

# WHMIS: 8 Things to Do Now to Prepare for the GHS



Canada intends to implement a new international system for classifying and labelling chemicals called the Globally Harmonized System (GHS), which will impact the current MSDS and label requirements under WHMIS. (See the May 2009 issue for more details about the GHS.) The original goal of implementing GHS by 2008 obviously didn't happen. And the final GHS implementation date hasn't been set yet. But there are still things that safety coordinators can do *now* to ensure that their companies are prepared when new GHS rules *do* take effect.

We'll review what's going on with GHS. And then with help from Mike P. Moffatt, a safety and environmental compliance expert, we'll tell you eight things you can do now to prepare for Canada's eventual implementation of GHS.

## GHS: WHERE THINGS STAND

The idea for the GHS came about in 1992 at the United Nations Conference on Environment and Development Earth Summit. Many countries have systems for classifying and labelling chemicals. Although national systems are similar, there are enough significant differences to create trade barriers, impede compliance and cause confusion. For example, a company that manufactures a product containing hazardous substances may need to create a different MSDS for each country to which it ships that product.

The summit participants agreed that an internationally-harmonized system for classifying and labelling chemicals would ensure that companies, workers and other end-users have consistent and appropriate information on chemicals and their hazards. This initiative is now known as the GHS. A UN subcommittee formally adopted the first edition of the GHS in 2002; a third edition of the GHS was published in 2009.

Health Canada is coordinating Canadian adoption of the GHS with help from Environment Canada and Transport Canada. The government must first identify which parts of the GHS it wants to adopt and then amend the existing laws to reflect the GHS requirements. It has held technical consultations with multi-stakeholder groups on implementation of the GHS. But a final implementation date still hasn't been set.

So where do things stand? Moffatt believes that Canada's final GHS regulations will be published sometime in 2012, with full compliance required by 2014.

## **How the GHS Works**

The GHS has two major elements:

**Classification of chemical hazards.** The GHS sets rules or criteria for classifying both pure chemicals and mixtures. Within this classification system, there are three major hazard groups:

1. Physical hazards;
2. Health hazards; and
3. Environmental hazards.

Each hazard group has "classes" and "categories" within the classes. Each class or category is called a "building block." Countries can determine which building block(s) to adopt. They must then use the GHS rules for classification and communication corresponding to the block(s) they adopt.

**Communication of hazards.** Once a chemical has been properly classified, information about the hazards associated with its classification must be effectively communicated to anyone who may come in contact with the substance, including workers. The GHS relies on two items for hazard communication: labels and SDSs (the equivalent of MSDSs).

Thus, the implementation of GHS will directly affect the Canadian WHMIS system. All existing WHMIS requirements will need to be adapted to reflect the new GHS hazard classification criteria and communication rules, which means changes to WHMIS labelling and MSDS requirements.

## **8 WAYS TO PREPARE FOR THE GHS**

Moffatt suggests that Canadian companies do the following now so they'll be prepared when Canada adopts the GHS:

### **1. Designate Someone to Be Responsible for GHS Transition**

Someone in the company will need to spearhead efforts to transition from WHMIS to the GHS, says Moffatt. That person should probably be the safety or EHS coordinator. However, that person may need to work with a team of representatives from the affected parts of the company. Transition to GHS will affect each company differently depending on its operations. For example, the transition will be more challenging for a company that manufactures chemical products than for a company whose workers simply use a few chemical products in their jobs. Thus, a chemical manufacturer may need a full-blown GHS transition team.

### **2. Become Familiar with the Current Edition of the GHS**

Whoever leads the GHS transition or transition team should start becoming familiar with the current edition of the GHS, especially its label and SDS requirements. The third edition is available online. You can also order a hard copy or CD-ROM version.

### **3. Follow Progress of Adoption of GHS in the US and Canada**

The US has made more progress in adopting the GHS than Canada, which is taking a wait-and-see approach, says Moffatt. And it's likely that Canada will follow the US's lead in many respects, he adds. For example, it's expected that both the US and Canada will omit the entire environmental hazard group because of issues as to how environmental hazards are regulated in these countries. It's also likely that both countries will add hazard classes. So the transition person needs to follow what's going on with GHS implementation in both the US and Canada.

#### **4. Provide Feedback to the Government**

The Canadian government has already held consultations with stakeholders on the GHS and is expected to ask for additional feedback as it develops GHS regulations. By providing feedback on proposed GHS rules, you may be able to influence how GHS is implemented in Canada and reduce potential implementation costs. For example, Moffatt believes that with enough industry feedback, the government may agree to a longer timeline for implementation of GHS regulations and staggered timelines for pure substances and mixtures.

#### **5. Get Substance Level Classifications for Products**

To know what information to put on a GHS-compliant label and SDS for a chemical or mixture, you'll need to know its classification. Classification of individual chemicals is pretty straightforward. But classification of mixtures is based on a variety of factors including:

- Human experience;
- Physical properties of mixture;
- Concentration of ingredients; and
- In vitro or animal test data.

Moffatt says that if your company manufactures chemical mixtures, you'll need a database of the GHS classifications for each of the individual components in your mixtures to properly classify them. And because the classification process could be lengthy, start gathering this information now, he advises.

As of Dec. 1, 2010, companies in the EU must have compliant SDSs for substances and proposed "provisional classifications" for 140,000 REACH pre-registered components. You can use this EU information as the basis for classifying your mixtures.

#### **6. Determine the Impact of Classifications**

Once you've classified the chemicals and mixtures your company makes, consider the impact of that classification. For example, will you have to change a product's marketing materials or claims because of its classification? If so, determine if you can reformulate the product so that it falls into a less severe hazard category—or even exclude it from the hazard class entirely. If the product can't be reformulated and the hazard category seems unreasonable, consider having the product tested, suggests Moffatt. In many classes, product testing data "trumps" general ingredient-based classification rules, he explains.

#### **7. Develop a Plan for New SDSs and Labels**

If your company manufactures or supplies chemicals, you'll have to reclassify

those chemicals under the GHS rules, and generate GHS-compliant labels and SDSs. So start figuring out the best plan to do so. For example, compare the costs of creating new SDSs and labels internally versus outsourcing the job.

You'll also have to get updated SDSs for the chemicals you use and ensure that new GHS-compliant labels are on them. So develop a plan on how you'll acquire GHS-compliant SDSs and labels. And you'll need to be prepared to create GHS-compliant workplace labels for use, say, when workers decant a chemical from its original container into a smaller container.

## **8. Develop a GHS Training Program**

Although the GHS doesn't include specific training requirements, under Canadian law, you'll clearly have to train workers who work with or near chemicals and mixtures on the new GHS requirements. So start developing a GHS training program now. At a minimum, such training should cover:

- The new hazard classes and categories;
- The new format for SDSs; and
- Understanding the information on GHS-compliant labels and SDSs.

### **BOTTOM LINE**

Yes, it may take a while for the Canadian government to finalize and implement the GHS. And the new requirements will probably be phased in over time. But instead of waiting until the GHS requirements officially become law and then scrambling to bring your company into compliance, taking the steps outlined in this article *now* will help smooth the transition and make implementation easier.

### **INSIDER SOURCE**

**Mike P. Moffatt:** Director of Communications, Nexreg Compliance Inc., [info@nexreg.com](mailto:info@nexreg.com); (866) 361-3032.

### **GHS Resources**

Here are links to government and other websites that have more information on GHS and its implementation in Canada and across the world:

United Nations

CCOHS

European Union GHS Regulations