Global Harmonization System: Impact on OSHA's Hazard Communication Standard

by Byron Bombay and Rich Gaul

Before you begin

- O Survey your workplace and identify the chemical and other substances that employees may handle.
- O Review your hazard communication program with your employees. Ensure they understand the potential hazards associated with these materials and how to handle them properly and protect themselves.

Introduction

Chemicals are and have been a major part of our lives for many years. Today, companies ship chemicals from one country to another and even one continent to another. We see more and more chemicals manufactured across the world each year.

Currently, there is no universal method to communicate chemical hazard information throughout the world. This may cause problems for the business community when shipping chemical products from one country to another. It may also cause serious safety concerns when vital information is missing or misunderstood by the people using the chemicals or in an emergency situation. It can even prove hazardous to the general population in some extreme situations.

Help is on the way

The solution is the Globally Harmonized System (GHS), a universal system for chemical hazard communication. In 2002, the World Summit on Sustainable Development encouraged countries to adopt the new GHS and have it operational by 2008. GHS is designed to help workers identify the intrinsic hazards associated with chemicals and convey detailed information about hazardous ingredients, first aid measures, and proper storage and handling techniques for chemical substances and mixtures.

The Occupational Safety and Health Administration (OSHA) announced a proposed rule to align its existing Hazard Communication Standard with the GHS. Although not finalized, it's important for businesses to become familiar with the proposed rule. The GHS will provide universal guidelines for chemical hazard communication information. For example, GHS will use pictograms (universal symbols) on all product labels. These pictograms will provide quick and easy hazard recognition. The GHS standardizes label elements so that they all have the same five basic pieces of information:

- O A signal word;
- O A hazard statement;
- O Precautionary statements;
- O A product identifier;
- O Name of the manufacturer or supplier.



Under GHS, safety data sheets (SDSs) will replace material safety data sheets (MSDSs). The new system standardizes the format and content of SDSs, and the revised SDSs will include additional information on ecology, disposal, transport and other regulatory information.

The United States has not finalized the change to the GHS. However, companies should begin to educate their employees about the pending changes.

Discussion

- O Ask each participant if they are aware of the efforts to develop a GHS for hazardous chemicals.
- O Ask them what information do they feel would improve communication of chemical hazards in the workplace.

Group activities

Follow up with an exercise that asks students to describe the benefits of the proposed GHS system. What are these specific benefits?

The students should mention such things as improving the efficiency of the regulatory system and reducing duplication and wasted time. The system should promote international trade and ease compliance issues between countries. The universal labeling system will reduce regulatory costs, provide more consistent and perhaps even more complete information. Overall, the handling and transport of hazardous chemicals should be safer and more efficient.

Follow up with an exercise where each member of the group (or team) develops a list of potential emergencies or problems that could occur at their facilities and how GHS would impact that specific emergency situation. Demonstrate how the GHS should work.

Discussion

What are the main points making up the GHS?

The GHS addresses three main areas. They are:

- 1. Classification of substances;
- 2. Classification of mixtures;
- 3. A system of hazard communication internationally understood and recognized.

What are the target groups for this system?

- 1. Workplaces, including educational institutions
- 2. Household use
- 3. Transportation including labels and placards
- 4. Emergency response

What are some of the specific changes proposed to the existing HazCom standard?

- O Revised criteria for classifying chemical hazards and how that might look in the future
- O Current labeling and how it might change in the future
- O Format and content change of current MSDS (to GHS-compliant SDSs)
- O Current requirements and future changes that might occur

Follow-up questions

Does your plant or facility use GHS now?

Are the people at your plant or facility aware of GHS?

Was OSHA successful in adopting the new guidelines to the HazCom standard?

Do you know where to find CURRENT HazCom rules?

References

EHSToday

www.osha.gov

www.cdc.gov

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