Understanding Hazard Communication

A Port of San Diego Ship Repair Association Course for Shipyards Workers
Use the symbols above as a guide to support you in facilitating your class.

INTRODUCTION – Identify yourself and explain that this class is to support them in understanding and protecting themselves from the hazards associated with harmful chemicals at work.

Read the bottom of Page 1 of the Training Manual
Course Purpose:
Read course purpose.

Ask “who uses chemicals to do their job?”

Target answer: All or most.

Key point: This class pertains to all attending

Specific Objectives:
Read and ask if there are questions.

Objective Measurement:
Read and ask if there are questions.
Read Training Topics and ask if there are any questions.
Handout Pre/Post Test and explain by completing this test they will have a good understanding of the material being covered. Explain this will also establish a benchmark to determine how well the trainer conveyed the information. Ask if there are questions.

Have them circle “Pre” at the top of the test. Have them write the date in the appropriate space. Explain that they will not need to write their names on the pre-test. Allow 5-10 minutes to complete the pre-test and collect the tests. Coordinator will grade tests.
Hazard Communication Standard

Ask for a participant to read this page.

Thank them.

Ask, “What are chemical manufacturers and importers required to do?”

Target Answer: Prepare labels and safety data sheets and convey to customers.

Ask, “What are all employers required to do?”

Target Answer: “Provide and train employees on labels and safety data sheets.”

Ask if there are questions.
Related Facts

Ask a participant to read page 6.

Thank them.

Ask if there are questions.
Health Hazards

Ask, “Who can tell me, in your own words, the difference between an acute health hazard and a chronic health hazard?”

Target Answer: Acute is immediate and chronic is long-term with repeated exposures.
Hazardous Material Entry Routes

Read page 8.

Ask participants to think of a chemical they use and how it might enter their body.

Target answer will vary based on chemical and work they do.

Key Point: Chemicals can enter your body in a variety of ways and we must protect ourselves.
Shipyard Material Hazards

Read page 9.

Explain that these are common chemical hazards found in the shipyard.

Ask participants to put a check mark next to each of the hazards they are exposed to. Allow 2 minutes to complete.

Ask, “How many of you checked multiple hazards?

Key Point: Most all shipyard workers are exposed to many chemical hazards.
**Introduction Exercise**

**Your Exposure!**

Read instructions.

Ask participants to do one column at a time (Work then Materials/Chemicals then Effects)

Allow 2 minutes per column. When finished, ask participants, one at a time, to share one of the rows (Work, Materials/Chemicals, Effects) with the class.

Flipchart the Effects

Key Point: We must understand the effects of the chemicals we use and protect ourselves.

In some cases participants may not know the effects of a chemical that they use.

Ask them where they might find that information

Target Answer: SDS
OSHA and You!

Read the bullets and ask if there are questions.
Employee’s Responsibilities and Rights

For each of the bullets under Responsibilities include:
Ask participants to rate themselves on how they fulfill their responsibilities regarding OSHA compliance next to each bullet.
1 = less than 50% of the time
2 = 50% - 75% of the time
3 = 75% - 100% of the time
Ask the question – “How might your scores impact your risk of injury?”

Target Answer: The higher the score the less the risk.

Read and review the Rights.
No Retribution

Read page 13.

Be sure participants understand that they are protected from retribution if they file a complaint to OSHA. Reinforce that they are not “telling on a company”, they are reporting a hazard.
Resolve With Your Company –

Have the participants read this page to themselves.

Explain that their company chain of command is the most practical first step.

Point out that when reporting a hazard, whether on-line or on the telephone, the information can be confidential.

Ask if there are any questions.
Read the instructions on the page 15.

Explain that the purpose of this exercise is to know the material that was just covered well enough to ask pertinent questions. Another purpose is to do a review of the material in this section.

Reinforce that questions must come from the material found in pages 11 – 14.

Allow up to 5 minutes.

Ask volunteers to “stump the class”. To be time appropriate, ask each team for one question only. Allow 4 questions before you call an end to the exercise.

Acknowledge all participants.
Ask participants to read page 16 and allow 2 minutes for them to do that.

Ask if there are any questions.
Manufacturers Responsibilities

Read this paragraph.

Employer Responsibilities

Explain that the list on page 17 are employer requirements that must be in place to comply with the OSHA Standard.

