MNOPS Alert Notice - 01-2016

Expanding the Use of Excess Flow Valves in Gas Distribution Systems

Nov. 17, 2016

Purpose
This Minnesota Office of Pipeline Safety (MNOPS) Alert Notice notifies distribution pipeline operators about a final rule issued by the Pipeline and Hazardous Materials Safety Administration (PHMSA). The rule includes additional excess flow valve (EFV) requirements as well as a new requirement for installation of service line shut-off valves.

Effective Date
This final rule is effective April 14, 2017.

Applicable Codes
1. 49 CFR §192.381 — Service lines: Excess flow valve performance standards [revised].
2. 49 CFR §192.383 — Excess flow valve installation [revised].

Scope
This Alert Notice applies to all Minnesota intrastate distribution pipeline operators subject to 49 CFR Part 192. This document only summarizes the regulatory rule change and is not intended to substitute for the completeness provided by the final rule published in the Federal Register.

Rule Requirements
There are three primary changes to Part 192:
1. EFV installation requirements are expanded to include new or replaced branched service lines servicing single family residences, multifamily residences, and small commercial entities consuming gas volumes not exceeding 1,000 Standard Cubic Feet per Hour (SCFH).
2. A new requirement to install manual service line shut-off valves (e.g., curb valves) or EFVs, if appropriate, for new or replaced service lines with meter capacities exceeding 1,000 SCFH. These valves must be installed as to allow accessibility during emergencies and are subject to regular scheduled maintenance (with documentation).
3. Operators are also now required to notify customers of their right to request installation of an EFV on service lines that are not being newly installed or replaced. PHMSA has left the question of who bears the cost of installing EFVs on service lines not being newly installed or replaced to the operator's rate-setter.
The complete Federal Register publication of the Final Rule is available online: https://www.gpo.gov/fdsys/pkg/FR-2016-10-14/pdf/2016-24817.pdf. For convenience, a redlined summary of the rule change is enclosed.

Operators shall ensure that manuals are revised as necessary, and that service line construction practices for new or replaced service lines comply with this final rule on or before the effective date of April 14, 2017. MNOPS will be incorporating this regulatory change into its inspections.

Please contact our office if you have any questions regarding this final rule.

Enclosure: Amendment Redline
§192.381 Service Lines: Excess flow valve performance standards

a) Excess flow valves (EFVs) to be used on single-residence service lines that operate continuously throughout the year at a pressure not less than 10 p.s.i. (69 kPa) gage must be manufactured and tested by the manufacturer according to an industry specification, or the manufacturer’s written specification, to ensure that each valve will:

1) Function properly up to the maximum operating pressure at which the valve is rated;
2) Function properly at all temperatures reasonably expected in the operating environment of the service line;
3) At 10 p.s.i. (69 kPa) gage:
   i) Close at, or not more than 50 percent above, the rated closure flow rate specified by the manufacturer; and
   ii) Upon closure, reduce gas flow-
      (A) For an excess flow valve designed to allow pressure to equalize across the valve, to no more than 5 percent of the manufacturer’s specified closure flow rate, up to a maximum of 20 cubic feet per hour (0.57 cubic meters per hour); or
      (B) For an excess flow valve designed to prevent equalization of pressure across the valve, to no more than 0.4 cubic feet per hour (.01 cubic meters per hour); and
4) Not close when the pressure is less than the manufacturer’s minimum specified operating pressure and the flow rate is below the manufacturer’s minimum specified closure flow rate.

b) An excess flow valve must meet the applicable requirements of Subparts B and D of this part.

c) An operator must mark or otherwise identify the presence of an excess flow valve on the service line.

d) An operator shall locate an excess flow valve as near as practical to the fitting connecting the service line to its source of gas supply.

e) An operator should not install an excess flow valve on a service line where the operator has prior experience with contaminants in the gas stream, where these contaminants could be expected to cause the excess flow valve to malfunction or where the excess flow valve would interfere with necessary operation and maintenance activities on the service, such as blowing liquids from the line.

§192.383 Excess flow valve installation.

a) Definitions. As used in this section:

Branched service line means a gas service line that begins at the existing service line or is installed concurrently with the primary service line but serves a separate residence.

Replaced service line means a gas service line where the fitting that connects the service line to the main is replaced or the piping connected to this fitting is replaced.

