

VIGILANT™

● counsel for employers



VIGILANT TRAINING

Safety & Health Management Classes

HAZARD COMMUNICATION TRAINING FOR TRAINERS

Funding and support for this project has been provided by the State of Washington, Department of Labor & Industries, Safety & Health Investment Projects.



Hazard Communication Training for Trainers

Hazard Communication Training for Trainers

Course Overview

This training program is designed to meet or exceed Federal and State requirements. The course is divided into two main parts:

1. Train the trainer workbook, including regulations, elements of a written Hazard Communication program, and Global Harmonization System requirements.
2. Employee training workbook, including power point with speaker notes and exercises.

Course Objectives

As a Hazard Communication trainer, it is our responsibility to ensure that every employee we work with understands the potential hazards of working with chemicals in the workplace.

- Educate employees how potentially hazardous chemicals affect our everyday lives
- State and Federal requirements on Hazard Communication
- Introduction to 5S and how it will change your Hazard Communication Program
- Incorporating the new Global Harmonization Standard GHS into your Haz-Com Program

Table of Contents

1. Train the Trainer Work Book

Chemicals in the Work Place

- How chemicals enter the body
- How chemicals affect your body

Regulations

- New Hazard Communication Requirements
- Global Harmonization System: What is it?
- Phase in dates

Elements of a Written Hazard Communication Program

- Current list of all hazardous chemicals
- Obtain and maintain Safety Data Sheets
- Safety Data Sheets are readily accessible
- Container Labeling
- Inform and train employees about hazardous chemicals in your workplace

2. Hazard Communication Workbook

Power Point

- Speaker notes

Handouts

- Exercises
- Test

Introduction

“Exposure to hazardous chemicals is one of the most serious threats facing American workers today,” said U.S. Secretary of Labor Hilda Solis. “Revising OSHA’s Hazard Communication standard will improve the quality and consistency of hazard information, making it safer for workers to do their jobs and easier for employers to stay competitive.”

<http://www.osha.gov/dsg/hazcom/>

Statistics

OSHA has estimated that more than 32 million workers are exposed to 650,000 hazardous chemical products in more than 3 million American workplaces. This poses a serious problem for exposed workers and their employers.

<http://www.lni.wa.gov/Safety/Topics/AtoZ/Hazcom/>



Chemicals can enter your body in several ways:

Skin Absorption or eye contact:

Some chemicals, when contacted, can pass through the skin into the blood stream. This is especially true of liquid chemicals.

Inhaling hazardous fumes, vapors, mists, or dust:

Breathing of contaminated air is the most common way that workplace chemicals enter the body.

Swallowing or ingestion:

Even though you may not intentionally swallow hazardous chemicals, chemicals can be transferred onto food if your hands are contaminated, and then swallowed accidentally.

Direct penetration:

Such as when a chemical enters the body through an open cut or skin puncture. While uncommon in most workplaces, it can occur when a sharp object (e.g., needle) punctures the skin and injects a chemical (or virus) directly into the bloodstream.

Regardless of the way the chemical gets into the body, once it is in the body, it is distributed throughout the body by the blood stream. In this way, the chemicals can attack and harm organs which are far away from the original point of entry.

Adverse health effects are dependent on the factors of the exposure. Factors that play a part in whether or not adverse health effects may result from an exposure are:

- the **type** of chemical;
- the **amount** or level of a chemical a person was exposed to;
- the **duration** (how long did exposure occur); and
- the **frequency** (how many times the person was exposed).



Washington State's new Hazard Communication (GHS) Rule, WAC 296-901, became effective and is substantially identical to OSHA's new rule and compliance in our state and will be phased in.

This occupational safety and health standard is intended to address comprehensively the issue of classifying the potential hazards of chemicals, and communicating information concerning hazards and appropriate protective measures to employees.

Employers who do not produce or import chemicals need only focus on those parts of this rule that deal with establishing a workplace program and communicating information to their workers.

