IOGCC 75 Anniversary

INTERSTATE Oil & Gas COMPACT COMMISSION

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March 26, 2010

Mr. Edward Hanlon
Designated Federal Officer
EPA Science Advisory Board (1400F)
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Mr. Hanlon:

I am writing on behalf of the nation's 38 oil and natural gas producing states represented by the Interstate Oil and Gas Compact Commission (IOGCC). As one of the most prominent stakeholders in the study proposed by the U.S. Environmental Protection Agency (EPA) on hydraulic fracturing, the IOGCC is most interested in fully participating and cooperating in this work product.

Protection of potential drinking water sources is a critical, uncompromised function of oil and gas regulatory officials at the state level. It is a fundamental job responsibility that is never taken for granted. For this reason alone, the IOGCC will cooperate to the greatest degree possible in this research effort.

The IOGCC member states have demonstrated this cooperative spirit by their eight-year commitment to participating in an IOGCC/EPA Task Force that is designed to keep state and federal co-regulators informed on issues of common concern. During this time, many issues have been explored by the Task Force, including hydraulic fracturing. In fact, the IOGCC has arranged for presentations directly to Task Force members in an attempt to educate members about state programs designed to protect the environment during hydraulic fracturing operations.

No government organization has more expertise, data and experience than the collective offices of state oil and gas regulatory bodies. States have regulated more than 1 million fracturing operations in the last 60 years. While there has yet to be a documented case of drinking water contamination as a result of hydraulic fracturing, the IOGCC strongly believes its members should be closely involved in every discussion of the study's scope and design.

Specifically, it is noted that the study as proposed envisions an undefined level of "field work." Since field work would most likely involve functions currently regulated by states, the IOGCC recommends that state inspectors be notified of and allowed to participate in both the planning and conduct of any activities.

In addition, the IOGCC encourages the Environmental Engineering Committee and the Science Advisory Board to suggest that research plans regarding any regulatory matter be presented to state regulatory officials and particularly oil and gas regulatory offices. As the principal repositories of information on hydraulic fracturing, states should be the point of first contact for any research activity. The IOGCC would provide appropriate contact information for state oil and gas regulatory offices if necessary.

Due to the short review time and the use of some vague terms within the scoping document, it is difficult to evaluate its full intent. The IOGCC encourages the Environmental Engineering Committee to suggest further dialog with the states to ensure it satisfies the intent of the language of the U.S. House Appropriations Conference Committee "...to carry out a study on the relationship between hydraulic fracturing and drinking water..." in consultation with interstate regulatory agencies while not duplicating efforts undertaken by EPA in 2004 that found no cases of drinking water contamination caused by hydraulic fracturing in coalbed methane recovery operations.

The additional information that follows documents the states' long-time involvement in the process of regulating hydraulic fracturing and their unwavering commitment to environmental protection. IOGCC staff members are available to provide additional detail and participation in the study-design process as requested.

Sincerely,

D. Gerow Baker
Associate Executive Director

Attachments:
- 2003 Survey of States Re: Hydraulic Fracturing
- Testimony Submitted to The House Committee on Energy and Commerce, Subcommittee On Energy And Mineral Resources, June 2009, Lynn Helms, Director of The Department of Mineral Resources of The Industrial Commission of The State of North Dakota
- Testimony Submitted to The House Committee on Oversight and Government Reform, October 2007, David E. Bolin, Deputy Director of the State Oil and
- Testimony Submitted to The House Committee on Resources, July 2005, Victor Carrillo, Chairman, Texas Railroad Commission
- Guest Opinion, Tom Richmond, Division Administrator, Montana Board of Oil and Gas Conservation, Department of Natural Resources
- White Paper: Safeguards Utilized by State Oil and Gas Conservation Agencies for Protecting From Potential Adverse Effects on Water From Hydraulic Fracturing, 2009, Marvin Rogers, Of Counsel, Alabama State Oil and Gas Board
- Letter to President Barack Obama, February 2009, from IOGCC Executive Director with IOGCC Resolution 09.011 on Hydraulic Fracturing
- State Resolutions on Hydraulic Fracturing: Alabama, Louisiana, North Dakota, Oklahoma, Utah and Wyoming

2003 SURVEY OF STATES RE: HYDRAULIC FRACTURING

STATE	YR STATE BEGAN REG.	FRACTURING DONE IN STATE?	HOW LONG FRACTURING ?	TYPE OF WELLS	APP. WELLS FRACKED ANNUALLY	APP. WELLS FRACTURED IN STATE TOTAL	% OF WELLS FRACKED	HARM ?
ALABAMA	1945	YES	1945	G,O,CSNG	285	5300	85%	NO
ALASKA	1958	YES	1981	G,O	55	1400	40%	NO
ARKANSAS	1939	YES	1980s	G,CSNG	150	N/A	75%	NO
CALIFORNIA	1915	YES	1970s	O,G	500	15,000	15%	NO
COLORADO	1951	YES	1980s	G,O,CSNG	1500	20,000	99%	NO
ILLINOIS	1939	YES	1950s	O	1,000	30 to 50,000	30%	NO
INDIANA	1947	YES	1950s	O,G	1,000	20,562	95%	NO
KANSAS	1933	YES	1960s	O,G,CSNG	900	50,000	40%	NO
KENTUCKY	1960	YES	1960s	G	1,000	30,000	50%	NO
LOUISIANA	1920s	YES	1960s	O,G	258	36,000	30%	NO
MICHIGAN	1927	YES	1970s	O,G	400	9,000	90%	NO
MISSISSIPPI	1939	YES	1960s	G	70	2 to 3,000	35%	NO
MONTANA	1954	YES	1950s	O,G	10	4,000	66%	NO
NEBRASKA	1959	YES	1950s	O,G	200	3,500	80%	NO
NEVADA	1954	YES	1980s	O	10	50	5%	NO
NEW MEXICO	1935	YES	1950s	O,G,CSNG	1,000	30,000	90%	NO
NEW YORK	1879	YES	1962	O,G	100	8,000	85%	NO
NORTH DAKOTA	1945	YES	1950s	O,G	15	290	10%	NO
OHIO	1965	YES	1950s	O,G	550	67,000	81%	NO
OKLAHOMA	1915	YES	1950s	O,G	1,150	58,000	60%	NO
PENNSYLVANIA	Pre-1900	YES	1950s	O,G,CSNG	2,000	118,000	99.9%	NO
SOUTH DAKOTA	1943	YES	1960s	O,G	10	195	90%	NO
TENNESSEE	1969	YES	1969	O,G	N/A	N/A	N/A	NO
TEXAS	1919	YES	1950s	O,G	20,220	361,000	50%	NO
UTAH	1955	YES	1970s	G,O	480	7,000	80%	NO
VIRGINIA	1950	YES	1970s	G,CSNG	300	3,000	100%	NO
WEST VIRGINIA	1929	YES	1960s	O,G,CSNG	1,000	25,000	95%	NO
WYOMING	1951	YES	1950s	O,G	500	25 to 30,000	66%	NO
				TOTALS:	**34,663**	**948,597**	**56.3%**	

Types of wells: G=Natural Gas, O=Oil, CSNG=Natural gas from coal seams N/A = Specific numbers not available

TESTIMONY SUBMITTED TO THE HOUSE COMMITTEE ON NATURAL RESOURCES

SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES

BY LYNN D. HELMS, DIRECTOR OF THE DEPARTMENT OF MINERAL RESOURCES OF THE INDUSTRIAL COMMISSION OF THE STATE OF NORTH DAKOTA

JUNE 4, 2009

Good morning Chairman Costa, Ranking Member Lamborn, and members of the Committee. My name is Lynn Helms. I am the Director of the Department of Mineral Resources of the Industrial Commission of the State of North Dakota. I am here today representing the Industrial Commission, the State of North Dakota, and other member states of the Interstate Oil and Gas Compact Commission (IOGCC) to express my views as a state regulator on development of shale gas in the United States and as to the outstanding job that states are doing in regulating the development of this most important national resource.

The 30 member states of the IOGCC are responsible for more than 99% of the oil and natural gas produced onshore in the United States. Formed by Governors in 1935, the IOGCC is a congressionally chartered interstate compact. The organization, the nation's leading advocate for conservation and wise development of domestic petroleum resources, includes 30 member and 8 associate states. The mission of the IOGCC is two-fold: to conserve our nation's oil and gas resources and to protect human health and the environment. Our current chairman is Governor Brad Henry of Oklahoma.

In my testimony today I propose to begin with some information on the Bakken shale formation in North Dakota and, how, thanks to recent technological advances, it is providing this country with an abundant and critical domestic energy resource. I will also provide testimony as to the competency and commitment of state oil and gas regulators to protect our states' drinking water resources in the development of the country's shale energy resources.

North Dakota's Bakken Resource

Let me begin by talking about the Bakken formation. I note that because of high crude oil prices in 2007 and 2008 and the discovery of new technology that has made it possible to economically produce the Bakken formation in North Dakota and Montana, the state of North Dakota has recently moved from the country's 9th ranked state in daily oil production to number 5.

The Bakken Formation is a large unconventional oil and gas resource that underlies most of western North Dakota, eastern Montana, southeast Saskatchewan, and southwest Manitoba. The U.S. Geological Survey (USGS) stated in an April 2008 report that it is the largest continuous resource they have assessed in the lower 48 states.

