

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

IN THE MATTER OF CHANGES TO THE RULES OF	)	CAUSE NO. 1R
PRACTICE AND PROCEDURE OF THE OIL & GAS	)	
CONSERVATION COMMISSION OF THE STATE OF	)	DOCKET NO. 1208-RM-02
COLORADO	)	

NOTICE OF RULEMAKING HEARING

TO ALL INTERESTED PARTIES AND TO WHOM IT MAY CONCERN:

The Oil and Gas Conservation Commission, on its own motion, will consider amendments to the Rule 100 Series (Definitions) and Rule 318A. of the Commission's Rules of Practice and Procedure, 2 CCR 404-1 ("Rules") to define "horizontal well," to permit greater flexibility in the creation of wellbore spacing units for purposes of drilling horizontal and infill wells in the portion of the City and County of Broomfield ("Broomfield") located within the Greater Wattenberg Area ("GWA") and to clarify existing rules applicable to horizontal wellbore spacing units.

The current Rule 318A(II). applicable in Broomfield generally: 1) authorizes comingling of hydrocarbon resources of Cretaceous age formations to the base of the Dakota Formation; 2) allows defined drilling locations ("GWA Windows") to be used to drill wells; 3) establishes procedures for adaptive (wellbore) spacing units; 4) provides for the location of interior infill and boundary wells; and 5) limits the number of producing completions to eight per 160-acre governmental section.

The proposed amendments would apply Rule 318A. amendments approved by the Commission at its August 8, 2011 meeting ("August 2011 Amendments") applicable to the remainder of GWA, to Broomfield. The August 2011 Amendments, once extended to Broomfield, will: 1) permit wellbore spacing units to be smaller than 160 acres; 2) permit flexible horizontal wellbore spacing sizes such that a horizontal wellbore spacing unit may include any quarter-quarter sections within 460 feet of the lateral wellbore in the producing formation; 3) remove the infill well area geographic restriction of 318A(II).e., to allow infill wells throughout the GWA; 4) extend the current water well sampling requirement of 318A.(I).e.(4) to the entire GWA; 5) establish notice and hearing procedures specific to the amendments, including establishing a process to inform mineral owners of the intent of an operator to create a new unit and drill a new well, requiring the notice recipient to respond within 30 days with any objection to the proposal, and establishing a 90-day period for the operator to apply for a permit to drill or have the unit definition expire; 6) eliminate an effectiveness review of the GWA infill provisions that was required by previous amendment; 7) eliminate the restriction on the number of wellbore completions per quarter section, and thus eliminate the requirement that any increase in the number of completions beyond eight requires Commission approval; 8) require an operator filing an Oil and Gas Location Assessment, Form 2A, to file a waste management plan in accordance with Rule 907.a.; 9) state that the new rule will not impact the number of authorized horizontal wells where the Commission has already entered orders specifying the number of authorized wells per spacing unit; and 10) establish a minimum distance of 150 feet between any new horizontal well and any existing or permitted wellbore, unless waived by the operator of the encroached wellbore. The proposed amendments would also clarify existing rules applicable to horizontal wellbore spacing units.

Broomfield submitted written comments on the August 2011 Amendments objecting on numerous grounds. Broomfield's objection advocated, among other things, that the Commission should have provided a more lengthy comment period. An interim compromise that was acceptable to Broomfield was proposed prior to the Commission's August 8, 2011 hearing. The August 2011 Amendments adopted by the Commission incorporate the compromise. Namely, Broomfield was effectively excepted from the Amendments. Rule 318A.(I) contains the amendments to GWA rules approved by the Commission on August 8, 2011 and applies to GWA lands within Larimer, Boulder, Adams and Weld counties. Whereas Rule 318A.(II) applies only to GWA lands within Broomfield and contains the version of Rule 318A. as it existed immediately prior to the Commission's August 8, 2011 hearing. The purpose of this rulemaking is to remove Rule 318A.(II) from the August 2011 Amendments such that Rule 318A. would apply to all counties within GWA, including Broomfield. Further, the proposed amendments would also adopt a definition of "horizontal well" in the 100 Series of 2 CCR 404-1.

