

Blowdown Emissions Reduction Plan SCG: 7011

PURPOSE

To document planning of blowdowns and selection of appropriate methane emissions reduction methods when venting gas to atmosphere from gas pipeline facilities in support of Company operations.

1. Roles and Responsibilities:

- 1.1. Company employees, usually a planner or project manager, are responsible for completing Form #7011 for pipeline work involving controlled blowdowns. Refer to <u>Standard 182.0032</u>, *Blowdown Time, Sizing, and Volume Calculations* and <u>Standard 223.0155</u>, *Planning Pipeline Blowdowns* for guidelines.
- 1.2. The Emissions Strategy Program Team is responsible for reviewing all completed blowdown emissions reduction planning forms and ensures compliance requirements with the SB1371 Natural Gas Leak Abatement Compliance Plan.
- 1.3. **Engineering Design** is responsible for interpretation, revision, and functional review of this Company Form Instruction.

1.4. Preparation

Form #7011 is prepared whenever there is a planned blowdown of natural gas to atmosphere from pipeline facilities under any of the following conditions:

- Blowdown due to the shutdown, replacement, and/or abandonment of transmission pipelines or distribution mains operating over 60 pounds per square inch gauge (PSIG).
- Blowdown due to in-line inspection (ILI) operations. For these operations, document the cumulative planned blowdown volume per project.
- Blowdown due to the shutdown, replacement, and/or abandonment distribution mains of 6 Inches diameter or larger and 1,000 Feet or greater in length, operating at a pressure of 60 PSIG and under.
- Any other blowdown operation not included above that will result in a gas
 loss of 10 MSCF (1 MSCF = 1,000 Standard cubic feet) or more, before any
 methane emissions reduction. This also includes gas used during Company
 operations (including Storage Operations). For these operations, document
 the cumulative planned blowdown volume per project.

2. Definitions

2.1. **Blowdown** - As defined in **Standard 185.0559**, *Terms and Definitions*. A blowdown can be planned or unplanned (such as in support of an emergency



- operation), see <u>Standard 182.0032</u>, *Blowdown Time, Sizing, and Volume Calculations* and <u>Standard 223.0155</u>, *Planning Pipeline Blowdowns*.
- 2.2. **Methane Emissions Reduction** The volume of gas saved as a result of the application of one or more methods to reduce the release of natural gas blown into the atmosphere. See **Standard 223.0155**, *Planning Pipeline Blowdowns*.
- 2.3. Methane Emissions Reduction Methods operations in support of reducing pressure in a pipeline prior to blowdown. The following methods are approved for Company methane emissions reduction operations. For definitions of these methods, see <u>Standard 223.0155</u>, Planning Pipeline Blowdowns.
 - CNG Capture (tanking)
 - Cross Compression
 - Diverting to Other Local Lines
 - Draw Down Pressure
 - Thermal Oxidizer
 - Volume Reduction Via Stopple Fittings
- 2.4 See <u>Standard 182.0185</u>, *Pressure Terminology and Establishment of Pressure Levels for Piping*, for additional definitions.
- 2.5 See <u>Standard 223.0415</u>, *Pipeline and Related Definitions*, for additional definitions of distribution main and services.
- 3. Online Form Completion and Submittal Instructions
 - 3.1. For planned blowdown events, **Form #7011** and all necessary documentation shall be completed and submitted electronically **at least 30 days** prior to the blowdown event to ensure proper and timely documentation of compliance requirements with the **SB1371 Natural Gas Leak Abatement Compliance**Plan. For unplanned blowdown events, such as those in conjunction with emergency operations, follow the reporting criteria in **Standard 182.0155**, *Gas Loss Estimation Pipeline* and **Form 3466**, *Reporting of Gas Blown to*



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Atmosphere. The use of **Form** #7011 is not required for unplanned or emergency blowdown events.

- 3.2. Collectible and Non-Collectible Planned Blowdown Events
 - 3.2.1. Online Electronic Form: The online version of Form #7011 can be accessed at the SoCalGas Blowdown Planning and Reporting Tool. Complete and submit Form #7011. Refer to Figure 1 below. Attach electronic copies of all supporting documentation, which shows how the pipeline pressure will be reduced prior to the blowdown. Examples of this documentation include, but are not limited to, the following:
 - Contractor's cost estimate or scope of work for Cross Compression/Gas Capture operations.
 - Communication records with Gas Control confirming the availability of time for extended outage.
 - Gas Handling Plan and/or Request for Engineering Review (RER) identifying taps that will be used for draw-down.
 - Completed Gas Capturing & Cross Injection Request form from the CNG/LNG Team. This is for gas capture operations performed by the CNG/LNG Team only. For copies of the request email the CNG/LNG Team at

CNGLNGPGCSupportServices@semprautilities.com



Figure 1

3.2.2. Upon successful submittal of Form #7011, the company employee who submitted the form will receive an email confirmation from the Emissions Strategy Program Team. The email confirmation will contain all information that was entered into the Form #7011. If the confirmation was not received, please contact the Emissions Strategy



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Program Team at MethaneEmissions@semprautilities.com for assistance.

