U.S. Department of Labor

Occupational Safety and Health Administration
Washington, D.C. 20210

Reply to the attention of:

DEC 5 2016

DEP/CPSEI/JRL

Robyn Brooks
Director - Health, Environment, Safety and Security
The Chlorine Institute
1300 Wilson Blvd., Suite 525
Arlington, VA 22209

Dear Ms. Brooks,

Thank you for your November 16, 2015, letter to the Occupational Safety and Health Administration (OSHA), in which you request clarification regarding OSHA's coverage of aqueous hydrochloric acid solutions under the PSM standard (29 CFR 1910.119). We apologize for the delay in our response.

Your concern was in the context of OSHA's June 8, 2015, memorandum to regional administrators and state designees on covered concentrations of appendix A chemicals in the process safety management (PSM) standard. This letter constitutes OSHA's interpretation only of the specific concerns discussed and may not be applicable to any question not delineated within your original correspondence.

As part of a legal settlement, the June 8, 2015, memorandum was withdrawn and replaced with a revised memorandum dated July 21, 2016. The revised memorandum can be accessed at: https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=30848.

The July 21, 2016, memorandum states, in relevant part:

> OSHA notes that where an entry in Appendix A is listed as "anhydrous," it does not cover aqueous solutions or aqueous mixtures. Anhydrous means "containing no water" or "without water." Thus, by definition, Appendix A to PSM does not cover aqueous solutions or aqueous mixtures of chemicals specifically listed as "anhydrous." In addition, although not specifically designated as "anhydrous," OSHA has interpreted Appendix A to mean that the PSM standard does not cover Hydrogen Chloride (CAS 7647-01-0) and/or Hydrogen Fluoride (CAS 7664-39-3) in aqueous solutions or aqueous mixtures. Therefore, the following entries in Appendix A are not covered when in aqueous solutions or aqueous mixtures:
>
> (1) Ammonia, Anhydrous (CAS 7664-41-7)[2];
> (2) Dimethylamine, Anhydrous (CAS 124-40-3);
> (3) Hydrogen Cyanide, Anhydrous (CAS 74-90-8);
> (4) Methylamine, Anhydrous (CAS 74-89-5);
> (5) Hydrochloric Acid, Anhydrous/ Hydrogen Chloride (CAS 7647-01-0); and
> (6) Hydrofluoric Acid, Anhydrous/ Hydrogen Fluoride (CAS 7664-39-3).
>
> In such cases, the listing in Appendix A covers only the anhydrous form of the chemical.

Thus, per the July 21, 2016, memorandum, aqueous solutions of HCl are not covered under the PSM standard, regardless of quantity. However, solutions of HCl in materials other than water, e.g., hydrocarbons, are subject to PSM if present in greater than threshold quantity.

Thank you for your interest in occupational safety and health. We hope you find this information helpful. OSHA requirements are set by statute, standards, and regulations. Our interpretation letters explain these requirements and how they apply to particular circumstances, but they cannot create additional employer obligations. This letter constitutes OSHA's interpretation of the requirements discussed. Note that our enforcement guidance may be affected by changes to OSHA rules. Also, from time to time we update our guidance in response to new information. To keep apprised of such developments, you can consult OSHA's website at http://www.osha.gov. If you have any further questions, please feel free to contact the Office of Chemical Process Safety and Enforcement Initiatives at (202) 693-2341.

Sincerely,

Thomas Galassi

Thomas Galassi, Director
Directorate of Enforcement Programs