The proposed amendments are intended to reduce the need for routine well location exception applications filed with and approved by the Commission. Such applications have increased significantly in recent months, due to ongoing oil and gas development activities in the GWA. The proposed amendments are intended to establish rules of general application across the GWA that will facilitate responsible, balanced oil and gas development in the GWA, with appropriate protections for surface owners and the environment.

The proposed amendments read as follows:

DEFINITIONS (100 Series)

**HORIZONTAL WELL – SHALL MEAN A WELL WHICH IS DRILLED IN SUCH A WAY THAT THE WELLBORE DEVIATES Laterally TO AN APPROXIMATE HORIZONTAL**

**ORIENTATION WITHIN THE TARGET FORMATION WITH THE LENGTH OF THE HORIZONTAL COMPONENT OF THE WELLBORE EXTENDING AT LEAST ONE HUNDRED FEET (100') IN THE TARGET FORMATION, MEASURED FROM THE INITIAL POINT OF PENETRATION INTO THE TARGET FORMATION THROUGH THE TERMINUS OF THE HORIZONTAL COMPONENT OF THE WELLBORE IN THE SAME COMMON SOURCE OF HYDROCARBON SUPPLY.**

Rule 318A.

**318A. GREATER WATTENBERG AREA SPECIAL WELL LOCATION, SPACING AND UNIT DESIGNATION RULE**

a. **GWA, GWA wells, GWA windows and unit designations.** The Greater Wattenberg Area ("GWA") is defined to include those lands from and including Townships 2 South to 7 North and Ranges 61 West to 69 West, 6th P.M. In the GWA, operators may utilize the following described surface drilling locations ("GWA windows") to drill, twin, deepen, or recomplete a well ("GWA well") and to commingle any or all of the Cretaceous Age formations from the base of the Dakota Formation to the surface:

- (1) A square with sides four hundred (400) feet in length, the center of which is the center of any governmental quarter-quarter section ("400' window"); and,
- (2) A square with sides eight hundred (800) feet in length, the center of which is the center of any governmental quarter section ("800' window").
- (3) Absent a showing of good cause, which shall include the existence of a surface use or other agreement with the surface owner authorizing a surface well location outside of a GWA window, all surface wellsites shall be located within a GWA window.
- (4) Unit designations.

A. 400' window. When completing a GWA well in a 400' window to a spaced formation, the operator shall designate drilling and spacing units in accordance with existing spacing orders.

B. 800' window. When completing a GWA well in an 800' window, whether in spaced or unspaced formations, the operator shall: (i) designate drilling and spacing units in accordance with existing spacing orders where units are not smaller than a governmental quarter section; or (ii) form a voluntary drilling and spacing unit consisting of a governmental quarter section; or (iii) where designating a drilling and spacing unit smaller than a governmental quarter section, secure waiver(s) from the operator or from the mineral owners (if the operator is also the holder of the mineral lease) of the lands in the governmental quarter section that are not to be included in the spacing unit; or (iv) apply to the Commission to form an alternate unit or to respace the area.

C. Unspaced areas and wellbore spacing units. When completing a GWA well to an unspaced formation, the operator shall designate a drilling and spacing unit not smaller than a governmental quarter-quarter section if such well is proposed to be located greater than four hundred sixty (460) feet from the quarter-quarter section boundary in which it is located. If a well is proposed to be located less than four hundred sixty (460) feet from the governmental quarter-quarter section boundary, a wellbore spacing unit ("wellbore spacing unit") for such well shall be comprised of the governmental quarter-quarter sections that are located less than four hundred sixty (460) feet from the wellbore regardless of section or quarter section lines.

