



Technology Spotlight

Minimizing Emissions from Pipeline Blowdowns

Large amounts of gas can be lost when natural gas pipelines are taken offline for maintenance. However, many companies are using new technologies to recover and reuse this gas and are implementing innovative practices to minimize pipeline methane emissions. The following are three options available to operators to reduce methane emissions from pipeline blowdowns.

In-Line and Portable Compressors

The use of compressors to lower gas line pressure before maintenance is an effective method to reduce emissions and save money. Pipeline pumpdown

techniques involve the use of in-line compressors either alone or in sequence with portable compressors. Utilizing in-line compressors is typically justifiable since there are no capital costs and payback is nearly immediate. Depending on site-specific factors and operating costs, some companies find it cost-effective to also use a portable compressor to increase gas recovery. By implementing pipeline pumpdown techniques during maintenance, companies can recover 50 to 90 percent of the gas typically vented.

More than 10 Gas STAR transmission and distribution partners have reported using fixed and/or portable compressors

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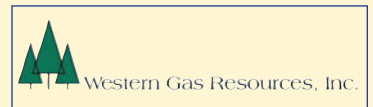
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June 1, 2004

Partner Profile

Western Gas Resources



Western Gas Resources, an independent upstream and mid-stream natural gas company, joined Natural Gas STAR as a processing sector partner in 2001. Headquartered in Denver, Colorado, Western operates

18 gathering, processing, and treating facilities located in major gas-producing basins in the Rocky Mountain, Mid-Continent, and West Texas regions of the United States. Together, these facilities gather, process, or treat

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Program Expansion

Identifying Opportunities to Improve Operational Efficiency, Reduce Emissions, and Increase Profits

EPA strongly encourages partners to reexamine their Natural Gas STAR Program commitments on a regular basis in order to identify new opportunities to increase operational efficiency and profits. As technologies evolve and operations change, many new emissions reduction projects are becoming economically feasible, especially as the price of gas on the market continues to rise. Together, EPA, partners, and representatives from the natural gas industry have identified nearly 100 technologies and practices for reducing methane emissions and bringing more gas to market. Despite this, many partners are still not maximizing their implementation of Natural Gas STAR opportunities.

An examination of partner data reported to EPA through 2003 revealed that 33 percent of partner companies have implemented three or fewer Gas STAR best management practices (BMPs) and partner reported opportunities (PROs). This clearly demonstrates that many partners can be doing more to identify and implement new practices to improve operational efficiency, increase profits, and reduce methane emissions.

Outlined below is a step-by-step approach for determining how and where to expand your emissions reduction efforts.

1) Determine Your Emissions Sources

Review your operations. Target facilities with the highest production rates or pipelines with the greatest throughput. Conduct facility walk-throughs and engage in discussions with operators. Information sources include facility emissions inventories, copies of process and instrumentation diagrams (P&IDs), repair and maintenance logs, air permitting requirements (e.g., LDAR programs, pipe replacement programs), and lists of air pollution control devices for units.

2) Estimate Quantity of Gas Lost and Rank Sources

Develop an initial, rough estimate of the amount of methane emitted from each source identified using facility production rates and operating pressures of systems. Next, rank the sources to determine where you should focus your emissions reduction efforts to get the greatest return on investment. Based on this ranking, determine which emissions sources are the best candidates for conducting a refined, detailed quantification. Sampling and/or direct measurement will yield the most accurate results, but other options include the use of emissions factors, engineering estimates, manufacturers specifications, industrywide “rules-of-thumb,” or EPA’s

Additional Resources

Accepted methods for estimating emissions of methane can be found on EPA’s Web site at epa.gov/ttn/chief. Other useful documents produced by EPA’s Emission Inventory Improvement Program (EIIP) include:

- ★ Preferred and Alternative Methods for Estimating Air Emissions from Equipment Leaks (November 1996), located at epa.gov/ttn/chief/eiip/techreport/volume02/ii04_b.pdf.
- ★ Preferred and Alternative Methods for Estimating Air Emissions from Oil and Gas Field Production and Processing Operations (September 1999), located at epa.gov/ttn/chief/eiip/techreport/volume02/ii10.pdf.

default emission values—consult EPA technical support documents including Lessons Learned studies and PRO fact sheets.

3) Determine Which Process Changes, Technologies, or Practices Can Be Implemented

Evaluate potential methane emissions reduction technologies and practices. Review Gas STAR technical support documents and talk to operators. Determine what process changes, technologies, or practices can be practically implemented to recover gas from your largest sources.

