

Gas Pipe Cleaning Procedure for the Torrington Test Plant Fuel Cell

Line requiring cleaning:

There is one run of gas piping on this project, a 3" line approximately 55' long made of welded carbon steel. This gas line was installed in accordance NFPA 54 (2015 edition), ASME B31.3, Category D service and NFPA 853 (2010 edition). Per NFPA 54-8.3.1 (2015 edition) this line will require purging during the FuelCell startup.

Cleaning Plan:

The following actions were taken to ensure there is no large weld slag or construction debris in the pipe.

3" Gas Pipe:

- A clean rag was drawn through the pipe multiple times to ensure there was not construction
 debris or foreign matter remaining in the pipe. A small handheld mechanical air blower using
 ambient air was used to blow out any remaining dust and mill scale. During the procedure the
 outlet area of the gas line was restricted to those performing the blowing procedure.
- 2. After cleaning was complete the 3" line was isolated, and pressure tested with inert gas. After an acceptable pressure test, it was reconnected, filled with nitrogen, and left pressurized at 2-5psi as outlined in NFPA 54-8.3.1.2. The 3" line will be purged in accordance with NFPA 54-8.3.2.1 as indicated by FCE during the Fuelcell startup.

This cleaning and purging of the piping was conducted on December 29, 2021 and witnessed by Nick Papotto, Mechanical Site Supervisor, NOTCH Mechanical.

In accordance with the above submitted procedure, I, Philip E. Neveu being a Professional Engineer, certify that the natural gas piping for the FuelCell Project at the Torrington test Plant in Torrington CT has been cleaned and purged under my supervision and to the best of my knowledge such conditions do conform to the provisions of the "Fuel Cell Decision and Orden required by the Connecticut Siting Council.

Philip E. Neveu, P.E. (# 222

WASTER PLUMBER PM-03659
NATURAL GAS INSTALLER GN-03448 (H)

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