



LAST REVIEW DATE: 2/17/15	REVIEW CYCLE: 5 Years
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INTERIM GUIDELINE: G-699-2-IG-2

TITLE: INSTALLATION AND INSPECTION OF GAS SERVICE REGULATOR VENT LINE PROTECTORS (VLPs) [Interim Guideline]

VOLUME: 3, 10 and Yellow Book

REGISTRATION NO. GAS0564

TARGET TRAINING GROUPS: Gas Measurement, Gas Distribution Services (GDS), Gas Construction, Pressure Control, Construction Management, Gas Contractors

REVISIONS: (See ★)

- 1) Section 3.7
 - Added requirement to obtain customer permission prior to installing, removing, or performing maintenance on a VLP.



Gas Operations Interim Guideline

**TITLE: INSTALLATION AND INSPECTION OF GAS
SERVICE REGULATOR VENT LINE
PROTECTORS (VLPs) [Interim Guideline]**

**Effective immediately Gas Operations Standard G-699-2 is revised as follows:
(added text is underlined)**

3.0 **GENERAL**

- ★ 3.7 Obtain permission from the customer prior to installing, removing, or performing maintenance on a VLP. If access is denied, install a Class C warning tag in accordance with G-11837.

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ENVIRONMENTAL REVIEW BY: J. Fox		SAFETY REVIEW BY: J. Fox		
PREPARED BY:	APPROVED BY:	DATE:	VOLUME: 3, 10 and YB	PAGE 1 OF
G. Ludwig	Patrick R. Williams General Manager Technical Operations	2/17/15	Metering Specs and Procedures; O&M Manual; Yellow Book	1 PAGES



LAST REVIEW DATE:
2/12/15

REVIEW CYCLE:
5 Years

INTERIM GUIDELINE: G-699-2-IG

TITLE: INSTALLATION AND INSPECTION OF GAS SERVICE REGULATOR VENT LINE PROTECTORS (VLPs) [Interim Guideline]

VOLUME: 3, 10 and Yellow Book

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TARGET TRAINING GROUPS: Gas Measurement, Gas Distribution Services (GDS), Gas Construction, Pressure Control, Construction Management, Gas Contractors

REVISIONS: (See ★)

- 1) Section 4.6 - Revised to allow alternatives to pipe strap (mounting bracket) and its location.
- 2) Section 4.7 - Added new section allowing installation of a VLP without the U-shaped pipe providing 18" ground clearance is maintained.
- 3) Section 5.4 - Added new section providing instruction in cases where 18" ground clearance cannot be maintained for outdoor regulator installations.



Gas Operations Interim Guideline

**TITLE: INSTALLATION AND INSPECTION OF GAS
SERVICE REGULATOR VENT LINE
PROTECTORS (VLPs) [Interim Guideline]**

**Effective immediately Gas Operations Standard G-699-2 is revised as follows:
(added text is underlined)**

4.0 INSTALLATION FOR INDOOR REGULATORS

- ★ 4.6 Screws or other hardware used to attach the mounting bracket to the building face shall be hardened and corrosion resistant. Variations to Figure 1 pipe strap (mounting bracket) location and type are allowed as long as the VLP is adequately secured so it cannot be rotated.
- ★ 4.7 If 18" ground clearance can be maintained, it is acceptable to install the VLP head section without the U-shaped pipe. At the vent terminus, install a 1" elbow and 1" nipple into the VLP. Avoid getting dirt/debris inside the VLP.

5.0 INSTALLATION FOR OUTDOOR REGULATORS

- ★ 5.4 If 18" ground clearance cannot be maintained, attach the VLP to the building face as in Figure 1 and run 1" pipe and fittings from the regulator to the VLP.

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ENVIRONMENTAL REVIEW BY: J. Fox		SAFETY REVIEW BY: J. Fox		
PREPARED BY:	APPROVED BY:	DATE:	VOLUME: 3, 10 and YB	PAGE 1 OF
G. Ludwig	James Lucente Acting General Manager Technical Operations	2/12/15	Metering Specs and Procedures; O&M Manual; Yellow Book	1 PAGES



LAST REVIEW DATE:
10/17/14

REVIEW CYCLE:
5 Years

SPECIFICATION: **G-699-2**

★ **TITLE:** **INSTALLATION AND INSPECTION OF GAS
SERVICE REGULATOR VENT LINE
PROTECTORS (VLPs)**

★ **VOLUME:** **3, 10 and Yellow Book**

REGISTRATION NO. **GAS0564**

**TARGET TRAINING
GROUPS:** **Gas Measurement, Gas Distribution
Services (GDS), Gas Construction, Pressure
Control, Construction Management,
Gas Contractors**

