BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF COLORADO

IN THE MATTER OF CHANGES TO THE	)	
RULES OF PRACTICE AND PROCEDURE	)	Cause No. 1R
OF THE OIL & GAS CONSERVATION	)	
COMMISSION OF THE STATE OF COLORADO	)	Docket No. 1211-RM-03

PRELIMINARY PRE-HEARING STATEMENT OF THE COLORADO OIL & GAS ASSOCIATION

Anadarko Petroleum Company

Bill Barrett Corporation

EnCana Oil & Gas (USA), Inc.

K.P. Kauffman Company, Inc.

Noble Energy, Inc.

PDC Energy, Inc.

Pioneer Natural Resources USA, Inc.

WPX Energy Rocky Mountain, LLC
WPX Energy Production, LLC

COLLECTIVELY, THE JOINING PARTIES

The Colorado Oil & Gas Association ("COGA") by and through its undersigned attorneys, respectfully submits this Preliminary Pre-Hearing Statement with respect to proposed new Rule 609 – Statewide Groundwater Baseline Sampling and Monitoring. Pursuant to the Commission's request that "[p]arties are encouraged to coordinate with other parties who have similar interests and concerns" with respect to the Preliminary Prehearing Statements, *First Prehearing Order* ¶ 6 (October 26, 2012), the above-referenced Joining Parties join COGA's Preliminary Pre-Hearing Statement, including COGA's associated Alternative Rule Proposal and Proposed Statement of Basis and Purpose for purposes of filing their Preliminary Pre-Hearing Statement and Alternative Rule Proposal in this rulemaking

On November 2, 2012, COGA filed its Application for Party Status in this matter and identified several policy, factual or legal issues with respect to proposed Rule 609:

A. *Whether the rulemaking is necessary to address significant adverse environmental, public health or safety impacts, and is supported by adequate technical and scientific evidence?*

> COGA believes that the rulemaking is a legitimate regulatory response to public concerns that have arisen with respect to the perceived potential for hydraulic fracturing operations to impact groundwater resources. It is supplemental to Rule 205A, the Hydraulic Fracturing Chemical Disclosure Rule. In neither case is the rule responsive to actual instances of significant impacts to the state's groundwater resources from hydraulic fracturing operations, for which there is no evidence, a fact affirmed by the Commission itself on numerous occasions.
>
> However, in addition to the positive, confidence-building effects of Rule 609, COGA believes that it will assist the Commission to implement its mandate to "foster the responsible, balanced development, production and utilization of the natural resources of oil and gas in the State of Colorado in a manner consistent with the protection of public health, safety and welfare ...". C.R.S. § 34-60-102(1).
>
> COGA reserves judgment on the technical and scientific evidence to support the Commission's proposed Rule 609, pending review of the staff's Statement of Basis & Purpose and Regulatory Analysis, and presentation of its case in-chief.

B. *Whether Rule 609 is cost-effective?*

> **Need for exemptions**
>
> COGA believes that Rule 609, as proposed, fails this test in several respects, most notably by not exempting areas of the State already covered by successfully-implemented ground water testing programs (see discussion in "C" below). In addition, the proposed rule requires operators to seek exceptions or waivers from the Director in certain instances, an inefficient bureaucratic procedure (*see* Rule 609.b). Instead, the exemption process should be self-implementing.

Effect on small operators

COGA notes that Rule 609 will have a disproportionate impact on small operators who cannot afford dedicated staff for its implementation, and urges the Commission to keep this consideration in mind. Small operators should be granted variances as appropriate, keeping in mind that Rule 609 is not designed for comprehensive statewide groundwater quality assessment.

Use of the environmental response fund

To the extent that the Commission believes that comprehensive groundwater quality assessment should be conducted in selected areas of special concern, it should utilize the oil and gas conservation and environmental response fund to "gather background or baseline data on any ... water ... resource that the commission determines may be ... impacted by the conduct of oil and gas operations." C.R.S. § 34-60-124(4)(a)(II). This Commission function should not be shifted to operators by Rule 609.

