

Alaska Oil and Gas Association



121 W. Fireweed Lane, Suite 207
Anchorage, Alaska 99503-2035
Phone: (907) 272-1481 Fax: (907) 279-8114
Email: moriarty@aoga.org
Joshua Kindred, Environmental Counsel

December 22, 2016

Commissioner Cathy P. Foerster, Chair
Alaska Oil & Gas Conservation Commission
333 W. 7th Avenue, Suite 100
Anchorage, AK 99501
Submitted by E-Mail to: jody.colombie@alaska.gov

Re: Proposed Amendment to 20 AAC 25.280(f)

Dear Commissioner Foerster:

Thank you for the opportunity to provide the Alaska Oil and Gas Conservation Commission (“AOGCC” or “Commission”) with comments relating to the proposed modification to 20 AAC 25.280(f) (“proposed modification”). The members of the Alaska Oil and Gas Association (“AOGA”) account for the majority of oil and gas exploration, development, production, transportation, refining, and marketing activities in Alaska. As our previous comments and testimony regarding the AOGCC’s hydraulic fracturing regulations have indicated, AOGA’s members remain supportive of hydraulic fracturing regulations and chemical disclosure and the increased transparency it has provided to Alaskans. However, as articulated below, AOGA urges the AOGCC to reject the proposed modification.

AOGCC’s hydraulic fracturing regulations came at a time when a number of other States had begun to promulgate new regulations or modify existing regulations relating to hydraulic fracturing. In part, the catalyst for these regulations were to address public concerns regarding a process that is largely misunderstood. AOGA believes that the regulations as currently constructed provide ample protection and public input. The proposed modification is unnecessary, and appears to be nothing more than a veiled attempt to frustrate oil and gas recovery as opposed to articulating legitimate concerns with the current regulations.

I. Hydraulic Fracturing Studies

Hydraulic fracturing is a process that has been utilized for over a half-century. For the first 50 years, hydraulic fracturing was mostly used in vertical wells in conventional formations. Hydraulic fracturing is still used in such settings, but the process has evolved as technological developments, including horizontal and directional drilling, have allowed the use of hydraulic fracturing in unconventional hydrocarbon formations that could not otherwise be profitably

produced. Government agencies and respected authorities have conducted a myriad of studies in an attempt to determine whether the practice of hydraulic fracturing poses any environmental threats. To put it simply, those studies have found that hydraulic fracturing, particularly as it is implemented in Alaska, does not pose any harm to the environment. AOGA will focus its comments below on studies conducted by the Environmental Protection Agency (EPA), the Ground Water Protection Council (“GWPC”) and the Interstate Oil & Gas Compact Commission (“IOGCC”) as these studies provide a fair cross section, both geographically and temporally, but should hardly be considered exhaustive.

In 2004, the EPA completed an extensive survey of hydraulic fracturing practices and their effect on drinking water. The focus of that particular study was on extremely shallow methane wells, which stand in stark contrast to the depths of hydraulic fracturing in Alaska. The EPA study revealed that several factors (fluid recovery, the small amount of chemicals contained in fracture fluids, their dilution in water, and their absorption by rock formations) serve to mitigate the potential risks associated with hydraulic fracturing. Ultimately, the EPA concurred with the GWPC and the IOGCC in finding that the practice of hydraulic fracturing is environmentally safe. Of particular note, the EPA concluded that hydraulic fracturing does not create pathways for fluids to travel between rock formations to affect fresh water aquifers. In February, 2010, Steve Heare, then director of EPA’s Drinking Water Protection division said, “I have no information that states are not doing a good job already (of protecting water supplies).”¹ Heare also reported that he had not seen any documented cases where hydraulic fracturing was contaminating water supplies.

In May, 2009, the U.S. Department of Energy and Ground Water Protection conducted a study and survey of State regulations relating to the oil industry. The GWPC surveyed relevant state regulatory agencies and were unable to find evidence of even one documented case of contaminated drinking water linked to hydraulic fracturing. The GWPC discussed the process of hydraulic fracturing and noted that critics of that process routinely highlight the theoretical possibility of the exposure of hydraulic fracturing additives while failing to consider the extreme unlikelihood of aquifer contamination. Citing two comparable studies, the GWPC found that depending upon the particular fracturing design and the specific formation dynamics involved, anywhere from 30-70% of fracturing fluids are safely returned to the surface through the well. The unrecovered treatment fluids are typically trapped in the geological formation through a variety of mechanisms, including pore storage and stranding, which result in effective isolation from ground water. The GWPC also noted that the risk of endangerment to ground water is further reduced by other physical factors such as the (1) implementation of state well construction requirements; (2) vertical distance between the fractured zone and ground water; (3) presence of other zones between the fractured zone and the deepest ground water zone that may readily accept fluid; and (4) presence of vertically impermeable formations between the fractured zone and the deepest ground water zone; which act as geologic barriers to fluid migration. Additionally, the utilization of proper surface fluid handling methods significantly decreases the likelihood of environmental harm or human exposure related to hydraulic fracturing fluids.

