

June 15, 2015

Dr. David Michaels
Assistant Secretary
U.S. Department of Labor
Occupational Safety and Health Administration
200 Constitution Ave, N.W.
Washington, D.C.
20210

Dear Dr. Michaels:

The Industrial Packaging Safety Alliance (PackSafe) is a coalition of interested parties seeking to make industrial packaging safer for people, property and the environment by advocating for regulatory clarity and consistency. We seek to engage both regulators and industry representatives to promote the safe handling and warehousing of hazardous and non-hazardous materials.

We are reaching out to OSHA today to urge agency action regarding a serious life safety issue concerning OSHA 29 C.F.R. § 1910.106 that regulates the storage of ignitable liquids. This regulation is based upon a *very outdated* fire code and OSHA interpretive letters. It is also *silent* on many important issues related to electrostatic ignitions risks and the fire performance of containers used to store ignitable liquids. This silence poses *unacceptable* life safety concerns for all U.S. citizens, serious risks to property, and threatens the environment.

Many State and local jurisdictions adopt or recognize model fire codes, such as those promulgated by the National Fire Protection Association (NFPA) to mitigate fire risk and protect property and life. The NFPA's Flammable and Combustible Liquids Code, NFPA 30, addresses the fire risks associated with the storage of containerized flammable and combustible liquids. This code prescribes requirements for storage conditions, including restrictions on container type and size that are designed to mitigate the associated fire risk. Once adopted by jurisdictional authorities, these code provisions, along with other building and fire codes that reference NFPA 30, become mandatory requirements.

OSHA addresses the safety risk associated with storage of Flammable and Combustible Liquids in 29 CFR §1910.106. However, the regulation references an NFPA Code that was published in 1969 and is woefully out of date. Since §1910.106 was adopted, NFPA has revised the Code numerous times, with the most recent issue dated 2015. A significant revision occurred in 1996, after a massive fire that occurred in 1987 at a Sherwin-Williams' warehouse in Dayton, Ohio. That watershed event caused \$60 million in property damage. At the time of this incident, the NFPA Code lacked information regarding the proper protection scheme for flammable and combustible liquids as that information was not based on actual fire testing and provided only as an Appendix for informational purposes. As a consequence of the Dayton disaster, many fire tests were conducted by industry and the NFPA Committee rewrote portions of the code. That effort concluded with the issuance of the 1996 edition of NFPA 30, Flammable and Combustible Liquids Code. To the Committee's credit, it addressed these potentially devastating fire situations rather than waiting for another "accident" to happen.

Since 1996, several major fires have occurred due to the improper storage of Flammable and Combustible liquids. These incidents resulted in conflagrations that could have been more easily prevented or managed, if the regulations were more clear and consistent. In Waxahachie, Texas, a fire at the Magnablend plant was caused by improper storage conditions and protection schemes for flammable and combustible liquids. At the Chemie-Pack facility in Moerdijk, the Netherlands, a large fire occurred also due to improper handling of flammable liquids.

Due to the nature of these events and to better educate the public about its fire safety concerns, the NFPA has recently launched a campaign to educate users about the fire risks associated with improper containerization and storage of these liquids. We at PackSafe applaud their efforts.

As the former Chairman of the Chemical Safety Board (CSB), Dr. Rafael Moure-Eraso, noted in an op-ed item recently published in *The New York Times*, the current regulatory process is in need of reform. Too much time is spent waiting for the *next* accident. He observed that after the West, Texas, chemical explosion in 2013, President Obama issued an executive order directing Federal agencies to review safety rules at chemical facilities. We are encouraged by the leadership of the White House on this important public safety issue. Also as noted in Dr. Moure-Eraso's commentary, U.S. process safety management regulations have undergone no substantive improvements since their inception in the 1990s. The CSB chief also said that many existing OSHA Standards governing explosives like ammonium nitrate, flammable and combustible liquids, and hot work are even older - dating from the early 1970's and based on fire code guidance from the 1960's. While these regulations have not been updated, voluntary fire codes have undergone many cycles of revision and improvement helping to mitigate fire danger where these codes have been adopted. The Chairman concluded that more must be done to ensure that a comprehensive process safety management system is in place in the U.S. to protect worker safety, public health and the environment.

Voluntary guidance is provided by the NFPA and various states and municipalities. However, to better protect U.S. workers, it is imperative that we eliminate this patchwork of regulations which results in the use of improper packaging and storage arrays for Flammable and Combustible liquids that can lead to tragic results. OSHA has the opportunity to take the critical lead in meeting this challenge by simply updating its regulations to require the use of the most recent issue of National Fire Codes from voluntary organizations such as the NFPA.

Out of concern for the looming and ongoing life safety issue associated with the improper storage of flammable and combustible liquids, PackSafe respectfully asks that OSHA exercise reasonable diligence and reply to the following questions:

1. How can PackSafe assist OSHA in the update and review of the referenced regulations to incorporate the most recent revision of voluntary safety codes and standards such as NFPA 30?
2. How can PackSafe assist OSHA in developing regulations that insure safe and proper storage of Flammable and Combustible liquids?

We envision a solution to these issues wherein OSHA incorporates NFPA 30 by reference (IBR) under § 1910.6 and amends § 1910.106 to reference back to the IBR in § 1910.6. The proposed regulatory amendments are as follows (*noted in italics*):

§ 1910.6 Incorporation by reference.

(a)(1) The standards of agencies of the U.S. Government, and organizations which are not agencies of the U.S. Government which are incorporated by reference in this part, have the same force and effect as other standards in this part. Only the mandatory provisions (i.e., provisions containing the word "shall" or other mandatory language) of standards incorporated by reference are adopted as standards under the Occupational Safety and Health Act.

(2) Any changes in the standards incorporated by reference in this part and an official historic file of such changes are available for inspection in the Docket Office at the national office of the Occupational Safety and Health Administration, U.S. Department of Labor, Washington, DC 20910; telephone: 202-693-2350 (TTY number: 877-889-5627).

(3) The materials listed in paragraphs (b) through (w) of this section are incorporated by reference in the corresponding sections noted as they exist on the date of the approval, and a notice of any change in these materials will be published in the Federal Register. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(q) The following material is available for purchase from the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02269; Telephone: 800-344-3555 or 617-770-3000; Fax: 1-800-593-6372 or 1-508-895-8301; Email: custserv@nfpa.org; Web site: <http://www.nfpa.org>.

(16) NFPA 30 Flammable and Combustible Liquids Code, incorporation by reference (IBR) approved for § 1910.106(d).

§ 1910.106 Flammable liquids.

(d) Container and portable tank storage -- (1) Scope -- (i) General. The storage of flammable liquids in drums or other containers (including flammable aerosols) *shall comply with NFPA 30 Flammable and Combustible Liquids Code, which is incorporated by reference as specified in § 1910.6.*

We respectfully await your response.

Sincerely,



Senior Advisor, The Industrial Packaging Safety Alliance
