

The Hazard Communication Standard in Health Care

Labeling, MSDS, and Other Aspects of Dealing with Chemicals

Health care workers whose jobs put them in contact with hazardous chemicals need to have the appropriate protective measures in place to protect them from illness and injury due to those chemicals. The Occupational Safety and Health Administration's (OSHA's) Hazard Communication Standard provides a mechanism to ensure that information about the protective measures is disseminated to employers and employees. The Hazard Communication Standard covers all industries where employees are exposed to hazardous chemicals and requires chemical manufacturers and importers to evaluate the hazards of the chemicals they produce or import and to provide information about the hazards and associated protective measures by

putting labels on containers and preparing and distributing material safety data sheets (MSDS). Every employer with hazardous chemicals in the workplace is required to have a hazard communication program that includes the labeling of containers of hazardous substances, MSDS, and employee training.

What's the Problem?

To protect people who are potentially exposed to chemicals when these substances are produced, transported, used, and disposed of, several countries require information about hazardous chemicals to be prepared and conveyed to affected parties. These laws vary in the scope of chemicals covered, definitions of hazards, specificity of requirements, and use of symbols and pictograms. The incon-

sistencies among the various laws are often substantial enough that manufacturers must create different versions of labels and MSDS for their products to suit the laws and regulations of different countries.

It's not just the requirements of various nations that make hazard communication challenging. Sometimes the requirements of various regulatory bodies within a country complicate matters. For example, in the United States, several regulatory authorities exercise jurisdiction over hazard communication for chemicals. In addition to OSHA's Hazard Communication Standard, the Department of Transportation regulates chemicals in transport, the Consumer Product Safety Commission regulates chemicals in consumer products, and the Environmental Protection Agency regulates pesticides and labeling under the Toxic Substances Control Act. "Each of these regulatory agencies operates under different mandates," says Maureen Ruskin, director of the Office of Chemical Hazards–Metals in OSHA's Directorate of Standards and Guidance. "And each has adopted varying approaches to hazard communication requirements. The diverse and sometimes conflicting national and international requirements can create confusion among those who want to use hazard information effectively."



OSHA's Hazard Communication Standard helps ensure that employers and employees are informed about hazardous chemicals.

What's the Solution?

In 1984, the United States adopted an interagency trade policy supporting development of a unified approach to these issues. To address these varying and vying requirements, a number of international organizations, countries, and stakeholder representatives took part in negotiations in 1992 to develop the Globally Harmonized System of Classification and Labeling of Chemicals, which is designed to be a single coordinated system to address classification of chemicals, labels, and MSDS. The United Nations adopted the Globally Harmonized System in 2002, with the goal of increasing the quality and consistency of information provided to those who use chemicals, including employers and employees.

In 2006, as part of its standards development process, OSHA published an Advance Notice of Proposed Rulemaking to solicit information from the industry about how the requirements of the Globally Harmonized System would affect the provisions of the Hazard Communication Standard if they were integrated. OSHA received more than 100 comments from a range of stakeholders; the majority supported OSHA aligning its Hazard Communication Standard provisions with the global approach. Accordingly, OSHA published the Notice of Proposed Rulemaking on September 30, 2009, modifying the current Hazard Communication Standard to align the provisions with those of the Globally Harmonized System. Again, the comments OSHA received showed broad support for this rulemaking. The proposed revisions to the Hazard Communication Standard are based on the third revision to the Globally Harmonized System and also take into account the input received from the public, as well as the actions taken by

major trading partners of the United States for their own regulatory activities when adopting the Globally Harmonized System.

If OSHA's Notice of Proposed Rulemaking is adopted, the chemical manufacturing sector of industry will still have primary responsibility for evaluating the hazards of products and preparing new labels and MSDS. However, the Notice of Proposed Rulemaking adopts a standardized approach to hazard classification, labels, and MSDS based on the Globally Harmonized System criteria. For the vast majority of those who use chemicals, including most small businesses covered by the Hazard Communication Standard, these changes would improve information and have minimal cost effects. Employers, including health care organizations, would receive new labels and MSDS from their suppliers and would be required to provide some additional training to make sure their staff and employees understand the new formats provided. Ruskin says, "OSHA believes this proposal will prevent injuries, illnesses, and fatalities from exposure to hazardous chemicals through clearer and more accessible information."

Proposed Rule

The current Hazard Communication Standard is performance oriented—meaning that when OSHA sets a goal, employers decide how to meet it. The current standard provides guidance for defining hazards and performing a hazard determination but does not specify the approach to follow. Neither does it specify a format or language in which to convey hazards and other information on either labels or MSDS.

Although the Globally Harmonized System has certain aspects that are performance oriented, the key provisions would be specification oriented—mean-

ing that in the Notice of Proposed Rulemaking, OSHA would provide detailed specifications on how to meet a goal. This would ensure that a common approach would be taken to classify hazards and prepare labels and MSDS.

