

**Natural Gas STAR Methane Challenge**

OMB Control No. 2060-XXX  
Approval Expires XXXX/XXXX

This reporting form must be downloaded from the Methane Challenge module in e-GGRT. All data on this page will automatically populate based on data entered in e-GGRT.

Note that if you have committed to a source, but that source is not present at this facility, check the box in column F to indicate this.

Participating sources are automatically populated based on the most recent commitment information EPA has received from your company. If these commitments are not accurate, please email a Methane Challenge program manager at gasstar@epa.gov.

If other data on this tab are incorrect, you can fix the data in e-GGRT and re-download this form. If you need help locating the data in e-GGRT, please contact the Help Desk (GHGreporting@epa.gov)

After completing this Facility Info tab, please fill out the tab(s) corresponding to the sources on which this facility is reporting.

Note that you will need to submit a separate report for each of your facilities.

Report Year:

Partner Name:

Facility Name:

Industry Segment:

|                          |                         |
|--------------------------|-------------------------|
| <input type="checkbox"/> | athering and Boosting   |
| <input type="checkbox"/> | ransmission and Storage |
| <input type="checkbox"/> | istribution             |

Last Updated: 5/10/2018  
Version: R.3.3

*If this source does not exist at this facility, please check this box*

| Participating Sources    |   |  |  |
|--------------------------|---|--|--|
| <input type="checkbox"/> | lowdowns                                    |  |  |
| <input type="checkbox"/> | ains- Cast Iron and Unprotected Steel       |  |  |
| <input type="checkbox"/> | ervices- Cast Iron and Unprotected Steel    |  |  |
| <input type="checkbox"/> | xcavation Damages                           |  |  |
| <input type="checkbox"/> | eciprocating Compressors - Rod Packing Vent |  |  |
| <input type="checkbox"/> | entrifugal Compressors - Venting            |  |  |
| <input type="checkbox"/> | ic Controllers                              |  |  |

Methane Challenge Partner ID Number:  Methane Challenge Partner IDs are automatically assigned to partners by the e-GGRT system

Methane Challenge Facility ID Number:  Methane Challenge Facility IDs are automatically assigned to partners by the e-GGRT system

GHGRP ID Number\*:  < This field will populate with an GHGRP ID if you indicated that this Methane Challenge facility reports to GHGRP during Methane Challenge Facility Registration. If you need help updating your facility information, please contact the Help Desk. On all subsequent tabs, fields shaded in grey represent data elements that are reported to GHGRP; these fields will be pre-populated with data submitted to GHGRP. Therefore, when completing these forms, those fields will be locked to prevent changes and you may skip fields that are shaded in grey.

Pre-populated using certified Part 98 Subpart W annual report:

Reporting Year:  
Version:  
Date Certified:

EPA Form No. 5900-434

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for this collection of information is estimated to average 50 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (20227), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

Based on your commitment, please fill out all of the fields below. Hitting the tab key after data entry will automatically take you to the next data-entry field.

[For additional information about the data being requested, and for further detail on quantification methodologies, please refer to the "BMP Commitment: Distribution Segment S](#)

| Partner Name | Facility Name | Report Year |
|--------------|---------------|-------------|
|              |               | 0           |

### Distribution Pipeline Blowdowns

|   |  |
|---|--|
| Number of blowdowns                                   |  |
| Total CH <sub>4</sub> emissions (mt CH <sub>4</sub> ) |  |

### Voluntary Actions Taken to Reduce Methane Emissions in

|   |  |
|---|--|
| Number of blowdowns that routed gas to:   |  |
| Compressor or capture system for beneficial use                                     |  |
| Flare   |  |
| Low-pressure system   |  |
| Number of hot taps utilized that avoided the need to blowdown gas to the atmosphere |  |
| Total potential emissions (mt CH <sub>4</sub> )                                     |  |
| Emission reductions from voluntary action (mt CH <sub>4</sub> )                     |  |

### Additional Information

This space provides an opportunity for reporting optional, qualitative information that was not covered in the above data elements which communicates progress on the applicable commitment.

