

Columbus Division of Fire 3639 Parsons Avenue Columbus, Ohio 43207 614-645-7641 Ext. 7-5653 cfdevents@columbus.gov

City of Columbus EVENTS-PPLT VERIFICATON ONLY

(PPLT) Propane Pressure Leak Test certification This section to be filled out by (MFV) Mobile Food Vending Operator

Mobile Food Vendor Information

This document shall be maintained on the MFV Unit posted in a conspicuous location.

This document OR State of Ohio PPLT Certification is REQUIRED to operate at events in the City of Columbus

NOT FOR MFV LICENSE

SEE NFPA 58 (6.14; 6.15; 8.1; 8.2; and 8.3) FOR COMPLETE INFORMATION

Chapter 8 Inspection, Testing, and Purging

8.1 Pressure Testing and Inspection.

8.1.1* General.

- **8.1.1.1** Prior to acceptance and initial operation, all piping installations shall be visually inspected and pressure tested to determine that the materials, design, fabrication, and installation practices comply with the requirements of this code.
- 8.1.1.2 Inspection shall consist of visual examination, during or after manufacture, fabrication, assembly, or pressure tests.
- **8.1.1.3** Where repairs or additions are made following the pressure test, the affected piping shall be tested. Minor repairs and additions are not required to be pressure tested, provided that the work is inspected and connections are tested with a noncorrosive leak-detecting fluid or other leak-detecting methods approved by the authority having jurisdiction.
- **8.1.1.4** Where new branches are installed to new appliance(s), only the newly installed branch (es) shall be required to be pressure tested. Connections between the new piping and the existing piping shall be tested with a noncorrosive leak-detecting fluid or approved leak-detecting methods.
- **8.1.1.5** A piping system shall be tested as a complete unit or in sections. Under no circumstances shall a valve in a line be used as a bulkhead between gas in one section of the piping system and test medium in an adjacent section, unless two valves are installed in series with a valved "telltale" located between these valves. A valve shall not be subjected to the test pressure unless it can be determined that the valve, including the valve closing mechanism, is designed to safely withstand the pressure.
- **8.1.1.6** Regulator and valve assemblies fabricated independently of the piping system in which they are to be installed shall be permitted to be tested with inert gas or air at the time of fabrication.
- **8.1.1.7** Prior to testing, the interior of the pipe shall be cleared of all foreign material.
- 8.1.2 Test Medium. The test medium shall be air, nitrogen, carbon dioxide, or an inert gas. OXYGEN SHALL NEVER BEUSED.

8.1.3 Test Preparation.

- **8.1.3.1** Pipe joints, including welds, shall be left exposed for examination during the test. Exception: covered or concealed pipe end joints that have been previously tested in accordance with this code.
- 8.1.3.2 Expansion joints shall be provided with temporary restraints, if required, for the additional thrust load undertest.
- **8.1.3.3** Appliances and equipment that are not to be included in the test shall be either disconnected from the piping or isolated by blanks, blind flanges, or caps. Flanged joints at which blinds are inserted to blank off other equipment during the test shall not be required to betested.
- **8.1.3.4** Where the piping system is connected to appliances or equipment designed for operating pressures of less than the test pressure, such appliances or equipment shall be isolated from the piping system by disconnecting them and capping the outlet(s).
- **8.1.3.5** Where the piping system is connected to appliances or equipment designed for operating pressures equal to or greater than the test pressure, such appliances or equipment shall be isolated from the piping system by closing the individual appliance or equipment shutoff valve(s).
- 8.1.3.6 All testing of piping systems shall be performed in a manner that protects the safety of employees and the public during the test.

8.1.4 Test Pressure.

- **8.1.4.1** Test pressure shall be measured with a manometer or with a pressure measuring device designed and calibrated to read, record, or indicate a pressure loss due to leakage during the pressure test period. The source of pressure shall be isolated before the pressure tests are made. Mechanical gauges used to measure test pressures shall have a range such that the highest end of the scale is not greater than 5 times the test pressure.
- **8.1.4.2** The test pressure to be used shall be no less than 11/2 times the proposed maximum working pressure, but not less than 3 psi (20 kPa), irrespective of design pressure. Where the test pressure exceeds 125 psi (862 kPa), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe.
- **8.1.4.3*** Test duration shall be not less than 1/2 hour for each 500 ft3 (14 m3) of pipe volume or fraction thereof. When testing a system having a volume less than 10 ft3 (0.28 m3) or a system in a single-family dwelling, the test duration shall be a minimum of 10 minutes. The duration of the test shall not be required to exceed 24 hours

8.1.5 Detection of Leaks and Defects.

- **8.1.5.1** The piping system shall withstand the test pressure specified without showing any evidence of leakage or other defects. Any reduction of test pressures as indicated by pressure gauges shall be deemed to indicate the presence of a leak unless such reduction can be readily attributed to some other cause.
- **8.1.5.2** The leakage shall be located by means of an approved gas detector, a noncorrosive leak detection fluid, or other approved leak detection methods. **Matches, candles, open flames,** or other methods that provide a source of ignition shall not be used.
- 8.1.5.3 Where leakage or other defects are located, the affected portion of the piping system shall be repaired or replaced and retested.

8.2 Piping System Leak Check.

- 8.2.1 Test Gases. Leak checks using fuel gas shall be permitted in piping systems that have been pressure tested in accordance with Section 8.1.
- **8.2.2 Turning Gas On.** During the process of turning gas on into a system of new gas piping, the entire system shall be inspected to determine that there are no open fittings or ends and that all valves at unused outlets are closed and plugged or capped.
- **8.2.3* Leak Check.** Immediately after the gas is turned on into a new system or into a system that has been initially restored after an interruption of service, the piping system shall be checked for leakage. Where leakage is indicated, the gas supply shall be shut off until the necessary repairs have been made.
- **8.2.4 Placing Appliances and Equipment in Operation.** Appliances and equipment shall not be placed in operation until after the piping system has been checked for leakage in accordance with 8.2.3, the piping system is purged in accordance with 8.3, and connections to the appliance are checked for leakage.
- 8.3* Purging Requirements. The purging of piping shall be in accordance with 8.3.1 through 8.3.3.