Identifying Opportunities

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4) Conduct Economic Analysis

Determine the methane emissions reduction potential, implementation costs, O&M costs, and payback. Target emission sources with the greatest potential for increased profits, efficiency, and waste reduction.

Use EPA's Online BMP/PRO Economic Analysis Tool to conduct fast screening analyses to determine which technologies and practices will be most cost-effective for your operations—visit epa.gov/gasstar/onlinetools.htm.

5) Implement, Track, and Report

Implement the methane emissions reduction opportunities that are most cost-effective and applicable to your operations. Calculate and track your emissions reductions and associated savings, and report this information to the Natural Gas STAR Program in your annual report.

Review Your Company's Emissions Reduction Opportunity Report

Last year, EPA provided a customized Emissions Reduction Opportunity Report to every partner that submitted an annual report. These reports provided each partner company with suggested opportunities to cost-effectively reduce your methane emissions by comparing your activities with activities regularly reported by your peers.

EPA encourages partners to review these reports as a quick starting point to see where you might be able to expand your program.

Contact EPA for Technical Assistance

EPA can provide specialized onsite technical assistance to help partners identify new or under-utilized emissions reduction opportunities. Using partner supplied data, EPA can work with partners to develop customized estimates of the projected costs to implement additional BMPs or PROs, potential methane savings, payback, and other key operational issues.

Additional Assistance

There are various private firms available to help companies find cost-effective technologies to reduce methane emissions. Many of these firms will provide all funding and share only in revenue generated from the reduced methane emissions.

We encourage you to take advantage of this service to get the most out of the Natural Gas STAR Program.



2004 GAS STAR TECHNOLOGY TRANSFER WORKSHOPS

Production

- ★ **Rocky Mountain Region—Colorado Springs, Colorado**
June 29, 2004
Co-sponsored by SGA, Bill Barrett Corporation, and Evergreen Resources
- ★ **Houston, Texas**
September 21, 2004
Co-sponsored by API and ExxonMobil

Offshore Platforms

- ★ **Houston, Texas**
June 8, 2004
Co-sponsored by API, GCEAG, Rice University, and Shell

Processing

- ★ **Dallas, Texas**
September 23, 2004
Co-sponsored by GPA and Pioneer Natural Resources

Transmission

- ★ **Houston, Texas**
September 22, 2004
Co-sponsor Duke Energy Gas Transmission

Distribution

- ★ **New Orleans, Louisiana**
October 17, 2004
Co-sponsored by AGA

2004 GAS STAR ANNUAL MEETING

- ★ **Houston, Texas**
Warwick Hotel
5701 Main Street, Houston, Texas
October 25-27, 2004

For further information, contact Roger Fernandez at fernandez.roger@epa.gov. To view a conference agenda and to register online, please visit epa.gov/gasstar/workshops.htm.



Technology Spotlight

Minimizing Emissions

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for pipeline pumpdowns. Additional information on using pipeline pump-down techniques to reduce methane emissions is available in the Gas STAR Lessons Learned document entitled, *Using Pipeline Pump-Down Techniques to Lower Gas Line Pressure Before Maintenance*, located at epa.gov/gasstar/pdf/lessons/ll_pipeline.pdf.

Ejector

One Natural Gas STAR partner, Marathon Oil Company, reported using

an ejector as an alternative to using a portable compressor to recover pipeline gas. Marathon reported saving more than 8 MMcf during a 55-month period using this ejector technology on a pipeline bleeder. This technique is available for recovery of blowdown gas from any pipeline (low to high pressure) and can be accomplished by injecting the natural gas into a lower pressure pipeline using motive gas from a nearby higher pressure system gas pipeline. More information on the pipeline project conducted by Marathon is available in the Gas STAR PRO Fact Sheet entitled,

TransCanada, a major gas transmission company with operations in Canada and the United States, has been testing portable incinerators to decrease its greenhouse gas emissions from scheduled blowdowns. The portable incinerators are used to combust residual methane left in pipelines after the use of air-powered expellers. TransCanada has found that incineration achieves a greater percentage of combustion than traditional flaring—almost 100 percent—and generates no visible flames or noise concerns.

For more information, visit transcanada.com/transmission/update/february2003/feb_technologies.htm.