Explain that you will going into detail regarding labeling requirements and SDS requirements.
Checklist for Compliance With Your Hazard Communication Program

Ask a participant to read the employer compliance checklist on page 18.

Ask if there are any questions.
Training Requirements

Ask a participant to read page 19  Training Requirements.

Training is not satisfied solely by giving the employee the safety data sheets to read. An employer's training program is to be a forum for explaining to employees not only the hazards of the chemicals in their work area, but also how to use the information generated in the Hazard Communication Program.
Related Facts

Ask a participant to read page 20.

Ask if there are questions.
What Needs to be Trained

Ask a participant to read page 21.

Ask if there are questions.
For each statement below circle ‘T’ for True or ‘F’ for False.

Ask the participants to team up and answer the questions on page 22 collectively.

Allow 4-5 minutes to complete.
Read each question and ask a team to answer. Acknowledge all answers.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T</strong></td>
<td><strong>F</strong></td>
<td>You must train employees only when new chemicals are introduced into their work area.</td>
</tr>
<tr>
<td><strong>T</strong></td>
<td><strong>F</strong></td>
<td>Employers are responsible to obtain SDS’s and labels for each hazardous chemical, if not provided by the manufacturer, importer or distributor.</td>
</tr>
<tr>
<td><strong>T</strong></td>
<td><strong>F</strong></td>
<td>Training need not be conducted on each specific chemical found in the workplace, but may be conducted by categories.</td>
</tr>
<tr>
<td><strong>T</strong></td>
<td><strong>F</strong></td>
<td>It is the employees responsibility to know the location of the SDS sheets in his or her workplace.</td>
</tr>
</tbody>
</table>
Ask a participant to read page 21.

Ask if there are questions.
Ask a participant to read this.
Provide example of one or more of the bullets.

Ask a participant to read this.
Provide example of one or more of the bullets.
Read each bullet.

After finishing the second bullet explain hazard categories as they are not in the training manual. See below:

It’s important to note, the GHS categories are similar yet contradictory to the HMIS/NFPA ratings: The GHS 1 – 4 rating system ranks 4 as the least severe while NFPA’s rank 4 is most severe.

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Associated Hazard Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosives</td>
<td>Divisions 1.1-1.6 (with 1.1 being the most hazardous, 1.6 the least hazardous)</td>
</tr>
</tbody>
</table>
**Physical Hazard**
Have participants read this column to themselves.

Recap by saying that the hazards are classified by three major classes:
- Physical
- Health
- Environmental

Within these classes are more specific classes listed here.

**Health Hazard**
Have participants read this column to themselves.

Recap by saying that hazards are classified by Health hazards as well as Physical hazards.

Ask if there are questions.
Read the instructions on the page 27.

Explain that the purpose of this exercise is to know the material that was just covered well enough to ask pertinent questions. Another purpose is to do a review of the material in this section.

Reinforce that questions must come from the material found in pages 23 – 26.

Allow up to 5 minutes.

Ask volunteers to “stump the class”. To be time appropriate, ask each team for one question only. Allow 4 questions before you call an end to the exercise.
Acknowledge all participants.
Requirements

Read page 28.

Ask if there are questions.
Label Requirements

As you read each bullet, point to the location of each on the slide.

Ask if there are questions.
Explain that it is unlikely that all of the participants will remember each bullet under each pictogram. It is important, however, that they understand what they are handling, working with or even what chemical hazards are in their working environment. To that end, it is important to know what each pictogram represents.

Go through each pictogram and generally explain what each represents.

Explain that there is going to be quiz on the next page, so you are going to give the participants 5 minutes to study. First, you will give them 3 minutes to study by themselves and then 3 minutes to study with their partner.

Ask if there are questions.
Give participants 5 minutes to study by themselves.

Give participants 3 minutes to study with a partner.
Draw a line from the hazard to the correct pictogram

In teams of two ask participants to draw a line from each hazard to the correct pictogram. Ask each team to share one word at a time.

- Corrosion
- Oxidizers
- Health
- Acute Toxicity
- Flammables
- Gas Under Pressure
- Aquatic Toxicity
- Explosives
- Irritant / Respiratory
Label Requirements

Go through the six label requirements and use a pointer to highlight each as you go through them.

Ask if there are questions.

