

Singh, Angela K (DOA)

From: Colombie, Jody J (DOA)
Sent: Monday, August 05, 2013 3:42 PM
To: Singh, Angela K (DOA)
Subject: FW: AOGA Comments & Redline on AOGCC Hydraulic Fracturing Regulations
Attachments: HF AOGA Comments 08 05 13.pdf; HF AOGA Redline 08 05 13.pdf

[process](#)

From: Kara Moriarty [<mailto:moriarty@aoga.org>]
Sent: Monday, August 05, 2013 3:30 PM
To: Foerster, Catherine P (DOA)
Cc: Parnell, Sean R (GOV); Seamount, Dan T (DOA); Norman, John K (DOA); Brakes, Heather K (GOV); Balash, Joseph R (DNR); Ballantine, Tab A (LAW); Colombie, Jody J (DOA)
Subject: AOGA Comments & Redline on AOGCC Hydraulic Fracturing Regulations

Commissioner Foerster:

Please find AOGA's initial written comments and suggested revisions to the proposed hydraulic fracturing comments. We will be supplying additional written comments, as well as providing oral testimony at the hearing on August 15.

Thank you for your consideration,
Kara

Alaska Oil and Gas Association



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Kara Moriarty, Executive Director

August 5, 2013

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 Revisions to 20 AAC 25.005,
20 AAC 25.280, 20 AAC 25.990 and proposed
addition of 20 AAC 25.283 – Regulation of
Hydraulic Fracturing Operations

Dear Commissioner Foerster:

Thank you for the opportunity to comment on the Alaska Oil and Gas Conservation Commission's ("AOGCC" or "Commission") second proposed regulation of hydraulic fracturing in revisions to 20 AAC 25.005—20 AAC 25.990 and the addition of 20 AAC 25.283. The 15 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. AOGA's members are supportive of hydraulic fracturing chemical disclosure and the increased transparency it will provide to Alaskans.

Hydraulic fracturing has been safely conducted to increase and enhance production of Alaska's oil and gas resources for decades. As AOGCC has reported, "[i]n 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."¹ Through the Commission's efforts, we will have the opportunity to provide Alaskans information regarding hydraulic fracturing operations that will help dispel any misconceptions or false impressions regarding the safety and chemical makeup of materials used in hydraulic fracturing. While many of our members already voluntarily supply this information on the chemical disclosure registry, FracFocus, AOGA supports the development and careful consideration of practical regulations that address public concerns regarding processes used for the benefit of all Alaskans.

¹ Alaska Oil and Gas Conservation Commission, Hydraulic Fracturing White Paper, (April 6, 2011) ("AOGCC White Paper").

Commissioner Cathy P. Foerster
Alaska Oil & Gas Conservation Commission
August 5, 2013

Page 2 of 2

As we indicated in our comments and testimony in April 2013, we had substantial concerns about the proposed regulations, and even though the second set of regulations does address one provision of our comments from April, many of our concerns remain.

Specifically, we have concerns about the pre-approval process, the sampling requirements and the lack of trade secret protection for proprietary information. We have enclosed suggested revisions for your consideration. The suggested language would still provide Alaskans and the public with information about the process of hydraulic fracturing, while maintaining industry's ability to operate in an efficient manner.

Thank you again for opportunity to provide written comments. AOGA will provide additional written comments and oral testimony at the August 15, 2013 public hearing. We look forward to working with AOGCC to develop final regulations that are reasonable and serve to assuage any future public concern without imposing unnecessary restrictions and straining AOGCC staff resources.

Sincerely,

A handwritten signature in black ink that reads "Kara Moriarty". The signature is written in a cursive, flowing style.

KARA MORIARTY
Executive Director

Enclosure as noted.

