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TESTIMONY OF THE HONORABLE JEFF CLOUD
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BEFORE THE U.S. SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC
WORKS
AND SUBCOMMITTEE ON WATER AND WILDLIFE
JOINT HEARING
"NATURAL GAS DRILLING: PUBLIC HEALTH AND ENVIRONMENTAL
IMPACTS"
TUESDAY, APRIL 12, 2011

I very much appreciate the opportunity to testify today before the joint hearing of the Senate Committee on Environment and Public Works and the Subcommittee on Water and Wildlife about the regulation of hydraulic fracturing and Oklahoma's many decades of experience in this regard.

Oklahoma's first commercial oil well was drilled in 1897, which was 10 years before Oklahoma officially became a state in 1907. Since then, oil and natural gas production has expanded into almost part of the state.

The Oklahoma Corporation Commission (OCC) was first given responsibility for regulation of oil and gas production in Oklahoma in 1914. Currently the Commission has exclusive state jurisdiction over all oil and gas industry activity in Oklahoma, including oversight and enforcement of rules aimed at pollution prevention and abatement and protecting the state's precious water supplies.

Presently, there are over 185,000 active wells in Oklahoma – roughly 115,000 oil, 65,000 gas and 10,500 injection/disposal wells – and thousands of miles of gathering and transmission pipelines.

In recent years the Woodford Shale in Oklahoma has become an important source of natural gas for the nation. The development of the Oklahoma's Woodford Shale, like the other shale regions in the United States, has been made possible by horizontal drilling and hydraulic fracturing technologies.

Hydraulic fracturing has been used for over 60 years in Oklahoma, and more than 100,000 Oklahoma wells have been hydraulically fractured over that period. Over that more than half century of hydraulic frac experience, there has not been a single documented instance of contamination to groundwater or drinking water as result of hydraulic fracturing.

To say we take protection of our water quality seriously would be an understatement. Our rules are constantly reviewed and updated with that in mind. Our rules include a general prohibition against pollution of any surface or subsurface fresh water from well completion activities.

Proper casing and cementing represent the primary means of protecting fresh water during hydraulic fracturing operations. Production casing is required to be cemented a minimum of 200 feet above oil and gas producing zones and Corporation Commission inspectors must be given at least 24 hours advance notice of cementing so that the inspector can witness that activity.

Oklahoma Corporation Commission rules address procedures in the event of unanticipated operational or mechanical changes that may be encountered during hydraulic fracturing and require the operator of the well to contact Commission officials within 24 hours of discovery of a casing problem. In addition to that notice, immediate

remedial action is also required to repair any problems with surface or production casing.

A guidance document, referred to as the Oklahoma Corporation Commission “Guardian Guidance” has been developed and distributed widely. It provides the incremental process that an oil and gas operator should follow to assess, remediate if necessary and to close any site that would be found to impact ground water or surface water.

As previously stated, Corporation Commission rules require operators to give 24-hour notice before setting surface casing or cementing surface strings. Standard Commission rules also require an operator to submit a well completion report within 30 days after completion activities. The volumes of fluids and proppants used in any hydraulic frac operation are required on the form. Commission rules also allow the agency to obtain information identifying chemicals used in hydraulic fracturing or other exploration and production operations.

In August of 2010, the Oklahoma Corporation Commission volunteered to have its hydraulic fracturing program reviewed by a 12-year-old multi-stakeholder organization known as STRONGER, or, by its full name, State Review of Oil & Natural Gas Environmental Regulations. The Oklahoma oil and gas regulatory program had undergone three successful prior reviews.

From October 2010 through January 2011, a sevenperson, again multi-stakeholder review team appointed by STRONGER conducted an in-depth examination of Oklahoma’s hydraulic regulatory program. The review team included Leslie Savage of the Texas Railroad Commission; Wilma Subra, of Subra Company of New Iberia, Louisiana (and a noted critic of the domestic oil and gas industry); and Jim Collins of the Independent Petroleum Association of America. The official observers included the Oklahoma Sierra Club and the United States Environmental Protection Agency Region VI.

The review team concluded that the Oklahoma program is, overall, well managed, professional and meets its program objectives. Incidentally, the U.S. Environmental Protection Agency and U.S. Department of Energy have provided grant funding to STRONGER to support its activities.

I would also note that in Oklahoma, collaboration involving the regulated oil and gas industry, other stakeholders and my state agency’s Staff have repeatedly led to successful development of rules and policies to address environmental protection issues, particularly the protection of water.

An example: In 2008 when the Corporation Commission modified and expanded rules over oil and gas industry activity to control runoff of soil and dissolved minerals and chlorides into the watershed that feeds two vital southeast Oklahoma lakes.

The two particular lakes that I mentioned – Lake Atoka and McGee Creek Reservoir – are exceptionally clean and provide very high quality water to the City of Oklahoma City about 100 miles away. But the lakes also are on top of deep rock deposits that hold huge amounts of natural gas, which, in the best interest of Oklahoma and the nation, we want to allow the petroleum industry to find and produce.

The rules established in 2008 replaced out-dated 1985 field rules that were developed back when there was much less oil and gas industry activity in that part of the state. The new rules were hammered out over several meetings involving representatives of Oklahoma City's water utility division, the oil and gas industry, rural water districts, counties, tribes, my agency's regulatory enforcement Staff and other stakeholders.

These revised rules modified requirements for setbacks (buffer zones) from lakes, retaining walls or berms around wellsites, for pit liners and operations for muds and fluids used and produced during drilling operations and for other requirements to provide flexibility needed by industry while increasing protection of water resources.

This allows the oil and gas industry to continue to pursue its important goal of finding and producing critical natural energy resources while also providing added measures to ensure the quality of lake waters and environment are protected.

Without the need for any federal intervention, the City of Oklahoma City, the regulated oil and gas industry and the State worked together to come up with acceptable protections because we all realize that it is in our mutual best interest to ensure proper and practical water and environmental protections without cutting off access to critical resources.

Nature by itself unfortunately did not bless Oklahoma with any natural large bodies of water, so fresh water is especially precious in my state. Oklahoma has more than 50 man-made lakes. It is worth noting that Texas is currently in court suing Oklahoma to get our state's water. We must be doing something right.

All of us can agree that there needs to be "rules of the road" and that those rules need to be followed and enforced. The issue is what works best in making sure that those rules are followed and that Oklahoma's water and our environment are protected. Oklahoma's record makes it clear that state regulation is the best way to meet those goals

I and my two fellow Commissioners hold elected positions. We are directly accountable to our fellow Oklahomans. We have both a vested and personal interest in ensuring our water is protected. After all, and not to be trite, we drink the water, too.