D. Horizontal GWA well. Where a drilling and spacing unit does not exist for a horizontal well, a horizontal wellbore spacing unit shall be designated by the operator for each proposed horizontal well. The horizontal wellbore spacing unit may be of different sizes and configurations depending on lateral length and orientation but shall be comprised of the governmental quarter-quarter sections in which the productive portion of the wellbore lateral is located as well as any governmental quarter-quarter sections that are located less than four hundred sixty (460) feet from any productive portion of the wellbore lateral, regardless of section or quarter section lines. However, if the horizontal component of the horizontal wellbore is located entirely within a GWA window, the operator shall designate a drilling and spacing unit in accordance with subsections a.(4)A. and a.(4)B. of this rule. A horizontal wellbore spacing unit may overlap portions of another horizontal wellbore spacing unit or other wellbore spacing unit designated in accordance with subsection a.(4)C. GWA horizontal wells and horizontal wellbore spacing units shall be subject to the notice and hearing procedures as provided for in Rule 318A.e.(6).

b. **Recompletion/commingling of existing wells.** Any GWA well in existence prior to the effective date of this rule, which is not located as described above, may also be utilized for deepening to or recompletion in any Cretaceous Age formation and for the commingling of production therefrom.

c. **Surface locations.** Prior to the approval of any Application for Permit-to-Drill submitted for a GWA well, the proposed surface well location shall be reviewed in accordance with the following criteria:

- (1) A new surface well location shall be approved in accordance with Commission rules when it is less than fifty (50) feet from an existing surface well location.
- (2) When the operator is requesting a surface well location greater than fifty (50) feet from a well (unless safety or mechanical considerations of the well to be twinned or topographical or surface constraints justify a location greater than fifty (50) feet), the operator shall provide a consent to the exception signed by the surface owner on which the well is proposed to be located in order for the Director to approve the well location administratively.
- (3) If there is no well located within a GWA window but there is an approved exception location well located outside of a GWA window that is attributed to such window, the provisions of subsections (1) and (2) of this subsection c. shall be applicable to such location.

d. **Prior wells excepted.** This rule does not alter the size or configuration of drilling units for GWA wells in existence prior to the effective date of this rule. Where deemed necessary by an operator for purposes of allocating production, such operator may allocate production to any drilling and spacing unit with respect to a particular Cretaceous Age formation consistent with the provisions of this rule.

e. **GWA infill.**

(1) **Interior infill wells.** Additional bottom hole locations for the "J" Sand, Codell and Niobrara Formations are hereby established greater than four hundred sixty (460) feet from the outer boundary of any existing 320-acre drilling and spacing unit ("interior infill wells"). Pursuant to the well location provisions of subsection a., above, interior infill well locations shall be reached by utilizing directional drilling techniques from the GWA windows.

A. If a bottom hole location for an interior infill well is proposed to be located less than four hundred sixty (460) feet from the outer boundary of an existing drilling and spacing unit, a wellbore spacing unit as defined in a.(4)C., above, shall be designated by the operator for such well.

B. If a bottom hole location for an interior infill well is proposed to be located greater than four hundred sixty (460) feet from an existing 80-acre or existing 320-acre drilling and spacing unit, the spacing unit for such well shall conform to the existing 80-acre or existing 320-acre drilling and spacing unit.

(2) **Boundary wells.** Additional bottom hole locations for the "J" Sand, Codell and Niobrara Formations are hereby established less than four hundred sixty (460) feet from the outer boundary of a 320-acre governmental half section or from the outer boundary of any existing 320-acre drilling and spacing unit ("boundary wells"). A wellbore spacing unit as defined in a.(4)C., above, shall be designated by the operator for such well.

(3) **Additional producing formations.** An operator wanting to complete an interior infill well or boundary well in a formation other than the "J" Sand, Codell, or Niobrara Formations ("additional producing formation") must request an exception location prior to completing the additional producing formation. The spacing unit dedicated to the exception location shall comply with subsections (1) or (2), above, as appropriate.

(4) **Water well sampling.** The Director shall require initial baseline testing prior to the first well proposed within a governmental section. The following shall be used as guidance for the Director in establishing initial baseline testing:

A. Within the governmental quarter section of the proposed well, the closest water well ("water quality testing well") completed in the Laramie/Fox Hills Aquifer shall be sampled.