The upper and lower members of the Bakken formation are world class petroleum source rocks. Published estimates of Bakken oil generation potential range from 10 billion barrels (Dow 1974) to 300 billion barrels (Flannery and Krause 2006). The unpublished work of Price estimated the Bakken oil generation potential at up to 503 billion barrels. An extensive oil sampling program conducted by the North Dakota Geological Survey has shown that the Bakken is "truly dysfunctional" with no evidence that Bakken-generated oil has migrated away from the Bakken pool as previously thought. The geological models presented by Price (unpublished) and by Flannery and Kraus (2006) were based on input from North Dakota Geological Survey geologists, samples from the North Dakota Core and Sample Library, and the well files from the North Dakota Oil and Gas Division establish the most likely range of oil and gas in-place estimates of 300-500 billion barrels of oil and 300-500 trillion cubic feet of associated natural gas.

This incredible resource was identified by geologists within months of the first commercial oil production in North Dakota in a well drilled on a farm north of Tioga, ND in 1951. Yet, economic production was rare until the remarkable technologies of the 21st century were brought to bear, including deep, long horizontal wells with multiple hydraulic fracture treatments. I might note that research funded by the U.S. Department of Energy (DOE) Office of Fossil Energy has helped advance these shale technologies, and I encourage strong Congressional support of the program.

Significantly, even after applying the latest tools available, the Bakken Formation is expected to yield only **1.4%** of its original oil in place, which is still a remarkable **4-7 billion barrels of oil and 4-7 trillion cubic feet of natural gas.** The Bakken play in North Dakota is still in the learning curve. North Dakota wells are still undergoing adjustments and modifications to the drilling and completion practices used for this formation. It is apparent that technology and the price of oil will dictate what is potentially recoverable from this formation. The current Bakken shale recovery estimate equals all U.S. crude oil imports from the Persian Gulf since 2000 and a full year of residential natural gas consumption for our nation. The proven portion of the middle Bakken member occupies over 8.4 million acres in western North Dakota. The current North Dakota drilling rig fleet is capable of developing 300,000 to 650,000 acres per year meaning full development could require 13 to 26 years and over 13,000 new wells each hydraulically fractured from 2 to 20 times. This is lot of energy for our country and jobs for the American economy.

State Regulation of Oil and Natural Gas Development

I'd like to now address the issue of how development of this shale resource in North Dakota, and throughout the country, is regulated so as to also protect and preserve our country's precious water resources. It is useful to understand the critical role that states play in the regulation of oil and natural gas resources in the United States. A history of oil and natural gas in North Dakota can serve as an illustrative example.

North Dakota Oil and Gas Regulatory History

In response to shallow natural gas discoveries used for domestic lighting and heating the North Dakota Legislature passed an oil and gas conservation law that prohibited production of gas unless it was tied to a distribution system in 1911. The 1941 Legislature later passed the first meaningful regulatory bill under the urging of then State Geologist Wilson M. Laird. As a result, North Dakota had an oil-conservation law in place when oil was discovered in the State ten years later, but following that first commercial oil production in April 1951 North Dakota saw the need to be part of the organization chartered by congress to assist states with oil and gas regulation. North Dakota joined the Interstate Oil Compact Commission in 1953 and the North Dakota Legislature revised the Oil and Gas Conservation Law to conform to the IOCC Model Act that same year. A Chief Petroleum Engineer was hired who immediately updated the rules to reflect the new law. Most states that produce oil and gas share a similar history and are also members of the IOGCC.

Every North Dakota Governor since 1987, around the time when North Dakota became one of the top 10 U.S. states in daily oil production, has chaired the organization.

The highlight of IOGCC meetings since 1988 has been the Council of State Regulatory Officials. At meetings of this group, the top oil and gas regulatory official of every member state and every oil and gas producing Canadian province, or their designee, shares with the group the top issues in their state or province. Recommendations from other states that have or are working with similar issues are frequently solicited. This forum allows state regulators to respond to new issues very quickly, consistently, and collaboratively. For example, within weeks of a recent home explosion in Ohio state regulatory officials were discussing the investigation by the Ohio Department of Natural Resources and the primary cementing failure that caused it. Another example of the efficacy of such a program is the frequent updates on the LEAF lawsuit and group discussions of the issues surrounding hydraulic fracturing in the United States that ensued.

When I began this job almost eleven years ago the relationship between the North Dakota Oil and Gas Division and other state and federal agencies whose jurisdiction overlapped in many areas was very mixed. Realizing that relationships change as do agency directors we moved aggressively to develop Memoranda of Agreement with those agencies that provide structure for both the regulators and regulated community and provide for period review and change. A national example of this is a Memorandum between the IOGCC and the U.S. Environmental Protection Agency (EPA) which provides for a process under which states and EPA regularly meet as environmental co-regulators.

Regulation to Protect Water Resources

As the head regulator of oil and natural gas development in the State of North Dakota and an officer of the IOGCC representing all oil and natural gas producing state regulators, I can assure you that we have no higher priority than the protection of our states' water resources – let me repeat no higher priority. Much of our entire regulatory framework, from drilling to completion, production, and finally plugging and abandonment, is centered around measures to prevent any contamination of the water resource. As a component of the completion of a well, hydraulic fracturing operations are thus thoroughly regulated and supervised by the states.

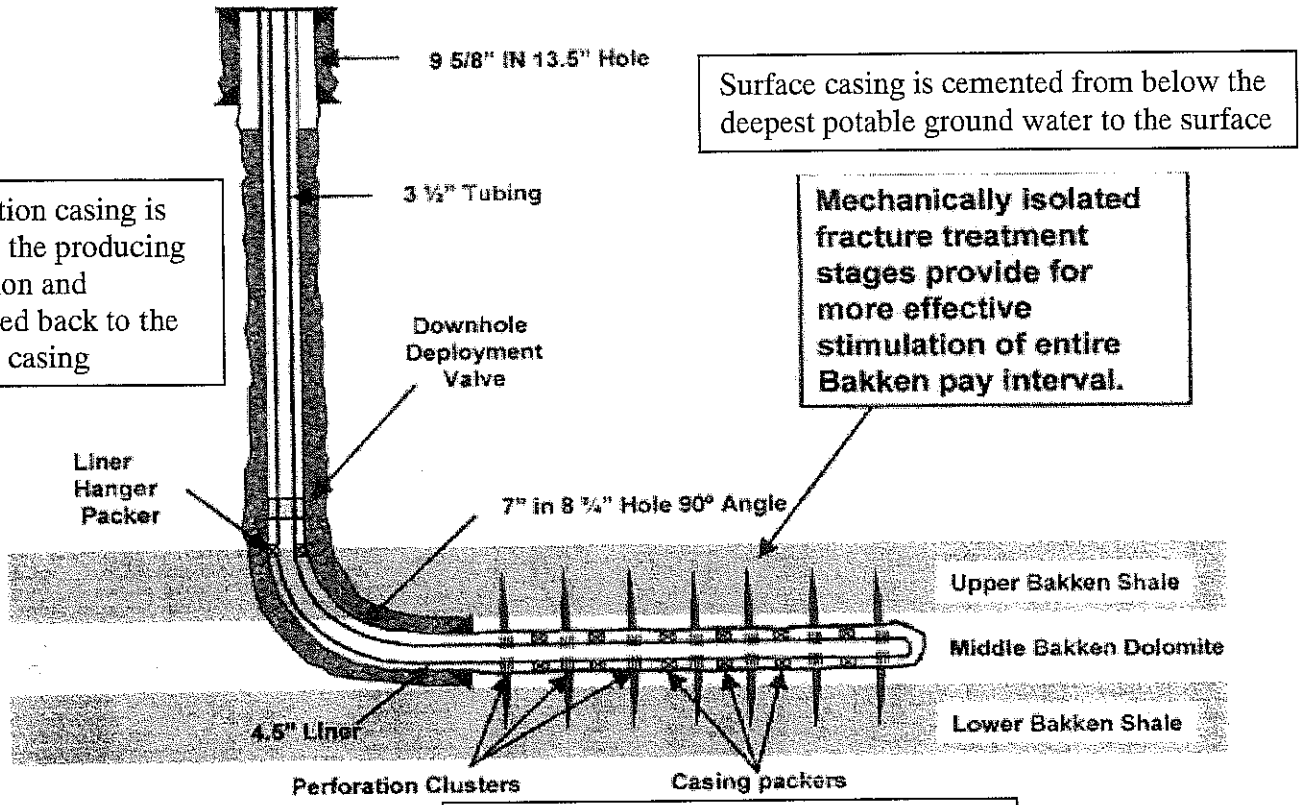
A major component of production operations is the proper storage and disposal of all production wastes, including hydraulic fracturing flow back water. These operations are carefully monitored, audited, and regulated in our state programs.

As I noted in my testimony above, hydraulic fracturing is a critical component of developing the Bakken formation, indeed every shale play throughout the U.S. and Canada. Without hydraulic fracturing, under regulation of the states, this resource could not be produced.

I have included both a picture of a hydraulic fracture treatment near Lake Sakakawea in North Dakota (page 5) and a diagram of a typical Bakken formation well (page 6) that shows how it is that water resources are protected during the oil and natural gas production operations, including hydraulic fracturing.

ND hydraulic fracture treatment:

ND Bakken shale well bore:



Surface casing is cemented from below the deepest potable ground water to the surface

Production casing is set into the producing formation and cemented back to the surface casing

Mechanically isolated fracture treatment stages provide for more effective stimulation of entire Bakken pay interval.

A liner with external "swell" packers is run to into the producing formation to divide the bore hole into sections

Hydraulic Fracturing Is Environmentally Safe

In a 1998 survey of state oil and gas regulatory agencies, conducted by the GWPC, twenty four state programs said they had not recorded any complaints of contamination to a USDW that the agency could attribute to hydraulic fracturing of coalbed methane zones.