Cc: Governor Sean Parnell, State of Alaska
Director Heather Brakes, Office of the Governor
Commissioner John Norman, Alaska Oil & Gas Conservation Commission
Commissioner Dan Seamount, Alaska Oil & Gas Conservation Commission
Acting Commissioner Joe Balash, Department of Natural Resources

20 AAC 25.005. Permit to Drill

~~(13) a copy of the proposed drilling program; for a well proposed for hydraulic fracturing, the drilling program shall so indicate; a request for approval to perform hydraulic fracturing must be separately made by submitting Form 10-403 (Application for Sundry Approvals) with the information specified at 20 AAC 25.280 and 25.283;~~

20 AAC 25.280. Workover Operations.

~~(f) an application for Sundry Approvals for a well proposed for stimulation by hydraulic fracturing must also comply with 20 AAC 25.283.~~

20 AAC 25.283. Hydraulic Fracturing. (a) Prior to hydraulic fracturing a well with a current or proposed wellbore trajectory within one-quarter mile radius of a freshwater aquifer, for which there is no Freshwater Aquifer Exemption pursuant to 20 AAC 25.440, the operator must submit an Application For Sundry Approvals (Form 10-403) under 20 AAC 25.280. If the Commission takes no action on the application within ten (10) business days of receipt, the application shall be deemed approved. The application shall include:

(1) an affidavit showing that all owners, landowners, surface owners, and operators within a ~~one-half~~ one-quarter mile radius of the wellbore trajectory have been provided notice of operations. The notification will state that upon request, a complete copy of the application is available from the Commission operator, and will include the operator contact information.

(2) a plat showing the well location and the current or proposed wellbore trajectory identifying any water wells located within a one-half mile radius of the well's surface location and further identifying any well penetrations (all well types) within one-half one-quarter mile radius of the current or proposed wellbore trajectory and fracturing interval and the sources of the information used in identifying such wells. Applicant will make a good faith effort to identify any water wells in the defined project area. Information used to collect water well location information will include notification to surface owners and publicly available recordings including Alaska Department of Natural Resources Water Right data (AS 46.15) and similar public records.

(3) identification of freshwater aquifers within the one-half-quarter mile radius of the current or proposed wellbore trajectory;

(4) whether the well is covered by a Freshwater Aquifer Exemption as per 20 AAC 25.440;

(5) ~~water sampling of water wells. Water sampling consists of collection of baseline water data pre-fracture (but not more than 90 days prior) and follow-up water sampling collected at the same location no sooner than 90 days and no later than 120 days after the conclusion of any hydraulic fracturing operations. The sample parameters shall include pH; Alkalinity; Specific conductance; arsenic; barium; bicarbonate; boron; bromide; cadmium; calcium; carbonate; chloride; chromium; fluoride; hydroxide; iodide; iron; lithium; magnesium; manganese; potassium; radium; selenium; silicon; sodium; strontium; sulfate; Total dissolved solids; BTEX/GRO/DRO (Benzene, Toluene, Ethylene, Xylene/Gasoline Range Organics/Diesel Range Organics); TPH (Total Petroleum Hydrocarbons) or Oil and Grease (HEM); PAH's (Polynuclear Aromatic Hydrocarbons including benzo(a)pyrene); Dissolved Methane, Dissolved Ethane, and Dissolved Propane. Current applicable EPA approved sample custody and collection protocols and analytical methods for drinking water must be used and analyses must be performed by laboratories that maintain nationally accredited programs. Copies of all test~~

~~results, analytical results and sample locations shall be provided to the commission and to the Alaska Department of Environmental Conservation in printed form and in an electronic data deliverable format that is acceptable to the commission within 90 days of collecting the samples;~~

(5) A plan for water sampling of up to four water wells within 1,000 vertical feet and one-quarter mile radius of the proposed wellbore trajectory is required. If there are no water wells located within 1,000 vertical feet and one-quarter mile of the proposed wellbore trajectory, or if property owners do not grant permission for sampling, then this will be documented and submitted in the application. Water sampling should consist of collection of baseline water data pre-fracture and follow-up water sampling collected at the same location no sooner than 90 days and no later than 180 days after the conclusion of any hydraulic fracturing operations.

