Natural Gas STAR Annual Report - Production Segment

FORM VERSION: REPORTING SEASON 2021 (for activities completed in 2020)

RS2021PRODv1

Partner Name	
Reporting Year	2020

Use the Table of Contents below to navigate to the different tabs of the form. You can use column B to indicate if you reported data on a specific tab.

Production Emission Sources	Data Reported	Information
Dehydrator Vents	No	Install flash tank separators on glycol dehydrator vents
Pneumatic Controllers	No	Convert high-bleed controllers to low-bleed; convert high-bleed or low-bleed controllers to zero-emitting controllers; remove controllers from service with no replacement
Additional Production Activities	No	Use this tab to report all other methane reductions in the Production segment. You will be able to select the technology/practice used from the list of Natural Gas STAR Partner Reported Opportunities. If the activity you are reporting is not included in the list, please contact EPA at GasSTAR@epa.gov

Update Partner Information (If applicable)

New Partner Name	

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Dehydrator Vents

Install Flash Tank Separators on Glycol Dehydrators

Start Year	Eligible Sunset Years for this Activity	Automatically calculate sunsets?	End Year	New or Ongoing?	Calculation Method: Default, Standard, or Other	Number of Flash Tank Separators Installed

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Calculate Using Default		
Average Gas Throughput (MMcf/yr)	Calculated Total Methane Emission Reduction Based on Default Values {[Number of Flash Tank Separators Installed]x[Average Gas Throughput]) x 170 scf/MMcf x 0.9] / 1000]}	TEG Circulation Rate (gal/hr)
[redacted]		

Calculate Using Standard Calculation		
Methane Entrainment Rate (scf/gal)	Hours of Operation (hrs/yr)	Calculated Total Methane Emission Reduction Based on Standard Calculation {[TEG Circulation Rate]x [Methane Entrainment Rate]x[Hours of Operation] x 0.9] / 1000}
[redacted]		

Other Calculation	
Total Methane Emission Reduction Based on Other Assumptions (Mcf/yr)	Explain Reduction Calculation Used
[redacted]	

Provide additional comments or detail about how your company implemented this BMP

Pneumatic Controllers

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Convert high-bleed controllers to low-bleed; convert high-bleed or low-bleed controllers to zero-emitting controlle

				Convert high-bleed to low-bleed	
Start Year	New or Ongoing?	Average Methane Content of Gas (enter as a decimal; leave blank to use default 82.1% methane)	Average annual operating hours (leave blank to use default 8760 hours)	Number of controllers converted	Calculated Total Methane Emission Reductions (Mcf/yr)

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rs; remove controllers from service with no replacement

Convert high-bleed to zero-bleed/remove from service		Convert low-bleed to zero-bleed/remove from service	
Number of controllers converted/removed from service	Calculated Total Methane Emission Reductions (Mcf/yr)	Number of controllers converted/removed from service	Calculated Total Methane Emission Reductions (Mcf/yr)

Provide additional comments or detail about how your company implemented this BMP

Additional Production Activities

Start Year	Select the Activity	New or Ongoing?	Eligible Sunset Years for this Activity

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Automatically calculate sunsets (if Sunset Years >1)?	End Year	Total Methane Emission Reduction (Mcf/yr)	Basis for Emission Reduction Estimate

ts

Explain Reduction Calculation Used

Describe how your company implemented this activity (e.g., number of units installed or other activities conducted)

This sheet summarizes values used in calculations in this workbook. If you have

Install Flash Tank Separators on Glycol Dehydrators

Default Values

Emission Factor[1]	170
Efficiency[2]	0.9

Pneumatic Controllers

Emission Factors *Source: 40 CFR 98, Table*

Low Continuous Bleed Pneumatic Device Vents	1.39
High Continuous Bleed Pneumatic Device Vents	37.3

Default Values

Operating hours	8760
Methane content of natural gas	82.1%

Notes:

[1] Derived from "Methane Emissions from the Natural Gas Industry," Volume 14, Glycol

[2] Derived from "Optimize Glycol Circulation And Install Flash Tank Separators In Glycol

e questions on any of the values used, please contact EPA at GasSTAR@epa.gov

scf/MMcfd

percent (expressed as decimal)

e W-1A (Population Emission Factors, Gas Service)

scf whole gas / hr / device

scf whole gas / hr / device

Assumes 24/7 operation all year

Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016, Annex 3.6 (Table 3.6-3), https://www.epa.gov/sites/production/files/2018-04/2018_ghgi_natural_gas_systems_annex_tables.xlsx

Dehydrators, co-sponsored by the Gas Research Institute and EPA, June 1996.

Dehydrators" Lessons Learned document, EPA, October 2006.