Key dates for implementation in Washington State include:

- April 15, 2013 — Effective date
- June 1, 2014 — Train employees on the new label elements and SDS format.
- June 1, 2015 — Chemical manufacturers and importers must comply with SDS and label requirements.
- December 1, 2015 — Distributors may not ship a container unless it has a GHS (Global Harmonization System) Label
- June 1, 2016 — Update labels on workplace containers and train employees on newly identified hazards. Update the Hazard Communication Program, as needed.

Written Hazard Communication Program

Employers must develop, implement, and maintain at each workplace a written hazard communication program which at least describes how the criteria for labels and other forms of warning, safety data sheets, and employee information and training will be met, which also includes the following:

- A list of the hazardous chemicals known to be present using a product identifier that is referenced on the appropriate safety data sheet (the list may be compiled for the workplace as a whole or for individual work areas)
- The methods the employer will use to inform employees of the hazards of non-routine tasks

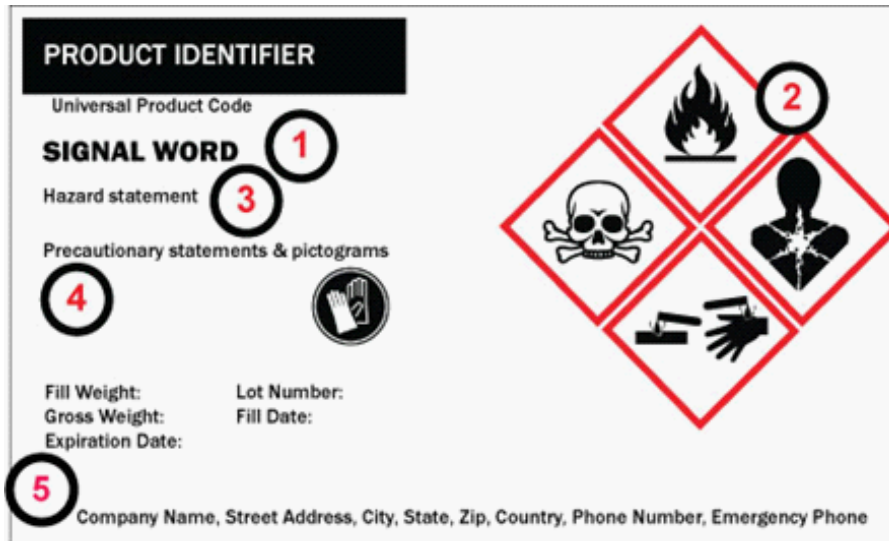
What are the major changes to the Hazard Communication Standard?

Hazard Classification: The definitions of hazard have been changed to provide specific criteria for classification of health and physical hazards, as well as classification of mixtures. These specific criteria will help to ensure that evaluations of hazardous effects are consistent across manufacturers, and that labels and safety data sheets are more accurate as a result.

Labels: Chemical manufacturers and importers will be required to provide a label that includes a harmonized signal word, pictogram, and hazard statement for each hazard class and category.

Safety Data Sheets: Will now have a specified 16-section format.

New Product Label Requirements



- 1. Harmonized signal word:** a single word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used are "Danger" and "Warning." "Danger" is used for the more severe hazards, while "warning" is used for less severe hazards.
- 2. GHS pictogram:** a symbol plus other graphic elements, such as a border, background pattern, or color that is intended to convey specific information about the hazards of a chemical. Each pictogram consists of a different symbol on a white background within a red square frame set on a point (i.e., a red diamond).
- 3. Hazard statement:** a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate and the degree of hazard.
- 4. Precautionary statement:** a phrase that describes recommended measures to minimize or prevent adverse effects resulting from exposure to a hazardous chemical; or improper storage or handling of a hazardous chemical.
- 5. Supplier identification:** the name, address and telephone number of the manufacturer or supplier of the substance or mixture should be provided on the label.