Read:

1) These requirements do not have to be listed on the in this order.
Label Requirements

Ask participants, in teams of two, to write the requirements below, that they just went over on the previous page, that corresponds with the number above. Give the participants 3 minutes to complete. Ask participants to share their answers one at a time.

Acknowledge all answers.

1) Product identifier
2) Signal word (Danger or Warning)
3) Pictogram(s)
4) Hazard Statements
5) Precautionary statement(s)
6) Name, address, and phone number of the responsible party
Now ask the participants, individually, to draw a label based on the information in their training manual. Allow 7-8 minutes to complete. When they are finished, ask participants to share their labels with their partner. Walk around the room and provide input to each group.

Ask if there are questions.
Exceptions

Ask participants to read page 35 to themselves.

Read the third bullet:

“You are not required to label portable containers into which hazardous chemicals are transferred from labeled containers and are intended only for the immediate use of the employee who makes the transfer”.

*Explain that though OSHA allows this, the shipyards where they work do not. All portable containers must be labeled.*

Ask if there are questions.
For each statement below circle ‘T’ for True or ‘F’ for False.

Ask the participants to team up and answer the questions on page 36 collectively.

Allow 4-5 minutes to complete.

Read each question and ask a team to answer. Acknowledge all answers.

<table>
<thead>
<tr>
<th>T</th>
<th>F</th>
<th>One of the pictograms represents an exploding bomb.</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>F</td>
<td>A “signal word” could be either Danger or Warning.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>Every label must have at least 5 elements.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>A hazard classification will be either Physical or Mental.</td>
</tr>
</tbody>
</table>
Safety Data Sheets

Read page 37.

Explain that the SDS has taken the place of the MSDS.
Manufacturer and Distributor Requirements

Ask a participant to read the first paragraph.

Ask if there are questions.

Ask a participant to read the second paragraph.

Ask if there are questions.
Employer Responsibilities

Read page 39 and ask if there are questions.
Employee Responsibilities

Ask a participant to read this page.

Reinforce the point: These are your responsibilities!
Read the first sentence and give participants a few seconds to answer. Read each bullet and provide a few seconds to respond.

When finished asked how many participants answered yes to every bullet.

Tell the participants that if they did not answer yes to each bullet their “homework” is to turn the “No” into a “Yes”!
MSDS – 1994
Ask participants to read both paragraphs to themselves. Allow about one minute to do this.

SDS – Current
Ask: Just based on these two paragraphs, what are the differences between the old MSDS systems and the SDS system?

Target answer: A universal and consistent order and format.
Reinforce that SDSs have a universal format and 16 information requirements.

Go through each one and ask what the participants believe each section means.

Ask if there are questions.
Ask the participants, individually, to put in the proper order. After 3 or 4 minutes ask them to compare their work with that of their partners. Ask them to come to consensus on the proper order. Allow 5-6 minutes to do this. When finished ask if there is any time that would like to share their information.

Acknowledge participation.

Ask if there are questions.
Ask the participants, individually, to answer the first question (left column) on the screen or the top of their training manual.

Respirator. Face shield. Coveralls or other appropriate body protection. Gloves.

Ask the participants, individually, to answer the second question.

Section 8.

Using the SDS it was much easier to find the information and it left
no room for doubt.
Let participants read page 46 to themselves.

This should be fully implemented in your organizations.
Host Yard Rules!

Read page 47.

Site any examples that reinforce these points.

Ask if there are questions.
Important

Ask a participant to read page 48.

Key points: Know where to dispose of your hazardous waste when working off site and be sure there is a spill kit and fire extinguisher at this location.

If you are not sure of a substance someone is using, or the hazards the substance presents, ask to see their SDS.

Know where the SDS’s are kept wherever you are working!
For each statement below circle ‘T’ for True or ‘F’ for False.

One question at a time, ask the participants together to answer the questions on page 49.

Ask if there are questions.
Hand out Feedback Form and ask participants to complete. Allow 4-5 minutes.

Handout Pre/Post Test and explain by completing this test we will be able to identify how well the trainer conveyed the information. Ask if there are questions.

Have them circle “Post” at the top of the test. Have them write the date in the appropriate space. Ask them to write their names on the pre-test. Allow 5-10 minutes to complete the pre-test and collect the tests. Coordinator will grade tests.
Ask participants if they have any final questions.

Thank participants for the time and effort.