Recommendation Text:

In the Liquefied Petroleum Gas Code (NFPA 58) "Qualifications for Personnel" section, specify training requirements (including supervised on-the-job training), training curricula, competencies, and testing through written examination and performance evaluation, or reference a nationally recognized curriculum for these requirements.

Board Status Change Decision:

A. Rationale for Recommendation

On January 30, 2007, a propane explosion at the Little General Store in Ghent, West Virginia, killed two propane service technicians and two emergency responders, and injured six others. The explosion leveled the store, destroyed a responding ambulance, and damaged other nearby vehicles.

On the day of the incident, a junior propane service technician was preparing to transfer liquid propane from an existing tank to a newly installed tank. When the technician removed a plug from the existing tank’s liquid withdrawal valve, liquid propane began spraying out. As a large vapor cloud formed and expanded into the store, the technician telephoned his off-site supervisor, a lead technician, for guidance in stopping the release. Fifteen minutes later, the technician dialed 911; however, minutes after emergency responders arrived, the explosion occurred.

The CSB investigation found that the junior technician servicing the tank had no formal training that may have helped him to recognize the defect in the withdrawal valve. He was also working unsupervised, despite having been on the job for only a month and a half.

The CSB reviewed the 2008 edition of the National Fire Protection Association’s Liquefied Petroleum Gas Code (NFPA 58), and found that the standard requires that persons who handle LPG “be trained in proper handling procedures;” however, the section did not indicate specific training components. Therefore, the CSB recommended that the NFPA revise NFPA 58 to elaborate specific training requirements.

B. Response to the Recommendation

After significant advocacy efforts by CSB Investigations and Recommendations staff, the NFPA issued a Tentative Interim Amendment (TIA) to the 2011 edition of NFPA 58 in March 2011. The TIA modified NFPA 58, Section 4.4 to elaborate basic training requirements for
propane technicians that were consistent with training requirements of both the OSHA Process Safety Management (PSM) and the EPA Risk Management Program (RMP) regulations. Based on this action, the Board voted on April 15, 2011, to designate this recommendation with the status “Open- Acceptable Response.” Because TIAs are effective only between editions of a standard and do not become a part of the next edition unless approved by the committee during the regular revision cycle, the Board did not vote to close this recommendation at that time.

In August 2013, the NFPA Standards Council officially approved issuance of the 2014 edition of NFPA 58. CSB Recommendations staff reviewed this edition, and found that the training requirements elaborated in the Tentative Interim Amendment were codified in this edition.

C. Board Analysis and Decision

Because the 2014 edition of NFPA 58 contains training requirements for propane technicians that are consistent with the intent of CSB Recommendation No. 2007-04-I-WV-5, the Board voted to change the status of this recommendation to: “Closed- Acceptable Action.”