

## Energy in the Environment— Initiatives 2004-08

### DE-FG26-04NT15455

#### Program

This project was selected in response to DOE's Federal Lands Access and Produced Water Management solicitation, DE-PS26-04NT15460. The goal was to streamline data management processes, enabling better decisions, saving time, and reducing costs.

#### Project Goal

The principal goals of the project are to expand the oil and gas electronic commerce initiatives used to enhance the Risk-Based Data Management System (RBDMS) and the Cost Effective Regulatory Approach (CERA).

#### Performer

Ground Water Protection Research  
Foundation (GWPRF)  
Oklahoma City, OK

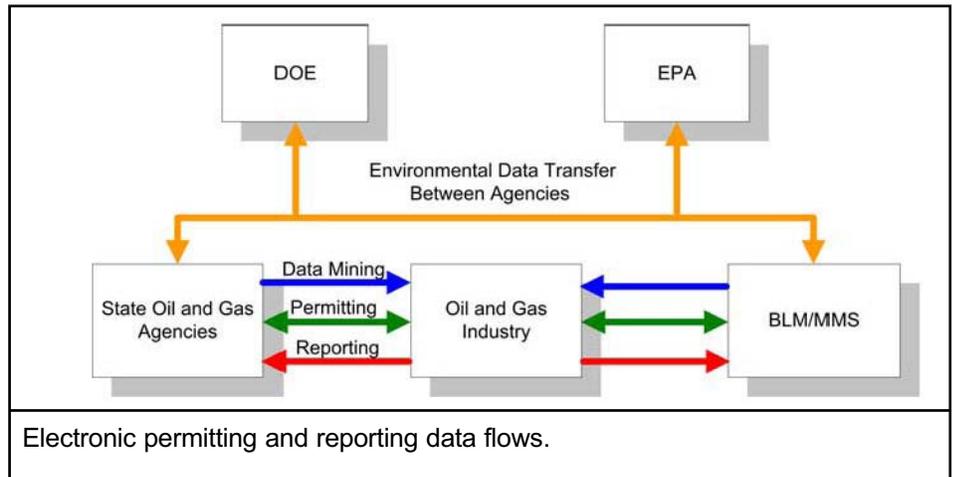
#### Project Results

The project will result in the capability of oil and gas agencies and operators to utilize electronic permitting and electronic reporting. It also will result in the development of a coalbed natural gas resource management module for the RBDMS program designed to manage water quality data as it relates to fossil energy activities.

#### Benefits

State agencies will benefit from a reduction in permit processing times and increased environmental compliance. Industry will benefit from reduced permitting time through a reduction in costs associated with idle rig time. Both States and industry will benefit from the reduced costs associated with paper handling and storage and the staff time needed to manually enter information multiple times; which could be entered through electronic data transfer.

In North Dakota, more than 250 wells over the last 5 years have been reentered and drilled horizontally. Before well information was readily available, many of these wells would have been plugged or shut in. The cost savings to drill a well horizontally from an existing wellbore vs. drilling a new well is estimated to be at least \$300,000. By keeping these wells avail-



able, industry has saved in excess of \$75,000,000 in North Dakota alone. Additional documentation on how RBDMS saves money and produces more oil and gas can be found in the reference list at the end of this report.

#### Background

The Ground Water Protection Council (GWPC) previously had developed a prototype electronic reporting system being tested in Utah, Montana, and California. As part of this initiative, GWPC/GWPRF is collaborating with the Bureau of Land Management (BLM), Minerals Management Service (MMS), and industry to refine the e-reporting module. GWPC/GWPRF and BLM have developed a business case that will guide the development and implementation of e-permitting and e-reporting. In support of this effort, GWPC hosted an e-commerce forum at its Annual Forum in September 2004.

GWPC holds annual training sessions where states receive training in the use of RBDMS and e-commerce applications in locations near one of the RBDMS state agencies to provide an opportunity to highlight the host agency's information management processes.

With respect to the CERA aspects of this project, GWPC/GWPRF has spearheaded an effort to seek and foster the development of new approaches that can benefit the petroleum industry and relevant government agencies. These include holding meetings for the purpose of providing technology transfer, discussing policy, and dealing with emerging issues such as CO<sub>2</sub> sequestration and produced-water management.