(A) Surface Owner Access and Exception Process

(i) Surface owners have the right to refuse written permission for water well access and/or disclosure of sampling results.

(ii) If the owners of water wells suitable for testing under this rule do not grant access despite an operator's reasonable good faith efforts to obtain consent to conduct sampling, then an operator may apply for exception to this sampling. An operator seeking an exception on this ground shall document the efforts used to obtain access from the owners of suitable water wells.

(iii) If the Commission takes no action on the application within ten (10) business days of receipt, the requested exception from the requirements of this rule shall be deemed approved.

(B) Sample Parameters. The sample parameters shall include pH; Alkalinity; Specific conductance; arsenic; barium; bicarbonate; boron; bromide; cadmium; calcium; carbonate; chloride; chromium; fluoride; hydroxide; iodide; iron; lithium; magnesium; manganese; potassium; radium; selenium; silicon; sodium; strontium; sulfate; Total dissolved solids; BTEX/GRO/DRO (Benzene, Toluene, Ethylene, Xylene/Gasoline Range Organics/Diesel Range Organics); TPH (Total Petroleum Hydrocarbons) or Oil and Grease (HEM); PAH's (Polynuclear Aromatic Hydrocarbons including benzo(a)pyrene); Dissolved Methane, Dissolved Ethane, and Dissolved Propane. Current applicable EPA-approved sample custody and collection protocols and analytical methods for drinking water must be used and analyses must be performed by laboratories that maintain nationally accredited programs. Copies of all test results, analytical results and sample locations shall be provided to the commission and to the Alaska Department of Environmental Conservation within 90 days of collecting the samples;

(C) Liability. The sampling results obtained to satisfy the requirements of this section, including any changes in the constituents or concentrations of constituents present in the samples, shall not create a presumption of liability, fault, or causation against the owner or operator of a Well who conducted the sampling, or on whose behalf sampling was conducted by a third-party. The admissibility and probity of any such sampling results in an administrative or judicial proceeding shall be determined by the presiding body according to applicable administrative, civil, or evidentiary rules.

~~(6) detailed casing and cementing information;~~

~~(7) an assessment of each casing and cementing operation performed to construct or repair the well with sufficient supporting information, including cement evaluation logs and~~

~~other evaluation logs approved by the commission, to demonstrate that casing is cemented below the base of the lowermost freshwater aquifer and according to 20 AAC 25.030 and that all hydrocarbon zones penetrated by the well are isolated;~~

~~(8) pressure test information if available and plans to pressure test the casings and tubing installed in the well;~~

~~(9) accurate pressure ratings and schematics for the wellbore, wellhead, BOPE, and treating head;~~

~~(10) data for the fracturing zone and confining zones including lithologic description, geological name, thickness and measured depth (MD) and true vertical depth (TVD), and estimated fracture pressures for the fracturing zone and confining zones;~~

~~(11) the geologic name and depth (MD and TVD) to the bottom of all freshwater aquifers located within one-half quarter mile radius of the current or proposed wellbore trajectory;~~

~~(12) the location, orientation, and a report on the mechanical condition of each well located within one-quarter mile radius of the current or proposed wellbore trajectory that may transect the confining zones and information sufficient to support a determination that such wells will not interfere with containment of the hydraulic fracturing fluid ~~within the one-half mile radius of the proposed wellbore trajectory~~;~~

~~(13) the location, orientation, and geological data of known or ~~suspected~~ faults and fractures within one-quarter mile of the current or proposed wellbore trajectory that may transect the confining zones, and information sufficient to support a determination that any such faults and fractures will not interfere with containment of the hydraulic fracturing fluid ~~within the one-half mile radius of the proposed wellbore trajectory~~;~~

~~(14) a detailed copy of the proposed hydraulic fracturing program including, but not limited to, the pumping procedure ~~by stage~~ where applicable, with a chemical disclosure based on the total amounts and volumes per well including;~~