In 2004 the Environmental Protection Agency published a final report summarizing a study to evaluate the potential threat to underground sources of drinking water from hydraulic fracturing of coal bed methane production wells and the Environmental Protection Agency concluded that "additional or further study is not warranted at this time..." and that "the injection of hydraulic fracturing fluids into coal bed methane wells poses minimal threat to the underground sources of drinking water".

Subsequently, the IOGCC conducted a survey of North Dakota and other oil and gas-producing states that found that there were no known cases of ground water contamination associated with hydraulic fracturing. Hydraulic fracturing is a common operation used in exploration and production by the oil and gas industry in North Dakota and all the member states of the IOGCC. Approximately 35,000 wells are hydraulically fractured annually in the United States, and close to one million wells have been hydraulically fractured in the United States since the technique's inception, with no known harm to ground water.

It is my firmly held view and that of the IOGCC that the subject of hydraulic fracturing is adequately regulated by the states and needs no further study. In my opinion too frequent nationwide or federal study and review of critical operations like hydraulic fracturing, underground injection, and RCRA class II waste exemptions create an environment of uncertainty and litigation that inhibits real progress in sustainable resources development.

Complaints of ground water contamination attributed to hydraulic fracturing or any other oil and gas operation should continue to be investigated by the appropriate state agency or agencies to determine whether or not ground water has been affected and whether a cause and effect relationship can be established between any impacts to ground water and petroleum exploration and production activities.

Summary

The state of North Dakota and the IOGCC are firmly committed to the premise that regulation of oil and gas field activities is managed best at the state level where regional and local conditions are understood and where regulations can be tailored to fit the needs of the local environment. Federal regulatory programs have been most effective when they have been delegated to state regulatory agencies and funded through primacy programs. The primary example of this success has been the 1974 Safe Drinking Water Act (SDWA) section called the Underground Injection Control (UIC) Program. Between 1982 and 1990, twenty oil producing states applied for and received primary enforcement authority (primacy) from EPA to administer the program under Section 1425 of SDWA. Delegation of authority for this program to the states has required those with oil and gas regulatory programs to demonstrate that their programs were equally effective in protecting ground water as those

promulgated and administered by EPA under Section 1422 of SDWA. Federal regulatory programs that can not be delegated to state regulatory agencies and funded through primacy programs have been a constant source of friction between regulators and it has been much more difficult to achieve compliance. The primary example of this success has been the 1990 Oil Pollution Act (OPA) and Spill Prevention Control and Countermeasure (SPCC) regulations.

Regulations alone don't begin to provide the full measure of a regulatory program. The North Dakota Oil and Gas Division of the Department of Mineral Resources utilizes 8 performance measures to monitor our activity in the areas of drilling permitting, UIC permitting, wellbore construction, well bore mechanical integrity testing, spill containment and clean up, fluid measurement, oil and gas conservation, and customer satisfaction. At least five of these measures are directly related to protection of water resources. These performance measures are backed up by a staff of field inspectors who visit the wells every day from when the drilling rig moves in until the permanent wellhead is installed and at least quarterly after that.

North Dakota has participated in numerous work groups whose purpose was the development of Best Management Practices (BMPs) and regulatory review processes. While these efforts have done a great job of documenting the evolution of technology used to address and mitigate problems real or imagined they result in snap shot views of BMP or regulatory practices at a point in time and they do not result in living documents that keep up with the industry. For example, North Dakota participated in a deep unconventional natural gas BMP work group, which finished its work just as industry focus shifted to coal bed methane, sparking another BMP work group which again finished its work just as industry focus shifted to unconventional oil and gas shale utilizing horizontal drilling and hydraulic fracturing.

Regular meetings of regulatory officials such as the IOGCC's Council of Regulatory Officials and EPA Task Force are the most effective way for regulators to keep pace with the rapid shifts in energy industry focus in real time.

TESTIMONY SUBMITTED TO
THE HOUSE COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM

BY DAVID E. BOLIN, DEPUTY DIRECTOR OF THE STATE OIL AND GAS BOARD OF ALABAMA

OCTOBER 31, 2007

Good morning Chairman Waxman, Ranking Member Davis, and members of the Committee. My name is David E. Bolin. I am the Deputy Director of the State of Alabama Oil and Gas Board (Board). I am here today representing the Board, the State of Alabama, and other member states of the Interstate Oil and Gas Compact Commission (IOGCC) to express my views as a state regulator regarding the applicability of federal requirements that protect public health and the environment to oil and gas development.

The member states of the IOGCC harvest more than 99% of the oil and natural gas produced onshore in the United States. Formed by Governors in 1935, the IOGCC is a congressionally ratified interstate compact. The organization, the nation's leading advocate for conservation and wise development of domestic petroleum resources, includes 30 member and 8 associate states. The mission of the IOGCC is two-fold: to conserve our nation's oil and gas resources and to protect human health and the environment. Our current chairman is Governor Sarah Palin of Alaska.

I am here today to address two issues arising from the proposition that two provisions of the Energy Policy Act of 2005 (EPACT), Section 327 concerning hydraulic fracturing and Section 328 regarding "storm water", have resulted in harm to drinking water resources in the United States. The evidence would strongly suggest otherwise. What

these two provisions accomplished was the removal of unnecessary administrative burdens on the production of oil and natural gas in the United States – nothing more.

Hydraulic Fracturing

Let me begin by addressing the hydraulic fracturing issue as it is one with which I am intimately familiar. I have been employed by the State of Alabama since July 1979 and have served in technical and supervisory roles with the Board since 1982. I am a Ground Water Hydrologist as well as a Petroleum Engineer by training. My first responsibility with the Board was to develop the State's Class II Underground Injection Control (UIC) Program, pursuant to Section 1425 of the Safe Drinking Water Act (SDWA), in order to obtain primary enforcement responsibility for that program from the U.S. Environmental Protection Agency (EPA). The EPA made a determination that our Program accomplished the objectives of the SDWA, that being to protect underground sources of drinking water from endangerment that could result from improper injection of fluids, and was therefore approved by EPA in August 1982. Since that time, I have had supervisory responsibility for the Class II UIC Program and all other ground water protection programs under the Board's jurisdiction.

Obtaining primacy for the Class II UIC Program, however, was not the beginning of the Board's ground-water protection programs. Such programs, to include the regulation and approval of hydraulic fracturing operations, have been actively implemented continually since the Board was established in 1945. The Board has a staff of geologists and

petroleum engineers to provide technical expertise and to otherwise assist in its duties. In the original act establishing the Board, one of the Board's duties was to "prevent the pollution of fresh water." Protecting drinking water resources is part and parcel of every states' conservation statute: the prevention of waste and the loss of critical natural resources without economic or beneficial use. These mandates to protect drinking water and other natural resources preceded the establishment of the SDWA.

Although the Board in Alabama had been adequately protecting ground water for many years, it elected to apply for primary regulatory authority for this federal program in order to prevent dual regulatory requirements and to eliminate extended time delays associated with federal permitting and decision-making so that oil and gas development could proceed in an orderly manner and to prevent any waste that would otherwise be incurred.

Perhaps the recent history of litigation involving the issue of hydraulic fracturing would be beneficial. In 1994, a Florida-based environmental group, the Legal Environmental Assistance Foundation (LEAF), filed a petition with EPA requesting that EPA take over primacy under the State of Alabama's UIC program. LEAF contended that hydraulic fracturing associated with methane gas production was an injection under the SDWA and therefore should be subject to regulation under the State of Alabama's UIC program.

Following EPA's rejection of its petition in 1995, LEAF filed an appeal with the 11th U.S. Circuit Court of Appeals. In 1997 the 11th Circuit ruled in favor of LEAF holding that hydraulic fracturing constitutes underground injection and therefore must be

regulated as such under the SWDA. The court did not address the issue of risk of harm associated with fracturing or reach any finding of actual harm to drinking water, deciding the issue strictly on the definitional issue. As a result of the court's decision and subsequent rulings, the State of Alabama in 1999 submitted a revised Class II UIC Program package consistent with the Court's rulings and subsequent orders. The EPA approved the Alabama program. A subsequent LEAF effort before the 11th U.S. Circuit arguing that EPA erred in approving the Alabama program failed as did an application for writ of certiorari before the U.S. Supreme Court.

Although EPA had never regarded hydraulic fracturing as an "underground injection" under the SDWA, and so argued before the 11th Circuit Court of Appeals, the EPA decided to let the decision stand and not appeal the court's decision. The result has been higher operating costs for producers of coalbed methane in Alabama and significantly higher administrative costs by the State of Alabama in administering its Class II UIC Program.

Thus the LEAF case launched an effort, based solely on a definitional issue and never any finding of harm, to tighten up the regulation of hydraulic fracturing nationally.

In 1999, the Ground Water Protection Council conducted a survey of state regulatory agencies regarding the inventory and extent of hydraulic fracturing in coalbed methane wells in oil and gas producing states. The principal conclusion of that survey was that

"[t]here are no indications from this survey to suggest that public health is at risk as a result of the hydraulic fracturing of coalbeds used for the production of methane gas."

Additionally, in 2002, the IOGCC completed a survey of oil and natural gas producing states that provides an understanding of hydraulic fracturing and its role in the completion of oil and natural gas wells in the United States. With the committee's permission I would like to submit a copy of this survey for the record. Principal findings of this survey reveal that the technique has been in widespread, common use for nearly 60 years – the technique gained its current widespread popularity as a production technique in the 1940s. Approximately 35,000 wells are hydraulically fractured annually in this country with close to one million wells having been hydraulically fractured in the United States since the technique's inception with no documented harm to groundwater. Hydraulic fracturing has been regulated by the states since its inception. A principal focus of state oil and gas regulatory programs is on protecting ground and surface water resources. The survey reveals hydraulic fracturing of natural gas and oil wells is a process that is well understood and well regulated by the petroleum producing states.