- 3.2.3. Electronic copies of completed Form #7011 and other associated documentation are maintained on the Emissions Strategy Program Team's Company SharePoint Site. For an electronic copy of completed Form #7011, contact the Emissions Strategy Program Team at MethaneEmissions@semprautilities.com.
- 3.2.4. For projects that will require multiple blowdowns at the same or at different locations, add up the individual planned blowdown volumes and submit the total cumulative volume on one form per project. The manual calculation option must be used in these instances. See Section 5.1 below.
- 3.3. If the gas loss will be on a Transmission asset, the electronic copy of completed Form #7011 and all supporting documentation and records are routed to **Transmission Technical Services** as a **Transmission Service Request** (TSR).

4. Required Form Retention Period

Records of Emissions Reduction Plan Forms fall under the Record Series Code ENV-30-02 in the Corporate Records Retention Schedule and shall be retained for 10 years in the **Emissions Strategy Program Team** SharePoint Site.

5. Online Form Data Entry Instructions (refer to Figure 2 below):

DATA ENTRY INSTRUCTIONS

- (1) Planned Blowdown Date: Enter the date the blowdown is scheduled for.
- (2) Location: Enter the location of where the blowdown will occur (Lay down yard, end points, or GPS coordinates).
- (3) City: Select or Enter the city or municipality where the blowdown will occur.
- (4) District: Select the SoCalGas operating district where the blowdown will occur.
- (5) Department: Select or Enter from the drop-down which department is initiating the blowdown.
- (6) Asset Owner: Select the Asset Owner for this blowdown
- (7) Project Title: Enter the name of the project for this blowdown
- (8) Reason: Select the reason for the loss of the gas to atmosphere via radio button
 - Shutdown, replacement and/or abandonment of transmission pipelines or distribution mains operating over 60 PSIG



- In-line inspection (ILI) of operations
- Shutdown, replacement and/or abandonment of distribution mains of 6" diameter or larger and 1,000 feed or greater in length, operating at a pressure of 60 PSIG and under
- Other blowdown operation that will result in a gas loss of 10 MSCF or more, before any methane emissions reduction. If other, please enter all necessary details.
- (9) Account #: Enter the Work Order number of the project.
- (10) I/O #: Enter the SAP Internal Order number of the project.
- (11) USA Ticket #: Enter the number of the related USA Ticket, if applicable.
- (12) SAP Plant Maintenance #: Enter the corresponding Plant Maintenance number from SAP.
- (13) Cost Center: Enter the responsible department's Cost Center.
- (14) Collectible?: Select from the drop-down whether or not the gas loss will be collectible by indicating "Yes" or "No".
- (15) Line Number: If the blowdown will occur on a high-pressure pipeline, enter the transmission pipeline or supply line number.
- (16) Outside Diameter (in): Enter or select the outside diameter of the pipe (inches) that will be blown down. In the case of multiple pipe diameters, see Section 5.1 below on manual calculations. If more than one pipeline diameter exists, select "Multiple".
- (17) Wall Thickness: Enter or select the wall thickness of the pipe in inches that will be blown down. In the case of multiple wall thicknesses, see Section 5.1 below on manual calculations. When more than one pipeline wall thickness exists, select "Multiple".
- (18) Pipeline Isolation Points (Stationing): Enter the stationing points for the section of the line that will be blown down, if applicable, and select the Method used.
- (19) Total Miles Isolated: Enter the total number of miles of pipe that will be isolated and blown down.
- Note: One-mile equals 5,280 feet. To convert footage to miles, divide the footage by 5,280. For example, to convert 3,000 feet to miles, divide 3000 by 5,280, which equals 0.57 miles.
- (20) How will the pipeline pressure be reduced prior to blowdown? Check all boxes that apply for how the pipeline pressure will be reduced prior to the blowdown (see Definitions section above). If "Other" is checked, provide details in the field.



