





WE ARE THE ARMY'S HOME





## **OSHA HISTORY**

## **1893 Safety Appliance Act passed by Congress**

- Required safety equipment in the workplace (railroad)
- 1st Federal Safety Legislation

## **Early 1900's**

States enacted workers' compensation backed by trade unions

### **1910 United States Bureau of Mines**

Response to series of highly publicized explosions

### **1900 – 1960**

- Accident rates continually climbed
- Insurance agencies pressuring Government
- Labor unions lobbied Congress
- Public outcry throughout media sources

# **OSHA HISTORY**

#### 1968 & 1969

- 14,000 deaths per year
- 90 million Americans in workforce
- Congress studies occupational injuries & illnesses
- 1969 "General Duty" clause bill introduced to Congress
- **1970** General Duty clause signed and passed into law (Public Law 91-596)
- 1971 Department of Labor OSHA is up and running



## THE OSH ACT

## Section 5(a)(1) General Duty Clause

- Employer MUST provide a safe and healthy workplace.
- Employers must look for and abate hazards.

## **Section 5(b) Employees**

- Responsibility to comply with regulations, rules, & policies
- Have the right to:
  - File a complaint
  - Request an OSHA inspection
  - To be protected from retaliation from employer (Whistle Blower Protection)

# Law to Local Policy Flow



Public Law 91-596



EO 12196



29 CFR 1960



DODI 6055 Series



AR 385-10



DA Pam 385-10



# HAZARD COMMUNICATION (HAZCOM)

Also known as the "Right to Know" Standard Employees have the right to know:

- About workplace hazardous substances
- The effects of substances in the workplace
- How to protect themselves from these substances
- What to do in case of emergency



# HAZARD COMMUNICATION (HAZCOM)

## Container Labeling

- Every container must be labeled, tagged or marked
- Manufacturer's label attached to original containers
- Labels must be written in English and prominently displayed
- Warning can be a message, words, pictures or symbols
- Always read the label before use
- Must use GHS approved labeling system

What is GHS?

Plate - X Gold Plating Solution

#### DANGER!

May be fatal if swallowed, inhaled, or absorbed through the skin.



- Do not breathe vapor or mist.
- Do not get into eyes, on skin, or on clothing.
- Exposure causes weakness, headache, cyanosis, loss of consciousness, respiratory arrest, or death.
- Target organs blood, metabolic enzymes, skin, lungs.
  - Physicians treat exposure victims for cyanide poisoning.
- Refer to Material Safety Data Sheet for additional Information.

ABC Chemical Company 123 Hazard Drive Anywhere, NY 13333 800-123-4567

# GHS WHAT IS IT?

- GHS: Globally Harmonized System of the classification and labelling of chemical
- UN agreed upon guidelines for all aspects of hazardous materials
- International attempt to get everyone on the same page
- Adopted by U.S. March 26, 2012
- OSHA's adoption is a revision of the Hazard Communication Standard to align with the GHS
- Standardizes format of SDSs and labels

As of June 1, 2015, the Hazard Communication Standard (HCS) will require pictograms on labels to alert users of the chemical hazards to which they may be exposed. Each pictogram consists of a symbol on a white background framed within a red border and represents a distinct hazard(s). The pictogram on the label is determined by the chemical hazard classification.

# **HCS Pictograms and Hazards**

**Health Hazard** 



- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

Flame



- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

**Exclamation Mark** 



- · Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity (harmful)
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non-Mandatory)

# HAZARD COMMUNICATION (HAZCOM)

Before GHS change, employer was required to:

- Have a written hazard communication program
- Have each hazardous chemical in the workplace appropriately labeled
- Have a Material Safety Data Sheet (MSDS) for each hazardous chemical in the workplace
- Train employees about the hazards associated with and precautionary measures required for each hazardous chemical in the workplace. Training is required initially and anytime a new hazardous chemical is introduced in to the workplace.

