



WASHINGTON WATCH

A Glimpse of Things to Come: OSHA's Soon to Be Updated Hazard Communication Standard

By Lynn L. Bergeson

In the Trump Administration's Unified Agenda of Regulatory and Deregulatory Actions (Regulatory Agenda) issued on October 17, 2018, the US Department of Labor's Occupational Safety and Health Administration (OSHA) published a Proposed Rule Stage item titled, "Update to the Hazard Communication Standard," [RIN 1218-AC93](#) (OSHA, 2018), and scheduled the Notice of Proposed Rulemaking (NPRM) to be issued by March, 2019. This could be an important regulatory development for all entities subject to Hazard Communication Standard (HCS) requirements, which is just about everyone. This column explains why this development is significant.

Background

Under the HCS, chemical manufacturers and importers know they are required by law to evaluate the hazards of the chemicals they produce or import. They are also required to prepare labels and safety data sheets (SDS) to convey the hazard information they identify in their products to downstream customers. In addition, all employers with hazardous chemicals in the workplace must ensure that the products have labels and SDSs available to communicate to potentially exposed workers the hazards of the products with which they come into contact on the job. The HCS is the foundational backbone of the United States' system intended to convey relevant occupational hazard information to all participants in the value chain who need to know the potential hazards associated with chemicals to which they are or may be exposed.

Another hazard communication imperative is the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). Adopted by the United Nations (UN) in 2003, the GHS includes criteria for the classification of health, physical, and environmental hazards, and specifies what information should be included on labels of hazardous chemicals and in SDSs. The GHS is regularly updated and revised. The GHS is not legally enforceable; however, it is an important international consensus standard, reflecting a broad goal of aligning disparate hazard communication programs around the world to facilitate the international movement of chemicals and products that might pose hazards.

Not surprisingly, these two communication imperatives—the HCS and the GHS—do not align in all cases. The HCS predates the GHS and is a legally enforceable standard, and the amendments to it require notice-and-comment rulemaking. Because the two programs are different but very much interrelated, OSHA is chronically in a “catch-up” mode of aligning the HCS with changes to the GHS, which occur with some regularity, and certainly with much more frequency than amendments to the HCS.

OSHA’s rulemaking recognizes the goal of aligning these systems as well as the United States’ commitment to aligning the programs as much as possible. The GHS process is extraordinarily iterative and ongoing, with revisions issued every two years, which causes no small amount of problems for OSHA in its efforts to keep up with these changes. The full description of the OSHA rulemaking description is:

OSHA and other U.S. agencies have been involved in a long-term project to negotiate a globally harmonized approach to classifying chemical hazards, and providing labels and safety data sheets for hazardous chemicals. The result is the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). The GHS was adopted by the United Nations, with an international goal of as many countries as possible adopting it by 2008. OSHA incorporated the GHS into the Hazard Communication Standard (HCS) in March 2012 to specify requirements for hazard classification and to standardize label components and information on safety data sheets, which will improve employee protection and facilitate international trade.

However, the GHS is a living document and has been updated several times since OSHA's rulemaking. OSHA's rulemaking was based on the third edition of the GHS and the UN recently completed the seventh. OSHA is conducting rulemaking to harmonize the HCS to the latest edition of the GHS and to codify a number of enforcement policies that have been issued since the 2012 standard. (OSHA, 2018).

OSHA first notified the Office of Management and Budget (OMB) in the [Spring of 2018](#) that it intended to publish this NPRM to update the HCS to align with the latest edition of the GHS; the only difference is that it scheduled it to be issued by February, 2019, instead of March, 2019—a difference only of one month. The official text of the GHS -- also known as the "Purple Book" -- was first published and implemented by the UN in 2003, and is amended every two years. OSHA's [final rule incorporating the 3rd Revised Edition of the UN GHS](#) (Rev 3) became effective on May 25, 2012, (HCS 2012). All substances and mixtures were required to comply with HCS 2012 by the transition period that ended on June 1, 2015, for manufacturers, and December 1, 2015, for distributors. OSHA extended the deadline, for specific circumstances, on May 29, 2015. Those circumstances were quite limited and must be documented to demonstrate compliance. The 2012 final rule significantly altered the previous HCS. GHS Rev 3 was released in 2009, and the HCS has not been updated since that time, even though the final HCS rule became effective in 2012. A proposed rule that incorporated the Rev 3 changes was issued on September 30, 2009. OSHA has been planning to further update the HCS since [Fall 2014](#) when RIN 1218-AC93 first appeared in the Regulatory Agenda. No action on the item was listed until the [Fall 2016](#) Regulatory Agenda posted that it would issue a NPRM in October 2017, but subsequent Regulatory Agendas only listed the NPRM status as "To be announced" until the Spring 2018 Regulatory Agenda set the timeframe for February 2019. The Spring Regulatory Agenda moved the NPRM from the long-term agenda to the short-term agenda.

As the UN Sub-Committee of Experts on the Globally Harmonized System of Classification and Labeling of Chemicals (UNSCEGHS) released the seventh edition (Rev 7) of the GHS in July 2017, OSHA's HCS needs to be updated to conform not only with Rev 7, but also with the fourth (Rev 4), fifth (Rev 5), and sixth (Rev 6) revised editions. Rev 7 includes both amendments to Rev

6 and some newly added content and guidance relating to the classification and labeling of chemical substances and mixtures. OSHA announced that to maintain alignment with GHS, it would be updating its HCS in the following ways, potentially to align with GHS Rev 7:

- Appendix A (health hazards): mostly editorial;
- Appendix B (physical hazards):
 - Flammable gases, desensitized explosives;
 - Aerosols -- align with GHS Rev 6/7, include Category 3;
- Appendix C (label elements):
 - New or updated hazards, updated guidance, and precautionary statements;
- Appendix D (Safety Data Sheet (SDS)):
 - Updates to SDS Sections 2, 5, 7, 9.