B. If no Laramie/Fox Hills water wells are located within the governmental quarter section, then the deepest representative water quality testing well within the governmental quarter section of the proposed well shall be sampled.

C. If no water wells are located within the governmental quarter section, a water quality testing well (preferably completed in the Laramie/Fox Hills Aquifer) within one-half (½) mile of the proposed well shall be selected.

D. If there are no water quality testing wells that meet the foregoing criteria, then initial baseline testing shall not be required.

E. Initial baseline testing shall include laboratory analysis of all major cations and anions, total

dissolved solids, iron and manganese, nutrients (nitrates, nitrites, selenium), dissolved methane, pH, and specific conductance.

F. If free gas or a methane concentration level greater than 2 mg/l is detected in a water quality testing well, compositional analysis shall be performed to determine gas type (thermogenic, biogenic or an intermediate mix of both). If the testing results reveal biogenic gas, no further isotopic testing shall be required. If the testing results reveal thermogenic gas, carbon isotopic analyses of methane carbon shall be conducted. The Director may require further water well sampling at any time as a result of the laboratory results or in response to complaints from water well owners.

G. Copies of all test results described above shall be provided to the Director and the landowner where the water quality testing well is located within three (3) months of collecting the samples used for the test. Laboratory results shall also be submitted to the Director in an electronic format.

(5) **Existing production facilities.** To the extent reasonably practicable, operators shall utilize existing roads, pipelines, tank batteries and related surface facilities for all interior infill wells and boundary wells.

(6) **Notice and hearing procedures.** For proposed boundary wells, wellbore spacing units, and additional producing formations provided by this subsection e., and for proposed horizontal wells and horizontal wellbore spacing units as provided by 318A.a.(4)D., the following process shall apply:

A. Notice shall be given by certified mail by the operator of a proposed boundary well, wellbore spacing unit, horizontal well or horizontal wellbore spacing unit to all owners in the proposed wellbore spacing unit. Notice shall be given by certified mail by the operator of a proposed additional producing formation to all owners in cornering and contiguous spacing units of the requested completion and the proposed spacing unit; if the additional producing formation is unspaced only the owner in the proposed spacing unit needs to be notified. Notice for a boundary well, wellbore spacing unit, horizontal well or horizontal wellbore spacing unit shall include a description of the wellbore orientation, the anticipated spud date, the size and shape of the proposed wellbore spacing unit (with depiction attached), the proposed surface and bottom hole locations, identified by footage descriptions, and the survey plat. For proposed horizontal wells and horizontal wellbore spacing units, the operator shall also identify by footage descriptions, the location at which the wellbore penetrates the target formation.

B. Each owner shall have a thirty (30) day period after receipt of such notice to object in writing to the operator. The written objection must be based upon a claim that the notice provided by the operator does not comply with the informational requirements of subsection A., above, and/or a technical objection that either waste will be caused, correlative rights will be adversely affected, or that the operator is not an "owner", as defined in the Act, of the mineral estate(s) through which the wellbore penetrates within the target formation. Specific facts must form the basis for such objection. The objecting party shall provide a copy of the written objection to the Director.

C. If an objection pursuant to subsection B. is timely received, the operator may seek a hearing before the Commission on the objection. The objecting party will bear the burden of proving that the notice provided by the operator does not comply with the informational requirements of subsection A., above, that the operator is not an owner, as defined by the Act, and/or the approval of the boundary well location, wellbore spacing unit, horizontal well, horizontal wellbore spacing unit or additional producing formation would either create waste or adversely affect the objecting party's correlative rights. The objection may be first presented to the hearing officer of the Commission and such hearing officer, based on the facts, may recommend to the Commission that such objection shall stand or be dismissed.

