

# Implementation Plan



## Gathering and Processing Sector

### Company Information

Company Name: \_\_\_\_\_

Gas Star Contact: \_\_\_\_\_

Position: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip Code: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Email: \_\_\_\_\_

### Implementation Plan Elements

#### ELEMENT 1 Best Management Practices (BMPs)

The following BMPs have been identified as significant opportunities to cost effectively reduce methane emissions from the gathering and processing sector. They were selected based on their applicability to the industry, economic feasibility, and cost-effectiveness. There are three core BMPs for the gathering and processing sector:

**BMP 1** Convert gas pneumatics to instrument air systems

**BMP 2** Install flash tank separators on glycol dehydrators

**BMP 3** Directed inspection and maintenance (DI&M) at gas plants and booster stations

For detailed information on these BMPs, please refer to the *Lessons Learned* publications on the Natural Gas STAR website: <https://www.epa.gov/natural-gas-star-program/recommended-technologies-reduce-methane-emissions>.

#### ELEMENT 2 Additional Activities

Current partners have reported many processes and technologies that are considered additional Best Management Practices by the program. New partners are encouraged to evaluate and report current and new practices or technologies that cost effectively reduce methane emissions.

#### ELEMENT 3 Inventory Past Reductions

Partners are encouraged to report past methane emission reductions back to 1990. Accounting for these historical reductions will create a permanent record of your company's methane emission reduction efforts. In addition, reviewing past activities will help guide companies' participation in Natural Gas STAR by creating a base of understanding of current activities to facilitate planning of future activities.

*The Implementation Plan is designed to be a dynamic tool for Natural Gas STAR Partners to plan their program activities. As company priorities and plans shift over time, the Implementation Plan may be revised or updated by submitting a new form to the program. The Partner should only share non-Confidential Business Information (CBI) to fulfill Gas STAR Program requirements.*

## ELEMENT 1 Best Management Practices

### BMP 1 Convert Gas Pneumatics to Instrument Air Systems

Pneumatic devices that use the pipeline gas pressure to transmit signals and drive process control valves collectively emit large amounts of methane into the atmosphere. Replacing these with instrument air systems eliminates emissions and improves safety.

Estimated Reduction  
Potential  
15.8 Bcf

Will you be implementing this BMP? ☐ Yes ☐ No

If no, why?

- ☐ Not cost effective
- ☐ May consider at a later date
- ☐ Have already implemented
- ☐ Other \_\_\_\_\_

Please describe:

If yes, at what scale will you be implementing this BMP?

- ☐ Company Wide
- ☐ Pilot Project
- ☐ Other \_\_\_\_\_

Please describe:

#### Activity Summary

Number of facilities currently equipped with instrument air systems? \_\_\_\_\_

Number of facilities suitable for conversion to instrument air? \_\_\_\_\_

#### Replacement Schedule

Number of planned instrument air projects:

Year 1: \_\_\_\_\_ Year 2: \_\_\_\_\_ Year 3: \_\_\_\_\_ Year 4: \_\_\_\_\_

#### Additional Information on Anticipated Plans and Projects

If additional space is needed, please continue on the back.

## BMP 2

### Install Flash Tank Separators on Glycol Dehydrators

Flash tank separators installed in glycol dehydration systems capture the methane entrained in the circulating glycol for use on site.

Estimated Reduction  
Potential  
1.70 Bcf

Will you be implementing this BMP? ☐ Yes ☐ No

If no, why?

- ☐ Not cost effective
- ☐ May consider at a later date
- ☐ Have already implemented
- ☐ Other \_\_\_\_\_

Please describe:

If yes, at what scale will you be implementing this BMP?

- ☐ Company Wide
- ☐ Pilot Project
- ☐ Other \_\_\_\_\_

Please describe:

### Activity Summary

Number of glycol dehydrators currently equipped with flash tank separators? \_\_\_\_\_

Number of glycol dehydrators suitable for flash tank installation? \_\_\_\_\_

### Replacement Schedule

Number of flash tank separators to be installed by the end of:

Year 1: \_\_\_\_\_ Year 2: \_\_\_\_\_ Year 3: \_\_\_\_\_ Year 4: \_\_\_\_\_

### Additional Information on Anticipated Plans and Projects

If additional space is needed, please continue on the back.

### BMP 3 Directed Inspection and Maintenance at Gas Plants and Booster Stations

A DI&M program is a system for performing routine leak detection and repair where leak measurement data from previous inspections are used to guide subsequent inspections and to direct maintenance to those leaks that are cost effective to repair.

Estimated Reduction  
Potential  
26.9 Bcf

Will you be implementing this BMP? ☐ Yes ☐ No

If no, why?

- ☐ Not cost effective  
☐ May consider at a later date  
☐ Have already implemented  
☐ Other \_\_\_\_\_

Please describe:

If yes, at what scale will you be implementing this BMP?

- ☐ Company Wide  
☐ Pilot Project  
☐ Other

Please describe:

#### Activity Summary

Please fill out the table below to show the total number of gas plants and booster stations selected for BMP 3.

	Total number of facilities	Number selected for BMP 3
Number of Gas Plants	_____	_____
Number of Booster Stations	_____	_____

#### Inspection Schedule

Facilities will be inspected: ☐ quarterly ☐ annually ☐ biannually ☐ Other \_\_\_\_\_

Please list in detail the number of gas plants and booster stations that will implement BMP 3 in upcoming years.

Year _____	Number of processing plants _____	Number of booster stations _____
Year _____	Number of processing plants _____	Number of booster stations _____
Year _____	Number of processing plants _____	Number of booster stations _____
Year _____	Number of processing plants _____	Number of booster stations _____

#### Additional Information on Anticipated Plans and Projects

If additional space is needed, please continue on the back.

## ELEMENT 2

### Additional Activities

#### Additional Activities

Your company may take advantage of additional technologies or practices to reduce methane emissions. The following is a list of some of the additional activities that have been reported by other Natural Gas STAR partners, which may be applicable to your operations (for more information on these activities, please view: <https://www.epa.gov/natural-gas-star-program/recommended-technologies-reduce-methane-emissions>):

- ☆ DI&M: aerial leak detection using laser and/or infrared technology
- ☆ Eliminate unnecessary equipment and/or systems
- ☆ Install electric compressors
- ☆ Redesign blowdown systems/alter ESD practices

Additional activities you will be implementing	Please describe
Activity _____ At what scale will this activity be implemented? <input type="checkbox"/> Company Wide <input type="checkbox"/> Pilot Project <input type="checkbox"/> Other _____	
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## ELEMENT 3

### Inventory Past Reductions

**An inventory of past reductions will help to create a permanent record of your past efforts.**

As a first step, many new partners find it useful to inventory and document past methane emission reduction efforts. The inventory process helps companies quantify the success of their past activities and target future emission reduction efforts. Historical methane emission reductions identified as part of the inventory process can be reported to the Natural Gas STAR Program.

Will you inventory past activities to include in your annual report? ☐ Yes ☐ No

If yes, please describe your company's plans for reviewing past methane emission reduction activities.

The Natural Gas STAR Program thanks you for your time.

Please send completed forms to:

**Regular Mail**

**Natural Gas STAR Program  
U.S. EPA (6207A)  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460**

**Express/Overnight Mail**

**Natural Gas STAR Program  
1201 Constitution Ave NW  
Room Number 4353PP  
Washington, DC 20004**

*Questions? Please call Jerome Blackman at (202) 343-9630, or send an email to [GasSTAR@epa.gov](mailto:GasSTAR@epa.gov).*

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