REVISIONS: (See ★)

- 1) This revision incorporates the provisions of Interim Guideline G-699-1a-IG dated 10/16/14, which is hereby rescinded.
- 2) Cover Page - Revised title to include inspection of VLPs. Added specification to the Yellow Book.
- 3) Table of Contents - Added Sections 6.0 and 7.0. Renumbered subsequent sections.
- 4) Section 1.0 - Revised Scope to include inspection of VLPs.
- 5) Section 4.1 - Revised VLP selection table for indoor regulators.
- 6) Section 4.3 - Revised elbow selection table.
- 7) Section 5.1 - Revised VLP selection table for outdoor regulators.
- 8) Section 6.0 - Added new section covering Vent Line Terminus 2" and Greater. Renumbered subsequent sections.
- 9) Section 7.0 - Added new section covering annual inspections. Renumbered subsequent sections.
- 10) Section 8.2 - Deleted GEHSI S11.01.
- 11) Section 9.0 - Deleted GEHSI S11.01.



Gas Operations Standards

TITLE: INSTALLATION AND INSPECTION OF GAS SERVICE REGULATOR VENT LINE PROTECTORS (VLPs)

EFFECTIVE DATE: November 17, 2014

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ENVIRONMENTAL REVIEW BY: J. Fox		SAFETY REVIEW BY: J. Fox		
PREPARED BY:	APPROVED BY:	DATE:	VOLUME: 3, 10, YB	PAGE 1
G. Ludwig	Liliana Gonzalez General Manager Technical Operations	10/17/14	Metering Specs and Procedures; O&M Manual; Yellow Book	OF 7 PAGES



★ **TITLE: INSTALLATION AND INSPECTION OF GAS
SERVICE REGULATOR VENT LINE
PROTECTORS (VLPs)**

★ 1.0 **SCOPE**

This specification details the installation and inspection of Vent Line Protectors (VLPs) on new and existing gas service regulator (indoor and outdoor) vent outlet terminus. VLPs are devices that prevent the flow of water into a gas service regulator vent outlet terminus.

2.0 **LEGAL REQUIREMENTS**

This specification is in compliance with the applicable sections stipulated in:

- 2.1 Code of Federal Regulations, Title 49, Part 192, "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards."
- 2.2 Rules and Regulations of the State of New York, Public Service Commission, 16 NYCRR Part 255, "Transmission and Distribution of Gas."

3.0 **GENERAL**

- 3.1 Specification G-8217, "Flood-Prone Areas for the Installation of Gas Service Regulator Vent Line Protectors (VLPs)" lists the areas by M&S plate where VLPs shall be installed. Local management may determine other areas where VLPs may be required.
- 3.2 Where the installation of VLPs is impractical, the vent line terminus shall be raised to a minimum of 3 feet above the Base Flood Elevation (BFE) provided on the Federal Emergency Management Agency (FEMA) maps.
- 3.3 Gas service regulator vents shall be installed per Drawing EO-17118, "Regulator Vent Installation." Where the installation of a VLP will not provide the required 18" clearance from the lower end of the VLP to final outdoor grade, provisions must be made to elevate the vent outlet terminus.
- 3.4 The VLP shall be installed perpendicular to the ground and shall not exceed 10 degrees in the vertical position.
- 3.5 All threaded joints on pipe and pipe fittings shall be sealed with Teflon tape or approved pipe dope.
- 3.6 All uncoated outdoor piping and fittings shall be painted with suitable non-lead outdoor paint for use on metal surfaces.



**★ TITLE: INSTALLATION AND INSPECTION OF GAS
SERVICE REGULATOR VENT LINE
PROTECTORS (VLPs)**

4.0 INSTALLATION FOR INDOOR REGULATORS

- ★ 4.1 Using the table below, select a VLP properly sized to the existing service regulator vent or vent line.

Vent Outlet Terminus Size	VLP
½", ¾", 1", 1 ¼", 1 ½"	1"
2" and above	See Section 6.0

- 4.2 Remove the existing vent line cap.

- ★ 4.3 Using the table below, select a properly matched 90° elbow to adapt from the vent line terminus to the VLP.