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| Partner Name | Facility Name | Report Year |
|--------------|---------------|-------------|
|              |               | 0           |

**Transmission Pipeline Blowdowns between Compressor Stations<sup>1</sup>**

| Quantification Method  | Equipment or event type  | Total number of blowdowns | Total CH <sub>4</sub> emissions (mt CH <sub>4</sub> ) |
|--|--|---------------------------|---|
| Subpart W Method 1, based on volume, temperature, and pressure | Pipeline integrity work (e.g., the preparation work of modifying facilities, ongoing assessments, maintenance or mitigation) |                           |   |
|  | Traditional operations or pipeline maintenance   |                           |   |
|  | Equipment replacement or repair (e.g., valves)   |                           |   |
|  | Pipe abandonment   |                           |   |
|  | New construction or modification of pipelines including commissioning and change of service                                  |                           |   |
|  | Operational precaution during activities (e.g. excavation near pipelines)  |                           |   |
|  | All other pipeline segments with a physical volume greater than or equal to 50 cubic feet                                    |                           |   |
| Subpart W Method 2, based on measurement                       | Calculated using flow meter  |                           |   |

**Voluntary Actions Taken to Reduce Methane Emissions in**

|   |  |
|---|--|
| Total number of blowdowns to which a BMP was applied                                |  |
| Number of blowdowns that routed gas to:   |  |
| Compressor or capture system for beneficial use                                     |  |
| Flare   |  |
| Low-pressure system   |  |
| Number of hot taps utilized that avoided the need to blowdown gas to the atmosphere |  |
| Total potential emissions (mt CH <sub>4</sub> )                                     |  |
| Emission reductions from voluntary action (mt CH <sub>4</sub> ) <sup>2</sup>        |  |

**Additional Information**

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<sup>1</sup> This source is intended to align with Subpart W's 'Onshore Natural Gas Transmission Pipeline Segment,' capturing all blowdowns not occurring at compressor stations. In Subpart W, this activity is reported on tab (I) Blowdown Vent Stacks.

<sup>2</sup> Difference in potential and actual emissions as calculated per the specified emission quantification methodologies for each source.

Based on your commitment, please fill out all of the fields below. Hitting the tab key after data entry will automatically take you to the next data-entry field.

For additional information about the data being requested, and for further detail on quantification methodologies, please refer to the "BMP Commitment: Distribution Seg

| Partner Name | Facility Name | Report Year |
|--------------|---------------|-------------|
|              |               | 0           |

**Distribution Mains - Cast Iron and Unprotected Steel<sup>1</sup>**

|   |  |
|---|--|
| Initial inventory of cast iron distribution mains as of January 1 of the first year of current commitment (miles)         |  |
| Initial inventory of unprotected steel distribution mains as of January 1 of the first year of current commitment (miles) |  |

|  | Total miles of distribution mains | Annual CH <sub>4</sub> emissions (mt CH <sub>4</sub> ) |
|--|-----------------------------------|--|
| Distribution Mains, Gas Service - Unprotected Steel                                    |                                   |  |
| Distribution Mains, Gas Service - Protected Steel                                      |                                   |  |
| Distribution Mains, Gas Service - Plastic  |                                   |  |
| Distribution Mains, Gas Service - Cast Iron  |                                   |  |
| Distribution Mains, Gas Service - Reconditioned Cast Iron (with cured-in-place liners) |                                   |  |
| Distribution Mains, Gas Service - Unprotected Steel with cured-in-place liners         |                                   |  |

See [Table W-7 to Subpart W of Part 98 - Default Methane Emission Factors for Natural Gas Distribution](#), for EFs by line material

**Voluntary Actions Taken to Reduce Methane Emissions in**

|   |  |
|---|--|
| Miles of cast iron mains:                                       |  |
| Replaced with plastic   |  |
| Replaced with protected steel                                   |  |
| Rehabilitated with cured-in-place liners                        |  |
| Retired without replacement                                     |  |
| Miles of unprotected steel mains:                               |  |
| Cathodically protected or replaced with protected steel         |  |
| Replaced with plastic   |  |
| Rehabilitated with cured-in-place liners                        |  |
| Retired without replacement                                     |  |
| Emission reductions from voluntary action (mt CH <sub>4</sub> ) |  |

**Additional Information**

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<sup>1</sup>In Subpart W, this activity is reported on tab (q,r) Equipment Leaks.

Based on your commitment, please fill out all of the fields below. Hitting the tab key after data entry will automatically take you to the next data-entry field.

