



DEPARTMENT OF NATURAL RESOURCES
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October 16, 2012

Huerfano County Commissioners
c/o John Galusha
401 Main Street, Suite 201
Walsenburg, CO 81089

Re: Natural Resources Group Inc. Form 2 and 2A Document Nos. 400260765 and 400261755,
COGCC Response to Public Comment

Dear Commissioners,

The Colorado Oil and Gas Conservation Commission (COGCC) has received and reviewed comments pertaining to the Oil and Gas Location proposed by Natural Resources Group, Inc. (NRG) on May 1, 2012 in Huerfano County, Colorado. NRG has submitted one Oil and Gas Location Assessment (Form 2A) and one Application to Drill (Form 2). Multiple comments were received on the Form 2A and Form 2.

By statutory mandate, the COGCC has adopted and enforces Rules regulating oil and gas development to protect public health, safety, and welfare, including the environment and wildlife resources. In 2009, amended Rules took effect and established the Form 2A, Oil and Gas Location Assessment process, which provides for a site-specific review of surface disturbance associated with a proposed Oil and Gas Location. In this review process, the COGCC Oil and Gas Location Assessment (OGLA), Permitting, and Engineering staff utilizes onsite inspections, consultation and input from the Colorado Department of Public Health and Environment, Colorado Division of Parks and Wildlife (CPW), local governments, surface owners, and interested public. Using this input, the COGCC reviews the Rules and the operator's proposed surface use plans and best management practices (BMPs) in consideration of all the geographic and environmental conditions observed and evaluated and may apply conditions of approval (COAs) to address situations that require additional safeguards beyond the extent of the Rules.

During the site specific Form 2A review process for the planned NRG location, the COGCC reviewed environmental information, including proximity to surface water and groundwater, soil type, topography, climate, and wildlife; cultural information, including housing density, proximity to residences and other public use areas; and planned activities for the location, including type of equipment, duration of planned activities, and operational plans and practices. The COGCC has

carefully considered the input received the public on this subject. The COGCC has developed site-specific COAs to provide additional protection for public health, safety, and welfare including ground water and air quality. These COAs will require the operator to implement additional groundwater monitoring, emissions controls, and fluids containment to protect water resources, nearby residents, and the environment generally.

The COGCC has also required the operator of this location to notify us 48 hours prior to commencing construction, 24 hours prior to rig mobilization, in addition to notification 48 hours prior to beginning fracture stimulation operations as required by Rule. These notifications will allow for the COGCC to conduct coordinated inspections at critical times of operations and work with the operator to ensure that the prescribed measures are in place and effective. If warranted, the COGCC can work with the operator to further refine or enhance the measures taken.

COGCC has reviewed the public comments on the Form 2 (Document No. 400260765) and form 2A (Document No. 400261755). Comments that were received generally fall into five categories which are discussed individually below:

- Surface and ground water,
- Drilling and stimulation practices,
- Subsurface geology,
- General environmental concerns, and
- Wildlife concerns

Surface and Ground Water

COGCC engineering and environmental staff does not conclude that a regional groundwater study is necessary before issuance of the oil and gas permits in process. COGCC staff routinely evaluates water well records and oil and gas well logs to gain a better understanding of local hydrologic conditions in the immediate area surrounding application(s) for permit to drill. Both water well records and oil and gas well logs have much more detailed information on local conditions than can be found in regional synthesis studies. However, COGCC staff does utilize published regional studies such as USGS studies and Colorado Geological Survey publications to gain a better understanding of regional stratigraphy and regional hydrology.

COGCC drilling Rules (317) provide mandatory guidance on well installation and surface casing installation such that groundwater aquifers are protected. In this case, the COGCC Engineer's review of the drilling program resulted in a Condition of Approval (COA) that ensures that the well bore will have surface casing with cement coverage from 330 feet to the surface and the cement in the production casing will overlap the surface casing by 80 feet. Additionally, COGCC has Rules

in place to prevent adverse impacts to air, water and soil, including incorporation by reference of the Water Quality Control Commission water quality standards for waters of the state.

Rule 324A prohibits both significant adverse impacts to state waters and violations of state water quality standards and classifications. This prohibition is supplemented by Rule 341, which requires stimulation fluids to be confined to the objective formations during treatment, and by Rule 317, which mandates well construction, casing and cementing practices. Rule 303.d. provides for a review of the hydrogeologic setting during review of the Form 2A. The application package has also been conditioned to include baseline and post-completions water sampling.