# HAZARD COMMUNICATION (HAZCOM)

# GHS changes:

- "Hazard Classification" rather than "hazard determination"
- "Safety Data Sheet" rather than "material safety data sheet"
- SDS uses 16 section format
- Labels are more defined with specific requirements

#### **Health Hazard**



- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

#### Gas Cylinder



• Gases Under Pressure

#### Flame Over Circle



The hazardous chemical product's manufacturer is responsible for labeling each hazardous chemical product a **HCS OSHA Label** containing:

- Product name
- Name, address, and telephone number of the manufacturer, importer, or other responsible party
- Signal word danger or warning as appropriate
- Hazard statement(s) such as toxic if swallowed, harmful if contact with skin
- Precautionary statement(s) describing recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical or improper storage or handling; and
- Pictogram(s) on the next slide providing specific hazard

Signal words **Danger** or **Warning** indicate level of **severity** of the **hazard** 

**Danger** is used for the **more severe hazards** 

Warning is used for the less severe hazards

There will only be **one signal word** on the label no matter how many hazards a hazardous chemical product may have

For hazardous chemical products with more than one hazard where one hazard is "Danger" and the other is "Warning," then only "Danger" will be indicated on the label

**Danger** 

Warning

**Hazard statements** describe the **nature of the hazard**(s)

Examples:

Causes damage to kidneys through prolonged or repeated when absorbed through the skin

exposure

Highly flammable liquid and vapor

All of the applicable hazard statements must appear on the label

Hazard statements may be combined where appropriate to reduce redundancies and improve readability (may be more than one)

The hazard statements are specific to the hazard classification categories, and chemical users should always see the same statement for the same hazards no matter what the chemical is or who produces it

#### **Precautionary statements** tell the user:

- ✓ Prevention measure to take to minimize exposure
- ✓ Actions to take for spillage, first aid, or medical emergency
- ✓ Storage requirements
- ✓ **Disposal** requirements

#### Example:

Do not breathe vapors or spray

Get medical attention if you feel unwell

Store in a cool, dry location - avoid excessive heat

Dispose of contents IAW local, state, and Federal regulations

## OSHA has developed nine (9) pictograms identifying specific chemical hazards.



SAMPLE LABEL	
CODE Product Name Product Identifi	
Company Name Street Address City State Postal Code Country Emergency Phone Number	cation
Keep container tightly closed. Store in a cool, well-ventilated place that is locked. Keep away from heat/sparks/open flame. No smoking. Only use non-sparking tools. Use explosion-proof electrical equipment. Take precautionary measures against static discharge. Ground and bond container and receiving equipment. Do not breathe vapors. Wear protective gloves. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Dispose of in accordance with local, regional, national.	Highly flammable liquid and vapor. May cause liver and kidney damage.  Precautionary Statements
international regulations as specified.  In Case of Fire: use dry chemical (BC) or Carbon Dioxide (CO <sub>2</sub> ) fire extinguisher to extinguish.  First Aid If exposed call Poison Center. If on skin (or hair): Take off immediately any contaminated clothing. Rinse skin with water.	Supplemental Information  Directions for Use  Fill weight: Lot Number: Fill Date: Fill Date: Fill Date: Lot Number: Fill Date: Lot Number: Fill Date: Lot Number: Lot Number: Fill Date: Lot Number: L

Employees are <u>not</u> responsible for providing the HCS label – it is the product manufacturer's responsibility.

### **Employees are responsible for:**

- ✓ Not removing or defacing existing HCS OSHA labels
- ✓ Notifying your Supervisor when an HCS OSHA label is missing or illegible so it may be replaced

Containers that are <u>not</u> the original manufacturer's container are <u>secondary containers</u>

Secondary containers require a label informing the user of the contents hazards unless

- ✓ the hazardous chemical product will be under the control of and used only by the
  person who transfers it from a HCS OSHA labeled container
- ✓ it will only be used within the work shift in which it is transferred

#### Examples:



Safety Date Sheets (SDS) provide health, safety and emergency information of a hazardous chemical product.

A SDS binder located in each Shop/Building contains

- ✓ SDS inventory list
- ✓ All SDSs for that specific area including those related to
  - SIAD operations
  - Contractor operations
  - Other Military groups (Navy, Air Force or Marines)

For hazardous chemical products that are used in the field, the SDSs are maintained in the Shop/Building

- ✓ repairing vehicles in the training field
- ✓ repairing weapons at the training range



SDSs are required to contain specific information

## OSHA has developed:

- ✓ OSHA Brief Hazard Communication Standard: Safety Data Sheets
  which further explains in detail each SDS section
- ✓ OSHA Quick Card: Hazardous Communication Safety Data Sheets
  which provides a quick description of each SDS section.