Install Ejector available at epa.gov/gasstar/pro/installejector.pdf

Two New PRO Fact Sheets Now Available

EPA has developed two new PRO fact sheets that describe methane emissions reduction technologies reported by Gas STAR partners:

- ★ *Replace Glycol Dehydration Units with Methanol Injection*
- ★ *Install Pumpjacks on Low Water Production Gas Wells*

PROs—also known as partner reported opportunities—can be implemented by companies to further reduce methane emissions and improve operational efficiency. EPA plans to finalize 10 additional PRO fact sheets this year. PRO fact sheets are available online at epa.gov/gasstar/pro/index.htm.

Gas STAR would like to thank Western Gas Resources and ConocoPhillips for their time and assistance in helping produce these two documents and sharing their emissions reductions activities with their peers.

Install Pumpjacks on Low Water Production Gas Wells

PRO Fact Sheet

Applicable technology: Production Processing Transmission and Distribution

Partners reporting this PRO: ConocoPhillips

Technology/Practice Overview

Description
This pumpjack system is used to lift oil and gas from the well to the surface. The pumpjack system consists of a pumpjack unit and a gas lift valve. The pumpjack unit is used to lift the gas from the well to the surface. The gas lift valve is used to lift the gas from the well to the surface. The pumpjack system is used to lift the gas from the well to the surface. The gas lift valve is used to lift the gas from the well to the surface.

Methane Emission Reductions
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Replace Glycol Dehydration Units with Methanol Injection
PRO Fact Sheet

Applicable technology: Production Processing Transmission and Distribution

Partners reporting this PRO: Western Gas Resources

Technology/Practice Overview
Description: This process replaces glycol dehydration units with methanol injection. Methanol is injected into the gas stream to prevent hydrate formation. This process is used to lift the gas from the well to the surface. The methanol injection system is used to lift the gas from the well to the surface.

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Combustion

Another option for planned depressurization is to bleed some of the high-pressure gas (e.g., 800 psig) from in-service equipment to a low-pressure fuel gas system (e.g., 35 to 80 psig). By recovering a partial volume for fuel, a company can realize the dual benefits of reduced fuel costs and decreased emissions. For companies that cannot recover blowdown gas for use as fuel, a flare can be used to combust the methane. The flare can be a fixed permanent installation or a portable, mobile flare system.

Portable flare systems use skid-mounted or trailer-mounted flares, which can be moved from site to site. Often, these flares can be leased from suppliers on short notice and for varying lengths of time.

Western Gas Resources

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approximately 2 billion cubic feet (Bcf) of gas per day, including gas from third-party producers.

Prior to joining the Gas STAR Program, Western was taking steps to improve operational efficiency and reduce methane emissions. The company's commitment to the Program has been



a catalyst to bring more attention to these efforts and heighten environmental awareness within the company. Since joining, Western has reported methane emissions reductions of more than 2.5 billion cubic feet (Bcf)—a significant achievement that clearly

Pioneer Case Study Developed

In coordination with processing partner, Pioneer Natural Resources, Natural Gas STAR has produced the Program's seventh partner case study. This document spotlights Pioneer's Gas STAR successes including information on several of the innovative technologies and practices implemented to decrease methane emissions. Gas STAR would like to thank Pioneer for its generous cooperation and support during the development of this case study. The full document is available at epa.gov/gasstar/pdf/pioneerstudystudy.pdf, and a limited number of printed copies are available upon request.

demonstrates the company's commitment to environmental protection. In recognition of this accomplishment, EPA named Western the Natural Gas STAR Processing Partner of the Year in 2003.

Getting Started

With strong support from management, Don Anderson, Western Gas Resources' Midstream Compliance Coordinator, launched Western's participation in Natural Gas STAR by reviewing the company's past and current methane emissions reduction activities. He first identified a point person in each of Western's five field areas to assist with Program implementation and information gathering. He then began identifying current emissions reduction activities in preparation for submitting the company's first annual report in 2003. He looked to his Gas STAR team to identify projects being implemented in the field and to quantify the associated emissions reductions. Anderson also relied on EPA's technical support documents—Lessons Learned studies and PRO fact sheets—to show the operations staff what types of activities to identify.

The next step was to document emissions reductions activities implemented by the company prior to joining Natural Gas STAR back to 1990. Anderson began by providing staff with information about Gas STAR's best management practices (BMPs) and partner reported opportunities (PROs) and asking them to identify which practices the company had implemented. Anderson also used Western's internal pipeline

database to identify and quantify some activities, such as the use of hot taps. Unfortunately, many other projects were unrecorded. To document these, he relied on information provided by long-time employees.