OSHA indicated in the Advance Notice of Proposed Rulemaking that it wouldn't change the aspects of the Hazard Communication Standard that are unaffected by the Globally Harmonized System. Those who commented agreed with this approach and urged OSHA to maintain as much of the current rule as possible. The Notice of Proposed Rulemaking follows these suggestions and is written as a modification to the existing standard. Parts of the standard that don't relate to the Globally Harmonized System or are already consistent with it would remain unchanged except for some modifications to terminology to align it with language used in the Globally Harmonized System. For example, throughout the Notice of Proposed Rulemaking, the term *hazard determination* would be changed to *hazard classification* and *material safety data sheet* would be changed to *safety data sheet*.

Structure of the Standard

The Notice of Proposed Rulemaking, which is similar to the current Hazard Communication Standard, is structured as follows:

(a) *Purpose.* The Hazard Communication Standard includes a paragraph that describes its purpose and addresses preemption of state and local laws. The Notice of Proposed Rulemaking includes essentially the same paragraph. The primary modification is to affirm that part of the purpose is to harmonize with international requirements.

(b) *Scope and application.* This paragraph in the proposed Hazard

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Communication Standard addresses many of the practical accommodations OSHA has made regarding application of the Hazard Communication Standard to different types of workplaces, as well as addressing the interface of the Hazard Communication Standard with other federal laws that require hazard communication provisions. The Globally Harmonized System allows such accommodations to be made by regulatory authorities adopting the system, so no substantive changes have been made in this paragraph of the Hazard Communication Standard.

(c) *Definitions.* This paragraph defines many of the terms used in the proposed Hazard Communication Standard. To be consistent with the Globally Harmonized System, OSHA has proposed to change a number of the definitions, as well as the actual terms used. For many of these terms, the changes are simply in the language and have no impact on their meaning or use in the standard or on the scope of the standard. The terms are relevant primarily to the hazard classification process and thus to the chemical manufacturers and importers performing this process.

(d) *Hazard classification.* The hazard-classification approach in the Globally Harmonized System is quite different from the performance-oriented approach in the Hazard Communication Standard. The Globally Harmonized System has specific criteria for each health and physical hazard, along with detailed instructions for hazard evaluation and determinations about whether mixtures or substances are covered. OSHA's Notice of Proposed Rulemaking has included the general provisions for hazard classification in paragraph (d) of the revised rule and has added extensive

appendixes (Appendices A and B) that address the criteria for each health or physical effect.

(e) *Hazard communication program.* The Globally Harmonized System does not have provisions regarding hazard communication programs, and thus this paragraph is essentially the same as in the current Hazard Communication System.

(f) *Labels.* Under this paragraph, OSHA has proposed that chemical manufacturers and importers must provide a label that includes a harmonized signal word, pictogram, and hazard statement for each hazard class and category. In addition, precautionary statements must also be provided, as well as a product identifier and supplier information. A new mandatory Appendix C indicates what specific information is to be provided for each hazard class and category once a chemical is classified. These proposed requirements are significantly different from the current Hazard Communication Standard, which allows chemical manufacturers to use whatever language they believe is appropriate to convey hazards. The standardized approach will both improve communication aspects of the label and facilitate compliance by providing the specific information to be included based on the hazard classification.


(g) *Material safety data sheets.* Paragraph (g), as proposed, indicates the headings of information to be included on the safety data sheets and the order in which they are to be provided. This is supplemented by new mandatory Appendix D, which indicates what information is to be included under each heading. This format is the same as is used for the ANSI standard on MSDS, which is already familiar to U.S. employers. The current Hazard Communication Standard requires similar information but allows the use of any format. A standard-

ized approach would improve the effectiveness of the MSDS and make employer compliance easier.

(h) *Training and information.* The provisions in paragraph (h) have been clarified in the Notice of Proposed Rulemaking to indicate that the new label and data sheet formats and presentation of information must be discussed in training. All employers would be required to conduct additional training to ensure that their employees are familiar with the standardized labels and MSDS. Otherwise, the training provisions remain the same as in the current Hazard Communication Standard.

(i) *Trade secrets.* The trade secrets provisions of the Globally Harmonized System are consistent with those in the Hazard Communication System and required little change. One modification in this paragraph would be the inclusion of percentage composition of mixtures in trade secrets information that would now be disclosed under provisions in the proposed standard when necessary for protection.

(j) *Effective dates.* OSHA is proposing that all the revised provisions in the Hazard Communication Standard become effective three years from the adoption of the proposed rule, with training required in two years so employers and employees will recognize and understand the new labels and MSDS as they are received.

Concludes Ruskin, "We believe that, if adopted, the proposed rule would make a significant difference in the safety and well-being of health care workers and others who are exposed to chemicals." 

This article was developed through the cooperative efforts of the OSHA/Joint Commission Resources Alliance.