~~(A) the estimated total volumes planned;~~

~~(B) the trade name, generic name, and purpose of all base fluid(s) and additives to be used. The estimated or maximum rate or concentration of each additive shall be provided in appropriate measurement units;~~

~~(C) the chemical ingredient name and the Chemical Abstracts Service (CAS) Registry number, as published by the Chemical Abstracts Service (a division of the American Chemical Society, see www.cas.org), for each base fluid and each additive used. The actual or maximum concentration of each chemical ingredient in each base fluid and additive used shall be provided in percent by mass. In addition, the actual or maximum concentration of each chemical ingredient in the hydraulic fracturing fluid shall be provided in percent by mass. Freeze protect fluids pumped before and/or after hydraulic fracturing should not be included;~~

~~(D) the estimated weight or volume of inert substances, including proppants and other substances injected;~~

~~(E) the maximum anticipated treating pressure and information sufficient to support a determination that the well is appropriately constructed for the proposed hydraulic fracturing program; and~~

~~(F) the designed height and length of the proposed fracture(s), including the calculated MD and TVD of the top of the fracture(s) accompanied by a description of the methods and assumptions used to determine designed fracture height and length.~~

(15) a ~~detailed~~ description of the plan for post fracture wellbore cleanup and fluid recovery through to production operations.

(b) When hydraulic fracturing through production casing or through intermediate casing, the casing must be tested to 110% of the maximum anticipated pressure differential to which the casing may be subjected. If the casing fails the pressure test it must be repaired or the operator must use a temporary casing string (fracturing string).

(c) When hydraulic fracturing through a fracturing string, the fracturing string must be stung into a liner or run on a packer set not less than 100 ft MD below the cement top of the production or intermediate casing and tested to not less than 110% of the maximum anticipated pressure differential to which the fracturing string may be subjected.

(d) A pressure relief valve(s) must be installed on the treating lines between pumps and wellhead to limit the line pressure to the test pressure determined in (a)14 (E) of this section; the well must be equipped with a remotely controlled shut-in device unless the operator requests and obtains a waiver from the commission.

(e) The placement of all hydraulic fracturing fluids shall ~~be confined to the approved formations during hydraulic fracturing.~~ not result in the transmission of such fluids beyond the confining zone.

(f) If the surface casing annulus is not open to atmospheric pressure, then the annulus adjacent to the fracturing treatment string ~~surface casing pressures~~ shall be monitored with a gauge and pressure relief device while hydraulic fracturing operations are in progress; the annular space between the fracturing string and the intermediate or production casing must be continuously monitored; the pressure in such annular space may not exceed the pressure rating of the lowest rated component that would be exposed to pressure should the fracturing string fail.

(g) During hydraulic fracturing operations, the annulus pressures adjacent to the fracturing treatment string must be ~~continuously~~ monitored and recorded. If at any time during hydraulic fracturing operations the annulus pressure increases more than 500 psig above those anticipated increases caused by pressure or thermal transfer, the operator must notify the commission as soon as practicable, but no later than twenty-four (24) hours following the incident and shall implement corrective action or increased surveillance as the commission requires. ~~Within fifteen (15) days after the occurrence, the operator shall submit a Report of Sundry Well Operations Form 10-404 giving all details, including corrective actions taken.~~

(h) During hydraulic fracturing operations, all casings must be sufficiently cemented below the base of the lowermost freshwater aquifer according to the proposed well casing and cementing program submitted with Form 10-401 as described in 20 AAC 25.030. All hydrocarbon zones penetrated by the well must be isolated to prevent the treatment from negatively impacting the surface environment, freshwater aquifer, or water well.

