

**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**

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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.