Service line serving single-family residence means a gas service line that begins at the fitting that connects the service line to the main is replaced or the piping connected to this fitting is replaced.

b) Installation required. An excess flow valve (EFV) installation must comply with the performance standards in §192.381. The operator must install an EFV on any new or replaced service line serving a single-family residence after February 12, 2010, unless one or more of the following conditions is present: After April 17, 2016, each operator must install an EFV on any new or replaced service line serving the following types of services before the line is activated:

1) A single service line to one SFR;
2) A branched service line to a SFR installed concurrently with the primary SFR service line (i.e., a single EFV may be installed to protect both service lines);
3) A branched service line to a SFR installed off a previously installed SFR service line that does not contain an EFV;
4) Multifamily residences with known customer loads not exceeding 1,000 SCFH per service, at time of service installation based on installed meter capacity, and
5) A single, small commercial customer served by a single service line with a known customer load not exceeding 1,000 SCFH, at the time of meter installation, based on installed meter capacity.

c) Exceptions to excess flow valve installation requirement. An operator need not install an excess flow valve if one or more of the following conditions are present:
   1) The service line does not operate at a pressure of 10 psig or greater throughout the year;
   2) The operator has prior experience with contaminants in the gas stream that could interfere with the EFV’s operation or cause loss of service to a customer residence;
   3) An EFV could interfere with necessary operation or maintenance activities, such as blowing liquids from the line; or
   4) An EFV meeting the performance standards in § 192.381 is not commercially available to the operator.

d) Customer’s right to request an EFV. Existing service line customers who desire an EFV on service lines not exceeding 1,000 SCFH and who do not qualify for one of the exceptions in paragraph (c) of this section may request an EFV to be installed on their service lines. If an eligible service line customer requests an EFV installation, an operator must install the EFV at a mutually agreeable date. The operator’s rate-setter determines how and to whom the costs of the requested EFVs are distributed.

e) Operator notification of customers concerning EFV installation. Operators must notify customers of their right to request an EFV in the following manner:
   1) Except as specified in paragraphs (c) and (e)(5) of this section, each operator must provide written or electronic notification to customers of their right to request the installation of an EFV. Electronic notification can include emails, Web site postings, and e-billing notices.
   2) The notification must include an explanation for the service line customer of the potential safety benefits that may be derived from installing an EFV. The explanation must include information that an EFV is designed to shut off the flow of natural gas automatically if the service line breaks.
   3) The notification must include a description of EFV installation and replacement costs. The notice must alert the customer that the costs for maintaining and replacing an EFV may later be incurred, and what those costs will be to the extent known.
   4) The notification must indicate that if a service line customer requests installation of an EFV and the load does not exceed 1,000 SCFH and the conditions of paragraph (c) are not present, the operator must install an EFV at a mutually agreeable date.
   5) Operators of master-meter systems and liquefied petroleum gas (LPG) operators with fewer than 100 customers may continuously post a general notification in a prominent location frequented by customers.

f) Operator evidence of customer notification. An operator must make a copy of the notice or notices currently in use available during PHMSA inspections or State inspections conducted under a pipeline safety program certified or approved by PHMSA under 49 U.S.C. 60105 or 60106.

g) Reporting. Each operator must, on an annual basis, report the number of EFVs installed pursuant to this section as part of the Exception for operators of master-meter systems and LPG operators with fewer than 100 customers, each operator must report the EFV measures detailed in the annual report required by § 191.11.

§ 192.385 - Manual service line shut-off valve installation.

a) Definitions. As used in this section:
   Manual service line shut-off valve means a curb valve or other manually operated valve located near the service line that is safely accessible to operator personnel or other personnel authorized by the operator to manually shut off gas flow to the service line, if needed.

b) Installation requirement. The operator must install either a manual service line shut-off valve or, if possible, based on sound engineering analysis and availability, an EFV for any new or replaced service line with installed meter capacity exceeding 1,000 SCFH.

c) Accessibility and maintenance. Manual service line shut-off valves for any new or replaced service line must be installed in such a way as to allow accessibility during emergencies. Manual service shut-off valves installed under this section are subject to regular scheduled maintenance, as documented by the operator and consistent with the valve manufacturer’s specification.