NOTICE OF PROPOSED CHANGES IN THE REGULATIONS OF THE ALASKA OIL AND GAS CONSERVATION COMMISSION

BRIEF DESCRIPTION: The Alaska Oil and Gas Conservation Commission (AOGCC) proposes to adopt regulation changes in Title 20, Chapter 25 of the Alaska Administrative Code, dealing with hydraulic fracturing. 20 AAC 25.280 workover operations, and 20 AAC 25.990 definitions are proposed to be changed and a new section is proposed to be added 20 AAC 25.283 hydraulic fracturing as follows:

The AOGCC proposes to add regulations governing hydraulic fracturing applications, operations, and reporting regulations, including requirements for:

1. notification of landowners, surface owners, and operators within one-quarter mile of the wellbore trajectory;
2. pre and post hydraulic fracturing water well water sampling and analysis;
3. chemical disclosure of hydraulic fracturing fluids;
4. wellbore integrity requirements; and
5. containment of hydraulic fracturing fluids.

The AOGCC proposes that Sundry Approvals for well workover operations shall expire 24 months after the approval date.

For a copy of the proposed regulation changes, contact Jody Colombie at (907) 793-1221 or go to www.aogcc.alaska.gov.

You may comment on the proposed regulation changes, including the potential costs to private persons of complying with the proposed changes, by submitting written comments to the Alaska Oil and Gas Conservation Commission at 333 West 7th Avenue, Suite 100, Anchorage, Alaska 99501. Additionally, the Alaska Oil and Gas Conservation Commission will accept comments by facsimile at (907) 276-7542 and by electronic mail at www.doa.alaska.gov/ogc/. All written comments must be received no later than 4:30 p.m. on February 4, 2013.

Oral or written comments also may be submitted at a hearing to be held on February 5, 2013, at 333 West 7th Avenue, Anchorage, Alaska 99501. The hearing will be begin at 9:00 a.m. and may be extended to accommodate those present before 9:30 a.m. who did not have an opportunity to comment.

If you are a person with a disability who needs a special accommodation in order to participate in this hearing, please contact Jody Colombie at (907) 793-1221 no later than January 29, 2013 to ensure that any necessary accommodation can be provided.

After the public comment period ends, the Alaska Oil and Gas Conservation Commission will either adopt these or other provisions dealing with the same subject, without further notice, or decide to take no action on them. The language of any final regulation may be different from the proposed regulation. You should comment during the time allowed if your interests could be affected.

Statutory Authority: AS 31.05.030
Statutes Being Implemented, Interpreted, or Made Specific: AS 31.05.030
Fiscal Information: The proposed regulation change is not expected to require an increased appropriation.

DATE: December 20, 2012

John K. Norman, Commissioner

ADDITIONAL REGULATIONS NOTICE INFORMATION
(AS 44.62.190(d))

1. Adopting agency: Alaska Oil and Gas Conservation Commission.

2. General subject of regulation: hydraulic fracturing and workover operations.

3. Citation of regulation: 20 AAC 25.280, 20 AAC 25.283, and 20 AAC 25.990.

4. Reason for the proposed action: compliance with revised state statute.

5. Appropriation/Allocation: Alaska Oil and Gas Conservation Commission.

6. Cost of implementation to the state agency: There will be no increased cost.

7. The name of the contact person for the regulations:

Name	John K. Norman
Title	Commissioner
Address	333 West 7th Avenue, Anchorage, Alaska 99501
Telephone	(907) 793-1221

E-mail address is jody.colombie@alaska.gov

8. The origin of the proposed action: Alaska Oil and Gas Conservation Commission staff.

9. Date: December 20, 2012 Prepared by:

Jody J. Colombie
Special Staff Assistant
(907) 793-1221

20 AAC 25.280. Workover Operations. (a) An Application for Sundry Approvals (Form 10-403) must be submitted to and approved by the commission in order to enter a well and conduct one or more of the following types of well workover operations;

(1) the perforation or reperforation of casing:

(2) stimulation;

(3) the pulling of tubing;

(4) alteration of the casing;

(5) repairs to the well**; and**

(6) re-entering a suspended or abandoned well to the extent such operations are not covered by a Permit to Drill under 20 AAC 25.005.

