

HazCom Compliance: Best Practices

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Introduction

The Hazard Communication Standard (HCS) is consistently one of the most frequently cited OSHA violations, in fact it ranked third on OSHA's Top 10 *Most Frequently Cited Standards* list for 2009 (Oct. 1–Sept.30, 2009) (OSHA 2009a). In this paper, we provide a review of the HCS; share details about OSHA's proposal to align the HCS with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), detail some common compliance challenges facing employers, and recommend best practices for achieving and maintaining compliance with the standard.

What is HCS?

The Hazard Communication Standard is officially known as 29 CFR 1910.1200, but is commonly referred to by many names, including HCS, HazCom, 1910.1200, and simply The Reg. It was adopted in 1983 and today covers more than 100 million workplaces and more than 7 million workers (OSHA 2006). The purpose of the standard, according to OSHA, is to “ensure hazards of all chemicals produced or imported are evaluated and details regarding their hazards are transmitted to employers and employees” (OSHA 1983a).

Examples of chemicals and chemical properties that present physical hazards to those individuals who work with them or around them include combustible liquids, compressed gases, explosives, flammables, organic peroxides, oxidizers, pyrophorics, unstable (reactive) materials and water-reactives. You also have chemicals that may produce acute or chronic negative health effects in exposed workers, such as carcinogens, toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system and agents which damage the lungs, skin, eyes or mucous membranes.

As these examples demonstrate, there are an abundance of hazardous chemicals to consider when it comes to safety and compliance in the workplace, and they exist in varying states, with varying properties. They may be stored in anything from drums to tanks to spray bottles. Some are commonly known to be hazardous, like hydrochloric acid, while others may be less obvious, like Windex.

Who Has Responsibilities Under This Regulation?

So, who has responsibilities when it comes to HCS compliance and safety? Well, every chemical manufacturer, importer and distributor has responsibilities, as do all employers who use these chemicals. The term “use” means to ‘package, handle, react or transfer’ (OSHA 1983b). Chemical manufacturers, need to evaluate the chemicals and any components of chemical products they produce to identify potential hazards, and then must create and distribute appropriate warning labels and material safety data sheets (M)SDSs (in this paper, we place the ‘M’ in parentheses, in acknowledgement of the probable name change under the GHS alignment proposal, to safety data sheets or SDSs) along with any chemicals they ship to importers, distributors or end-users. Similarly, importers and distributors must supply labels and (M)SDSs along with any hazardous chemicals they ship to end-users.

End-users and employers in general, must do the following: maintain an inventory of the hazardous chemicals they use, prepare and implement a written hazard communication program, ensure that all on-site containers are properly labeled, obtain and provide employee access to (M)SDSs for all hazardous chemicals, and train employees about how to handle the chemicals and how to read (M)SDSs and warning labels (OSHA 1983b).

HCS may seem difficult to understand and comply with because the language in some cases is vague—which actually allows for it to cover a broad range of workplaces. However, we believe it is really a common-sense regulation, and the compass of common sense will get you through most interpretation questions.

If you’re not able to find an answer on your own, OSHA makes available plenty of resources to help you; one of the most useful being letters of interpretation. These documents, if you’re not familiar with them, contain OSHA responses to actual compliance-clarification questions the agency has received from employers. If you still need assistance after reviewing these letters, we suggest that you reach out to your local OSHA office.

HCS Requirements

The HCS is composed of four key components: (1) the written plan; (2) labels and warnings; (3) training; and (4) (M)SDS documents (OSHA 1983c).

Written Plan

The first part we’ll discuss is the written plan. If necessary, you can utilize a template to get started, but your actual, final plan has to be specific to your work environment. OSHA provides examples on its Web site.

Your written plan must include the following: a list of chemicals present at your work site; the identity of employee(s) responsible for components of the plan; details about where to find the written plan; a description of how the facility intends to meet the requirements for labels and other forms of warning, for (M)SDSs, and for employee information and training (OSHA 1983c).

For the chemical inventory list, you should include all chemicals that are hazardous and have the potential for employee exposure. Consider chemicals in all physical forms: liquids, solids, gases, vapors, dust, etc., and identify all the containers that house them, i.e., tanks, pipes, drums,

etc. Don't forget to include the hazardous chemicals generated during production or other work processes, such as welding fumes, exhaust fumes, dust particles, etc.

Written Plan: Best Practice Takeaways

First and foremost, be sure you have a written hazard communication plan. This is a fluid document that should change as your work environment and HCS-related processes change. OSHA has generic templates available and so do a number of EH&S industry-related Web sites, but you must adapt whatever template you find to reflect your actual work environment. It's also a good idea to create and maintain a checklist of the key components required in your plan. This will save you time when plan updates are necessary.

Once you have a written plan in place, you should review it a least annually, but as a best practice, we suggest even more frequently, making updates whenever changes in the workplace affect the plan; such as incorporating new chemicals into your inventory, or changing a process in your environment that creates a new hazard.