In June 2004, EPA published a final report summarizing a study to evaluate the potential threat to underground sources of drinking water (USDWs) from the injection of hydraulic fracturing fluids into coalbed methane (CBM) production wells. In that report, EPA concluded that "additional or further study is not warranted at this time . . ." and "that the injection of hydraulic fracturing fluids into CBM wells poses minimal threat to USDWs."

EPA further stated in its summary of the study that "[i]n its review of incidents of drinking water well contamination believed to be associated with hydraulic fracturing, EPA found no confirmed cases that are linked to fracturing fluid injection into CBM wells or subsequent underground movement of fracturing fluids. Further, although thousands of CBM wells are fractured annually, EPA did not find confirmed evidence that drinking water wells have been contaminated by hydraulic fracturing fluid injection into CBM wells. Where fluids are injected, EPA believes that groundwater production, combined with mitigating effects of dilution and dispersion, adsorption, and biodegradation, minimize the possibility that chemicals included in fracturing fluids would adversely affect USDWs."

The results of these national surveys and the conclusions reached by EPA, the federal agency responsible for protecting the environment, in its study are quite significant and can not be dismissed. The states, for more than 60 years, even before the SDWA, have done an outstanding job of protecting USDWs. The regulations promulgated and enforced by our Board and our counterparts in other states have been very effective; as evidenced by the surveys and EPA's study, there have been no verified reports of contamination of USDWs by coalbed methane operations.

Alabama is a major oil and gas producing state, presently ranking tenth among the states in gas production and fifteenth in oil production. It has a broad and diverse oil and gas industry that includes onshore and offshore operations, as well as conventional and

unconventional hydrocarbon resources. As such, Alabama serves as an excellent representative for all of the oil and gas producing states.

Coalbed methane has become a major contributor to Alabama's oil and gas industry in last 20 years. Since the establishment of the Board, half of the 15,600 oil and gas wells drilled in Alabama have been coalbed methane wells. Alabama has been a national leader in coalbed methane operations and was the first state to promulgate regulations addressing coalbed methane operations. In fiscal year 2007, 115.2 billion cubic feet of coalbed methane gas was produced in Alabama, representing approximately 40 percent of the state's total gas production. Similar developments in coalbed methane activity are occurring in a number of other states.

Coalbed methane production in Alabama is only economical if the coal seams can be hydraulically fractured. State regulatory agencies have a proven track record with the regulations that are in place now. These regulations have proven sufficient to adequately protect public health and the environment from hydraulic fracturing operations associated with the oil and gas development. Alabama's experience with federal requirements that were generated by the LEAF matter and ultimately required the Board to revise its Class II UIC Program have resulted in substantially increased administrative and production costs with no public health or environmental benefit.

Storm Water Discharge Management

Concerning the "storm water" issue, the issue first arose when EPA proposed a rule regarding storm water discharges when it was discovered that it could have a significant cost impact on the oil and gas industry even though the industry was not the focus of the rulemaking and even though there was no indication of inadequate regulation during construction relating to oil and natural gas production. In response, both the states, through the IOGCC, and industry engaged working groups to examine the matter.

The states, through the IOGCC, created a Storm Water Workgroup whose task was to determine how best meet EPA's needs regarding NPDES storm water management practices and to develop appropriate guidance based on existing state programs. Among other things, the workgroup did not find justification for requiring a storm water discharge permit for small exploration site activities. It found that the Federal NPDES permitting requirements were onerous and inappropriate given the level of risk to the environment. It also found that it was not feasible to develop a single standard to fit the diverse requirements for appropriate storm water discharge management throughout the United States. It concluded that states have been managing discharges at large sites and that there was no indication of a significant threat to the environment from storm water discharges by small exploration and production site activities.

The industry effort resulted in the creation of "Reasonable and Prudent Practices for Stabilization" (RAPPS) as an effective voluntary tool for reducing pollutants in storm

water discharges. The industry group which created RAPPS consisted of environmental representatives from several oil and gas companies and representatives of oil and natural gas industry associations. RAPPS consisted of a compilation of the various operating practices utilized by reasonable and prudent operators in the oil and gas industry to effectively control erosion and sedimentation associated with storm water runoff from areas disturbed by clearing, grading and excavating activities related to site preparation associated oil and gas exploration, production, processing, treatment, and transmission activities.

The bottom line with respect to the storm water issue is that there is no issue. Based on the conclusions of the IOGCC study, the states were already adequately regulating this activity. Supplemented by improved industry practices based on RAPPS, the conclusion can be drawn that there was no adverse environmental impact as a result of the passage of EPACT Section 328.

A study commissioned by the U.S. Department of Energy also showed that there would likely be severe economic impacts on the oil and gas industry had the original EPA rule covered the oil and natural gas industry. It is one thing to have economic impact where an environmental harm is being mitigated; it is another when it is unnecessary.

Conclusion

The point is that America needs its domestic production of oil and natural gas, and regulations at both the federal and state level should focus on that necessary to protect the environment and public health and safety. Superfluous regulation only decreases domestic production and increases foreign imports from countries where there often exist few environmental regulations. Make no mistake, we in the U.S. are the best regulated oil and natural gas regime in the world – no other country operates under stricter environmental, health and safety regulatory oversight than do we.

Elimination of Sections 327 and 328 of EPACT would not make production of oil and natural gas in the United States an iota safer but could substantially increase domestic oil and natural gas production costs and thereby decrease domestic supply.

Thank you for the opportunity to appear here today. If we can provide any additional information, please do not hesitate to ask.

HOUSE COMMITTEE ON RESOURCES
BY VICTOR CARRILLO, CHAIRMAN, TEXAS RAILROAD COMMISSION
REPRESENTING THE INTERSTATE OIL AND GAS COMPACT COMMISSION
JULY 23, 2005

Madame Chair McMorris, Congressman Gohmert, members -- my name is Victor Carrillo and I appreciate the opportunity to testify before you. I am Chairman of the Texas Railroad Commission. In spite of the name, we oversee the Texas oil & gas, pipeline & surface mining industries, including lignite coal mines. My background is in the energy sector as a former exploration geologist/geophysicist and oil & gas attorney.

I am also here today on behalf of the Interstate Oil and Gas Compact Commission (IOGCC). IOGCC member states produce over 99% of the oil and natural gas produced onshore in the U.S. Formed in 1935, the IOGCC is a congressionally ratified interstate compact that includes 30 member and 7 associate states. Our 2005 Chairman is Governor Murkowski of Alaska. I will be 2nd Vice Chair of the organization for the upcoming year.

The mission of the IOGCC is two-fold: *to promote conservation and efficient recovery of domestic oil and natural gas resources while protecting human health and the environment.* Though many would have you believe that those dual goals are mutually exclusive – let me assure you they are not. Responsible oil & gas exploration and development and stewardship of our land and water resources can both be accomplished simultaneously. We see it done in Texas day in and day out.

In Texas, we are quite proud of our ongoing role as the premier energy producing state in the nation. Texas is still the #1 producing state for oil and natural gas. We produce about 6 Trillion Cubic Feet of natural gas per year, which represents over 25% of total U.S. demand for the clean burning energy source. We are also the 5th largest producer of coal in the nation.

As of one week ago, Texas had 619 active oil & gas rigs operating in the state -- representing almost 50% of all land rigs in the nation. And as a nation as we move to establish more LNG (liquefied natural gas) facilities, I'm proud to say that four new onshore LNG facilities have already been given the green light by FERC along our Texas Gulf Coast.

Texas has the most extensive pipeline infrastructure in the nation with over 250,000 miles of underground petroleum pipelines throughout the state. There are 26 refineries in the state with a total refining capacity of over 4 million barrels per day, equaling over 25% of the nation's total refining capacity. Texas is still the preeminent energy producing and refining state in the nation.

In February, I testified in Washington alongside Governor Frank Murkowski of Alaska in support of the Energy Policy Act of 2005. I continue to believe that the House version is a very good first step to help ensure our nation's future energy security by helping to maximize the production of our domestic petroleum resource.

Turning to today's topic, no country in the world produces its oil, gas and coal to higher environmental standards. Texas and the other energy producing states are proud of these environmental standards for we believe that we have a stewardship responsibility for our land and water resources. But the ever growing and often Draconian federal environmental laws and regulations threaten future exploration, production, and refining capacity.

I'd also like to point out that while Texas is the top oil and gas producing state, Texas also ranks first in overall consumption of petroleum, natural gas, coal, and electricity. So we share the national concern for

reliable energy supply sources at reasonable and stable prices. A secure source of domestically produced oil, natural gas, and coal is in the best interest of all – producing and consuming states alike.

Recognizing that my time is limited, let me address just a few specific hot topics.

Stormwater Runoff.
I am concerned with EPA rulemaking under the NPDES Stormwater Permit Coverage for Small Oil & Gas Construction Activities which would potentially require a stormwater permit of oil & gas operators for activities affecting one acre or more, particularly with their interpretation of "common plan of development" concept in the Construction General Permit. EPA's rule would improperly seek to treat oil & gas activities activities like residential/commercial construction activities – and they are not the same. In residential/commercial construction projects, there is often a common plan of development that would impact an aggregated area of disturbance. With oil & gas exploration, there is no guarantee of success of the first well, much less any subsequent wells. In fact, let's say you drill a $2 million dollar exploratory well and you find nothing or at least nothing that is economic to produce, then any plans for future wells in that immediate area project will likely never come to fruition. For the oil & gas producer, there simply is no common plan of development in the vast majority of cases.

