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Materials Safety Administration

Excess Flow Valves for Multi-Residential and Commercial Applications

NPRM: 7/15/2015

**Pipeline Technical Advisory
Committee**

August 26, 2015



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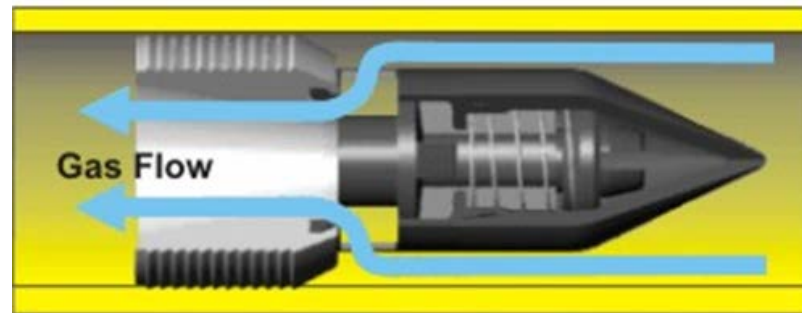
What is Excess Flow Valve? What is Curb Valve?

- **Excess flow valve (EFV)** provides a means to reduce risk of explosion, by shutting off unplanned excessive gas flow, primarily from excavation damage to service line that occur between the gas main and the building.
- **Curb valve** means a manually operated valve located near the service main or a common source of supply that is accessible to first responders and operator personnel to manually shut off gas flow to the service line in the event of an emergency.

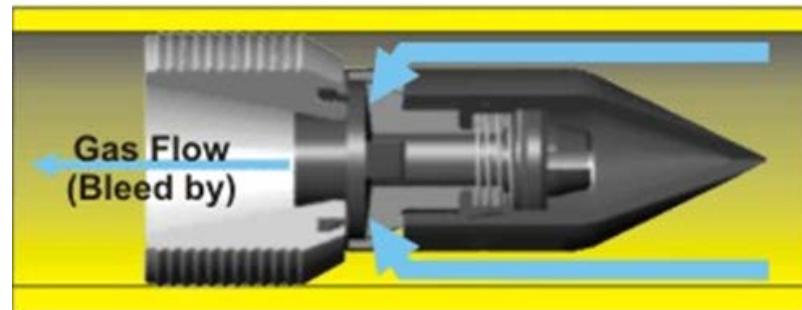


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Excess Flow Valve



Open Position

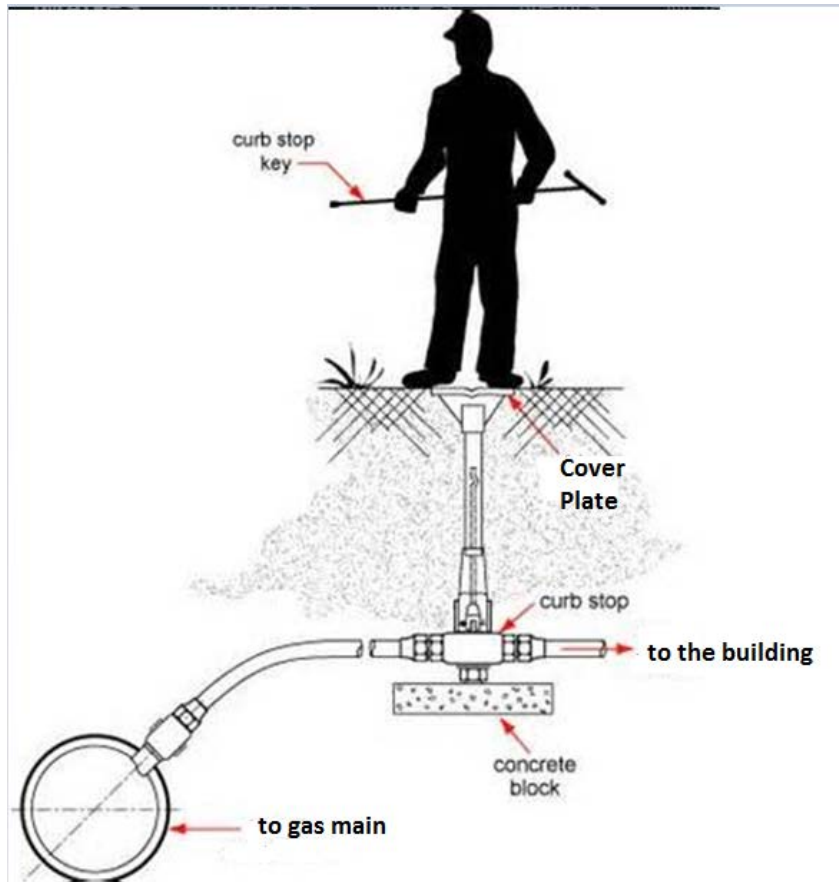


Closed Position
Full Cut-a-way view



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Curb Valve





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Where EFVs are currently required?

- Gas distribution pipeline operators, since Feb 2, 2010, are required to install an EFV in new and replacement service line supplying one single family residence per final rule on Gas Distribution Integrity Management Program (PIPES Act 2006).
- Act 2006 did not mandate that EFVs be installed on service lines of branched single family, Multi-residential, or commercial properties.



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Act 2011 & NTSB Rec. P-01-2

- Sec. 22 of Act 2011 (Effective Jan 3, 2012)
 - After Jan 3, 2014, Operator must install EFVs or equivalent technology on new or replaced branch services, multifamily, and small commercial facilities where economically, Technically and operationally feasible

- NTSB issued P-01-2 on June 22, 2001
 - PHMSA should require installation of EFVs on all new and replacement service lines, regardless of customer's classification, when operating conditions are compatible



Comments from ANPRM & Stakeholders Meeting

- **EFVs available $\leq 5,500$ SCFH, pressures ≤ 1000 psig**
- **Dynamic nature of customer load changes could require either**
 - More frequent need to replace EFVs, or
 - Larger service line/EFV in anticipation of future load growth
 - Larger lines/EFVs installed in anticipation of future load growth could result in greater consequences or failure to close when needed
- **DIMP rules and damage prevention requirements should reduce incidents and need for EFVs**
- **Data on EFV use beyond SFR is very limited**
- **Grouping by Classification**
- **Effectiveness of One-call Notification system**



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EFV Final Report

- Final report includes:
 - NTSB recommendation and regulatory actions taken to date
 - Perspective of various stakeholders & comments on ANPRM
 - Industry consensus standards and guidelines
 - Current US, international, and state regulations
 - Operator experience with EFVs other than SFR
 - Commercial availability of EFVs
 - Issues and challenges identified by stakeholders
- Final Report is placed in the EFV docket



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EFVs Proposed Rule

1. After Jan 3, 2014, each operator must install an EFV on any new or replaced service lines:
 - A branch service line to a single family home
 - Multi-family residences where the known load \leq 1000 scfh
 - A small commercial customer where the known load \leq 1,000 scfh
2. Exceptions: Pressure <10 psig; contaminants in gas stream;
Interfere O&M activities; efvs not available
3. Customer's right to request an EFV
4. Operator provide written notification to customers concerning their right to request an EFV & maintain evidence of notification



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EFVs Proposed Rule (Cont.)

5. Reporting: Each operator must report the EFV measures detailed in Annual Reports.

6. Each operator must install Manual shut-off valves (curb valves) for any new or replaced service lines with installed meter capacity > 1000 scfh

7. Manual shut-off valve must be installed to allow accessibility during emergencies





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Thank You

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