Variances

Operators, especially small operators, should be eligible for variances where the Commission or other agencies have already conducted regional baseline water quality studies. Many examples of such studies are found in the COGCC Library, including: Arapahoe Aquifer Baseline Domestic Water Well Background Investigation; Ogallala Aquifer Baseline Study; Upper Crow Creek Designated Groundwater Basin Study; Raton Basin Phase 1 Investigation; Piceance Basin Phase I-IV Baseline Water Quality Study. COGA asserts that, in these areas, impacts to groundwater can be more cost-effectively handled on a site-specific basis via the Commission's complaint investigation process.

Application to oil and gas wells only

COGA asserts that Rule 609 should apply only to oil and gas wells, not to production facilities or other "oil and gas locations." The public concern underpinning this rulemaking is directed at drilling and well completion operations. In addition, other Commission rules relating to storm water management, spill reporting and remediation, and E&P waste management appropriately address other modes of potential groundwater contamination. Spills and releases are readily discoverable, as compared to the potential for underground well casing or cementing failures. Rule 609 should be restricted to drilling and completion operations.

Appropriate analytes

COGA is opposed to sampling requirements for certain additional analytes beyond its voluntary baseline sampling program, particularly hydrogen sulfide (H_2S). Field screening of H_2S is often inaccurate and may create unnecessary concern among operators and the public. The Biological Activity Reaction Test used for sampling iron related, slime forming and sulfate reducing bacteria is a better leading indicator, as H_2S detection is most likely related to the presence of

sulfate reducing bacteria in the well water and unrelated to oil and gas activity. Further, H_2S sampling, compositional gas analysis, data management and reporting are already covered by the Commission's H_2S Notice to Operators, dated April, 13, 2012.

C. Whether Rule 318A, and other water sampling or monitoring requirements established by Commission orders or by private or governmental agreements should be excluded from the application of Rule 609?

The Greater Wattenberg Area ("GWA") has seen active oil and gas development for half a century, and features residential areas, agricultural operations, and oil and gas wells in close proximity. This is not to mention the 34,000 domestic water wells in the GWA. Obtaining true "baseline" groundwater samples in the GWA is generally not possible.

The Commission has traditionally recognized the need for unique regulatory treatment of the GWA[1] and has promulgated effective basin-specific regulations for ground water testing. This balance should not be disrupted by super-imposing Rule 609 on the GWA.

Similar considerations apply in other areas of the state where carefully-crafted groundwater testing program are in-place, including portions of the San Juan Basin, and as may be provided in surface use or local government agreements.

D. What the appropriate effective date should be for proposed Rule 609.

COGA reserves the right to propose an appropriate effective date once the parameters of Rule 609 are determined by the Commission.

Alternate Rule Proposal

Pursuant to the First Prehearing Order, COGA submits with this pre-hearing statement its Alternate Rule Proposal and Statement of Basis & Purpose. COGA's proposal better meets the cost-effective standard applicable to all Commission rules, and addresses the other substantive issues outlined above.

Reservation of rights

COGA and all Joining Parties expressly reserve their rights, in a Final Pre-hearing Statement or otherwise, to supplement or revise any positions expressed in this Preliminary Pre-Hearing Statement, or in COGA's Alternate Rule, based on the Commission's pending publication of the Statement of Basis and Purpose and Regulatory Cost Analysis for proposed Rule 609, as well as in consideration of alternate rule proposals or preliminary pre-hearing statements that may be submitted by other parties to this matter. All Joining Parties reserve their rights to proceed as independent parties to this rulemaking, including, but not limited to, submitting their own alternate rule proposals with a Final Pre-Hearing Statement.

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[1] See COGCC, Statement of Basis, Specific Statutory Authority, and Purpose, Amending Rule 318A (August 8 and 9, 2011) available at http://cogcc.state.co.us/rr_docs_new/GWA2011/GWA2011StatementBasisPurpose.pdf. The General Assembly has also recognized the unique nature of the GWA, see C.R.S. §§ 24-65.5-101 et seq.

DATED this 9th day of November, 2012.