Vent Line Terminus	Elbow Size
½" male thread	½" female to 1" female
¾" male thread	¾" female to 1" female
1" male thread	1" female to 1" female
½" female thread	½" male to 1" female
¾" female thread	¾" male to 1" female
1" female thread	1" male to 1" female
1 ¼" male thread	1 ¼" female to 1" female
1 ½" male thread	1 ½" female to 1" female
1 ¼" female thread	1 ¼" male to 1" female
1 ½" female thread	1 ½" male to 1" female

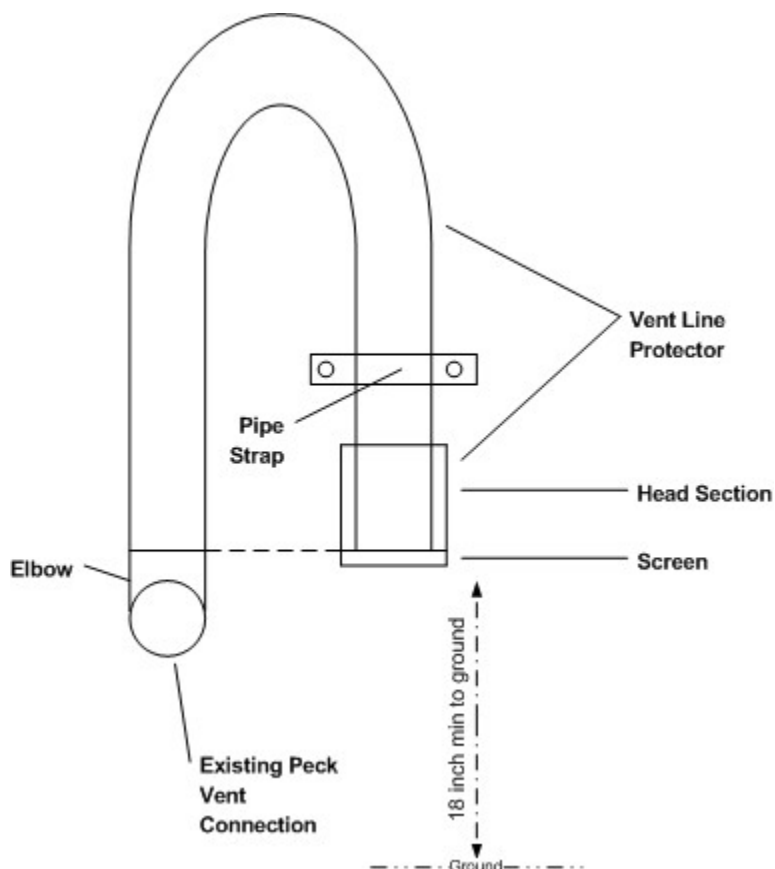
- 4.4 Attach the VLP with 90° elbow to the existing vent line terminus. The VLP should be in the vertical position with the screen section closest to the ground. Ensure 18" clearance from the lower end of the VLP to final outdoor grade.
- 4.5 Attach the 2-hole pipe strap (supplied with the VLP) to the VLP. Ensure the VLP is securely in place. (Figure 1)



★ TITLE: INSTALLATION AND INSPECTION OF GAS SERVICE REGULATOR VENT LINE PROTECTORS (VLPs)

4.0 INSTALLATION FOR INDOOR REGULATORS (Continued)

Figure 1



- 4.6 Screws or other hardware used to attach the mounting bracket to the building face shall be hardened and corrosion resistant.
- 4.7 For curb valve location tag installation requirements, see Specification G-8028, "Requirements for Indicating the Location of the Curb Valve Box on a Gas Service with an Indoor Regulator."



★ TITLE: INSTALLATION AND INSPECTION OF GAS SERVICE REGULATOR VENT LINE PROTECTORS (VLPs)

5.0 INSTALLATION FOR OUTDOOR REGULATORS

- ★ 5.1 Using the table below, select a VLP properly sized to the existing service regulator vent or vent line.

Vent Outlet Terminus Size	VLP
$\frac{1}{2}$ ", $\frac{3}{4}$ ", 1", 1 $\frac{1}{4}$ ", 1 $\frac{1}{2}$ "	1"
2" and above	See Section 6.0