¹ In May 5, 1995, Carol M. Browner, then an EPA administrator and now energy adviser to President Obama, stated, “There is no evidence that the hydraulic fracturing at issue has resulted in any contamination or endangerment of underground sources of drinking water.”

Furthermore, the GWPC referenced its 1998 survey of twenty-five state oil and gas regulatory agencies, which twenty-four state programs said they had not recorded any complaints of contamination to a underground sources of drinking water (“USDW”) that the agency could attribute to hydraulic fracturing of coalbed methane zones, which traditionally occur relatively close proximity to USDW’s. In the decade between studies, several citizens brought forth allegations that the practice of hydraulic fracturing had resulted in ground water contamination. The GWPC noted that the majority of those complaints related to hydraulic fracturing of coalbed methane zones. The GWPC observed that CBM wells are typically much shallower when compared to conventional oil and gas wells. The GWPC determined that, in general terms, the amount of vertical separation between an oil and gas producing formation and the deepest ground water zone in many parts of the country can be several thousand feet; while the separation of coalbed methane zones to ground water is sometimes only a few hundred feet or less. In some cases the coalbed methane zones themselves may qualify as USDWs. As noted above, EPA’s 2004 study found no confirmed cases of contamination from the relatively shallow hydraulic fracturing of CBM reservoirs. The GWPC found that the risk of fracture fluid intrusion into ground water from the hydraulic fracturing of deeper conventional and unconventional oil and gas zones should be considered very low. Specifically, the GWPC noted that hydraulic fracturing that occurs at more substantial depth poses virtually no threat to ground water, because: (1) there are frequently layers of rock between the fractured zone and ground water zones that are capable of accepting fluid under pressure; which would lower the available fluid that could reach a ground water zone; (2) there are also frequently layers of rock between the fractured zone and ground water zone through which vertical flow is restricted; thus serving as a hydraulic barrier to fluid migration; (3) the use of advanced computer modeling in fracture design has increased the ability to predict the three dimensional geometry of fracturing; which lowers the likelihood of a fracture job extending into an unintended zone.

In 2009, in response to the increase of hydraulic fracturing and the accompanying public concerns, the US House of Representatives tasked the EPA with conducting scientific research to examine the relationship between hydraulic fracturing and drinking water resources. In June 2015, the EPA began to release its findings. Specifically, the EPA’s report stated:

The EPA reviewed state-of-the-science studies and employed a structured and logical method of analysis to reach its conclusions by focusing on those areas where hydraulic fracturing was conducted in close proximity to drinking water supplies and/or residents. With this approach, **if a significant correlation between impaired drinking water resources and hydraulic fracturing existed, EPA would have identified it; however, the results did not support this finding.** Further quantitative support comes from a large, credible body of case studies and peer-reviewed scientific literature from around the country that conducted quantitative analysis and modeling of potential causative mechanisms for hydraulic fracturing fluids to come into contact with drinking water resources. Incorporation of these studies into their analysis further demonstrates that **there are no widespread effects to drinking water resources from hydraulic fracturing.**” (emphasis added)

The report also finds that EPA's evaluation of the scale of impacts is appropriate. After all, the purpose of EPA's study was to find out the overall risk and the data point to one conclusion only – that the impacts are not systemic. As the report states:

EPA considered that, at the scale of 25,000-30,000 new hydraulically fractured wells annually, the few instances of potential impairment are neither systemic nor widespread. At a geographic scale, the study addresses impacts from the national to the county level. Local impacts, at the scale of a well pad, occur rarely.

In December, the EPA released its final report capturing the results of its comprehensive study regarding the practice of hydraulic fracturing. The substance of the report, the actual data the study revealed, reinforces the 2015 draft report's topline conclusion that there was no evidence of "widespread, systemic impacts" from fracking. Any risks associated with the practice are easily remedied through proper engineering and regulations. Although the public at large may have reservations about the practice of hydraulic fracturing, AOGA believes it is important that the AOGCC's regulations consider relevant scientific conclusions rather than unsubstantiated rhetoric.

II. STRONGER Review

STRONGER, is an acronym for State Review of Oil and Natural Gas Environmental Regulations, which is a 501(c)3 nonprofit, multi-stakeholder, educational organization. The Board of Directors is comprised of equal representation from the oil and gas industry, state oil and gas environmental regulatory agencies, and the environmental public advocacy community. STRONGER's mission is to enhance protection of human health and the environment by educating and providing services for the continuous improvement of state oil and gas environmental regulatory programs. STRONGER's work focuses on two areas: developing Guidelines for state oil and gas environmental regulatory programs, and publishing State Review Reports of volunteer programs against the criteria of those Guidelines. All STRONGER efforts are led by multi-stakeholder workgroups comprised of subject-matter experts.