RESPECTFULLY SUBMITTED,

Colorado Oil & Gas Association

By: _____

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CERTIFICATE OF SERVICE

I hereby certify that on November 9, 2012, the **PRELIMINARY PRE-HEARING STATEMENT OF THE COLORADO OIL & GAS ASSOCIATION (including the Joining Parties)** was filed as follows:

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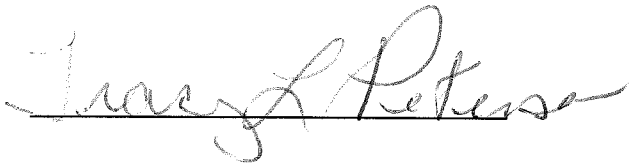

ALTERNATE RULE PROPOSAL – 11/08/12 DRAFT

609. STATEWIDE WATER WELL SAMPLING

a. Scope and Purpose.

(1) This Rule establishes regulations for the collection of samples from water wells or springs for the limited purposes described herein. It does not establish requirements for comprehensive ground water quality assessment.

(2) All enforcement actions associated with this Rule are governed by the Act and jurisdiction shall be with the Commission.

(3) This Rule is binding with respect to any local regulation that stands in operational conflict with its provisions.

b. Applicability.

(1) This Rule applies only to Oil Wells, Gas Wells (hereinafter "Wells") and Multi-Well Sites, as defined in the 100 Series of the Rules. It does not apply to production facilities or other Oil and Gas Locations defined in the 100 Series of the Rules.

(2) This Rule shall not apply to surface water features such as creeks, streams, rivers, tributaries, ditches, lakes, ponds or other waters of the United States as defined by the federal Clean Water Act.

(3) This Rule shall not apply to those Wells and Multi-Well Sites subject to Rule 608, Rule 318A or orders of the Commission promulgated prior to the effective date of this Rule that provide for ground water testing, and it does not supersede ground water testing provisions that are provided for in a surface use agreement, memorandum of understanding or other local government agreement entered into by an Operator prior to the effective date of this Rule.

(4) The installation of ground water monitoring wells is not required under this Rule, when the sampling of water wells or springs cannot be conducted because no suitable water wells or springs meeting the criteria of subsections "c" and "d" of this Rule can be identified.

c. **Sampling Requirements**. New Wells constructed after the effective date of this Rule, whether located on a single-well pad or on a Multi-Well Site, are subject to the following sampling requirements:

(1) Sampling Locations: Initial and subsequent samples shall be collected from two (2) water wells or springs located within a one- half (1/2) mile

radius of the surface location of a Well or the center of a Multi-Well Site. Selection of sampling locations shall be guided by the following criteria:

(A) Proximity. Water wells and springs closest to the Well or Multi-Well Site should be selected for sampling.

(B) Type of Water Well or Spring. Domestic water wells or springs that are adjudicated by a Water Court, are properly permitted or registered by the Division of Water Resources (or Groundwater Commission for wells located in Designated Groundwater Basins), are identified on the Colorado Oil and Gas Information System (COGIS) and that can be readily located in the field should be selected for sampling.

(C) Orientation of Locations. One sample location down-gradient and one sample location up-gradient of the Well or Multi-Well Site (if the groundwater flow direction is known or can be inferred from topography or other readily available information) are preferred.

(D) Water Well/Spring Condition. Water wells or springs that are safe for an Operator to access, in good operating condition, have a permanently installed pump or have artesian flow, and are properly maintained are to be selected. An Operator is not required to test water wells or springs with physical impediments to sampling that would not allow for a representative sample to be safely collected or that would require specialized sampling equipment (e.g. shut-in wells, wells with confined space issues, wells with no tap or pump, non-functioning wells, intermittent springs).

(E) Existing sample locations. Analytical data from water wells or springs for which the Commission has existing baseline or subsequent data may be utilized in lieu of additional initial sampling.

(F) Alternate Locations. In the event that two suitable wells or springs do not exist within a one-half (1/2) mile sampling radius, the Director, in consultation with the Operator, may identify other water wells or springs within a one (1) mile radius to be tested. In addition, Operators may, but are not required to, propose alternative methods to obtain ground water quality data, such as domestic water wells that were installed prior to any permitting or registration requirements.

(G) Exemption. If there are no suitable water wells or springs that meet the foregoing criteria, then sampling under this Rule shall not be required.

d. Well Owner and Landowner Refusal.

(1) Access to Locations. Operators shall make reasonable good faith efforts to obtain access for sampling. Where the owners of all suitable water wells, or the landowner in the case of a spring, refuse to grant access for sampling, or to allow submission of analytical data to the Director for inclusion in a publicly-available database, then sampling under this Rule is not required. Lack of response from a landowner or water well owner within 15 calendar days of sending a written request for sampling shall be considered denial of access.