~~(h)(i)~~ (i) The operator shall file with the commission, ~~within 30 days after completion of hydraulic fracturing operations,~~ on a Report of Sundry Well Operations (Form 10-404), a ~~complete record of the work performed and the tests conducted, and a summary of daily well operations as described in 20 AAC 25.070(3).~~ The operator shall also file with the commission a copy of the daily record required by 20 AAC 25.070(1), for each documenting the hydraulic fracturing interval. The information will include;

(1) a description of the actual treated interval including measured and true vertical depth of perforations;

(2) the amount and type(s) of base fluid(s) and additives pumped ~~during each treatment stage;~~

(3) the total amount and type(s) of base fluid(s) and additives pumped including;
(A) a description of the hydraulic fracturing fluid pumped identified by base fluid(s) and additives including trade name, supplier, and a brief description of the purpose (e.g., acid, biocide, breaker, brine, corrosion inhibitor, crosslinker, de-emulsifier, friction reducer, gel, iron control, oxygen scavenger, pH adjusting agent, proppant, scale inhibitor, surfactant); and

(B) the chemical ingredient name and the CAS registry number, as published by the Chemical Abstracts Service (a division of the American Chemical Society, see www.cas.org), ~~for each base fluid and each additive used. The actual or maximum concentration of each chemical ingredient in each base fluid and additive used shall be provided in percent by mass.~~ In addition, the actual or maximum concentration of each chemical ingredient in the hydraulic fracturing fluid shall be provided in percent by mass. Freeze-protect fluids pumped before and/or after hydraulic fracturing should not be included;

(j) If the operator claims that the specific identity of a chemical, the concentration of a chemical, or both the specific identity and concentration of a chemical is a trade secret, the operator of the well must indicate on the Application For Sundry Approvals (Form 10-403) and the Report of Sundry Well Operations (Form 10-404) that the identity of the chemical, the concentration of a chemical or both is claimed to be entitled to trade secret protection and will not be disclosed. If the identity of the chemical, the concentration of a chemical or both is claimed to be entitled to trade secret protection, the chemical family or other similar description associated with such chemical ingredient shall be disclosed.

(k) A service provider who performs any part of a hydraulic fracturing treatment or a vendor who provides hydraulic fracturing additives directly to the operator for a hydraulic fracturing treatment shall, with the exception of information claimed to be a trade secret, furnish the operator with the information required by subsection 20 AAC 25.283(h)(2), as applicable.

(l) A vendor, service provider, or operator is not required to disclose:

(1) chemicals that are not disclosed to the operator by the manufacturer, vendor or service provider;

(2) ingredients not intentionally added to the hydraulic fracturing fluid; or

(3) chemicals that occur incidentally or are otherwise unintentionally present in trace amounts, may be the incidental result of a chemical reaction or chemical process, or may be constituents of naturally occurring materials that become part of a hydraulic fracturing fluid.

(m) Operators, service providers and/or vendors shall disclose the specific identity and amount of any chemicals claimed to be a trade secret to a health professional or emergency responder that requests such information provided that the health professional or emergency responder provides:

(1) a written statement of need that the health professional or emergency responder has a reasonable basis to believe that:

(A) the information is needed for purposes of diagnosis or treatment of an individual;

(B) the individual being diagnosed or treated may have been exposed to the chemical concerned; and

(C) knowledge of the information will assist in such diagnosis or treatment

(2) a confidentiality agreement that states:

(A) the health professional or emergency responder shall not use the information for purposes other than the health needs asserted in the statement of need; and

(B) the health professional or emergency responder shall otherwise maintain the information as confidential.

(n) A written statement of need and confidentiality agreement is not required under (l) of this section when a health professional or emergency responder determines that a medical emergency exists and the specific identity and amount of any chemicals claimed to be a trade secret is necessary for emergency treatment. An operator, service provider and/or vendor shall immediately disclose the information to the health professional or emergency responder upon

(1) a verbal acknowledgment by the health professional or emergency responder that such information shall not be used for purposes other than the health needs asserted; and

(2) a verbal acknowledgment that the health professional or emergency responder shall otherwise maintain the information as confidential.