Assign an HCS coordinator to oversee your written plan; this will ensure that it is always up-to-date, keeping employees safe and the company in compliance. In addition, as a best practice, you should consider developing a written OSHA inspection plan that describes how your team will handle an inspection should OSHA visit your workplace. Take that one step further and set up actual mock inspections to better prepare your team for the real thing.

Often times an OSHA inspection is the result of a complaint from a "whistleblower" within the company. Take steps to prevent this from happening by encouraging an open dialogue among the EH&S department, safety managers and employees, and create a process for reporting, and also addressing workplace safety concerns. Be sure to also inform employees of their worker rights. This provides a level of transparency and demonstrates your concern for providing a safe, healthy and compliant workplace.

Lastly, you should stay current on OSHA federal, state and local activities, including regulatory proposals and rule changes that could eventually impact your HCS program. One major proposal you should keep an eye on right now, is the adoption of GHS (OSHA 2009b). Stay apprised of the proposed changes and critical implementation deadlines.

Labels and Warnings

The second key HCS component is labels and warnings. The HCS requires manufacturers, importers and distributors to label all hazardous chemical products they ship. The labels need to identify the hazardous chemicals contained in the product and provide the respective warnings associated with those chemicals. In addition, the labels need to include the manufacturer, importer and distributors' names and addresses.

On-site containers of hazardous chemicals must include labels and warnings as well, and they must be legible and prominently displayed. The language that the labels and warnings are in needs only to be English, per the regulation. However, you must train all non-English speaking employees in a language they understand, so they can truly be protected when handling or working near potentially dangerous materials.

Labels and Warnings: Best Practice Takeaways

Make sure all containers are labeled properly; this includes primary and secondary containers, as well as fixed or stationary containers like tanks and pipes. All labels must include the name of the chemical, the name of manufacturer, importer or distributor, all of the necessary hazard warnings, including what body parts or organs the hazards could affect, as well as how to properly handle the chemicals. This is an area of the HCS that will be impacted by the proposed adoption of GHS, so be sure to stay on the top of this regulatory news. Try to determine whether or not your labeling systems can accommodate new label requirements.

Here's a look at the proposed labeling requirements for GHS-compliant labels:

- The **product name and/or chemical identifier** needs to be clearly stated at the top of the label
- **Supplier information** including, the company name, street address, city, state or province, country and telephone number must be clearly stated at the bottom of the label
- Standardized **hazard pictograms** will be required to appear vertically along the left side of the label
- Standardized **signal words**, such as DANGER or WARNING, will be included and located just under the product or chemical name
- Standardized **hazard statements**, such as “highly flammable” or “causes severe eye irritation” must be clearly stated below the signal words and must identify all known hazards
- **Precautionary information** must be included, which identifies how to appropriately store and handle the product or chemical, and includes standard phrases such as “use only in a well-ventilated area,” etc.

Training

The third main component of the HCS is employee training. Training should take place before you ever assign an employee work involving, or taking place in proximity of, hazardous chemicals. Training can cover individual, or categories of, chemicals. It must provide employees with information on the requirements of the HCS, how to operate in work areas where hazardous chemicals are present, and include a full review of the chemical inventory and (M)SDSs. Training also needs to cover: methods to detect the presence or release of hazardous chemicals, the physical and health hazards of chemicals in the work area, employee hazard-protection measures, and details of your company's written hazard communication plan (OSHA 1983c).

Training: Best Practice Takeaways

Your training should include procedures for handling emergencies. Employees should know what to do in case of spills or uncontrollable releases or exposures. You should identify and review the location of, and demonstrate how to use, any onsite emergency response equipment such as safety showers and eye wash stations. Also discuss when first aid treatment is no longer sufficient and employees should seek medical attention for exposure incidents. Make sure to provide training on the proper storage and handling procedures for chemicals, as well as proper personal protective equipment (PPE) usage. With hazardous chemicals being the focus of this regulation, you'll obviously need to train employees on how to read labels, warnings and (M)SDSs.

Don't forget to review some of the non-routine tasks as well as routine, like how to handle expired or no longer-used chemicals. Whenever possible, you should try to incorporate a blended

training approach that is specific to your work environment. By this we mean one that includes both in-person and electronic-based training. Again it's critical to keep an eye on news related to the adoption of the GHS within OSHA's HCS requirements. We believe training employees on the proposed labeling and (M)SDS changes will significantly impact employers and their HCS plans in regards to saving time and preparing for potential GHS transition-related costs.