D. If the objection stands, the Commission may either enter an order approving or denying the proposed boundary well location, wellbore spacing unit, horizontal well location, horizontal wellbore spacing unit or additional producing formation, with or without conditions. Such conditions may be requisites for the Application for Permit-to-Drill, Form 2, if the operator chooses to proceed with an Application for Permit-to-Drill, Form 2, relative to the proposed boundary well, wellbore spacing unit, horizontal well, horizontal wellbore spacing unit or additional producing formation. If the objection is dismissed, the operator shall treat the objection as withdrawn and otherwise proceed with subsection E. below.

E. Absent receipt of a timely objection pursuant to subsections A. and B., above, the Director may administratively approve the boundary well, wellbore spacing unit, horizontal well, horizontal wellbore spacing unit or additional producing formation. A location plat evidencing the well location, wellbore spacing unit, or additional producing formation and applicable spacing unit shall be submitted to the Director together with copies of any surface waivers and a certification that no timely objections were received. An Application for Permit-to-Drill, Form 2, specifically identifying

that a boundary well, wellbore spacing unit, horizontal well, horizontal wellbore spacing unit or additional producing formation is proposed, shall also be filed with the Director in accordance with Rule 303. within ninety (90) days of the expiration of the thirty (30) day notice period or such notice shall be deemed withdrawn. Should such notice be withdrawn or deemed withdrawn, the proposed operator shall not submit another notice for the same well or wellbore spacing unit within forty-five (45) days of the date the original notice is withdrawn or deemed withdrawn.

f. **Limit on locations.** This rule does not limit the number of formations that may be completed in any GWA drilling and spacing unit nor, subject to subsection c., above, does it limit the number of wells that may be located within the GWA windows.

g. **GWA water sampling.** The Director may apply appropriate drilling permit conditions to require water well sampling near any proposed GWA wells in accordance with the guidelines set forth in subsection e.(4), above.

h. **Waste Management.** In conjunction with filing an Oil and Gas Location Assessment, Form 2A, the operator shall include a waste management plan meeting the general requirements of Rule 907.a.

i. **Exception locations.** The provisions of Rule 318.c. respecting exception locations shall be applicable to GWA wells, however, absent timely objection, boundary wells, wellbore spacing units, and additional producing formations shall be administratively approved as provided in subsection e.(6) above.

j. **Correlative rights.** This rule shall not serve to bar the granting of relief to owners who file an application alleging abuse of their correlative rights to the extent that such owners can demonstrate that their opportunity to produce Cretaceous Age formations from the drilling locations herein authorized does not provide an equal opportunity to obtain their just and equitable share of oil and gas from such formations.

k. **Supersedes orders and policy.** Subject to paragraph d. above, this rule supersedes all prior Commission drilling and spacing orders affecting well location and density requirements of GWA wells. Where the Commission has issued a specific order limiting the number of horizontal wells permitted in a drilling and spacing unit, the well density in such unit shall be governed by that order.

l. **Non-applicability of Rule 305.a. notice requirement.** The landowner notice provision for the owner(s) of surface property within five hundred (500) feet of the proposed oil and gas location under Rule 305.e. shall not apply to any such locations that are subject to the provisions of this subsection 318A.

m. **Minimum interwell distance.** No horizontal wellbore lateral shall be located less than one hundred fifty (150) feet from any existing or permitted oil or gas wellbore as illustrated in the directional survey for drilled wellbores or as illustrated in the deviated drilling plan for permitted wellbores or as otherwise reflected in the COGCC well records. This requirement may be waived in writing by the operator of the encroached upon well.

NOTICE IS HEREBY GIVEN, that the Oil and Gas Conservation Commission of the State of Colorado, pursuant to the above, has scheduled the above-entitled matter for hearing on:

Date: Monday, October 1, 2012  
Tuesday, October 2, 2012

Time: 9:00 a.m.

Place: Route County Justice Center  
1955 Shield Drive  
Steamboat Springs, CO 80487

The Commission has statutory authority to conduct rulemaking pursuant to section 34-60-105 C.R.S. (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 the Oil and Gas Conservation Act and has specific authority to promulgate these rules under section 34-60-106 (2)(d), C.R.S., (the Commission has the authority to regulate oil 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).