Additionally, GWPC conducts peer reviews of Underground Injection Control (UIC) programs so that state agencies can share experiences with their peers who administer similar regulatory programs. The GWPC education and outreach effort supports the continued communication of the activities, practices and policies of the UIC program to the public.

#### Project Summary

Electronic data mining is available via the Internet in Utah, New Mexico, Colorado, Nebraska, Alaska, Montana, North Dakota, and New York.

Electronic reporting of production and injection data is available in Utah, Nebraska, New York, Pennsylvania, and Montana.

Electronic permitting using web forms is being developed using .NET software. Alabama, Kentucky, and Alaska will pilot test this system.

Electronic permitting using XML schema for bulk transfer of files will be pilot-tested in California and New Mexico.

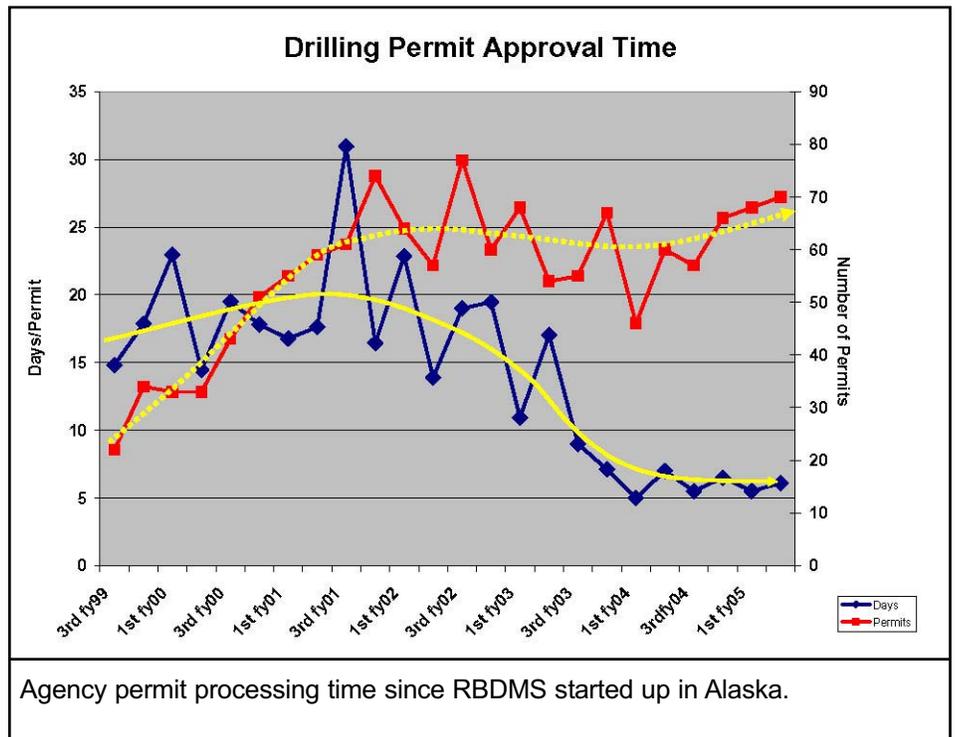
Company Name	PA Wells	NY Wells
Great Lakes Energy Partners LLC	4,257	1,691
U.S. Energy Dev.	3	21
KCS Energy, Inc./ Lenape Resources	641	410
Belden & Blake	1,164	27
Nornew	47	210
<b>Total eReported Statewide</b>	<b>16,044</b>	<b>4,882</b>

Companies e-reporting in New York and Pennsylvania.

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**Current Status (October 2005)**

This project is just completing the first year of a four-year cycle. Each year GWPC solicits input from State oil and gas commissions and industry on priorities. RBDMS is installed in 21 State oil and gas commissions and is considered by states, industry, BLM, and the American Petroleum Institute to be the standard for oil and gas program management.



**Publications**

The Effects of the RBDMS/e-Commerce Initiative on Domestic Oil and Gas Production and Water Resource Protection. 2005 [www.gwpc.org](http://www.gwpc.org)

Technical Achievements of Five DOE Grant Initiatives. 2005 [www.gwpc.org](http://www.gwpc.org)

**Project Start:** September 1, 2004

**Project End:** August 31, 2008

**Anticipated DOE Contribution:** \$3,800,000

**Performer Contribution:** \$1,550,000 (29% of total)

**Other Government Organizations Involved**

State oil and gas commissions, BLM, and U.S. Environmental Protection Agency

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