OMB Control No. 2060-0328 Approval Expires 3/31/2008

Annual Report 2007

Distribution Sector

Company Information

Company Name: _____

Gas STAR Contact: _____

Title: _____

Address: _____

_____

City, State, Zip Code: _____

Telephone: _____

Fax: _____

E-mail: _____

Business Units/ Locations Reporting: _____

_____

_____

Annual Report Summary

Please mark the activities your company executed and submit a report page for each facility/location it was implemented

- ☐ BMP 1: Directed inspection and maintenance at gate stations and surface facilities
- ☐ BMP 2: Identify and rehabilitate leaky distribution pipes
- ☐ Partner Reported Opportunities *(please specify):*

_____

_____

Period covered by report: From: _____ To: _____

Signature: Date:

- Gas STAR allows certain technologies/practices to count towards a company's emission reductions beyond the year they were initially implemented. For example, a technology implemented in 2007 can accrue emission reductions in future years. Gas STAR designates the length of time that these reductions accrue as "sunset dates." The Appendix lists these sunset dates. Companies can choose to allow EPA to apply the sunset dates or choose to report each technology/practice on an annual basis (i.e. not using sunset dates).
- In addition to reporting methane emissions reductions, you are welcome to include other information about your company's participation in Natural Gas STAR in the "Additional Program Accomplishments" section of this form. The Natural Gas STAR Program will use any information entered in this section to recognize the efforts and accomplishments of outstanding partners.

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BMP 1: Directed inspection and maintenance at gate stations and surface facilities

Current Year Activities

A. Facility/location identifier information:
(Note: Each facility requires its own reporting form) _____

B. Leak summary:
Total number of leaks found: _____ Total number of leaks repaired: _____

C. Cost summary:
Total cost of surveys conducted: $ _____ Total cost of leak repairs: $ _____

D. Methane emissions reduction: _____ Mcf ** BMP 1 must be reported on an annual basis.*

Please identify the basis for the emissions reduction estimate, using the space provided to show any calculations

☐ Actual field measurement

☐ Calculation using default*

Methane emissions reduction = Average annual leak rate per facility (1,700 Mcf) × Reduction efficiency (70%) × Number of facilities at which leaking components were repaired

** Important note: The default value is to be used only for aboveground, high-pressure (>300 psig) inlet facilities at which the guidelines outlined in EPA's* Lessons Learned: Directed Inspection and Maintenance at Gate Stations and Surface Facilities *have been applied. In addition, partners should only report reductions once per year per facility **and** should verify that the default value is used only at facilities where leak repairs were performed.*

☐ Other (*please specify*):

E. Total value of gas saved: $ _____

Total value of gas saved = Methane emissions reduction (in Mcf) x Gas value (in $/Mcf) [If not known, use default of $7.00/Mcf]

F. Do you plan to survey this facility/location next year? _____ (Yes/No)

Previous Years' Activities

Use the table below to report any past activities implemented, but not previously reported to the Natural Gas STAR Program

Year	Total Cost of Surveys ($)	Total Cost of Repairs ($)	Estimated Reductions (Mcf/yr)	Value of Gas Saved ($)

BMP 1 Comments: *Please use the back of the page for additional space if needed.*

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BMP 2: Identify and rehabilitate leaky distribution pipes

Current Year Activities

A. Facility/location identifier information:
(Note: Each facility requires its own reporting form) _____

B. Replacement summary:
Miles of distribution pipe replaced: _____ miles
Total cost of pipe replacement: $_____

C. Leak summary:
Total number of leaks repaired (excluding pipe replacement): _____ leaks repaired
Total cost of leak repairs: $_____

D. Methane emissions reduction: _____ Mcf ** BMP 2 must be reported on an annual basis.*

Please identify the basis for the emissions reduction estimate, using the space provided to show any calculations

☐ Actual field measurement
☐ Calculation using default *(Miles replaced x Leak rate conversion factor (Mcf/mi) = Methane emissions reduction)*

	Main Replacement			*Services Replacement*		
Type of Pipe Replaced	*Miles Replaced*	*Leak Rate Conversion (Mcf/mi)*	*Emissions Reduction*	*Miles Replaced*	*Leak Rate Conversion (Mcf/mi)*	*Emissions Reduction*
Cast Iron	_____ *miles*	*239*	_____ *Mcf*			
Protected Steel	_____ *miles*	*3*	_____ *Mcf*	_____ *miles*	*0.2*	_____ *Mcf*
Unprotected Steel	_____ *miles*	*110*	_____ *Mcf*	_____ *miles*	*1.7*	_____ *Mcf*
Plastic	_____ *miles*	*12*	_____ *Mcf*	_____ *miles*	*0.1*	_____ *Mcf*
Copper				_____ *miles*	*0.3*	_____ *Mcf*
Not Available (Average)	_____ *miles*	*29*	_____ *Mcf*	_____ *miles*	*0.3*	_____ *Mcf*
Totals:	_____ *miles*		_____ *Mcf*	_____ *miles*		_____ *Mcf*

☐ Other *(please specify):*

E. Total value of gas saved: $ _____

Total value of gas saved = Methane emissions reduction (in Mcf) × Gas value (in $/Mcf) [If not known, use default of $7.00/Mcf]