(2) Denial of Access. When an Operator's good faith efforts to obtain access to sampling locations are unsuccessful, such failure shall not constitute a violation of this or any other Commission Rule.

e. **Timing of initial sampling**. Initial sampling shall be conducted prior to setting conductor pipe in the Well or the first well on a Multi-well Site.

f. **Subsequent sampling**. Subsequent sampling shall be conducted at the initial sampling locations:

(1) Not less than 18 months, nor more than 36 months, following the completion of the Well, or the last Well on a Multi-Well Site.

(2) The Director may request sampling of domestic water wells or springs in response to verified complaints from water well owners or landowners. Any agreement by an Operator to perform such sampling shall not be considered an admission that any conditions forming the basis of the complaint are related to the conduct of oil and operations by the Operator. Any additional sampling required by the Director under this Rule shall be in conformance with, and under the authority of, an applicable Commission Rule. Operators shall retain all of their rights to contest any request to conduct such sampling, and in such case, the Director shall proceed under Rule 524.

g. **Sampling Procedures and Analysis**.

(1) Sampling and analysis shall be conducted in conformance with Rule 910.b(2) or other standard industry protocol.

(2) Sampling locations that are not already entered into the COGIS database shall be surveyed in accordance with Rule 215.

(3) Samples shall be collected upstream of any cistern or domestic water treatment system where practicable.

(4) The sampling and analysis described in this section shall include pH, specific conductance, total dissolved solids (TDS), dissolved gases (methane, ethane, propane), alkalinity (total bicarbonate and carbonate as CaCO3), major anions (bromide, chloride, fluoride, sulfate, nitrate and nitrite as N, phosphorus), major cations (calcium, iron, magnesium, manganese, potassium, sodium), other elements (barium, boron, selenium and strontium), presence of bacteria (iron related, sulfate reducing, slime forming) and BTEX compounds (benzene, toluene, ethylbenzene and xylenes). EPA SW 846 analytical methods should be used, as applicable, by laboratories that maintain state or national accreditation programs. Field observations such as color, odor, sediment, field conditions and field parameters shall also be recorded. Field records must be kept on file by the Operator and will be provided to the Director upon written request.

(5) If a dissolved methane concentration greater than 1.0 milligram per liter (mg/l) is detected in a water well or spring, compositional gas analysis and stable isotope analysis of the methane (carbon and hydrogen – 12C, 13C, 1H and 2H) shall be performed to determine gas type. If test results indicate thermogenic gas or a mixture of thermogenic and biogenic gas, the operator shall notify the Director upon receipt of final laboratory results and analysis. The Operator shall not be required to conduct subsequent isotopic analysis of any sample where thermogenic gas is present unless otherwise ordered by the Director after a determination is made under Rule 524. If it is verified that the dissolved methane concentration increases by more than 5.0 mg/l between sampling periods, or at any point exceeds 10 mg/l, the operator shall, as soon as practicable, notify the Director and the owner of the water well.

h. Sampling Results. Copies of all final laboratory results shall be provided to the Director in an electronic format, and to the water well owner or landowner, within three (3) months of collecting the samples.

i. Liability. No Operator shall be liable for any results of the required sampling under this Rule 609 that exceed the water quality standards in Table 910-1, or that exceed any other applicable water quality standards, unless and until such Operator is determined to be a Responsible Party pursuant to Rule 524.

STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY& PURPOSE
CAUSE NO. 1R
DOCKET NO. 1211-RM-03

Basis

The Colorado Oil & Gas Conservation Commission is directed to "foster the production, and utilization of the natural resources of oil and gas in the state of Colorado in a manner consistent with protection of public health, safety, and welfare, including protection of the environment. . . ." C.R.S. §§ 34-60-102(1) ("the Conservation Act"). This legislative declaration provides the general foundation for Rule 609, both as proposed by the Commission and by the Colorado Oil & Gas Association in its Alternate Rule (together "Rule 609").