A recent independent economic analysis completed for the U.S. Department of Energy (*Estimated Economic Impacts of Proposed Storm Water Discharge Requirement on Oil & Gas Industry Report* from Advance Resources International, Inc. to U.S. DOE Office of Fossil Fuels, Dec. 2004) estimated that just this one EPA regulatory change could cost the country from 1.3 to 3.9 billion barrels of domestic oil production and 15 to 45 trillion cubic feet of domestic gas production over the next 20 years. To put that into context, and taking the median of those numbers, that represents over five years of Texas natural gas production and over seven years of Texas oil production that would be lost.

Hydraulic Fracturing
There is a current effort in the context of the Energy Bill seeking to broadly regulate hydraulic fracturing under the Safe Drinking Water Act for the very first time ever. Hydraulic fracturing is a technique developed in oil & gas exploration to fracture deep underground oil & gas bearing strata, thus releasing more of the oil & gas to be produced. The technique has been safely and successfully used in states like Texas for decades without any known negative impact to drinking water supplies. In the vast majority of wells that have used these techniques in Texas, the fracture zone is thousands of feet deep, well below any possible contact with the drinking quality water, which is generally limited to a few hundred feet from the surface.

Technological advancements allow industry to find & produce more domestic oil & gas, more efficiently, where we already know it to exist. It is technological advancements like hydraulic fracturing, that have allowed the Barnett Shale Gas Play near Dallas/Ft. Worth to develop into the largest producing gas field in Texas and one of the hottest gas plays in the nation. Without the ability to use hydraulic fracture techniques in the Barnett Shale, this huge gas deposit would not be economic to produce.

A one-size fits all, federally mandated, EPA administered regulatory approach in this issue unnecessarily trammels state rights to oversee this activity in our state, by our own more flexible and appropriate means. State programs like ours in Texas have for almost 100 years protected precious ground water resources while allowing domestic oil and gas production to supply our national energy needs.

Refining (Downstream).
There has been no major new refinery built in the U.S. since 1976. Did you know that now, in addition to importing almost 60% of the oil (unrefined) that we need, we are now importing about 10% of the refined gasoline that we need. The fact is that there is limited domestic refining capacity. We had over 300 U.S.

refineries in 1980. At the end of 2003, there were about 149 – a 50% reduction. Most are running at near capacity.

Why have no U.S. based refineries been built in almost three decades? While NIMBY plays an important role, so do the incredibly stringent environmental controls (NEPA, Clean Air Act, Clean Water Act, RCRA, etc.) that apply to new major construction. Some estimates suggest that it would take several hundred permits and at least $2 billion to build a new refinery – perhaps half of that cost attributable to the regulations directly

In the last decade alone, industry has invested almost $50 billion in environmental improvements to existing facilities. And we wonder why gasoline prices are at their current prices.

Access to Public Lands.

One final issue I will mention is the need to encourage opening up areas currently off limits to oil and gas exploration – areas in the intermontane west, in Alaska, and in our Outer Continental Shelf (OCS) regions. And pertinent to this task force, we should also seek to streamline areas that are already open to exploration but that are frequently tied up in unnecessarily complicated environmental requirements, particularly on federal lands.

In summary, I believe that we would all do well to support the general notion that "government that governs least governs best." No doubt, certain environmental laws and regulations are essential to protect the public health and safety. However, many of these environmental laws far exceed their original intent. To the degree we can, we must reel in and restrain government regulations that all too often are overbroad, complex, and costly and that stifle innovation, ingenuity & investment growth in private sector. When the federal government does pass a law or regulation, it should be simple, clear, understandable, limited in scope, reasonable, practical, & pass the common sense test.

Finally, let me emphasize the need for flexible regulatory oversight and management tools as opposed to rigid, Draconian measures that simply add cost and delay, and ultimately limit domestic energy production at the very time that we need to be more, not less, energy self sufficient.

Thank you so much for the opportunity to appear before you today. If I can provide any additional information, please just ask. I personally stand ready to assist you in any energy-related matter in which you are interested.

Tom Richmond of Billings is division administrator of the Montana Board of Oil and Gas Conservation in the Department of Natural Resources and Conservation.

Guest Opinion: Hydraulic fracturing in oil fields works safely for Montana

By Tom Richmond

Hydraulic fracturing has been used by the oil and gas industry for 60 years to increase the productivity of wells and recover oil and gas. Many of Montana's gas wells and essentially all our Bakken oil wells would not be economically viable to drill without hydraulic fracturing, resulting in a loss of at least $4 billion worth of oil and $350 million of state revenues. Along with improved drilling technology, hydraulic fracturing has doubled Montana's oil and gas production.

Recently, the safety of hydraulic fracturing has been called into question by organizations trying to convince Congress and the Environmental Protection Agency to establish or broaden federal regulations. These organizations are using fear tactics - unsubstantiated claims of groundwater contamination by dangerous chemicals - to make their case. The truth is that hydraulic fracturing is already regulated appropriately by the states. Thousands of wells in Montana and about 1 million wells nationwide have been fractured with no groundwater contamination reported.

Protective barriers

Hydraulic fracturing is not a haphazard process. Engineers use computer models to custom-design each individual fracture treatment, taking into account the physical and chemical properties of the rock, the fluids contained within that rock, and the mechanical condition of the well. The computer models are used to design an effective treatment that stays within the targeted rock formation thousands of feet underground. Additionally, the wells are designed and constructed to provide at least three protective barriers that prevent water contamination.

The primary products used in Montana's hydraulic fractures are sand and a fluid to carry the sand. The most common carrier fluids are either nitrogen foam or gelled water. The products that cause the nitrogen to foam are the basic ingredients in household cleaning agents, such as borax or detergent; the gelling agents are similar to those used in making gelatin dessert or soft-serve ice cream. The EPA has identified diesel fuel as a potential health hazard, but it is seldom used in Montana.

The geology of Montana provides further protection from contamination. Groundwater that furnishes drinking water and conventional gas and oil reservoirs do not inhabit the same underground territory - they are typically many thousands of feet apart and separated by numerous impermeable layers.

Every oil- and gas-producing state has multiple agencies that regulate exploration and development. In addition to the Board of Oil and Gas Conservation, the Montana

Department of Environmental Quality and Montana Department of Natural Resources and Conservation have roles in oil and gas operations, water quality and water quantity regulation, as well as land use and leasing roles. The U.S. Occupational Safety and Health Administration, U.S. Department of Transportation and EPA oversee some aspect of the transportation, use and proper disposal of any substances used in oil and gas production; the U.S. Bureau of Land Management has similar responsibility on federally owned land. Requiring additional oversight by still more federal agencies would be costly and redundant and add little to the substantial regulatory network already in place.

No documented harm

Approximately 35,000 wells are hydraulically fractured annually in the United States; about 1 million wells have been hydraulically fractured in the U.S. since the technique was first developed, with no documented harm to groundwater. Hydraulic fracturing is essential for developing our abundant and environmentally desirable natural gas resources, and the safety and effectiveness of this process are proven every day.

SAFEGUARDS UTILIZED BY STATE OIL AND GAS CONSERVATION AGENCIES FOR PROTECTING FROM POTENTIAL ADVERSE EFFECTS ON WATER FROM HYDRAULIC FRACTURING, 2009

1. All states have regulations addressing casing and cementing requirements. Proper casing and cementing ensures that fracture fluids injected into the formation being fractured remain in that formation.
2. Oil and gas conservation experts review the geologic information to ensure there is an impervious stratum above the formation fractured.
3. Many states ban hydraulic fracturing shallower than a particular depth, e.g., in Alabama, hydraulic fracturing is banned at a depth shallower than 300 feet.
4. Some states require a water well survey to be performed for water wells within a quarter mile of the well on which a hydraulic fracturing operation is being conducted. Then these states consider the depth at which hydraulic fracturing is allowed.
5. Some states require a statement from the operator that fracture fluid utilized in hydraulic fracturing does not contain deleterious substances.
6. All states utilize inspectors, who observe the actual hydraulic fracturing operation to ensure that the operation is conducted properly so that no harm is caused.
7. When hydraulic fracturing operations are conducted, virtually all of the fracturing fluid is recovered to the surface and does not remain in the well. The EPA report addresses this recovery of fracture fluid.
8. All states have enforcement authority to ensure compliance with applicable statutes and regulations.
9. The fracture fluid that is recovered to the surface is disposed in accordance with accepted and regulated disposal techniques.

IOGCC 75 Anniversary

INTERSTATE
Oil & Gas
COMPACT COMMISSION

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Pennsylvania
South Dakota
Texas
Utah
Virginia
West Virginia
Wyoming

February 23, 2009

President Barack Obama
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

Dear Mr. President:

As the executive director of the Interstate Oil and Gas Compact Commission (IOGCC), I am forwarding resolutions approved by the IOGCC member states at our recent Annual Meeting. As you can see from these resolutions, the nation's oil and gas producing states have concerns about the need for a strong, active national energy policy.

The attention of Congress on energy policy recently has largely overlooked domestic petroleum, the nation's most important energy source. The states want to work with you to be a part of the energy solution. In addition, we hope for expanded dialogue on energy issues, particularly manpower, research and production concerns.

I welcome any opportunity to work with and assist you on matters related to our nation's energy resources. Please contact me if I can provide you or your staff with more background on energy policy matters. My phone number is (405) 525-3556, extension 200, and my e-mail address is mike.smith@iogcc.state.ok.us.