- (21) Provide verification: Check all boxes that apply for verification provided and attach supporting documentation. If "Other" is checked, enter details in box below. See Routing section above.
- (22) Attachments: Attach any relevant attachments for supporting documentation in this section (required if check boxes for Provide verification field above are selected).
- (23) Select automatic calculations (ON) or manual data entry (OFF) for the following:
 - If automatic calculations are selected (ON), the "Projected Volume of Gas Saved due to Pressure Reduction" and "Volume Planned to be Emitted Due to Blowdowns or Purges" fields are automatically populated upon entry of the pressure data.
 - If manual data entry is selected (OFF), all fields are editable, and no automatic calculations are provided.
- Enter the estimated Operating Pressure in PSIG before pressure reduction. (If unknown, enter the system or line's MOP).
- (25) Enter the estimated gas consumed by the equipment for blowdown reduction in MSCF, if applicable. This information can be obtained by the CNG/LNG Team.
- (26) Enter the estimated pipeline pressure at the start of the blowdown event in PSIG, after the pressure reduction. See <u>Standard 182.0032</u>, *Blowdown Time, Sizing, and Volume Calculations* for guidelines.
- (27) Enter the estimated pipeline pressure in PSIG at the end of the blowdown. By default, this value is 0. For more information on estimating gas loss, see Standard 182.0032, Blowdown Time, Sizing, and Volume Calculations.
- (28) Projected Volume of Gas Saved Due to Pressure Reduction in MSCF and
- (29) Volume Planned to be Emitted due to Blowdowns or Purges in MSCF will automatically calculate if "Automatic Calculations" was selected (ON). To manually calculate these fields, see Section 5.1 below.
- Enter the name of the employee who prepared the form by entering the last name and searching. You can also enter the last name, comma first name to filter on more precise results.
- (31) Enter the date the form was prepared.







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3 1	Select automatic calculations (ON) or manual data entry (OFF) for the following		On 23
Estimated operating pre-	ssure before pressure reduction (MOP if unknown):	* PSIG	24
Estimated gas consumed	by equipment for blowdown reduction (will be provided by CNG team, otherwise 0):	* MSCF	25
Estimated pipeline press	ure at the start of blowdown, after pressure reductions:	* PSIG	26
Estimated pipeline press	ure at the end of blowdown (default is zero):	* PSIG	27
Projected volume of gas saved due to pressure reduction		0	28
Volume planned to be emitted due to blowdown or purges:		o	29
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th by last name 30	2/6/2023 31 📾	Sı	ubmit Form

Figure 2

5.1. Manual Calculations

Form #7011 provides the user the ability to perform their own manual calculations and enter them into the following fields:

- (28) Projected Volume of Gas Saved Due to Pressure Reduction (MSCF)
- (29) Volume Planned to be Emitted Due to Blowdowns/Purges (MSCF)

Manual calculation of these <u>fields is optional</u> and may be selected when the volume calculations require the following:

- 1) Multiple pipe diameters exist in the isolated blowdown segment
- 2) Multiple wall thicknesses exist in the isolated blowdown segment
- Multiple blowdowns and/or blowdown locations, such as for ILI projects.
- 4) If the blowdown gas is not pipeline quality gas, has a specific gravity other than 0.6, and/or the gas compressibility factor is not the same as per <u>Standard 182.0032</u>, *Blowdown Time, Sizing, and Volume Calculations*. For gas temperatures other than 60°F contact Gas Engineering Pipeline Engineering for compressibility factors.
- 5) Any other reasons that would require manual calculations as determined by the responsible department.

See <u>Standard 182.0032</u>, *Blowdown Time, Sizing, and Volume Calculations* for guidelines.



6. Accessing the Form

The form can be filled out electronically through a PowerApps application. That application can be accessed via the hyperlink below (Ctrl + Click the hyperlink).

Form #7011 - Blowdown Emissions Reduction Plan

7. PROTECTED SECTIONS AND WORDING

The following sections and wording in this document cannot be altered or deleted without prior approval from Pipeline Safety & Compliance and Legal:

Section	Protected Wording (Underlined ONLY)	Justification	Date Wording Added
N/A			



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NOTE: Do not alter or add any content from this page down; the following content is automatically generated.

Brief: Fully reviewed. Revised Form Instruction to reflect that Form 7011 is now generated, filled out, and submitted via PowerApps. Updated several of the data entry instructions to reflect the new version of the form. Included screen shots of the new form and a hyperlink on where to access it.

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Department:	Gas Engineering			
Number of Common Document (if applicable):	N/A - Process is pending implementation by Emissions Strategy Team			
Confidential Sections:				
Contains OPQUAL Covered Task:	No			
Part of SoCalGas O&M Plan:	No			
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Part of Distribution IMP (DIMP):	No			
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Document:				
Impacts GO58A:	No			
GO58A Codes & Impacted Sections of				
Document:				
Impacts GO58B:	No			
GO58B Codes & Impacted Sections of				
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