



BULLETIN: 2010-1

SUBJECT: Use of Torches with a Pre-piped Fuel and Oxygen Supply

REFERENCE: N.J.A.C. 5:70-3, 104.1
N.J.A.C. 5:70-3, 104.3
N.J.A.C. 5:70-3, 2601.1

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This Bulletin is intended to provide guidance concerning the use of torches with a pre-piped fuel and oxygen supply. Installations of this type are routinely found in conjunction with jewelry repair, automobile repair and permanent welding applications.

The Division of Fire Safety has received information regarding damage to gas meters and other related equipment caused by the improper sequence of turning on the fuel and oxygen supplies. When the oxygen supply is turned on before the fuel supply, a flashback may occur which can lead to a fire or explosion. This condition can occur in any situation where the fuel and oxygen are supplied from tanks or piping system. The exception would be the self-contained torches fueled by propane, butane or MAPP gas.

A code change proposal has been submitted to the International Fuel Gas Code that will require the installation of flashback arrestors and backflow check valves in both the fuel and oxygen supply lines in new installations. The proposal has language regarding the definition of a flashback arrestor check valve, and where and when it should be installed. The proposal is working through the International Code Council's code development process and, if approved, will appear in the 2012 International Fuel Gas Code.

Until such time that these changes are adopted, Local Enforcing Agencies should ensure that these torches are used according to the manufacturer's installation instructions as required in N.J.A.C. 5:70-3, 104.3 and operated and maintained under the provisions of Chapter 26. Any installation or modification of fixed piping system supply lines must be done under a Uniform Construction Code permit. Any installation

or modification that is observed without a valid Certificate of Occupancy or Approval should be referred to the local Construction Official for investigation. The Fire Official is responsible for inspecting equipment utilizing compressed gas cylinders such as oxygen and acetylene and self-contained, hand-held torches or any other equipment where there is no fixed piping supplying fuel or oxygen. The maximum size of portable LP-gas containers is 2.5 pounds in water capacity.

Additionally, any modifications to the components of the fuel supply system, from the meter back to the street connection should be reported to the appropriate utility company for investigation. Fire officials and inspectors should also ensure that tanks such as the 20 lb. propane cylinders used for bar-b-ques are not used inside of buildings.

Any questions regarding this bulletin should be directed to the Division of Fire Safety, Bureau of Fire Code Enforcement at 609-633-6132 or through our website – www.nj.gov/dca/dfs.