Sincerely,

Carl Michael Smith
Executive Director
Interstate Oil and Gas Compact Commission

MS/mo

Enclosures:

09.011 Urging Congress Not To Remove Exemption Of Hydraulic Fracturing From Provisions Of The Safe Drinking Water Act
08.111 Supporting Congressional Appropriation for Geological and Geophysical Data Preservation under Provisions of the Energy Policy Act of 2005 (Reauthorized)
08.112 Urging The Continued Development Of An Effective National Energy Policy (Reauthorized)
08.113 Continuing Policy On The Issue Of Carbon Storage In Underground Geologic Formations (Reauthorized)
08.114 Identifying and Promoting Energy Manpower Needs (Reauthorized)
08.115 Requesting Funding for the Reclamation of Orphaned Well Sites (Reauthorized)
08.116 Encouraging the Full Funding of the Land and Water Conservation Fund State Assistance Program (New)

INTERSTATE Oil & Gas COMPACT COMMISSION

RESOLUTION 09.011

Urging Congress Not To Remove Exemption Of Hydraulic Fracturing From Provisions Of The Safe Drinking Water Act

WHEREAS, the United States Congress passed the Safe Drinking Water Act (42 U.S.C. § 300h) (SDWA) to assure the protection of the nation's drinking water sources; and,

WHEREAS, since the enactment of the SDWA, the EPA had never interpreted hydraulic fracturing as constituting "underground injection" within the SDWA; and,

WHEREAS, the United States 11th Circuit Court of Appeals ruled that hydraulic fracturing constituted "underground injection" under the SDWA (Legal Environmental Assistance Foundation v. United States Environmental Protection Agency (EPA), 118 F3d 1467 (11th Cir. 1997)); and,

WHEREAS, in 2004, EPA published a final report summarizing a study to evaluate the potential threat to underground sources of drinking water (USDWs) from hydraulic fracturing of coalbed methane (CBM) production wells and EPA concluded that "additional or further study is not warranted at this time . . ." and "that the injection of hydraulic fracturing fluids into CBM wells poses minimal threat to USDWs."; and,

WHEREAS, the United States Congress, in the Energy Policy Act of 2005, explicitly exempted hydraulic fracturing from the provisions of the SDWA; and,

WHEREAS, the IOGCC conducted a survey of oil and gas producing states which found that there were no known cases of ground water contamination associated with hydraulic fracturing; and,

WHEREAS, hydraulic fracturing is currently, and has been for decades, a common operation used in exploration and production by the oil and gas industry in all the member states of the Interstate Oil and Gas Compact Commission (IOGCC) without groundwater damage; and,

WHEREAS, approximately 35,000 wells are hydraulically fractured annually in the United States and close to one million wells have been hydraulically fractured in the United States since the technique's inception, with no known harm to groundwater; and,

WHEREAS, the regulation of oil and gas exploration and production activities, including hydraulic fracturing, has traditionally been the province of the states; and,

INTERSTATE
Oil & Gas
COMPACT COMMISSION

WHEREAS, the SDWA was never intended to grant to the federal government authority to regulate oil and gas drilling and production operations, such as "hydraulic fracturing," under the Underground Injection Control program; and,

WHEREAS, the member states of the IOGCC have adopted comprehensive laws and regulations to provide for safe operations and to protect the nation's drinking water sources, and have trained personnel to effectively regulate oil and gas exploration and production; and,

WHEREAS, production of coal seam natural gas, natural gas from shale formations and natural gas from tight conventional reservoirs is increasingly important to domestic natural gas supply and will be even more in important in the future; and,

WHEREAS, hydraulic fracturing plays a major role in the development of virtually all unconventional oil and gas resources and, thus, should not be limited in the absence of any evidence that such fracturing has damaged the environment; and,

WHEREAS, regulation of hydraulic fracturing as underground injection under the SDWA would impose significant administrative costs on the state and substantially increase the cost of drilling oil and gas wells with no resulting environmental benefits; and,

WHEREAS, regulation of hydraulic fracturing as underground injection under the SDWA would increase energy costs to the consumer,

NOW, THEREFORE, BE IT RESOLVED, the IOGCC hereby declares its support for maintaining the exemption of hydraulic fracturing from the provisions of the SDWA and urges the Congress of the United States to not pass legislation that removes the exemption for hydraulic fracturing.

History: New resolution submitted January 7, 2009, by the IOGCC Steering Committee
Approved, Special Telephonic Business Committee Meeting, January 9, 2009

ACT# 2009- 241

HJR254

108408-2

By Representatives Allen, Buskey, Guin, Scott, McClurkin, Mask and Harper

RFD: Rules

First Read: 03-MAR-09

ENROLLED, House Joint Resolution,

REQUESTING CONGRESS TO PRESERVE THE PRIMACY OF THE STATE OIL AND GAS BOARD OF ALABAMA TO REGULATE HYDRAULIC FRACTURING IN COMPLIANCE WITH DECADES OLD STATE REGULATIONS AND NOT TO ENACT ANY FUTURE LEGISLATION THAT WOULD REMOVE THIS PRIMACY.

WHEREAS, the regulation of oil and gas exploration and production activities, including hydraulic fracturing, has traditionally been the province of the states; and

WHEREAS, approximately 35,000 wells are hydraulically fractured annually in the United States and nearly 1,000,000 wells have been hydraulically fractured in the United States since the technique's inception, with no known harm to groundwater; and

WHEREAS, production of coal seam natural gas, natural gas from shale formations, and natural gas from tight conventional reservoirs is increasingly important to domestic natural gas supply and will be more important in the future; and

WHEREAS, Alabama was a pioneer in both the development of coal seam natural gas and the hydraulic fracturing technology necessary to make production economic; and

WHEREAS, coal seam gas now accounts for about 40 percent of all natural gas produced in Alabama because of successful implementation of hydraulic fracturing; and

WHEREAS, domestic production of natural gas will ensure that the United States continues on the path to energy independence; and

WHEREAS, hydraulic fracturing plays a major role in the development of virtually all unconventional oil and gas resources and, thus, should not be limited in the absence of any evidence that hydraulic fracturing has damaged the environment; and

WHEREAS, the United States Congress passed the Safe Drinking Water Act, 42 U.S.C. § 300h (SDWA) to assure the protection of the nation's drinking water sources; and

WHEREAS, since the enactment of the SDWA, the United States Environmental Protection Agency (EPA) has never interpreted hydraulic fracturing as constituting "underground injection" within the SDWA; and

WHEREAS, in 2004, the EPA published a final report summarizing a study to evaluate the potential threat to underground sources of drinking water (USDWs) from hydraulic fracturing of coalbed methane (CBM) production wells and concluded that "additional or further study is not warranted at this time" and that "the injection of hydraulic fracturing fluids into CBM wells poses minimal threat to USDWs"; and

WHEREAS, the United States Congress, in the Energy Policy Act of 2005, explicitly exempted hydraulic fracturing from the provisions of the SDWA; and

WHEREAS, the Interstate Oil and Gas Compact Commission (IOGCC) conducted a survey of oil and gas producing states and found that there were no known cases of ground water contamination associated with hydraulic fracturing; and

WHEREAS, hydraulic fracturing is currently, and has been for decades, a common operation used in exploration and production by the oil and gas industry in all the member states of the IOGCC without groundwater damage; and

WHEREAS, the SDWA has never intended to grant to the federal government authority to regulate oil and gas drilling and production operations, such as "hydraulic fracturing," under the Underground Injection Control Program; and

WHEREAS, the member states of the IOGCC have adopted comprehensive laws and regulations to provide for safe operations and to protect the nation's drinking water sources, and have trained personnel to effectively regulate oil and gas exploration and production; and

WHEREAS, regulation of hydraulic fracturing as underground injection under the SDWA would impose significant administrative costs on the state and substantially increase the cost of drilling oil and gas wells with no resulting environmental benefits; and

WHEREAS, the United States Department of Energy recently studied the impacts of subjecting hydraulic fracturing to the EPA Underground Injection Control Program and projected it would add an average of more than $100,000 in costs to each new natural gas well requiring fracturing, resulting in billions of dollars in deferred investment, reductions of 35 percent to 50 percent in new drilling for unconventional natural gas, foregone reserve additions of as much as 50 trillion cubic feet of natural gas, and foregone royalties from gas of nearly 50 billion dollars over 25 years; and

WHEREAS, regulation of hydraulic fracturing as underground injection under the SDWA would increase energy costs to the consumer; now therefore,

BE IT RESOLVED BY THE LEGISLATURE OF ALABAMA, BOTH HOUSES THEREOF CONCURRING, That the Alabama Legislature hereby declares its support for the State Oil and Gas Board of Alabama maintaining primacy for the regulation of hydraulic fracturing and urges the Congress of the United States not to pass legislation that would remove state primacy for hydraulic fracturing by regulating the practice under the Safe Drinking Water Act.

BE IT FURTHER RESOLVED, That copies of this resolution be sent forthwith to the President of the United States, to the President of the Senate, and the Speaker of the

House of Representatives of the United States Congress and to the members of the Alabama Congressional Delegation.

Speaker of the House of Representatives

President and Presiding Officer of the Senate

House of Representatives

I hereby certify that the within Act originated in and was adopted by the House 05-MAR-09.

Greg Pappas
Clerk

Senate 07-APR-09 Adopted

APPROVED April 20, 2009

TIME 9:10 a.m.

GOVERNOR

Alabama Secretary Of State

Act Num....: 2009-241
Bill Num...: HJR-254

Recv'd 04/20/09 03:01pmJJB

HLS 09RS-1501 **4/22/09 9:36 AM**

Regular Session, 2009

HOUSE CONCURRENT RESOLUTION NO.

BY REPRESENTATIVE HARRISON

ENERGY/DRILLING: Memorializes Congress to maintain the exemption from the Safe Drinking Water Act for hydraulic fracturing

To memorialize the United States Congress to take such actions as are necessary to preserve and maintain the exemption from the Safe Drinking Water Act for hydraulic fracturing.