Drilling and Stimulation Fluids

The operator has indicated that they plan to use air to drill the proposed well. Little or no fluids are utilized during the air drilling process. Drill cutting are moved to the surface through air pressure as opposed to conventional drilling that circulates drilling fluid (mud) to move cutting to the surface. Because air is utilized the cutting are mostly dry. A drilling pit may be utilized onsite for the storage and disposal of drill cuttings with a *de minimis* amount of liquid. Any onsite disposal of cuttings is subject to COGCC Rule 907, COGCC Table 910-1, and land-owner approval.

Pits are regulated in the COGCC 900 series rules, specifically Rules 902 through 905. Closure of the proposed drilling pit on this site is required to meet standards set out in Rule 905.d. and 1003.d.(2) and Table 910-1. Results of required sampling must be submitted to the COGCC for review prior to pit closure.

COGCC rules do not specify what chemicals can or should be used in downhole operations for drilling or well completions (stimulations) including hydraulic fracturing. Appropriate drilling or completion products vary by geologic formation and rock composition. COGCC Rule 205A. requires the disclosure of chemicals used in hydraulic fracturing within 60 days of conclusion of stimulation.

Subsurface Geology

The COGCC cannot require operators to conduct seismic surveys prior to drilling. In general oil and gas production is reduced near intrusive bodies so it is in the operator's best interest to avoid areas of known or suspected intrusive bodies. It is the operator's responsibility to evaluate the available data and design their drilling program accordingly.

General Environmental Concerns

COGCC Rule 907.a.(1) imposes the following obligations on operators:

“Operators shall ensure that E&P waste is properly stored, handled, transported, treated, recycled, or disposed to prevent threatened or actual significant adverse environmental impacts to air, water, soil or biological resources or to the extent necessary to ensure compliance with the concentration levels in Table 910-1, with consideration to WQCC ground water standards and classifications.”

Exploration and production (E&P) wastes produced during drilling and/or completion operations including hydraulic fracture stimulation must be stored and disposed of in compliance with applicable COGCC Rules. Road or ground spreading is not an authorized means of disposal of drilling fluids or flowback fluids from hydraulic fracturing operations.

Produced water E&P wastes may be treated and disposed by the means or processes outlined in rule 907.c. Road spreading on lease roads for dust control is allowed outside of sensitive areas, if the produced water contains less than 3,500 mg/l TDS (total dissolved solids) and when authorized by the surface owner. Road spreading of flowback fluids is specifically prohibited by COGCC Rules.

Operators have several options for produced water disposal as listed in Rule 907.c.(2), including injection into permitted Class II UIC wells or disposal at properly permitted commercial disposal facilities. In some cases, discharge of produced water into waters of the state may be approved by the Water Quality Control Division of the Colorado Department of Public Health and Environment under a CDPS permit (Colorado Discharge Permit System) as described in part in Rule 907. The operator makes decisions on the means of produced water disposal from the several processes specified in the rules. COGCC does not specify which if any process is required, but does ensure that the rules are followed.

COGCC Rule 906 requires that impacts resulting from spills/releases be investigated and cleaned up as soon as practicable by the responsible party. Operators are responsible for the oil and gas exploration and production actions of their staff, contractors, and subcontractors.

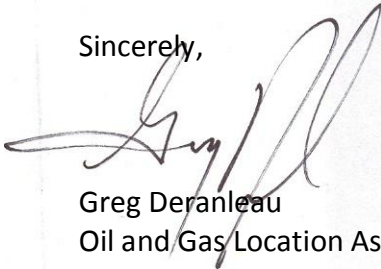
Wildlife Concerns

The COGCC 1200-Series Rules provide for protection of wildlife resources. The Jenny C1 location falls within a Sensitive Wildlife Habitat (SWH) as designated by Colorado Parks and Wildlife (CPW)

(formerly the Colorado Division of Wildlife), specifically the location is mapped in a Pronghorn Antelope wintering area. Based on the COGCC consultation with CPW, a timing restriction was imposed that prohibits construction activities between January 1 and March 31.

The COGCC takes its mandate to protect public health, safety and welfare, including the environment and wildlife resources extremely seriously. Our Rules and our permit review process are the cornerstones of that commitment. We appreciate the concerns raised and specific issues brought forward by individuals and groups in Huerfano County and encourage the continued involvement of the public in our permit process. Our efforts will continue to be focused on providing detailed review of proposals for oil and gas development and on inspection and enforcement of our Rules and permit conditions.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Deranleau", is written over a light gray rectangular background.

Greg Deranleau
Oil and Gas Location Assessment Supervisor

cc. Matt Lepore, Director, COGCC