“Our participation in Natural Gas STAR has heightened environmental awareness throughout the company. Emissions reductions and operational efficiency go together and are not only good for business but also for the environment.”

– Don Anderson,
Western Gas Resources

Western realized several benefits by reviewing its past emission reduction activities:

- ★ Opened lines of communication with field staff and introduced them to the Program.
- ★ Provided a more complete record of the company's efforts to reduce methane emissions.
- ★ Allowed the company to obtain baseline data to use for measuring future successes.
- ★ Provided insight as to what additional BMPs and PROs might apply to the company's operations.
- ★ Allowed the company to quantify the economic benefits of reducing emissions and bringing more gas to market.

Innovative Technologies and Practices

Western has implemented several projects that have resulted in significant methane emissions reductions and improved operational efficiency. Some of these activities include:

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Look for this new Gas STAR public service announcement in upcoming industry trade journals.


2003 Natural Gas STAR Award Winners

<p style="text-align: center;">BP</p> <p style="text-align: center;">ChevronTexaco</p> <p style="text-align: center;">Columbia Gas of Ohio</p> <p style="text-align: center;">Columbia Gas Transmission and Columbia Gulf Transmission</p>	<p style="text-align: center;">El Paso Pipeline Group</p> <p style="text-align: center;">Kerr-McGee Oil and Gas Corporation</p> <p style="text-align: center;">Northern Natural Gas</p> <p style="text-align: center;">Western Gas Resources (WGR)</p>
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Congratulations to Those Who Set the Bar High, Then Soar Above.

These forward-thinking companies are recognized by EPA as leaders in implementing and promoting voluntary, cost-effective measures to reduce emissions of methane, a potent greenhouse gas. By sharing their successes through the Natural Gas STAR Program, these and over 100 other oil and gas companies are addressing global climate change while improving profitability.





EPA Natural Gas STAR Program, visit the Web site at epa.gov/gasstar or call 202-343-9386 or 202-343-9086.

Independent Performance Verification Testing

The Greenhouse Gas Technology Center, operated by Southern Research Institute (SRI), is interested in locating and testing the performance of technologies that economically reduce emissions of GHGs and air pollutants from the oil and natural gas industry. The GHG Center is in search of vendors of the following technologies for independent performance verification testing:

- ★ Oil and gas production technologies, including devices that capture and utilize or minimize releases of waste gas from natural gas and crude oil production processes.
- ★ Advanced natural gas dehydration systems that produce little or no off-gas for flaring or emissions into the atmosphere.

To participate or receive further information, please contact Stephen Piccot, SRI, at (919) 806-3456 or visit the GHG Center's Web site at sri-rtp.com.

The GHG Center is an Environmental Technology Verification (ETV) organization sponsored by the U.S. EPA. For more information about EPA's ETV Program, visit epa.gov/etv.

Western Gas Resources

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Consolidation and optimization of compressors. Western conducted a system optimization study of its gas gathering systems in West Texas. As a result of the study, the company was able to eliminate 42 compressors in 2002, by removing under-loaded compressors and replacing older, slower compressors with modern high speed, lean-burn engines. By doing this, Western not only reduced emissions of methane, carbon monoxide, and nitrogen oxides but also reduced fuel and maintenance costs. Western conducted similar consolidation and optimization projects throughout its systems in Oklahoma, and plans to continue looking for additional opportunities.

Use of hot taps for pipeline tie-ins.

Western's standard operating procedures include an aggressive hot tapping program. It is Western's policy to use hot taps wherever possible instead of blowing down a pressurized line. While the use of hot taps is not a new practice for Western, recent design improvements make this an integral practice during pipeline maintenance that has both economic and environmental benefits. Since 1990, Western has saved over 50,000 Mcf of natural gas by employing hot tapping procedures.

Installation of skid-mounted liquid stabilizer unit.

In 2002, Western saved 1,300 Mcf by installing a skid-mounted liquid stabilizer at the company's San Juan processing/treating plant to remove liquids that can interfere with the proper

Pilot Project—Aerial Pipeline Leak Surveillance

Western is continually looking to improve its leak detection efforts and improve the company's bottom line. Last year, Western conducted an aerial leak detection pilot project on the company's gas gathering pipelines in West Texas. Infrared remote imaging equipment was mounted to a helicopter and from the air, technicians were able to quickly detect leaks. This type of aerial leak surveillance technology allows companies to cover their pipeline networks at up to 60 miles per hour, detecting even early stage leaks, and providing very exact locations and information. The aerial surveillance pilot project proved to be as effective and much faster than traditional hand-held sensors. Western is considering expanding use of this technology to other pipelines within its gas gathering system.