Hazard Communication Safety Data Sheets

Section 1: Identification includes product identifier; manufacturer or distributor name, address, phone number, emergency phone number; recommended use; restrictions on use.

Section 2: Hazard(s) identification includes all hazards regarding the chemical; required label elements.

Section 3: Composition/information on ingredients includes information on chemical ingredients; trade secret claims.

Section 4: First-aid measures include important symptoms/effects, acute, delayed; required treatment.

Section 5: Fire-fighting measures list suitable extinguishing techniques, equipment; chemical hazards from fire.

Section 6: Accidental release measures lists emergency procedures; protective equipment; proper methods of containment and cleanup.

Section 7: Handling and storage list precautions for safe handling and storage, including incompatibilities.

Section 8: Exposure controls/personal protection lists OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE).

Section 9: Physical and chemical properties lists the chemical's characteristics.

Section 10: Stability and reactivity list chemical stability and possibility of hazardous reactions.

Section 11: Toxicological information includes routes of exposure; related systems, acute and chronic effects; numerical measures of toxicity.

Section 12: Will give details on reaction of the materials with respect to the environment.

Section 13: Will have information of disposal of the materials as per general rules.

Section 14: Will have details of labeling and precautions to be taken while in transit.

Section 15: Will give hazard identifications (label, symbol & description) with respect to the regulatory board.

Section 16: Other information includes the date of preparation or last revision.

Elements of a Written Hazard Communication Program

- Current list of all hazardous chemicals

Chemical Name	Manufacturer	Location Used

- Obtain and maintain Safety Data Sheets
 - A system for ensuring SDS are obtained and maintained for all hazardous chemicals in the workplace
- Safety Data Sheets are readily accessible
 - A system that ensures every employee has access to Safety Data Sheets
- Container Labeling
 - A system that ensures containers coming into the workplace and secondary containers are labeled following the GHS guidelines for labels
- Inform and Train employees about hazardous chemicals in your workplace
 - A comprehensive training system that ensures all affected employees are trained
 - Within 30 days of initial employment or assignment to a new job
 - Whenever new hazards are introduced into the workplace
 - Annually (as a review)
 - Employees must be informed of:
 - Requirements of regulations
 - Any operations in their area where hazardous chemicals are used
 - Location and availability of SDS and Plan
 - Training must cover:
 - Safety Data Sheet awareness, 16 point format
 - New labeling requirements
 - Physical and health hazards
 - Measures of personal protection

Hazard Communication Video

Understanding the GHS Labeling System

Provided by: OSHA Training Center

Web Site:

<http://www.youtube.com/watch?v=RvQNf1Y7E84>

Skills Exercise

1. Take 5 minutes and write down how you would explain SDS Format.
2. Break into groups of three.
3. One person will be the presenter; one person will be the student and the third will watch and give feedback to the presenter.
4. Take 10 minutes to give your presentation, a few minutes for feedback and then trade places.

1. _____ Name Instructor Observer Student

2. _____ Name Student Instructor Observer

3. _____ Name Observer Student Instructor

Global Harmonized System Definitions

Chemical: any substance, or mixture of substances.

Chemical manufacturer: employer with a workplace where chemical(s) are produced for use or distribution.

Chemical name: the scientific designation of a chemical the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name that will clearly identify the chemical for the purpose of conducting a hazard classification.

Classification: to identify the relevant data regarding the hazards of a chemical; review those data to ascertain the hazards associated with the chemical; and decide whether the chemical will be classified as hazardous according to the definition of hazardous chemical in this section. In addition, classification for health and physical hazards includes the determination of the degree of hazard, where appropriate, by comparing the data with the criteria for health and physical hazards.

Common name: any designation or identification such as code name, code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.

Container: any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purposes of this section, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

Danger: used for the more severe hazards, while "warning" is used for the less severe.

