

# Distribution Line Valve Spacing

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# Agenda

- Welcome
- 192.181 Requirements
- Review of Violations
- Installation Considerations
- Inspection Requirements
- Conclusion - Q&A

## 49 CFR Part 192 – 192.181 Distribution line valves

- (a) **Each high-pressure distribution system must have valves spaced so as to reduce the time to shut down a section of main in an emergency. The valve spacing is determined by the operating pressure, the size of the mains, and the local physical conditions**
- (b) Each regulator station controlling the flow or pressure of gas in a distribution system must have a valve installed on the inlet piping at a distance from the regulator station sufficient to permit the operation of the valve during an emergency that might preclude access to the station.
- (c) Each valve on a main installed for operating or emergency purposes must comply with the following:
  - 1) The valve must be placed in a readily accessible location so as to facilitate its operation in an emergency.
  - 2) The operating stem or mechanism must be readily accessible.
  - 3) If the valve is installed in a buried box or enclosure, the box or enclosure must be installed so as to avoid transmitting external loads to the main.

# Violation summaries received for 192.181

260130

• 36 miles of high-pressure, plastic distribution main was installed, but no valves were designed nor installed. Not having valves spaced so as to reduce the time to shut down a section of main in an emergency is a violation of 49 CFR 192.181(a).

326629

• No valves were placed in the 1.2 mile section of main replaced. Failure to install valves spaced in each high-pressure distribution system so as to reduce the time to shut down a section of main in an emergency, is a violation of 49 CFR 192.181(a).

414625

• Distribution valves were not installed as part of a Street Reconstruction which included installation of 2,173 feet of two-inch plastic main and 589 feet of six-inch plastic main. Failure to have valves spaced so as to reduce the time to shut down a section of main in an emergency is a violation of 49 CFR 192.181(a).

433541

• There was no valve that would fully isolate the damaged area - the best way to isolate the main was to squeeze the main. After excavating the hole and squeezing off the main, Consumers did not install a valve for future emergencies. Failure to space valves in a high-pressure distribution system to shut down a section of main in an emergency is a violation of 49 CFR 192.181(a).

# WHEN TO INSTALL

New main installation

Replacement main installation



# WHERE TO: (refer to Gas Distribution Engineering Manual)



# Inspection Requirements

## Poly-valves -

- Maintenance Free (claimed by Manufacturer)
- Still need to maintain per gas code
- Annually checked and serviced
  - Following existing requirements in the Operations and Maintenance (O&M) Manual.
- Michigan added Rule requires operation of the valve.
  - Currently applying for a waiver to not operate valves annually.
  - Update required to O&M Manual once approved.

# Conclusion