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Western Gas Resources

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operation of pipelines and related equipment such as compressors, regulators, filters, meters, and valves. This project eliminated the need to pig the lines—and in turn, eliminated pigging liquids and vapors and improved operational efficiency.

Replace glycol dehydrators with methanol injection. Western replaced more than 70 glycol gas dehydrators with methanol injection at some of its low pressure (i.e., 50 to 400 psi) gas gathering systems to control gas hydrate formation in gas lines. Methane and volatile organic compound (VOC) emissions were eliminated. Additional benefits included reduced energy costs (because the methanol pumps are solar-powered) and reduced maintenance and system downtime. Western estimates saving over 3,000 Mcf per year as a result of this project.

Future Plans

Western plans to build upon its early successes as a Natural Gas STAR partner. The company is continually looking to expand its emissions reduction efforts—analyzing new emissions reductions technologies and practices and evaluating operational and economic benefits.

Western's Experience Documenting Past Methane Emissions Reductions

- ★ Review the Gas STAR BMPs and PROs—determine if your company is already implementing these or similar activities as part of current operations.
- ★ Interview key staff and visit field operations sites—describe the types of information that is being collected.
- ★ Consult as many different sources of information as possible including maintenance logs, internal tracking databases, air permitting requirements (e.g., LDAR programs, pipe replacement programs), and/or reports from operations and field staff.
- ★ Use default values and engineering rules-of-thumb if direct reduction measurements are not available.
- ★ Use Natural Gas STAR Program materials (e.g., Lessons Learned summaries, PRO fact sheets) to learn more about emission reduction practices and to assist in determining savings.
- ★ Document all assumptions and measurements to ensure accurate results.
- ★ Make it an ongoing process—encourage employees to find and report other reduction activities missed during initial reviews.



A solar-powered methanol injection pump.

Western also continues to take advantage of the tools and resources that the Natural Gas STAR Program provides and is actively working with EPA to share information with its peers through participation in technology transfer workshops and the development of technical support documents (see page

4 for information on the new PRO fact sheet developed by EPA in conjunction with Western Gas Resources).

Western's Natural Gas STAR successes are setting a good example for the rest of the company and industry.

According to Anderson, "Gas STAR has really benefited the company by demonstrating best practices in order to preserve the value of the gas saved. This in turn can enhance the economics of capital projects and enables us to continually do more to increase both operational efficiency and help the environment."

Maintaining Momentum

Anderson regularly engages the operations managers and field supervisors in regular Gas STAR-related awareness training, often tying it to the semiannual operations management meetings. It was during these meetings that Anderson introduced the company to Gas STAR. Now, the meetings serve as a means for him to share Western's emissions reduction successes, continue to educate staff on Gas STAR BMPs and PROs, and increase awareness for how

emissions reduction technologies not only save the company money, but are also good for the environment. These training sessions also help keep Western's Gas STAR Program growing by continually exposing the field and operations managers—those on the company's front line for identifying emissions reduction opportunities—to the Program and its goals. Through these meetings, Anderson often learns of new projects that the company can include in its Gas STAR annual reports.



Information Portal for Environmental Technologies

The Environmental Technology Opportunities Portal (ETOP) provides links to EPA programs that fund the development of new environmental technologies and offers information on existing environmental technologies. EPA offers assistance in developing and commercializing new environmental technologies by:

- ★ Supporting efforts through financial, testing, and verification.
- ★ Promoting the use/acceptance of technologies through collaborative, incentive, partnership and advocacy, and information programs.

For more information, visit the ETOP Web site at epa.gov/etop.

Gazprom and Ruhrgas Partner to Decrease Emissions

Since 1997, Russia's Gazprom and Germany's Ruhrgas have partnered to optimize a section of the Volgotransgaz gas transmission network that connects the Siberian gas fields to Western Europe. The companies' efforts will not only save energy, but will also decrease greenhouse gas emissions, including an estimated equivalent reduction of 447,000 metric tons of carbon dioxide. The joint project has already been a great success, receiving several awards, such as the 1998 European Better Environment Award for Industry. This effort is also an example of an effective joint international project for cross-border emissions reduction activities. Further information is available online at:

- ★ ruhrgas.de/englisch/glossar/aij.htm
- ★ iai-2002.com/fr_1ATORAL-RUHRGASAG.asp
- ★ vniigaz.com/english/articles/leontv1.htm



Q: What is flash gas?