(M)SDS Documents

The fourth and final component of the HCS regulation is the (M)SDS documents component. Once the GHS requirements are folded in and adopted into the HCS, (M)SDSs will simply be called SDSs, safety data sheets. As mentioned earlier, these are the documents that manufacturers, importers and distributors must include with the first shipment of any chemical they send. (M)SDSs provide detailed information about hazardous chemicals, including potential hazardous effects, physical and chemical characteristics and recommendations for appropriate protective measures. (M)SDSs must be readily accessible to employees when they are in their work areas during their work shifts. Therefore, paper copies may be kept in a central location or computerized access may be made available through workstation terminals, but receiving the information over the phone is not acceptable (except under the mobile worksite provision). Employers must obtain (M)SDSs for all hazardous chemicals in the workplace before using the chemicals.

(M)SDS: Best Practice Takeaways

You must have (M)SDSs for all chemicals or chemical products in use, including MROs, raw materials and finished goods. We suggest reviewing your (M)SDS library in conjunction with your annual inventory review. Make sure employees know where to find (M)SDSs and how to read them, and ensure you have a process in place for approving incoming chemical shipments.

Another best practice for meeting the HCS requirements is to manage (M)SDSs electronically. This practice greatly reduces paper, streamlines reporting— including capturing the data necessary for filling out reports such as the EPA's Tier II forms. Electronic systems make it easier to manage different versions of (M)SDSs and to archive older versions. You will also be able to retrieve (M)SDSs more quickly with an electronic system compared to most paper binder systems. In an emergency situation, locating an (M)SDS in seconds rather than minutes (or even hours) can be critical.

If you choose to use an electronic system, just keep in mind that in order to be in compliance with the HCS, you must have an adequate backup in place, such as a master paper copy or an on-demand fax system. Whatever system you choose to use at your facility, you must include the details about the system in your written HCS plan.

When it comes to the language of (M)SDSs it's only a requirement that you have English versions, but as a best practice, you should consider providing them in your employees' native language. If you only have English versions, remember, you must still train non-English-speaking employees in a language they understand, so that they are fully aware of workplace hazards and safe chemical-handling procedures.

Copies of (M)SDSs should be kept for 30 years after they are discontinued if they are being used as exposure records under the Access to Employee Exposure and Medical Records rule, 1910.1020.

OSHA Alignment with GHS

OSHA has a proposal in place to align the HCS with the GHS. Under the proposed changes, the core HCS framework will remain intact, but will include additional guidelines pulled from GHS, mostly around how hazards are classified (OSHA 2009c). The proposed rulemaking is currently under review with public hearings scheduled to take place early this year. We anticipate adoption of the rule to follow, in 2011 or sooner.

Chemical manufacturers will be the most affected, having to potentially re-author (M)SDSs, labels and warnings to make them GHS compliant. Resellers, distributors and importers will need to be supplied with, or generate new, (M)SDSs and labels, and must include them with any downstream shipments to customers. Employers must ensure that they have the latest (M)SDSs and labels and must train employees on their use.

Best Practices: Some Final Thoughts

Inherent dangers in certain work environments will always exist, but when possible, you should try to reduce or eliminate those that are in your control. There are strategies that can be deployed to help control chemical hazards. Engineering controls, for example, can be used to cut down on hazards by re-engineering products or processes to utilize alternative, less hazardous chemicals. This strategy seeks to control the hazard at the source by using such methods as total enclosure or substitution, or switching over to safer chemical options.

Administrative controls also can be deployed to improve safety. This strategy aims to alter work procedures to reduce the duration, frequency, and severity of employee exposure to known chemical hazards. Here, the focus is on incorporating safer work practices through written safety policies, rules, supervision and training.

Personal protective equipment controls are likely one of the most common ways to create a safer workplace. In many cases PPE is a requirement for handling hazardous chemicals. In this strategy, the workplace hazards are not reduced or eliminated, instead employers rely on the PPE to keep employees safe.

How to Ensure You Are Compliant

To get on the right path toward compliance, it's beneficial to understand what inspectors are looking for during an on-site inspection. First, they will likely ask to see your written plan along with a complete chemical inventory. Then, they will probably tour your site, checking for proper chemical labeling and warning signs for the chemicals in the inventory. They will ask to review the (M)SDS library and will want to confirm that an (M)SDS is available for every hazardous chemical in the inventory. They will interview employees to see if they know where to find the written hazard communication plan and (M)SDSs, and they will ask employees if, and how, they were trained on the plan, the plan elements and how to safely work with the chemicals in their work areas.

Penalties

Penalties for non-compliance are very real. In 2009, OSHA cited nearly 7,000 instances of HCS violations in workplaces across the United States (OSHA 2009c), ranking third on OSHA's latest Top 10 *Most Frequently Cited Standards* (OSHA 2009a).

The costs of non-compliance can add up quickly. In addition to fines levied by OSHA, there are the costs that could be associated with liability and lawsuits. Your company may incur downtime or internal disruption, leading to lost productivity. An indirect, but very real cost, is the damage to your company image that can result from negative press. All of these add up to lost revenues and decreased goodwill in the community.

Remember, compliance is not just about avoiding citations and fines but also about promoting the safety of our employees, our customers and the communities of our workforce.

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