WHEREAS, the Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply; and

WHEREAS, since the 1974 enactment of the Safe Drinking Water Act, the Environmental Protection Agency (EPA) has never interpreted hydraulic fracturing as constituting "underground injection" within the definitions of the SDWA; and

WHEREAS, in 2004, the EPA published a final report summarizing a study that evaluated the potential threat to underground drinking water sources from hydraulic fracturing of coal bed methane production wells and the EPA concluded that "the injection of hydraulic fracturing fluids into coal bed methane wells poses minimal threat" to underground sources of drinking water and that "additional or further study is not warranted at this time . . ."; and

WHEREAS, in the Energy Policy Act of 2005, the United States Congress explicitly exempted hydraulic fracturing from the provisions of the Safe Drinking Water Act; and

WHEREAS, the Interstate Oil and Gas Compact Commission (IOGCC) conducted a survey of oil and gas producing states which found that there were no known cases of groundwater contamination associated with hydraulic fracturing; and

WHEREAS, hydraulic fracturing is currently, and has been for decades, a common practice used in exploration and production by the oil and gas industry in all IOGCC member states without groundwater damage; and

WHEREAS, approximately 35,000 wells are hydraulically fractured in the United States annually, and close to a million wells have been hydraulically fractured in the United States since the technique's inception, all with no known harm to groundwater; and

WHEREAS, the regulation of oil and gas exploration and production activities, including hydraulic fracturing, has traditionally been the responsibility of the states and the Safe Drinking Water Act was never intended to grant to the federal government authority to regulate oil and gas drilling and production operations, such as "hydraulic fracturing," which is regulated under the Underground Injection Control program; and

WHEREAS, the individual member states of the IOGCC have adopted comprehensive laws and regulations to provide safe operations and to protect the nation's drinking water sources, and have trained personnel to effectively regulate oil and gas exploration and production; and

WHEREAS, production of coal seam natural gas, natural gas from shale formations, and natural gas from tight conventional reservoirs is becoming increasingly important to our domestic natural gas supply and will be even more important in the future; and

WHEREAS, continued and expanded domestic production of natural gas will help ensure that the United States continues on the path to energy independence; and

WHEREAS, hydraulic fracturing plays a major role in the development of virtually all unconventional oil and gas resources and regulation of hydraulic fracturing as underground injection under the Safe Drinking Water Act would impose significant administrative costs on the states and substantially increase the cost of drilling oil and gas wells with no resulting environmental benefits; and

WHEREAS, in addition to increasing the costs both to the producers of oil and gas resources and the states for regulation of hydraulic fracturing as underground injection under the SDWA, the costs to the consumer would also increase if hydraulic fracturing was limited or prohibited.

THEREFORE, BE IT RESOLVED that the Legislature of Louisiana does hereby memorialize the United States Congress to take such actions as are necessary to preserve and maintain the exemption from the Safe Drinking Water Act for hydraulic fracturing.

BE IT FURTHER RESOLVED that a copy of this Resolution be transmitted to the presiding officers of the Senate and the House of Representatives of the Congress of the United States of America and to each member of the Louisiana congressional delegation.

DIGEST

The digest printed below was prepared by House Legislative Services. It constitutes no part of the legislative instrument. The keyword, one-liner, abstract, and digest do not constitute part of the law or proof or indicia of legislative intent. [R.S. 1:13(B) and 24:177(E)]

Harrison No.

Memorialize the United States Congress to take such actions as are necessary to preserve and maintain the exemption from the Safe Drinking Water Act for hydraulic fracturing.

Sixty-first Legislative Assembly of North Dakota
In Regular Session Commencing Tuesday, January 6, 2009

SENATE CONCURRENT RESOLUTION NO. 4020
(Senators O'Connell, Grindberg, Wardner)
(Representatives Berg, S. Meyer, Skarphol)

A concurrent resolution urging Congress to preserve the exemption of hydraulic fracturing from the provisions of the Safe Drinking Water Act and to not enact legislation that removes the exemption for hydraulic fracturing.

WHEREAS, Congress enacted the Safe Drinking Water Act to ensure the protection of the nation's drinking water sources; and

WHEREAS, since enactment of the Safe Drinking Water Act, the Environmental Protection Agency has never interpreted hydraulic fracturing as constituting "underground injection" under the Safe Drinking Water Act; and

WHEREAS, in 2004 the Environmental Protection Agency published a final report summarizing a study to evaluate the potential threat to underground sources of drinking water from hydraulic fracturing of coalbed methane production wells and the Environmental Protection Agency concluded that "additional or further study is not warranted at this time..." and that "the injection of hydraulic fracturing fluids into coalbed methane wells poses minimal threat to the underground sources of drinking water"; and

WHEREAS, Congress, in the Energy Policy Act of 2005, explicitly exempted hydraulic fracturing from the provisions of the Safe Drinking Water Act; and

WHEREAS, the Interstate Oil and Gas Compact Commission conducted a survey of North Dakota and other oil and gas-producing states which found that there were no known cases of ground water contamination associated with hydraulic fracturing; and

WHEREAS, hydraulic fracturing is currently, and has been for decades, a common operation used in exploration and production by the oil and gas industry in North Dakota and all the member states of the Interstate Oil and Gas Compact Commission; and

WHEREAS, approximately 35,000 wells are hydraulically fractured annually in the United States, and close to one million wells have been hydraulically fractured in the United States since the technique's inception, with no known harm to ground water; and

WHEREAS, the regulation of oil and gas exploration and production activities, including hydraulic fracturing, has traditionally been the province of the states; and

WHEREAS, the success of the Bakken Formation and development of domestic oil and gas resources across the United States has been revitalized by technological advancements which include the ability to fracture and stimulate challenging geological formations, such as the Bakken Formation in North Dakota, and thus should not be limited in the absence of any evidence that such fracturing has damaged the environment; and

WHEREAS, the Safe Drinking Water Act was never intended to grant to the federal government authority to regulate oil and gas drilling and production operations, such as "hydraulic fracturing," under the underground injection control program; and

WHEREAS, North Dakota and other member states of the Interstate Oil and Gas Compact Commission have adopted comprehensive laws and regulations to provide for safe operations and to protect the nation's drinking water sources and have trained personnel to effectively regulate oil and gas exploration and production; and

WHEREAS, domestic production of natural gas will ensure that the United States continues on the path to energy independence; and

WHEREAS, regulation of hydraulic fracturing as underground injection under the Safe Drinking Water Act would impose significant administrative costs on the state, substantially increase the cost of drilling oil and gas wells, and potentially stop the development of our state's valuable natural resources, including the Bakken and other formations with no resulting environmental benefits; and

WHEREAS, regulation of hydraulic fracturing as underground injection under the Safe Drinking Water Act would increase energy costs to the consumer;

NOW, THEREFORE, BE IT RESOLVED BY THE SENATE OF NORTH DAKOTA, THE HOUSE OF REPRESENTATIVES CONCURRING THEREIN:

That the Sixty-first Legislative Assembly urges the Congress of the United States to preserve the exemption of hydraulic fracturing from the provisions of the Safe Drinking Water Act and urges the Congress of the United States not to enact legislation that removes the exemption for hydraulic fracturing; and

BE IT FURTHER RESOLVED, that the Secretary of State forward copies of this resolution to the President of the United States, to the President of the Senate and the Speaker of the House of Representatives of the United States, and to each member of the North Dakota Congressional Delegation.

President of the Senate

Speaker of the House

Secretary of the Senate

Chief Clerk of the House

Filed in this office this _____ day of _____, 2009,

at _____ o'clock _____ M.

Secretary of State

STATE OF OKLAHOMA

1st Session of the 52nd Legislature (2009)

HOUSE CONCURRENT
RESOLUTION 1012

By: Thompson of the House

and

Bingman of the Senate

AS INTRODUCED

A Concurrent Resolution expressing support for the preservation of the exemption for hydraulic fracturing from the Safe Drinking Water Act; urging Congress not to pass legislation that removes the exemption; and directing distribution.

WHEREAS, the United States Congress passed the Safe Drinking Water Act to assure the protection of the nation's drinking water sources; and

WHEREAS, since the enactment of the Safe Drinking Water Act, the United States Environmental Protection Agency has never interpreted hydraulic fracturing as constituting "underground injection" under the Act; and

WHEREAS, in the case of *Legal Environmental Assistance Foundation v. United States Environmental Protection Agency (EPA)*, 118 F3d 1467 (11th Cir. 1997), the United States 11th Circuit Court

of Appeals ruled contrary to argument of the United States Environmental Protection Agency that hydraulic fracturing constituted "underground injection" under the Safe Drinking Water Act; and

WHEREAS, in 2004, the Environmental Protection Agency published a final report summarizing a study to evaluate the potential threat to underground sources of drinking water from hydraulic fracturing of coalbed methane production wells and concluded that "additional or further study is not warranted at this time . . ." and "that the injection of hydraulic fracturing fluids into coalbed methane wells poses minimal threat to underground sources of drinking water"; and

WHEREAS, the United States Congress, in the Energy Policy Act of 2005, explicitly exempted hydraulic fracturing from the provisions of the Safe Drinking Water Act; and

WHEREAS, the Interstate Oil and Gas Compact Commission conducted a survey of oil- and gas-producing states and found that there were no known cases of groundwater contamination associated with hydraulic fracturing; and

WHEREAS, hydraulic fracturing is currently, and has been for decades, a common operation used in exploration and production by the oil and gas industry in all the member states of the Interstate Oil and Gas Compact Commission without groundwater damage; and

WHEREAS, approximately 35,000 wells are hydraulically fractured annually in the United States and close to one million wells have

been hydraulically fractured in the United States since the inception of the technique, with no known harm to groundwater; and

WHEREAS, the regulation of oil and gas exploration and production activities, including hydraulic fracturing, has traditionally been the province of the states; and

WHEREAS, the Safe Drinking Water Act was never intended to grant to the federal government authority to regulate oil and gas drilling and production operations, such as hydraulic fracturing, under the Underground Injection Control program; and

WHEREAS, the member states of the Interstate Oil and Gas Compact Commission have adopted comprehensive laws and regulations to provide for safe operations and to protect the drinking water sources of the nation, and have trained personnel to effectively regulate oil and gas exploration and production; and

WHEREAS, production of coal-seam natural gas, natural gas from shale formations and natural gas from tight conventional reservoirs is increasingly important to domestic natural gas supply and will be even more important in the future; and

WHEREAS, domestic production of natural gas will ensure that the United States continues on the path to energy independence; and

WHEREAS, hydraulic fracturing plays a major role in the development of virtually all unconventional oil and gas resources and should not be limited in the absence of any evidence that hydraulic fracturing has damaged the environment; and

WHEREAS, regulation of hydraulic fracturing as underground injection under the Safe Drinking Water Act would impose significant administrative costs on the state and substantially increase the cost of drilling oil and gas wells with no resulting environmental benefits; and

WHEREAS, the regulation of hydraulic fracturing as underground injection under the Safe Drinking Water Act would increase energy costs to the consumer.