(f) the sundry for a well proposed for stimulation by hydraulic fracturing must also comply with 20 AAC 25.283.

(g) sundry approvals issued under this subsection shall expire 24 months after the approval date. History: Eff. 4/2/86, Register 97; am 11/7/99, Register 152; am 12/28/2006, Register 180; Eff. __/__/__, Register ___.

Authority: AS 31.05.030

20 AAC 25.283. Hydraulic Fracturing. (a) An application for hydraulic fracturing under 20 AAC 25.280 shall include;

(1) an affidavit showing that all owners, landowners, surface owners, and operators within one-quarter mile of the wellbore trajectory have been provided a complete copy of the application for hydraulic fracturing;

(2) a plat showing the well location and identifying any water wells located within a one-quarter mile radius of the well's surface location and further identifying any well penetrations (all well types) within one-quarter mile of the proposed wellbore trajectory and fracturing interval and the sources of the information used in identifying such wells;

(3) identification of freshwater aquifers within the one-quarter mile radius;

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

(5) water sampling of water wells is required. Water sampling consists 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 120 days after the conclusion of any hydraulic fracturing operations. The sample parameters shall include pH; Alkalinity; Specific conductance; Major cations/anions (bromide, chloride, fluoride, potassium, sulfate, sodium); 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, Dissolved Propane; and Metals (arsenic, barium, boron, cadmium, calcium, chromium, iron, magnesium, manganese, selenium). 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 an electronic data deliverable format within 90 days of collecting the samples;

(6) 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;

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

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

(9) 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;

(10) the geologic name and depth (MD and TVD) to the bottom of all freshwater aquifers;

(11) the location, orientation, and a report on the mechanical condition of each well 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;

(12) the location, orientation, and geological data of known or suspected faults and fractures 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;

(13) a detailed copy of the proposed hydraulic fracturing program by stage including;

(A) the estimated total volumes planned;

(B) the trade name and generic name of the principle fluids to be used;

(C) the estimated amount or volume of the principle fluids to be used including viscosifiers, acids, or gelling agents;

(D) the estimated weight or volume of inert substances, including proppants and other substances injected to aid in well cleanup;

(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).

(14) 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 surface treating pressure. 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 TVD below the cement top of the production or intermediate casing and tested to not less than 110% of the maximum anticipated treating pressure minus the annulus pressure applied between the fracturing string and the production or intermediate casing.

(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)13 (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.

(f) The surface casing valve must remain open 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, all annulus pressures must be continuously monitored and recorded. If at any time during hydraulic fracturing operations the annulus pressure increases more than 500 psig 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) 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 hydraulic fracturing interval. The information will include;

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

(2) the amount and types(s) of material pumped during each treatment stage and the total amount and types of material pumped including;

(A) a description of the hydraulic fracturing fluid pumped identified by additive type (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);

(B) 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 (www.cas.org), for each ingredient of the additive used. The rate or concentration for each additive shall be provided in appropriate measurement units (pounds per gallon, gallons per thousand gallons, percent by weight or percent by volume, or parts per million);

(C) each chemical ingredient used in the hydraulic fracturing treatment(s) of the well that is subject to the requirements of 29 Code of Federal Regulations §1910.1200(g)(2), as provided by the chemical supplier or service company or by the operator, if the operator provides its own chemical ingredients; and

(D) a supplemental list of all chemicals and their respective CAS numbers, not subject to the requirements of 29 Code of Federal Regulations §1910.1200(g)(2), that were intentionally included in and used for the purpose of creating the hydraulic fracturing treatments for the well.

(i) 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 (http://fracfocus.org/). A hardcopy and electronic copy of this information shall be filed as an attachment with the Form 10-404. (Eff. __/__/__, Register __.)

Authority: AS 31.05.030

20 AAC 25.990. Definitions.

(32) "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.

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