[For additional information about the data being requested, and for further detail on quantification methodologies, please refer to the "BMP Commitment: Distribution S](#)

| Partner Name | Facility Name | Report Year |
|--------------|---------------|-------------|
|              |               | 0           |

**Distribution Services - Cast Iron and Unprotected Steel<sup>1</sup>**

|   |  |
|---|--|
| Initial inventory of cast iron services as of January 1 of the first year of current commitment (count)         |  |
| Initial inventory of unprotected steel services as of January 1 of the first year of current commitment (count) |  |

|  | Total number of services | Annual CH <sub>4</sub> emissions (mt CH <sub>4</sub> ) |
|--|--------------------------|--|
| Distribution Services, Gas Service - Unprotected Steel                             |                          |  |
| Distribution Services, Gas Service - Protected Steel                               |                          |  |
| Distribution Services, Gas Service - Plastic                                       |                          |  |
| Distribution Services, Gas Service - Copper  |                          |  |
| Distribution Services, Gas Service - Cast Iron                                     |                          |  |
| Distribution Services, Gas Service - Reconditioned Cast Iron (with Plastic Liners) |                          |  |
| Distribution Services, Gas Service - Unprotected Steel with Plastic Liners         |                          |  |

[See Table W-7 to Subpart W of Part 98 - Default Me](#)

**Voluntary Actions Taken to Reduce Methane Emissions in**

|   |  |
|---|--|
| Number of cast iron services:                                   |  |
| Replaced with plastic   |  |
| Replaced with protected steel                                   |  |
| Replaced with copper  |  |
| Reconditioned with cured-in-place liners                        |  |
| Number of unprotected steel services:                           |  |
| Cathodically protected or replaced with protected steel         |  |
| Replaced with plastic   |  |
| Replaced with copper  |  |
| Rehabilitated with cured-in-place liners                        |  |
| Emission reductions from voluntary action (mt CH <sub>4</sub> ) |  |

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<sup>1</sup> In Subpart W, this activity is reported on tab (q,r) Equipment Leaks.

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[For additional information about the data being requested, and for further detail on quantification methodologies, please refer to the "BMP Commitment Distribution S](#)

|                     |                      |                    |
|---------------------|----------------------|--------------------|
| <b>Partner Name</b> | <b>Facility Name</b> | <b>Report Year</b> |
|                     |                      | 0                  |

**Distribution Excavation Damages**

|   |   |  |
|---|---|--|
| <b>Excavation damages during reporting year</b> | Total number of excavation damages  |  |
|   | Total number of excavation damages per thousand locate calls  |  |
|   | Total number of excavation damages which resulted in a release of natural gas                             |  |
|   | Total number of excavation damages which resulted in the pipeline being shut down                         |  |
|   | Total number of excavation damages where the operator was given prior notification of excavation activity |  |

|   |         |         |         |         |
|---|---------|---------|---------|---------|
| <b>Total number of excavation damages per class location (optional, if data is available)</b> | Class 1 | Class 2 | Class 3 | Class 4 |
|   |         |         |         |         |

|  |           |      |         |                            |       |
|--|-----------|------|---------|----------------------------|-------|
| <b>Total number of excavation damages by pipe material and part of system involved</b> |           | Main | Service | Inside Meter/Regulator Set | Other |
|  | Steel     |      |         |                            |       |
|  | Cast Iron |      |         |                            |       |
|  | Copper    |      |         |                            |       |
|  | Plastic   |      |         |                            |       |
|  | Other     |      |         |                            |       |

|   |               |  |
|---|---------------|--|
| <b>Total number of excavation damages by type that caused excavation damage incidents</b> | Contractor    |  |
|   | Railroad      |  |
|   | County        |  |
|   | State         |  |
|   | Developer     |  |
|   | Farmer        |  |
|   | Utility       |  |
|   | Municipality  |  |
|   | Occupant      |  |
|   | Unknown/Other |  |

|  |  |  |
|--|--|--|
| <b>Total number of excavation damages by apparent root cause</b> | One-Call Notification Practices Not Sufficient |  |
|  | Locating Practices Not Sufficient              |  |
|  | Excavation Practices Not Sufficient            |  |
|  | One-Call Notification Center Error             |  |
|  | Abandoned Facility                             |  |
|  | Deteriorated Facility                          |  |
|  | Previous Damage                                |  |
|  | Other/Miscellaneous                            |  |

**Voluntary Actions Taken to Reduce Methane Emissions in**

|   |  |
|---|--|
| Actions taken to minimize excavation damages/reduce methane emissions from excavation damages                           |  |
| Company-specific goal for reducing excavation damages and/or methane emissions from excavation damages (when available) |  |
| Progress in meeting company-specific goal (when available)  |  |