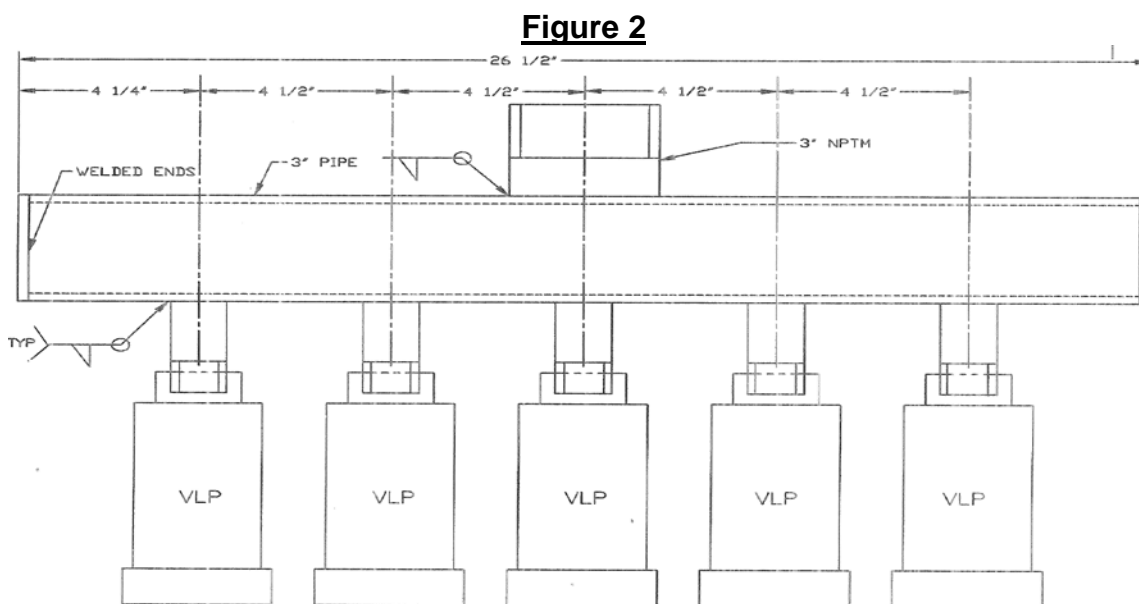
5.2 Remove the existing vent cap from the regulator.

5.3 Using appropriately sized pipe and elbows, install **only the head section** of the VLP such that the screen section is closest to the ground. Ensure 18" clearance from the lower end of the VLP to final outdoor grade.

★ 6.0 VENT LINE TERMINUS 2 INCHES AND GREATER

6.1 For industrial regulator installations with (4) 2 inch vent terminus, a single 1 inch VLP is required for each 2 inch vent terminus. Industrial regulators include Fisher models 99, 133HP, 133L, 1098, and EZR.

6.2 For a vent line terminus equal to or greater than 2 inches in diameter, a VLP manifold (Figure 2) should be used with (5) 1 inch VLPs.





★ **TITLE: INSTALLATION AND INSPECTION OF GAS
SERVICE REGULATOR VENT LINE
PROTECTORS (VLPs)**

★ 6.0 **VENT LINE TERMINUS 2 INCHES AND GREATER** (Continued)

- 6.3 When installing vent line manifold with VLPs, ensure that is adequately supported.
- 6.4 When encountering multiple 2 inch and above vent terminus, strong consideration should be given on raising existing vent line to a minimum of 3 feet above the Base Flood Elevation (BFE) provided on the Federal Emergency Management Agency (FEMA) maps.

★ 7.0 **ANNUAL VLP INSPECTIONS**

- 7.1 Starting in 2015 per rate case approval, the PSC requires that 5% of the VLP population be independently inspected for operability annually.
- 7.2 Gas Measurement shall send a list of VLPs to be inspected at the beginning of each year to each GDS operating area.
- 7.3 VLP's removed by GDS shall be returned to Gas Measurement. Gas Measurement will ensure VLPs are tested and report the result of VLP testing in the 4th Quarter AIP report.

8.0 **MERCURY CONTAMINATION PRECAUTIONS**

- 8.1 All personnel performing work on regulators and associated piping shall be aware of potential mercury contamination and have of knowledge of the notification/reporting requirements in the event of a mercury find or spill.
- ★ 8.2 When potential mercury-containing equipment such as gas regulators and gas vent lines are worked on or handled, proper mercury spill protection and PPE shall be used in accordance with CEHSP S11.00, "Mercury Management Program".
- 8.3 If mercury is discovered or if a mercury spill occurs, immediate notifications to the Gas Emergency Response Center (GERC) and Chem Lab shall be made. Cleanup shall only be performed by the Chem Lab in accordance with GEHSI E02.23, "Mercury Spill Containment."



★ **TITLE: INSTALLATION AND INSPECTION OF GAS
SERVICE REGULATOR VENT LINE
PROTECTORS (VLPs)**

★ 9.0 **REFERENCES**

G-8208	Requirements for Indicating the Location of the Curb Valve Box on a Gas Service Regulator with an Indoor Regulator
G-8217	Flood-Prone Areas for the Installation of Gas Service Regulator Vent Line Protectors (VLPs)
EO-17118	Regulator Vent Installation
CEHSP S11.00	Mercury Management Program
GEHSI E02.23	Mercury Spill Containment