A: Flash gas is natural gas that is liberated when an oil stream undergoes a pressure drop. Flash gas is associated with high, intermediate, and low-pressure separators, heater treaters, surge tanks, accumulators, and fixed roof atmospheric storage tanks. Methane emissions result from flash gas that is not routed back into the system (e.g., compressor suction, fuel system, sales gas) but is vented to the atmosphere.

Q: What are methods I can use to calculate flashing losses?

A: There are various methods available, including: Vasquez-Beggs Solution Gas/Oil Ratio Correlation Method; pressurized oil sample flashed in a laboratory to obtain a gas-to-oil ratio and chemical analysis of the flash gas; process simulation software such as HYSIM, PROSIM; API's E&P TANK Version 2.0 computer program (product number 4697); or a direct measurement of flowrate using ultrasonic methods.



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For additional information on topics in this Update, please contact Roger Fernandez.

Have a question for the next issue of the Natural Gas STAR Partner Update? Contact Kevin Tingley at tingley.kevin@epa.gov.



Natural Gas STAR would like to welcome its new partners: Evergreen Resources, Hunt Oil, New Jersey Natural Gas, Pogo Producing Company, and Westport Resources Corporation. Gas STAR has nearly 110 partners.

Additionally, Gas STAR would like to welcome Gulf Coast Environmental Affairs Group as the Program's newest endorser. Gas STAR now has 11 endorsers.



Evergreen Resources: Evergreen is an independent energy company focusing on the exploration, development, and production of natural gas properties. Evergreen is one of the leading developers of coal bed methane reserves in the United States. The company's main interests are in Alaska, Kansas, Colorado, Utah, and Canada. The company has nearly 1,000 wells and 1.5 trillion cubic feet of natural gas equivalent in its Raton Basin, Colorado, properties alone. Please visit the company's Web site at evergreen-res.com.



Hunt Oil: A privately held exploration and production company, Hunt Oil conducts worldwide petroleum operations and is a leading independent energy company. Hunt currently conducts production operations in the United States, Canada, and Yemen. In addition, the company is playing a large role in two gas development projects in Yemen and Peru. Please visit the company's Web site at huntoil.com.



New Jersey Natural Gas (NJNG): NJNG—the principal subsidiary of New Jersey Resources—is one of the fastest growing local distribution companies in the United States, serving nearly 450,000 customers in New Jersey. NJNG has already been implementing methane emissions reductions practices and has been recognized by the American Gas Association (AGA) for its practices in routine leak repair. Please visit the company's Web site at njng.com.



Pogo Producing Company: Pogo owns interests in oil and gas producing areas offshore and onshore in the United States, offshore in the Gulf of Thailand, in Hungary, in the United Kingdom, and in Danish sectors of the North Sea. Its main exploration and development efforts are in the Gulf of Mexico. The company has net reserves of 873.5 billion cubic feet of natural gas in addition to its 118.2 million barrels of oil. Please visit the company's Web site at pogoproducing.com.



Westport Resources Corporation: Westport is an independent energy company engaged in oil and natural gas exploitation, acquisition, and exploration primarily within the United States. The company, with proven reserves of 1,781 billion cubic feet of gas equivalent, focuses on onshore and offshore reserves in North Dakota, Wyoming, Utah, Oklahoma, Texas, Louisiana, and the Gulf of Mexico. Please visit the company's Web site at westportresourcescorp.com.



Gulf Coast Environmental Affairs Group (GCEAG): GCEAG, formed in 1978, to share ideas and discuss solutions to environmental and regulatory issues, has officially endorsed the Natural Gas STAR Program. GCEAG is committed to supporting the Program through working with its members and other stakeholders that produce, process, transmit, and distribute natural gas to identify and promote the implementation of cost-effective technologies and practices to reduce methane emissions. Please visit the organization's Web site at gceag.org.

Hardhat Stickers Available

Natural Gas STAR hardhat stickers are now available to partners. These stickers make it easy for your company to show its commitment to the Natural Gas STAR Program. To obtain stickers for your company, contact Roger Fernandez at fernandez.roger@epa.gov or (202) 343-9386.



Gas Processors Association 84th Annual Convention

March 12-16, 2005, in San Antonio, Texas

Save the date to attend the Gas Processors Association's 84th Annual Convention from March 12-16, 2005. Remember to submit your papers for the convention by June 9, 2004. Further information about the event and the call for papers can be found on the association's Web site, gasprocessors.com.