This list reflects only a small subset of all of the amendments that GHS has integrated since Rev 3. The following list includes comprehensive changes made to Rev 4, issued in 2011; Rev 5, issued in 2013; Rev 6, issued in 2015; and Rev 7, issued in 2017. Most anticipate that some of the below revisions will also be integrated.

Highlights of the edits to Rev 3 and incorporated into Rev 4 include:

1. Create new physical hazard categories: (1) chemically unstable gases; and (2) non-flammable aerosols;
2. Rationalization of precautionary statements; and
3. Clarification of certain criteria to assist in classification processes.

Highlights of the edits to Rev 4 and incorporated into Rev 5 include:

1. A new test method for oxidizing solids;
2. Miscellaneous provisions intended to clarify further the criteria for some hazard classes (skin corrosion/irritation, severe eye damage/irritation, and aerosols) and to complement the information to be included in the SDS;
3. Revised and simplified classification and labeling summary tables;
4. A new codification system for hazard pictograms; and
5. Revised and further rationalized precautionary statements.

Highlights of the edits to Rev 5 and incorporated into Rev 6 include:

1. A new hazard class for desensitized explosives;
2. A new hazard category for pyrophoric gases;
3. Miscellaneous provisions intended to clarify the criteria for some hazard classes (explosives, specific target organ toxicity following single exposure, aspiration hazard, and hazardous to the aquatic environment);
4. Additional information to be included in the SDSs (Section 9);
5. Revised and further rationalized precautionary statements;
6. A new example in Annex 7 addressing labeling of small packaging; and
7. Clarification on criteria for several hazard classes and further rationalization of precautionary statements.

Highlights of the edits to Rev 6 and incorporated into Rev 7 include:

1. Changes to categories for Chapter 2.2 Flammable Gases. Category 1 is expanded to include sub-categories – specifically:

Category 1A:

Flammable gases are gases that, at 20 °C and a standard pressure of 101.3 kilopascals (kPa) are ignitable when in a mixture of 13% or less by volume in air, or have a flammable range with air of at least 12% regardless of its lower flammability limit, unless data show that such gases meet the Category 1B criteria.

Pyrophoric gases are gases which spontaneously ignite in air at or below a temperature of 54 °C.

Chemically unstable gases, A, which are chemically unstable gases at 20 °C and a standard pressure of 101.3 kPa, and chemically unstable gases, B, which are gases that are chemically unstable at a temperature greater than 20 °C and/or a pressure greater than 101.3 kPa.

Category 1B:

Flammable gases are gases that meet the criteria listed in Category 1A, but are neither pyrophoric nor chemically unstable, but have either a lower flammability limit of more than 6% by volume in air or a fundamental burning velocity of less than 10 centimeters per second (cm/s).

Category 2:

Flammable gases are gases other than Category 1A or 1B that, at 20 °C and a standard pressure of 101.3 kPa, have a flammable range when mixed in the air.

Adapted from the 7th Revised edition (United Nations, 2017)

2. Miscellaneous amendments intended to clarify the definitions of some health hazard classes;
3. Additional guidance to extend the coverage of Section 14 of the SDSs to all bulk cargoes transported under instruments of the International Maritime Organization (IMO), regardless of their physical state (Annex 4);
4. Revised and further rationalized precautionary statements in Annex 3; and
5. A new example in Annex 7 addressing labeling of small packaging with fold-out labels.

Discussion

One change appearing in every edition of the GHS is the further rationalization of precautionary statements. If OSHA seeks to conform the HCS with the GHS, rationalizing precautionary statements could signal big

changes for Appendix C: Allocation of Label Elements and Appendix D: Safety Data Sheets, and any textual changes to these mandatory requirements could mean very costly consequences for manufacturers and distributors if they are required to make major changes in their product labeling and SDSs. When OSHA updated the HCS in 2012, OSHA stated that “modifications will significantly reduce costs and burdens while also improving the quality and consistency of information provided to employers and employees regarding chemical hazards and associated protective measures” (OSHA, 2012, p. 17574), and “enhance the effectiveness of the HCS in ensuring that employees are apprised of the chemical hazards to which they may be exposed, and in reducing the incidence of chemical-related occupational illnesses and injuries” (OSHA, 2012, p. 17574).

As discussed, conforming with GHS is not a statutory directive, but more than 24 jurisdictions across the world have adopted some form of the GHS model into their respective regulatory frameworks, in strikingly and often frustratingly different ways, and with varying implementation dates. Any changes proposed to the HCS would presumably be made in the same spirit as those made in 2012 -- in a way to reduce costs and administrative burdens while also improving the quality and consistency of information provided to employers and employees regarding chemical hazards and associated protective measures -- and also implemented at a longer pace so as to allow the entities required to implement them to integrate changes in a planned and thoughtful way. In addition, if the intent is to align continually with GHS, OSHA must decide how and when to address subsequent updates to the UN model. The 8th revised edition (Rev 8) should be released in 2019. OSHA, in proposing to update Rev 7 in 2019, would need to consider how changes from Rev 7 to Rev 8 might be incorporated in the future.

For regulated entities, this is a complex calculus of complying with enforceable legal standards under HCS and trying to align with the aspirational goals of GHS where possible. Staying informed is the best counsel, and actively engaging where opportunities present themselves is recommended.

References

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