NOW, THEREFORE, BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES OF THE 1ST SESSION OF THE 52ND OKLAHOMA LEGISLATURE, THE SENATE CONCURRING THEREIN:

THAT the Oklahoma Legislature hereby declares its support for maintaining the exemption of hydraulic fracturing from the provisions of the Safe Drinking Water Act and urges the Congress of the United States not to pass legislation that removes the exemption for hydraulic fracturing.

THAT a copy of this resolution be distributed to the President of the United States, the President of the United States Senate, the Speaker of the United States House of Representatives, and to each member of the Oklahoma Congressional Delegation.

52-1-7241 KB 03/02/09

Enrolled Copy **S.J.R. 17**

HYDRAULIC FRACTURING JOINT RESOLUTION

2009 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: David P. Hinkins

House Sponsor: Michael E. Noel

LONG TITLE

General Description:

This joint resolution of the Legislature urges Congress to preserve the exemption for hydraulic fracturing in the Safe Drinking Water Act and to refrain from passing legislation that would remove the hydraulic fracturing exemption.

Highlighted Provisions:

This resolution:

- expresses support for maintaining the exemption of hydraulic fracturing from the provisions of the Safe Drinking Water Act; and
- urges Congress to refrain from passing legislation that would remove the exemption for hydraulic fracturing.

Special Clauses:

None

Be it resolved by the Legislature of the state of Utah:

WHEREAS, the United States Congress passed the Safe Drinking Water Act (Act) to assure the protection of the nation's drinking water sources;

WHEREAS, since the enactment of the Act, the Environmental Protection Agency (EPA) has never interpreted hydraulic fracturing as constituting "underground injection" within the Act;

WHEREAS, in 2004, the EPA published a final report summarizing a study to evaluate the potential threat to underground sources of drinking water from hydraulic fracturing of coal

bed methane production wells and the EPA concluded that "additional or further study is not warranted at this time . . ." and "that the injection of hydraulic fracturing fluids into coal bed methane wells poses minimal threat" to underground sources of drinking water;

WHEREAS, in the Energy Policy Act of 2005, the United States Congress explicitly exempted hydraulic fracturing from the provisions of the Act;

WHEREAS, the Interstate Oil and Gas Compact Commission (IOGCC) conducted a survey of oil and gas producing states which found that there were no known cases of groundwater contamination associated with hydraulic fracturing;

WHEREAS, hydraulic fracturing is currently, and has been for decades, a common operation used in exploration and production by the oil and gas industry in all the member states of the IOGCC without groundwater damage;

WHEREAS, approximately 35,000 wells are hydraulically fractured in the United States annually, and close to 1,000,000 wells have been hydraulically fractured in the United States since the technique's inception, with no known harm to groundwater;

WHEREAS, the regulation of oil and gas exploration and production activities, including hydraulic fracturing, has traditionally been the province of the states;

WHEREAS, the Act was never intended to grant to the federal government authority to regulate oil and gas drilling and production operations, such as "hydraulic fracturing," under the Underground Injection Control program;

WHEREAS, the member states of the IOGCC have adopted comprehensive laws and regulations to provide safe operations and to protect the nation's drinking water sources, and have trained personnel to effectively regulate oil and gas exploration and production;

WHEREAS, production of coal seam natural gas, natural gas from shale formations, and natural gas from tight conventional reservoirs is increasingly important to our domestic natural gas supply and will be even more important in the future;

WHEREAS, domestic production of natural gas will ensure that the United States continues on the path to energy independence;

WHEREAS, hydraulic fracturing plays a major role in the development of virtually all

unconventional oil and gas resources and, in the absence of any evidence that such fracturing has damaged the environment, should not be limited;

WHEREAS, regulation of hydraulic fracturing as underground injection under the Act would impose significant administrative costs on the state and substantially increase the cost of drilling oil and gas wells with no resulting environmental benefits; and

WHEREAS, regulation of hydraulic fracturing as underground injection under the Act would increase energy costs to the consumer:

NOW, THEREFORE, BE IT RESOLVED that the Legislature of the state of Utah expresses support for maintaining the exemption of hydraulic fracturing in the Safe Drinking Water Act and urges the United States Congress to refrain from passing legislation that would remove the exemption for hydraulic fracturing.

BE IT FURTHER RESOLVED that a copy of this resolution be sent to the President of the United States, the Majority Leader of the United States Senate, the Speaker of the United States House of Representatives, and to the members of Utah's congressional delegation.

SENATE JOINT RESOLUTION NO. SJ0005

Hydraulic fracturing.

Sponsored by: Senator(s) Bebout, Anderson, J., Cooper, Hines, Martin and Vasey and Representative(s) Anderson, R., Cohee, Craft, Illoway, Lockhart, Lubnau, Meyer, Miller and Pedersen

A Bill

for

A JOINT RESOLUTION requesting Congress to preserve the exemption of hydraulic fracturing in the Safe Drinking Water Act and to not pass any future legislation which would remove the exemption.

WHEREAS, the United States Congress passed the Safe Drinking Water Act, 42 U.S.C § 300h (SDWA) to assure the protection of the nation's drinking water sources; and

WHEREAS, since the enactment of the SDWA, the United States Environmental Protection Agency (EPA) had never interpreted hydraulic fracturing as constituting "underground injection" within the SWDA; and

WHEREAS, the United States 11th Circuit Court of Appeals ruled contrary to argument of the EPA that hydraulic fracturing constituted "underground injection" under the SDWA. Legal Environmental Assistance Foundation v. United States Environmental Protection Agency, 118 F3d 1467 (11th Cir. 1997); and

WHEREAS, in 2004, the EPA published a final report summarizing a study to evaluate the potential threat to underground sources of drinking water (USDWs) from hydraulic fracturing of coalbed methane (CBM) production wells and concluded that "additional or further study is not warranted at this time…" and that "the injection of hydraulic fracturing fluids into CBM wells poses minimal threat to USDWs."; and

WHEREAS, the United States Congress, in the Energy Policy Act of 2005, explicitly exempted hydraulic fracturing from the provisions of the SDWA; and

WHEREAS, the Interstate Oil and Gas Compact Commission (IOGCC) conducted a survey of oil and gas producing states and found that there were no known cases of ground water contamination associated with hydraulic fracturing; and

WHEREAS, hydraulic fracturing is currently, and has been for decades, a common operation used in exploration and production by the oil and gas industry in all the member states of the IOGCC without groundwater damage; and

WHEREAS, approximately thirty-five thousand (35,000) wells are hydraulically fractured annually in the United States and nearly one million (1,000,000) wells have been hydraulically fractured in the United States since the technique's inception, with no known harm to groundwater; and

WHEREAS, the regulation of oil and gas exploration and production activities, including hydraulic fracturing, has traditionally been the province of the states; and

WHEREAS, the SWDA was never intended to grant to the federal government authority to regulate oil and gas drilling and production operations, such as "hydraulic fracturing", under the Underground Injection Control program; and

WHEREAS, the member states of the IOGCC have adopted comprehensive laws and regulations to provide for safe operations and to protect the nation's drinking water sources, and have trained personnel to effectively regulate oil and gas exploration and production; and

WHEREAS, production of coal seam natural gas, natural gas from shale formations and natural gas from tight conventional reservoirs is increasingly important to domestic natural gas supply and will be more important in the future; and

WHEREAS, domestic production of natural gas will ensure that the United States continues on the path to energy independence; and

WHEREAS, hydraulic fracturing plays a major role in the development of virtually all unconventional oil and gas resources and, thus, should not be limited in the absence of any evidence that hydraulic fracturing has damaged the environment; and

WHEREAS, regulation of hydraulic fracturing as underground injection under the SDWA would impose significant

administrative costs on the state and substantially increase the cost of drilling oil and gas wells with no resulting environmental benefits; and

WHEREAS, regulation of hydraulic fracturing as underground injection under the SDWA would increase energy costs to the consumer.

NOW, THEREFORE, BE IT RESOLVED BY THE MEMBERS OF THE LEGISLATURE OF THE STATE OF WYOMING:

Section 1. That the Wyoming State Legislature hereby declares its support for maintaining the exemption of hydraulic fracturing from the provisions of the SDWA and urges the Congress of the United States not to pass legislation that would remove the exemption for hydraulic fracturing.

Section 2. That the Secretary of State of Wyoming transmit copies of this resolution to the President of the United States, to the President of the Senate and the Speaker of the House of Representatives of the United States Congress and to the Wyoming Congressional Delegation.

(END)