employee.

OSHA'S Hazard Communication Standard

1910.1200(b)(5)

This section does not require labeling of the following chemicals:

1910.1200(b)(5)(i)

Any pesticide as such term is defined in the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency;

1910.1200(b)(5)(ii)

Any chemical substance or mixture as such terms are defined in the Toxic Substances Control Act (15 U.S.C. 2601 et seq.), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency;

1910.1200(b)(5)(iii)

Any food, food additive, color additive, drug, cosmetic, or medical or veterinary device or product, including materials intended for use as ingredients in such products (e.g. flavors and fragrances), as such terms are defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.) or the Virus-Serum-Toxin Act of 1913 (21 U.S.C. 151 et seq.), and regulations issued under those Acts, when they are subject to the labeling requirements under those Acts by either the Food and Drug Administration or the Department of Agriculture;

1910.1200(b)(5)(iv)

Any distilled spirits (beverage alcohols), wine, or malt beverage intended for nonindustrial use, as such terms are defined in the Federal Alcohol Administration Act (27 U.S.C. 201 et seq.) and regulations issued under that Act, when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Bureau of Alcohol, Tobacco, Firearms and Explosives;

1910.1200(b)(5)(v)

Any consumer product or hazardous substance as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) respectively, when subject to a consumer product safety standard or labeling requirement of those Acts, or regulations issued under those Acts by the Consumer Product Safety Commission; and,

1910.1200(b)(5)(vi)

Agricultural or vegetable seed treated with pesticides and labeled in accordance with the Federal Seed Act (7 U.S.C. 1551 et seq.) and the labeling regulations issued under that Act by the Department of Agriculture.

1910.1200(b)(6)

This section does not apply to:

1910.1200(b)(6)(i)

Any hazardous waste as such term is defined by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 et seq.), when subject to regulations issued under that Act by the Environmental Protection Agency;

1910.1200(b)(6)(ii)

Any hazardous substance as such term is defined by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. 9601 et seq.) when the hazardous substance is the focus of remedial or removal action being conducted under CERCLA in accordance with Environmental Protection Agency regulations.

1910.1200(b)(6)(iii)

Tobacco or tobacco products;

1910.1200(b)(6)(iv)

Wood or wood products, including lumber which will not be processed, where the chemical manufacturer or importer can establish that the only hazard they pose to employees is the potential for flammability or combustibility (wood or wood products which have been treated with a hazardous chemical covered by this standard, and wood which may be subsequently sawed or cut, generating dust, are not exempted);

1910.1200(b)(6)(v)

Articles (as that term is defined in paragraph (c) of this section);

1910.1200(b)(6)(vi)

Food or alcoholic beverages which are sold, used, or prepared in a retail establishment (such as a grocery store, restaurant, or drinking place), and foods intended for personal consumption by employees while in the workplace;

1910.1200(b)(6)(vii)

Any drug, as that term is defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 et seq.), when it is in solid, final form for direct administration to the patient (e.g., tablets or pills); drugs which are packaged by the chemical manufacturer for sale to consumers in a retail establishment (e.g., over-the-counter drugs); and drugs intended for personal consumption by employees while in the workplace (e.g., first aid supplies);

1910.1200(b)(6)(viii)

Cosmetics which are packaged for sale to consumers in a retail establishment, and cosmetics intended for personal consumption by employees while in the workplace;

1910.1200(b)(6)(ix)

Any consumer product or hazardous substance, as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 et seq.) and Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) respectively, where the employer can show that it is used in the workplace for the purpose intended by the chemical manufacturer or importer of the product, and the use results in a duration and frequency of exposure which is not greater than the range of exposures that

could reasonably be experienced by consumers when used for the purpose intended;

1910.1200(b)(6)(x)

Nuisance particulates where the chemical manufacturer or importer can establish that they do not pose any physical or health hazard covered under this section;

1910.1200(b)(6)(xi)

Ionizing and nonionizing radiation; and,

1910.1200(b)(6)(xii)

Biological hazards.

Consumer Product defined in Consumer Product Safety Act (15 U.S.C. 2051 et seq.):

(5) CONSUMER PRODUCT.--The term "consumer product" means any article, or component part thereof, produced or distributed (i) for sale to a consumer for use in or around a permanent or temporary household or residence, a school, in recreation, or otherwise, or (ii) for the personal use, consumption or enjoyment of a consumer in or around a permanent or temporary household or residence, a school, in recreation, or otherwise; but such term does not include—

(A) any article which is not customarily produced or distributed for sale to, or use or consumption by, or enjoyment of, a consumer,

(B) tobacco and tobacco products,

(C) motor vehicles or motor vehicle equipment (as defined by sections 102(3) and (4) of the National Traffic and Motor Vehicle Safety Act of 1966, sections 30102(a)(6) and (7) of Title 49),

(D) pesticides (as defined by the Federal Insecticide, Fungicide, and Rodenticide Act), [7 U.S.C. § 136, et seq.]

(E) any article which, if sold by the manufacturer, producer, or importer, would be subject to the tax imposed by section 4181 of the Internal Revenue Code of 1986 [26 U.S.C. § 4181](determined without regard to any exemptions from such tax provided by section 4182 or 4221, or any other provision of such Code), or any component of any such article, {firearms and ammunition}1

Consumer Product defined in Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.)

(f) **The term "hazardous substance" means:**

1. (A) Any substance or mixture of substances which (i) is toxic, (ii) is corrosive, (iii) is an irritant, (iv) is a strong sensitizer, (v) is flammable or combustible, or (vi) generates pressure through decomposition, heat, or other means, if such substance or mixture of substances may cause substantial personal injury or substantial illness during or as a proximate result of any customary or reasonably foreseeable handling or use, including reasonably foreseeable

ingestion by children.

(B) Any substances which the Commission by regulation finds, pursuant to the provisions of section 3(a), meet the requirements of subparagraph 1(A) of this paragraph.

(C) Any radioactive substance, if, with respect to such substance as used in a particular class of article or as packaged, the Commission determines by regulation that the substance is sufficiently hazardous to require labeling in accordance with this Act in order to protect the public health.

(D) Any toy or other article intended for use by children which the Commission by regulation determines, in accordance with section 3(e) of this Act, presents an electrical, mechanical, or thermal hazard.

(E) Any solder which has a lead content in excess of 0.2 percent.

2. The term "hazardous substance" shall not apply to FEDERAL HAZARDOUS SUBSTANCES ACT *Unofficial compilation for convenience only.* 4 pesticides subject to the Federal Insecticide, Fungicide, and Rodenticide Act, [7 U.S.C. § 136] nor to foods, drugs, and cosmetics subject to the Federal Food, Drug, and Cosmetic Act, [21 U.S.C. § 301 et seq.] nor to substances intended for use as fuels when stored in containers and used in the heating, cooking, or refrigeration system of a house, nor to tobacco and tobacco products, but such term shall apply to any article which is not itself a pesticide within the meaning of the Federal Insecticide, Fungicide, and Rodenticide Act but which is a hazardous substance within the meaning of subparagraph 1 of this paragraph by reason of bearing or containing such a pesticide.

3. The term "hazardous substance" shall not include any source material, special nuclear material, or byproduct material as defined in the Atomic Energy Act of 1954, as amended, and regulations issued pursuant thereto by the Atomic Energy Commission. [42 U.S.C. § 2011 et seq.]