

**Statement of Dr. Manuel Gomez, Director of Recommendations, U.S. Chemical Safety Board
in support of issuance of the NFPA 56 Provisional Standard
NFPA Standards Council Meeting
August 10, 2011**

Thank you for the opportunity to urge the NFPA Standards Council to approve issuance of the NFPA 56 Provisional Standard: *Standard for Fire and Explosion Prevention During Cleaning and Purging of Flammable Gas Systems*.

The CSB has been very vocal in our support for the NFPA's development of this standard. As Council members are doubtless aware, our agency investigated two deadly explosions which resulted from the release of large quantities of flammable gas in the vicinity of workers and ignition sources. One occurred on June 9, 2009, during a gas line purging operation at the ConAgra SlimJim facility in Garner, North Carolina. The other incident occurred less than a year later on February 7, 2010, during a pipe cleaning operation at Kleen Energy, a combined-cycle, natural gas-fueled power plant under construction in Middletown, Connecticut.

Pursuant to the ConAgra and Kleen investigations, the CSB issued two recommendations concerning gas process safety to the NFPA, whose consensus standards play a pivotal role in promoting public health and safety around the world. Our agency has since applauded the August 2010 actions of the NFPA 54/National Fuel Gas Code Committee to promulgate a Tentative Interim Amendment (TIA) addressing gas purging operations, and we hope that the 54 Committee will make these new requirements permanent during the Code's next revision cycle. The CSB has also thanked, and today I reiterate our thanks, to the NFPA Standards Council for its March 2011 approval of the establishment of the NFPA 56 Committee in response to the CSB's recommendation that the NFPA address the safe conduct of fuel gas pipe cleaning operations.

Today, as the staff of the CSB, we strongly urge the Council to issue the NFPA 56 Provisional Standard developed and approved by the Technical Committee. We sincerely appreciate the excellent work of the Committee members, who have generously volunteered their own time to develop this standard via an expedited development process. We would also like to extend our thanks to NFPA's Guy Colonna and Denise Beach, who also have contributed their efforts to the development of this important document. In short, I think we can safely speak on behalf of the CSB when we say that we sincerely appreciate NFPA's taking expedited action to secure the health and safety of workers involved in cleaning and purging flammable gas systems.

In our opinion—and we are confident that our Board will agree—the proposed provisional standard fulfills the fundamental intent of the CSB's recommendation to the NFPA from the Kleen Energy Investigation by explicitly prohibiting the unsafe practice of using flammable gases to clean piping and requiring, instead, the use of non-flammable alternatives such as air, inert gas, steam, or water. The standard also prescribes important safety precautions for pipe cleaning

operations as well as for gas purging operations which are not covered under the scope of NFPA 54/the National Fuel Gas Code.

The CSB was originally concerned that this standard would permit the use of flammable gas to propel multiple cleaning pigs through piping; however, as CSB staff understand it, the finalized standard appropriately restricts that practice to prevent large quantities of flammable gas being released to the atmosphere. We also understand that the standard permits flammable gas to propel a cleaning pig, but only in a closed system and under very restricted circumstances—for example, where the pig is being used to accomplish both cleaning and purging into service, or where the flammable gas in the piping system is consumed by end-use equipment or flares. We also understand that the standard requires that pigs be appropriately sized to prevent comingling of flammable gas and air, that residual gas in the pig receiver be vented to a safe outdoor location and that the discharge area be monitored continuously to ensure adequate dissipation of flammable vapors. These safeguards, we believe, will sufficiently address the Board's concerns regarding the explosive hazards associated with the practice of pigging piping using flammable gas.

In closing, I again thank the Standards Council on behalf of the Chemical Safety Board for this opportunity to share our views in support of the NFPA 56 Provisional Standard. I urge the Committee to approve this standard, and to support its incorporation into other pertinent NFPA codes and standards. Finally, we hope that the NFPA will reaffirm its commitment to promoting the safety of pipe cleaning and purging operations by ensuring the eventual promulgation of NFPA 56 as a permanent standard.