



## Applying GHS in the Real World

Friday, October 5, 2007

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With all the changes in the Regulatory world of late, it is quite easy to feel smothered by the weight of the upcoming compliance tasks and associated paperwork. One of the changes with possibly the most far-reaching effect, is the promulgation of the Globally Harmonized System (GHS) by the United Nations. The unavoidable challenges related to this and the recommended world-wide implementation by 2008 has created a significant buzz in the world of Environmental Safety and Health.

### The Benefits

First let's discuss the benefits, for there are many. A unified form of communication across multiple countries and agencies provides the ability to present a clear and consistent message that ultimately leads to further protection for people and the environment. Messages presented consistently will allow those exposed to chemicals to handle, transport, use, and dispose of them properly, which will lower the number of incidents and the costs associated. Additionally, it is inevitable that ease of communication will have the effect of improving international trade. The unification resulting from a harmonized system will allow those in the chemical world to easily cross borders, with little additional cost. "Initially, the UN hoped an additional benefit would be realized in the costs associated with communication, as chemicals would only need to be classified once, for all agencies." Ruth Mayo, SiteHawk's Regulatory Compliance Specialist, states. "At the recent SCHC conference I learned that many competent authorities in the early adoption countries are

applying the GHS building blocks in such a fashion that makes it unique to their country. In addition, they are including country specific classification categories not covered by the GHS as 'supplemental information'. This limits country-to-country similarities which in turn limits the proposed benefits." Because of the possible effect this could have on communication, it is something that should be monitored closely over the coming months.

Although most agree that the benefits of unifying communication across borders are great, the actual implementation of such a system is a challenge most will be affected by to some degree. The anticipated changes caused by the GHS lead to many questions regarding associated effects in the workplace. The two main questions certain to top many lists will be, "How will this affect me?" and "What will I need to do to be compliant?" Following is a brief overview of the GHS implications as compared to HAZCOM, to assist in answering those questions.

### HAZCOM/GHS comparison:

- (M)SDS – the (M)SDS will experience extensive change after adoption of the GHS, as all products will need to be classified for health and physical hazards based on GHS criteria. The title of the document will also likely be changed to Safety Data Sheet (SDS). Additionally, the flexibility of format will be removed; the 16 section document (as adopted by ANSI Z400.1-2004) will be required. The

order of the 16 sections will be specified; with section two being for hazard identification and section three being for components. The consistent format will greatly assist employees in quickly and easily finding their information on the (M)SDS.

- Labeling – the GHS will require standardization for all labels which will result in a reprocessing of every label during transition. Standardized pictograms, signal words, hazard statements, and precautionary statements are specifically designed to enhance communication for all those handling chemicals. These elements will also need to be placed on the label in specified locations.
- Training – educating employees on the label and (M)SDS changes due to the updated product classifications, pictograms, signal words, and hazard and precautionary statements will represent the greatest training challenge. From a process standpoint, training managers should plan to follow the existing HAZCOM requirements, as the current training procedures are more detailed than the GHS training recommendations and will likely be retained.
- Written Program – Because OSHA has indicated it will retain the provisions of HAZCOM that are not affected by the GHS, the written program is expected to be largely unchanged. It will, however, need to be modified to include any resulting changes to labeling and (M)SDS communication as well as related employee training.

To review details associated with the classifications and pictograms of the GHS, visit [www.ghsinformation.com](http://www.ghsinformation.com). The Hazard Info page of this site gives detailed information for health and physical hazards by category with related pictograms, hazard statements, and precautionary statements. As mentioned previously, the GHS adoption is set up in a building block fashion, meaning each agency can choose to apply the elements of the GHS that they feel most benefit their focus and audience. When OSHA establishes the final rule, it will be

imperative that you understand which portions of the GHS have been incorporated. It is anticipated that most of the GHS elements will be adopted by OSHA with respect to labeling and MSDS format however, they will likely *not* adopt the fifth category for most hazard classes or the hazard classes related to the aquatic environment.

### **7 Tips to Creating an Effective GHS Transition Plan:**

- 1) Get Informed – learn all you can about the GHS and be on the lookout for information related to the new changes to best determine its potential impact on your organization. Find a good resource for gathering GHS related information and check it often. The website [www.ghsinformation.com](http://www.ghsinformation.com) is an excellent source and also provides a free newsletter, which will send timely news directly to your inbox.
- 2) Timeframes - be sure you are aware of implementation dates in your country as well as in the countries with whom you do business (see the timeline on the [www.ghsinformation.com](http://www.ghsinformation.com) home page for information by country). Also, be aware of the differences in adoption between countries as it may affect your exportation processes.
- 3) Don't Go It Alone - make sure your product and service providers have a transition plan in place and are able to support you as you make the necessary changes; this includes vendors who assist with: training, (M)SDS management, authoring new compliant documents, labeling, and transportation. Will they be able to assist you as you transition to the GHS? Are they informed about the GHS and will they be a useful resource for you?
- 4) Vendor (M)SDS Management System – support your transition with a chemical information management system that will aid in the administration of documents classified under existing and future regulations. Be sure your system is ready for the GHS and is able to provide a consistent and clear message

to your employees, even in the event the (M)SDS does not. How will you deal with vendors who are slow to transition to the GHS and provide the updated (M)SDS requirements your employees need? Does your (M)SDS management system provide a means for tracking the new GHS classifications and pictograms? If your chemical vendors are slow to respond to the GHS, can your MSDS Management system offer GHS classification guidance to assist with consistent messaging for your employees?

- 5) Workplace Labels – workplace labels will need to be updated to include the new pictograms and statements. To ensure workplace safety and allow for consistency, GHS labels may need to be created before an updated vendor (M)SDS is available. How will you create such a label and classify it appropriately? Contact your labeling vendor to find out how they plan to assist you with compliance for the upcoming label changes. If your Vendor MSDS management program is able to track the new fields and classifications, can it also provide a GHS compliant label?
- 6) Product (M)SDS authoring and distribution – how will you reclassify your products according to the GHS and how will that information be distributed to your customers? Be sure your authoring method will support GHS classification according to the various countries' requirements, and that it will be able to create the necessary associated product labels and documents. You might consider adding an addendum with the GHS classifications and related pictograms to your existing product (M)SDSs during the interim period, before full implementation is required. Explore your options with respect to distribution, a validated electronic distribution method could greatly assist in allaying some of the costs associated with such a large project.
- 7) Training Program – training will be a key component of your overall GHS approach and should incorporate information as it is introduced into the workplace. Employees and emergency responders

will need to be trained on all new elements they will be faced with, from hazard statements to pictograms. Bear in mind, if products are imported from countries that implement the GHS prior to the US, your employee training may need to begin earlier than expected. The sooner you begin planning your training approach, the more likely you will achieve a successful transition. It is not too early to begin familiarizing your employees with the upcoming pictograms and (M)SDS format changes.

OSHA estimates that, in the US alone, over seven million workplaces and 945,000 hazardous chemical products will be affected by the GHS. While the implementation of GHS in the US may not occur until late in 2008, the changes will be far-reaching and vast in nature. Because other countries like Japan have already implemented the GHS for many chemicals, your employees could be faced with the new documentation very soon. Bear in mind, thoughtful preparation is the best way to ensure a successful and smooth transition.

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