(o) A vendor, service provider, or operator shall provide the specific identity of a chemical, the concentration of a chemical, or both the specific identity and concentration of a chemical claimed to be a trade secret to the Commission upon receipt of a communication from the Commission stating that such information is necessary to investigate a release reported to the Commission under 20 AAC 25.205 or to investigate any allegation of waste presented to or initiated by the Commission under AS 31.05.030(b) or AS 31.05.030(e)(1)(E). Upon receipt of such a communication from the Commission, such information shall be disclosed by the vendor, service provider, or operator directly to the Commission or its designee and shall in no way be construed as publicly available.

(p) The Commission or its designee may disclose information provided to it under 20 AAC 25.283(l) to the Alaska Department of Environmental Conservation (ADEC) only to the extent that such disclosure is necessary to allow ADEC to respond to a release and to otherwise carry out its duties and responsibilities under AS 46.03 or AS 46.04, provided that such information shall not be disseminated any further. Any information so disclosed to ADEC shall at all times be considered confidential and shall in no way be construed as publicly available.

(q) Prior to the submission of Form 10-404 under subsection (h), the operator must post the information required by the Interstate Oil and Gas Compact Commission/Groundwater Protection Council hydraulic fracturing web site (www.fracfocus.org). A printed copy ~~and electronic copy~~ of this information in a format acceptable to the commission shall be filed as an attachment with the Form 10-404.

(r) Upon written request of the operator, the commission may modify a deadline in this section upon a showing of good cause, approve a variance from any other requirement of this section if the variance provides at least an equally effective means of complying with the requirement, or approve a waiver of a requirement of this section if the waiver will not promote waste, is based on sound engineering and geoscience principles, will not jeopardize the ultimate recovery of hydrocarbons, will not jeopardize correlative rights, and will not result in an increased risk to health, safety, or the environment, including freshwater.

(s) For purposes of 20 AAC 25.283, "confining zone" means a geological formation (or group or part of a formation) capable of limiting fluid movement out of an injection zone.

Eff. __/__/__, Register __.)

Authority: AS 31.05.030

20 AAC 25.990. Definitions.

(3) "Additive" means any chemical substance or combination of substances, including a proppant, contained in a hydraulic fracturing fluid that is intentionally added to a base fluid for a specific purpose whether or not the purpose of any such substance or combination of substances is to create fractures in a formation.

(14) "Chemical Ingredient" means a discrete chemical constituent with its own specific name or identity, such as a CAS registry number, that is contained in an additive.

(34) "Hydraulic fracturing" means the treatment of a well by the application of hydraulic fracturing fluid under pressure for the express purpose of initiating or propagating fractures in a target geologic formation to enhance production of oil and/or natural gas.

(35) "Hydraulic fracturing fluid" means the fluid, including the applicable base fluid and all additives, used to perform a particular hydraulic fracturing treatment.

(36) "Hydraulic fracturing treatment" means all stages of the treatment of a well by the application of hydraulic fracturing.

(73) "Surface owner" means any person who holds record title to the surface of the land as an owner..

(--) "Water well" means a well producing freshwater that serves as a source of drinking water for human consumption.

(--) "Stage" means one of several separate interval treatments during a multi-stage treatment that initiate new fractures sequentially from different locations within the wellbore.

(--) "Trade Secret" means any formula, pattern, device, or compilation of information that is used in a person's business, and that gives the person an opportunity to obtain an advantage over competitors. The six factors considered in determining whether information qualifies as a trade secret, in accordance with the definition of "trade secret" in the Restatement of Torts, Comment B to Section 757 (1939), as discussed in *Powercorp Alaska, LLC v. Alaska Energy Authority*, 209 P.3d 1173 (Alaska 2012) include:

(A) the extent to which the information is known outside of the company;

(B) the extent to which it is known by employees and others involved in the company's business;

(C) the extent of measures taken by the company to guard the secrecy of the information;

(D) the value of the information to the company and its competitors;

(E) the amount of effort or money expended by the company in developing the information; and

(F) the ease or difficulty with which the information could be properly acquired or duplicated by others.

(Eff. __/__/__, Register __.) **Authority:** AS 31.05.030