Exposure or exposed: an employee is subjected in the course of employment to a chemical that is a physical or health hazard, and includes potential (e.g., accidental or possible) exposure. "Subjected" in terms of health hazards include any route of entry (e.g., inhalation, ingestion, skin contact or absorption).

Hazard category: the division of criteria within each hazard class (e.g., oral acute toxicity and flammable liquids) include four hazard categories. These categories compare hazard severity within a hazard class and must not be taken as a comparison of hazard categories more generally.

Hazard class: the nature of the physical or health hazards (e.g., flammable solid, carcinogen, oral acute toxicity).

Hazard statement: a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical including, where appropriate, the degree of hazard.

Hazard chemical: any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified.

Global Harmonized System

Definitions continued

Immediate use: the hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

Label: an appropriate group of written, printed or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.

Label elements: the specified pictogram, hazard statement, signal word and precautionary statement for each hazard class and category.

Mixture: a combination of a solution composed of two or more substances in which they do not react.

Physical hazard: a chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas.

Pictogram: means a composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical. Eight pictograms are designated under this standard for application to a hazard category.

Precautionary statement: a phrase that describes recommended measures that must be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical or improper storage or handling.

Product identifier: the name or number used for a hazardous chemical on a label or in the SDS. It provides a unique means by which the user can identify the chemical. The product identifier used must permit cross-references to be made among the list of hazardous chemicals required in the written hazard communication program, the label and the SDS.

Safety data sheet (SDS): written or printed material concerning a hazardous chemical that is prepared in accordance with WAC 296-901-14014.

Signal word: a word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used in this section are "**Danger**" and "**Warning**". Danger is used for the more severe hazards, while "warning" is used for the less severe.

Substance: Chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurities deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.

Work area: a room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

Workplace: an establishment, job site, or project, at one geographical location containing one or more work areas.

Vigilant Tools

Vigilant provides you with publications to help you manage safety and health issues wisely and efficiently. These tools explain federal and state OSHA regulations and provide model forms for compliance. To obtain any of these publications, please contact your HR department, visit the member center of our website at www.vigilant.org or contact your Vigilant staff representative.

Some of the tools related to the topics covered in this workbook include:

Fact Sheets

- Accident Prevention Planning (Vigilant 3548)
- Emergency Action Plans and People with Disabilities (Vigilant 2741)
- Hazardous Energy Control (Vigilant 3913)
- Personal Protective Equipment (Vigilant 4448)
- Training Rules for Powered Industrial Truck (Forklift) Operators (Vigilant 1561)

Model Forms

- Safety Inspections (Vigilant 3666)

Model Policies

- General Health and Safety Policy (Vigilant 3459)
- Job Safety Training (Vigilant 3841)
- Accident Investigation (Vigilant 4430)

VIGILANT™

● counsel for employers

For more information about Vigilant training or other services, please call the regional office nearest you, or visit our website www.vigilant.org

Visit our new Washington Regional Office in Everett with its state-of-the-art training center.

Everett, WA
425.349.4477

Spokane, WA
509.276.2277

Tigard, OR
503.620.1710

Eugene, OR
541.485.7296

Redding, CA
530.222.3500

Sacramento, CA
916.231.6000

4042
Rev. 7/01/2013

OREGON REGION

6825 SW Sandburg Street
Tigard, Oregon 97223
503-620-1710
Toll-free 800-733-8621
FAX 503-620-3935

Eugene Office

541-485-7296
Toll-free 800-733-8624
FAX 541-485-8641

WASHINGTON REGION

(also serving Idaho & Montana)

Regional Office
6003 23rd Drive West, Suite 200
Everett, WA 98203
425-349-4477
Toll-free 800-733-8620
FAX 425-349-4480

Spokane Office

4957 N. Swenson Rd.
Deer Park, WA 99006
509-276-2277
Toll-free 800-656-8628
FAX 509-276-3022

CALIFORNIA REGION

Redding
530-222-3500
Toll-free 800-733-8625

Sacramento Office

916-231-6000