



Global Harmonization — A Catalyst for Safety

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The majority of employers in the United States would not argue the point that the Hazard Communication Standard (HCS) has cost their company an incredible amount of time, money, and grief since its inception. Though it is a great concept, I question whether the HCS, even after more than 20 years in existence, has produced more than a few positive results in the eyes of most employers and employees.

To make my point, let's examine the opening paragraphs of 29 CFR 1910.1200, appendix E, which are very positive and encouraging remarks.

The Hazard Communication Standard is based on a simple concept: that employees have both a need and a right to know the hazards and identities of the chemicals they are exposed to when working. They also need to know what protective measures are available to prevent adverse effects from occurring. The HCS is designed to provide employees with the information they need.

Knowledge acquired under the HCS will help employers provide safer workplaces for their employees. When employers have information about the chemicals being used, they can take steps to reduce exposures, substitute less hazardous materials, and establish proper work practices. These efforts will help prevent the occurrence of work-related illnesses and injuries caused by chemicals.

These statements give one the impression the HCS will be the easiest and most successful safety program any company ever will institute on behalf of its employees. In fact, you would wonder why every employer in America doesn't enthusiastically embrace the HCS as a best business practice. Unfortunately, the financial burden placed on companies attempting to comply with this standard have been staggering, while the rate of chemical source illness continues to grow each year and employees still don't buy it.

One of the major components of the HCS requires employers to maintain a current list of their hazardous chemicals (chemicals and mixtures that contain physical and health hazards) in their workplaces. Many employees consider this task to be an exercise in futility, while employers consider it to be expensive and time consuming, producing very few measurable results.

Certainly, it is important to maintain an accurate list of all of the chemicals in a workplace that pose a potential risk to employees. However, if that list is not accurate and does not reflect the associated risks in a manner that employees understand, then it is just a list, and it never will increase employee awareness or reduce workplace exposures.

Let's be practical: creating and maintaining a chemical list does not make a workplace safer — but it is also impossible to have a safer workplace if half of the required data is missing. And if the list or inventory does not identify the hazards associated with the chemicals, once again, it is just a list. And employees will not support any program they feel does not work for them.

Material Safety Data Sheets, one of the cornerstones of the HCS intended to provide employees with the valuable information and knowledge mentioned in Appendix E, are technical and confusing to

most employees. Therefore, most never look at an MSDS except to place it in a yellow binder on a shelf. The question, then, is how an employer possibly can provide the knowledge needed to create a safer workplace environment by simply maintaining a chemical list and a corresponding MSDS.

Merits of GHS

The Occupational Safety and Health Act enacted by the U.S. Congress provided a successful platform for employee safety programs. The HCS, one of the most familiar of those safety programs — though not the most successful — is still nonetheless a great concept, as noted in appendix E. I believe most American companies would choose to align their business objectives with that of the HCS if the tools were available to make this a reality.

I am excited to report the Globally Harmonized System of Classification and Labeling (GHS) may be the very tool that can provide the catalyst needed to finally gain industry and employee support that eventually can lead to safer workplaces and even safer homes.

Most readers should now be aware of the rule change proposed by OSHA to modify the current HCS to align it with GHS. GHS provides a single set of harmonized criteria for chemical manufacturers to classify their chemicals according to their health and physical hazards in classes such as Flammable Gases, Flammable Liquids, Self-Reactive Substances, etc. It is worth noting the classification of chemical products under GHS also includes mixtures.

Focusing on the classes that chemicals or mixtures are assigned to in a specific work area may enable health and safety professionals to develop a safety system that is not unlike the current DOT Emergency Response Guide book. The primary benefit of GHS is that it can increase the quality and consistency of information provided to workers, employers, and chemical users by adopting a standardized approach to hazard classification, labels, safety data sheets, and even training programs.

The impact of adopting the GHS guidelines to chemical producers is that they will have to follow specific criteria to assign their products to a Hazard Class and include harmonized words and pictograms on their safety data sheets (SDS) and labels. In addition, producers will be required to generate their MSDSs in the new SDS 16-section format, which means they will incur an additional investment to meet compliance.

One of the advantages of adopting GHS in the workplace is that the SDS will finally be formatted, which means it will provide information in the same section on every document. In addition, both the SDS and labels will include harmonized pictograms and warning phrases while providing EHS professionals access to more complete and detailed technical data than they have had previously.

There are also some disadvantages of adopting the GHS, such as the increase in the amount and technical nature of the data that will be provided. As a result, SDSs may be expanded from two and three pages to 15 and 20 pages. Chemical values and units of measure will follow the metric system, which is still a problem from a comprehension standpoint for most employees in America. Also, much of the chemical-specific information will still necessarily be technical and confusing to most, but the harmonized warning symbols and phrases should help offset some of the confusion. Lastly, the learning curve will be steep in the early adoption period, placing a potentially heavy financial burden on employers attempting to train employees. It is my firm belief, however, that if employees buy into this new GHS concept, they will embrace it and support it, especially if they feel it provides value for them.

All in all, GHS should provide the basis for a much safer workplace environment, especially if safety professionals take advantage of the harmonized data and simplified classification system to develop training programs that work effectively for all levels of employees. These combined efforts should help employers to align their business objectives with the regulatory objectives of OSHA, which

should reduce chemical-source illness and injury in the workplace and, in the end, reduce the overall cost of doing business in this global economy.

About the Author

Tom Jacques is Director of Sales and Marketing for the MAXCOM Services Division of HAAS TCM Group International.

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