In February 2015, the AOGCC volunteered to have its program reviewed by STRONGER. This review began with a questionnaire prepared by the STRONGER Board of Directors that was sent to AOGCC. STRONGER intended the questionnaire to capture the status of the AOGCC program relative to the 2013 Hydraulic Fracturing Guidelines. AOGCC prepared a response to the questionnaire, which was then sent to the review team. In July 2015, the review team traveled to Anchorage to conduct an interview of AOGCC staff. The interview was an open meeting held on July 30 at the AOGCC office.

The review team has concluded that the AOGCC is well managed, professional, and meets the criteria of the STRONGER 2013 Hydraulic Fracturing Guidelines. The review team identified a number of program strengths that warrant special recognition.

Of particular relevance to the proposed modification, the STRONGER team found that:

AOGCC is commended for its comprehensive program regulatory review with its robust public participation, and the resulting regulatory update prior to large-scale hydraulic fracturing operations occurring in Alaska.

It also found that:

It is commendable that AOGCC tries to “err on the side of [public] disclosure” and that staff generally respond to state public records requests within 10 business days.

The STRONGER review unequivocally lauds the Commission for its hydraulic fracturing regulations and its communication with the public.

III. Comments

The AOGCC currently regulates the practice of hydraulic fracturing and those regulations were developed through a lengthy and transparent public process. As relevant here, the general public has already been afforded ample opportunity to provide input to development of the regulations for hydraulic fracking in Alaska. Furthermore, if the Commission ever chooses to modify the regulations in the future, the public will again be afforded an opportunity to review and comment on those changes. The requirement for a public hearing prior to each hydraulic fracturing operation would add excessive delay and cost to the currently-existing process whereby the AOGCC staff conducts the technical reviews in a routine and timely manner. Therefore, a public hearing in advance of the operations would result in increased costs to the state and the operators, and it would also result in substantially longer review times which would, in turn, result in delays in new production from the wells. In particular, the requirement of a public hearing for hydraulic fracturing of development or exploration wells would likely result in a long period of expensive rig down-time while waiting for the public comment process to be completed. Simply stated, holding a public hearing for each individual hydraulic fracturing process would simply result in increased costs, lengthier delays, and great uncertainty, and not result in any substantive changes to the regulations under which the actual project would be carried out.

The State has purposefully and intelligently granted the AOGCC with the absolute authority to oversee all operations and ensure that operators are meaningfully adhering to the applicable regulations. The AOGCC staff includes highly-trained personnel who have a history of being extremely diligent in their critical review of industry operations, and their technical capability for oversight of each hydraulic fracturing procedure is much more acute than could possibly be gained through comments from the general public. Therefore, a public hearing in advance of the operations would fail to provide any additional or meaningful oversight to ensure that the applicable regulations are being followed by the operator. The current regulations already mandate the operators provide public notice to parties near any proposed fracking operation, and the materials used in the fracturing process are publicly disclosed. A public hearing would fail to provide any additional information to the public.

As articulated through the studies referenced above, hydraulic fracturing is no more dangerous or environmentally sensitive in Alaska than many other drilling and completion procedures that are

currently approved through a sundry request and AOGCC staff approval process. AOGA fears that, if the Commission mandates that a public hearing is required for each hydraulic fracturing operation, it creates a dangerous precedent, which may result in requirements for public hearings relating to all sundry requests. AOGA believes such a process will invariably become tremendously burdensome to the ultimate recovery of oil and gas within the State of Alaska.

IV. Conclusion

Objectively, and in comparison to other jurisdictions, the AOGCC hydraulic fracturing regulations are the most stringent in the nation. AOGA believes that there are no perceived benefits to be gained through an additional public hearing process for each individual hydraulic fracturing procedure. However, the costs and delays associated with such a requirement would be excessive and unnecessarily burdensome, resulting in a number of negative externalities for operators in Alaska. As this Commission has previously noted:

In over fifty years of oil and gas production, Alaska has yet to suffer a single documented instance of subsurface damage to an underground source of drinking water. As long as each well is properly constructed and its mechanical integrity is maintained, hydraulic fracturing should have no potential to damage any freshwater.

AOGA respectfully asks the AOGCC to deny the proposed modification.

Sincerely,



Joshua Kindred
Alaska Oil & Gas Association
Environmental Counsel

Cc: Commissioner Hollis French
Commissioner Dan Seamount