Specific Statutory Authority:

C.R.S. § 34-60-106(2)(d) provides specific authority for Rule 609:

> The commission has the authority to regulate . . . [o]il and gas operations so as to prevent and mitigate significant adverse environmental impacts on any air, water, soil, or biological resource resulting from oil and gas operations to the extent necessary to protect public health, safety, and welfare, including protection of the environment and wildlife resources, taking into consideration cost-effectiveness and technical feasibility.

While the taking of samples from water wells and springs does not directly prevent or mitigate significant adverse impacts to groundwater resources, it will generate a database that will assist the Commission in this important function. Pre-drilling and completion sampling provides a "baseline" against which allegations of subsequent groundwater contamination can be assessed. Post-drilling and completion sampling may provide an early warning of a potential well failure that needs to be investigated.

C.R.S. § 34-60-106(11)(a)(II) provides:

> [The commission shall, by April 1, 2008] promulgate rules, in consultation with the department of public health and environment, to protect the health, safety, and welfare of the general public in the conduct of oil and gas operations. The rules shall provide a timely and efficient procedure in which the department has an opportunity to provide comments during the commission's decision-making process. This rule-making shall be coordinated with the rule-making required in section 34-60-127 (3) (d), as enacted by house bill 07-1298 at the first regular session of the sixty-sixth general assembly, so that the timely and efficient procedure established pursuant to this subsection (11) is applicable to the department and to the division of wildlife.

This provision of the Conservation Act, by its express terms, directed the Commission to conduct rulemaking to protect public health, safety and welfare at a specific point in time and in conjunction with another rulemaking designed to protect wildlife habitat, in order to establish a coordinated, timely and efficient overall permitting procedure. However, it is unlikely that the General Assembly intended to time limit the Commission's authority to regulate so as to protect public health, safety and welfare. Read in conjunction with the Legislative Declaration (cited under Basis, *supra*), the General Assembly's directive to protect public health, safety and welfare is "evergreen."

This conclusion is further supported by the general authority provided in C.R.S. § 34-60-105(1):

> (1) The commission has jurisdiction over all persons and property, public and private, necessary to enforce the provisions of this article, and has the power to make and enforce rules, regulations, and orders pursuant to this article, and to do whatever may reasonably be necessary to carry out the provisions of this article.

Purpose:

Rule 609 is a regulatory response to public concerns that have arisen with respect to the perceived potential for hydraulic fracturing operations to impact groundwater resources. It is consistent with the Commission's mandate to foster the development of the state's oil and gas resources while protecting public health, safety and welfare, as well as building public confidence that oil and gas resources can be safely developed.

Rule 609 has been developed to supplement existing Commission regulations that ensure that oil and gas drilling and completion activities do not adversely affect groundwater quality. Rule 609 requires data collection that establishes a "baseline" against which allegations of subsequent groundwater contamination can be assessed. Post-drilling and completion sampling may provide an early warning of a potential well failure that needs to be investigated.

Rule 609 provides a set of criteria for selecting sampling locations of wells or springs, as well as guidelines with respect to seeking landowner authorization for such testing. The rule further provides for uniform sampling procedures and analytical methods for a defined set of constituents.

COGA's Alternate Rule meets these purposes in a more cost-effective manner than the Commission staff's proposed Rule 609 by:

- Clarifying the scope and purpose of the rule, namely that it is designed for the limited purpose of obtaining pre- and post-drilling and completion samples from proximate water wells or springs, and not for the purpose of a comprehensive groundwater quality assessment.
- Clarifying the Commission's intent to establish a uniform, cost-effective procedure for such sampling activities to the exclusion of operationally-conflicting local regulations (e.g. requirements to install groundwater monitoring wells).

- Providing appropriate exclusions for pre-existing Commission rules and orders establishing basin-specific groundwater testing programs, as well as for relevant local government and private agreements with operators.
- Limiting the applicability of Rule 609 to oil and gas wells only (including those on "multi-well sites") and excluding production facilities and other "oil and gas locations."
- Providing a more detailed set of criteria for the selection of sampling locations, as well as more specific guidance with respect to obtaining water well and land owner consent for sampling.
- Replacing the need to apply for Director approval of waivers when water well or land owner consent cannot be obtained, or where suitable wells or springs cannot be identified, with a self-implementing exemption process.
- Acknowledging the right of operators to contest Director requests for additional sampling activities pursuant to Commission Rule 524 (Responsible Party Determination).