Both are provided to you to assist in understanding the information contained in the SDS that will keep you safe.





## OSHA standard was amended in 2012 requiring additional information



#### SDS should have a date after 2015

\*\*change in 2012 but not effective until 2015

#### Rule of Thumb:

- ✓ dated between 2012-2015 AND
- ✓ and has pictograms

## **Consider it a current SDS**

#### **Example is current:**

- √ between 2012-2015
- √ has pictograms

Material Name: Fuel Oil No. 2

SDS No. 0088

Synonyms: #2 Heating Oil; 2 Oil; Off-road Diesel Fuel

#### \* \* \* Section 1 - Product and Company Identification \* \* \*

#### Manufacturer Information

Hess Corporation 1 Hess Plaza Woodbridge, NJ 07095-0961 Phone: 732-750-6000 Corporate EHS Emergency # 800-424-9300 CHEMTREC

0961 <u>www.hess.com</u> (Environment, Health, Safety Internet Website)

#### \* \* \* Section 2 - Hazards Identification \* \* \*

#### GHS Classification:

Flammable Liquids - Category 3 Acute Toxicity, Inhalation - Category 4

Skin Corrosion/Irritation – Category 2 Eye Damage/Irritation – Category 2

Carcinogenicity - Category 2

Specific Target Organ Toxicity (Single Exposure) - Category 3 (respiratory irritation, narcosis)

Aspiration Hazard – Category 1 Hazardous to the Aquatic Environment, Acute Hazard – Category 3

#### GHS LABEL ELEMENTS

#### Symbol(s)





pictograms

#### Signal Word DANGER

#### **Hazard Statements**

Flammable liquid and vapor. Harmful if inhaled.

Causes skin irritation

Suspected of causing cancer.

Suspected of causing genetic defects.

May cause respiratory irritation.

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

Harmful to aquatic life.

08/30/12 revision



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Revision Date 8/30/12

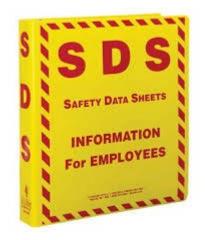
#### SDS Binder should have 2 sections:

**Section #1: Table of contents for Inventory List** 

Section #2: SDS

There should be no other documents within the SDS Binder!!





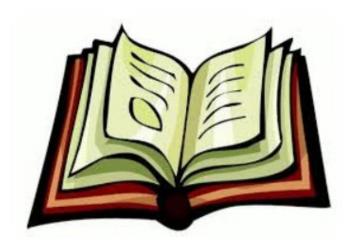


REMEMBER: SDS should have SDS creation or revision date after 2015

## Supervisors and CDSR's are required to ensuring the following:

- ✓ Revised SDS
- ✓ SDS for products that are no longer used

The Supervisor or CDSR will retain the older SDS that are not currently in use in a separate SDS Binder label "out of date/ not in use SDS/MSDS". These older and unused SDS must be maintain for 30 years IAW 29 CFR 1910.1012



## HAZARD RECOGNITION

## **BLOODBORNE PATHOGENS**

- Diseases passed by blood /body fluids
  - HIV, Hepatitis
- No contact with blood or body fluids
  - Injuries
  - Sexual contact
  - Contaminated needles
- Possible exposure- potentially infectious fluids
  - Splash to eyes or mucous membranes
  - Contact with damaged/abraded skin
  - Sharps injury that punctures the skin



## HAZARD RECOGNITION

## **BLOODBORNE PATHOGENS**

- Exposure? What to do?!?
  - Wash with soap & water immediately
  - Use eye wash station or bottles
  - Report incident to supervisor & EMS
- BP Protection Kit
  - Gloves & safety glasses
  - Protective suit & mask
  - Cleanup materials
  - Hospital / Laboratory Waste "Red Bag"
- Sharps disposal
  - Razor Blades Plastic container
  - Recycle when full



# If you have future questions regarding the OSHA Rights & Responsibilities, HAZCOM, or Bloodborne Pathogens, please contact the GSO