F. How many miles of pipe do you plan to replace next year? _____ miles

Previous Years' Activities

Use the table below to report any past activities implemented, but <u>not previously reported</u> to the Natural Gas STAR Program

Year	# Miles of Pipe Replaced	Total Cost of Replacements ($)	# of Leaks Repaired	Total Cost of Repairs ($)	Estimated Reductions (Mcf/yr)	Value of Gas Saved ($)

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BMP 2 Comments: *Please use the back of the page for additional space if needed.*

Partner Reported Opportunities (PROs)

(For more details on PROs, visit epa.gov/gasstar/techprac.htm)

Current Year Activities

A. Facility/location identifier information:
(Note: Each facility requires its own reporting form) _____

B. Activity description: Please provide a separate PRO reporting form for each activity and facility reported

Please specify the technology or practice that was implemented (choose from the list in the appendix or describe your own):	Please describe how your company implemented this activity:

C. Level of Implementation *(check one)*:

☐ Number of units installed: _____ units
☐ Frequency of practice: _____ times/year

D. Are emissions reductions a one-year reduction or a multi-year reduction? ☐ **One-year** ☐ **Multi-year**

If Multi-year:

☐ Partner will report this activity once and let EPA automatically calculate future emission reductions based on sunset date duration*.

☐ Partner will report this activity annually.

E. Methane emissions reduction: _____ Mcf

F. Cost summary: Estimated cost of implementing this practice/activity (including equipment and labor): $ _____

Please identify the basis for the emissions reduction estimate provided, using the space provided to show any calculations

☐ Actual field measurement
☐ Calculation using manufacturer specifications/other source
☐ Other *(please specify):*

G. Total value of gas saved: $ _____

Total value of gas saved = Methane emissions reduction (in Mcf) x Gas value (in $/Mcf) [If not known, use default of $7.00/Mcf]

H. To what extent do you expect to implement this practice next year?

Previous Years' Activities

Use the table below to report any past implementation of this PRO, but not previously reported to Natural Gas STAR

Year	Frequency of Practice/Activity or # of Installations	Total Cost of Practice/Activity (incl. equipment and labor) ($)	Estimated Reductions (Mcf/yr)	Value of Gas Saved ($)

PRO Comments: *Please use the back of the page for additional space if needed.*

* Gas STAR allows certain technologies/practices to count towards a company's emission reductions beyond the year they were initially implemented. For example, a technology implemented in 2007 can accrue emission reductions in future years. Gas STAR designates the

length of time that these reductions accrue as “sunset dates.” The Appendix lists these sunset dates. Companies can choose to allow EPA to apply the sunset dates or choose to report each technology/practice on an annual basis (i.e. not using sunset dates).

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Additional Program Accomplishments

The Natural Gas STAR Program will use any information entered here to recognize the efforts and achievements of outstanding partners.

Please include any additional information you would like to share about your company's participation in Natural Gas STAR. Examples may include:

- **Activities to strengthen your program (e.g., training/education, innovative technologies or activities, pilot projects, employee incentive programs).**
- **Efforts to communicate your participation and successes (e.g., internal newsletters, press releases, company Web site).**
- **Participation in Natural Gas STAR program activities (e.g., contributions to case studies, presentation at annual workshop).**

Additional Accomplishments:

Additional Accomplishments Comments: *Please use the back of the page for additional space if needed.*

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Appendix

Methane Emission Reduction Technologies & Practices— Distribution Sector

The list below describes a variety of methane emission reduction technologies that Natural Gas STAR partners in the distribution sector have implemented and reported to Natural Gas STAR. You may use this list as a guide when completing your annual report. Sunset dates (i.e. the length of time a technology or practice can continue to accrue emission reductions after implemented) are one year in duration unless otherwise noted in parentheses. An asterisk (*) indicates that a technical document related to the technology or practice is available online at epa.gov/gasstar/techprac.htm.

Compressors/Engines

- Eliminate unnecessary equipment and/or systems*
- Install electric starters (10 years)*
- Redesign blowdown systems and alter ESD practices*
- Reduce the frequency of engine starts with gas*
- Reducing methane emissions from compressor rod packing systems*
- Replace ignition - reduce false starts*

Dehydrators

- Install flares (10 years)*

Directed Inspection and Maintenance

- DI&M at compressor stations (non-mainline transmission)
- DI&M: survey and repair leaks
- Improve measurement systems to track gas loss
- Increase walking survey from a 5-to 3-year basis*

Pipelines

- Inject blowdown gas into low pressure mains*
- Insert gas main flexible liners (10 years)*
- Reduce/downgrade system pressure
- Use no-blow insertion fittings*
- Using hot taps for in-service pipeline connections*
- Using pipeline pumpdown techniques to lower gas line pressure before maintenance*

Pneumatics/Controls

- Convert gas pneumatic controls to instrument air (10 years)*
- Convert gas-driven chemical pumps to instrument air (10 years)*

Valves

- Install excess flow valves (10 years)*
- Install overpressure protection system (10 years)
- Test and repair pressure safety valves*
- Test gate station pressure relief valves with nitrogen*

Other

- Improve system design/operation
- Install flares (10 years)*
- Re-inject CNG cylinder test gas
- Retighten LNG pumps seals
- Use automated systems to reduce pressure