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For additional information about the data being requested and for further detail on quantification methodologies, please refer to the "MMP" Commitment, Onshore Production, Gathering and Boosting, Processing.

| Partner Name | Facility Name | Report Year |
|--------------|---------------|-------------|
|              |               | 0           |

**Transmission and Storage Reciprocating Compressors<sup>1</sup>**

**Transmission and Storage Reciprocating Compressors with Rod Packing**

If the release point changed or controls were added during the reporting year, please provide a different unique name or compressor ID for the reconfigured emission source and the operating data associated with the reconfiguration.

| Unique name or ID for compressor | Hours in operating mode | Hours in standby-pressurized-mode | Hours in not-operating-depressurized-mode | Is rod packing replacement occurring every 25,000 hours or 36 months? (Y/N) | Date of last rod packing replacement (mm/dd/yyyy) | Number of operating hours since rod packing replacement | Is compressor part of a grandfathered group of compressor sources? (Y/N) | Were are rod packing venting emissions from the compressor released? (Y/N) | Was compressor in not-operating-depressurized-mode all year? (Y/N) |
|----------------------------------|-------------------------|-----------------------------------|---|---|---|---|--|--|--|
|                                  |                         |                                   |   |   |   |   |  |  |  |
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**Transmission and Storage Reciprocating Compressors - Rod Packing Individual Atmospheric Vents**

Measured volumetric flow at standard conditions from the rod packing leak or vent

| Unique name or ID for the individual leak or vent to the atmosphere | Unique name or ID for compressor | Emissions Calculation Method | Measured volumetric flow at standard conditions from the rod packing leak or vent |                           | Annual CH <sub>4</sub> emissions (mt CH <sub>4</sub> ) |
|---|----------------------------------|------------------------------|---|---------------------------|--|
|   |                                  |                              | As found (scfh)   | Continuous (annual MMscf) |  |
|   |                                  |                              |   |                           |  |
|   |                                  |                              |   |                           |  |
|   |                                  |                              |   |                           |  |
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|   |                                  |                              |   |                           |  |
|   |                                  |                              |   |                           |  |

**Transmission and Storage Reciprocating Compressors - Reporter Emission Factor for Rod Packing Atmospheric Leak or Vents**

| Reporter EF (scfh) | Number of measured compressors (during the current year and 2 previous years) from which the reporter EF was developed |
|--------------------|--|
|                    |  |

**Voluntary Actions Taken to Reduce Methane Emissions in**

|   |  |
|---|--|
| Number of reciprocating compressors with rod packing leaks or vents routed to VRU or beneficial use during reporting year   |  |
| Number of reciprocating compressors with rod packing leaks or vents routed to flare or control device during reporting year |  |
| Number of reciprocating compressors for which rod packing was replaced during reporting year                                |  |
| Emission reductions from voluntary action (mt CH <sub>4</sub> )   |  |

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<sup>1</sup> In Subpart W, this activity is reported on tab (b) Reciprocating Compressors.







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[For additional information about the data being requested, and for further detail on quantification methodologies, please refer to the "BMP Commitment: Onshore Production, Gathering a](#)

| Partner Name | Facility Name | Report Year |
|--------------|---------------|-------------|
|              |               | 0           |

**Transmission and Storage Natural Gas Continuous Bleed Pneumatic Controllers<sup>1</sup>**

| Type of Pneumatic Device   | Total Number | Average operating hours per controller (hr/yr) | Total CH <sub>4</sub> Emissions (mt CH <sub>4</sub> ) |
|--|--------------|--|---|
| High-bleed pneumatic controllers (greater than 6 scf per hour)         |              |  |   |
| Low-bleed pneumatic controllers (less than or equal to 6 scf per hour) |              |  |   |

|  |  |
|--|--|
| Number of high-bleed controllers claiming operational exemptions |  |
| Rationale for operational exemption                              |  |

**Voluntary Actions Taken to Reduce Methane Emissions in**

|   |  |
|---|--|
| Number of high-bleed controllers converted to low-bleed                             |  |
| Number of high-bleed controllers converted to zero emitting or removed from service |  |
| Number of low bleed controllers converted to zero emitting or removed from service  |  |
| Emission reductions from voluntary action (mt CH <sub>4</sub> )                     |  |

**Additional Information**

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<sup>1</sup> In Subpart W, this activity is reported on tab (b) NG Pneumatic Device.