The Commission may take actions, including without limitation, modifying or amending the existing rules described or proposed herein and making conforming modifications to other rules, which it determines are reasonably necessary.

In accordance with the Americans with Disabilities Act, if any party requires special accommodations


as a result of a disability for this hearing, please contact Margaret Humecki at (303) 894-2100 ext. 5139, prior to the hearing and arrangements will be made.

Copies of the current Rules are available on the Commission internet homepage at <http://cogcc.state.co.us>. The reasons and authority for the proposed amendments are set forth in the Proposed Statement of Basis, Specific Statutory Authority, attached as Appendix A to this Notice.

Any written comments on the proposed rule changes to be considered are requested to be submitted by 5:00 p.m. on September 21, 2012 for more complete consideration by the Commission. Comments must be served on the Commission in hard copy and electronic copy as follows: hard copies for the Commission - the original and 13 copies delivered to Robert J. Frick, Hearings Manager, Docket No. 1208-RM-02, Oil and Gas Conservation Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado, 80203; and an electronic copy emailed, preferably in portable document format (*pdf*), to [COGCC.Rulemaking@state.co.us](mailto:COGCC.Rulemaking@state.co.us) for posting to the Commission website. Opportunity for testimony from any interested party will be provided at the hearing. However, the time to present testimony may be limited, and parties sharing similar viewpoints are requested to appoint a spokesperson to present their testimony at the hearing.

The Commission will enter its order adopting such rules based on the record made at the hearing and any continuation of the hearing.

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

By   
Robert J. Frick, Secretary

Dated: September 12, 2012

**Submit written comments to:**  
Colorado Oil & Gas Conservation Commission  
Attn. Robert J. Frick,  
Docket No. 1208-RM-02  
1120 Lincoln Street, Suite 801  
Denver, Colorado 80203

APPENDIX A

DEPARTMENT OF NATURAL RESOURCES  
OIL AND GAS CONSERVATION COMMISSION  
AMENDMENTS TO 100 SERIES - DEFINITIONS AND 300 SERIES - DRILLING, DEVELOPMENT,  
PRODUCTION AND ABANDONMENT  
2 CCR 404-1

**Proposed Statement of Basis, Specific Statutory Authority, and Purpose**

**Amendments to Current Rules of the Colorado Oil and Gas Conservation Commission, 2 CCR 404-1, Amending Rule 318A., and Defining Horizontal Well in the Rule 100 Series (Definitions).**

This statement sets forth the basis, specific statutory authority, and purpose for the amendments to Rule 318A. and Rule 100 Series (Definitions) of the Rules and Regulations and Rules of Practice and Procedure ("Rules") promulgated by the Colorado Oil and Gas Conservation Commission ("Commission" or "COGCC") on October 1, 2012.

**Statutory Authority**

These amendments to Rule 318A. and Rule 100 Series (Definitions) are based on: 1) general Commission jurisdiction and rulemaking authority granted in section 34-60-105(1), C.R.S.; and 2) specific statutory authority of section 34-60-106(2)(a), (c), and (d), C.R.S. The Commission adopted the following statement of basis and purpose consistent with section 24-4-103(4), C.R.S., of the Administrative Procedure Act. This statement is hereby incorporated by reference in the rules adopted.

The rulemaking hearing for these amendments to Rule 318A. and Rule 100 Series (Definitions) was held initially by the Commission on October 31, 2011, and November 1, 2011, and then again on April 16 2012, but was continued indefinitely. A subsequent rule making hearing for these amendments was held by the Commission on October 1, 2012, and October 2, 2012. These amendments become effective twenty days after publication in the *Colorado Register*.

**Basis and Purpose**

## INTRODUCTION

Since the initial Wattenberg Field discovery in 1970, oil and gas development has continued to increase, with significant ancillary economic benefits. Rule 318A. was initially adopted in April 1998, and modified in 2005. The rule, also referred to as The Greater Wattenberg Area ("GWA") Rule, was initiated to facilitate location of wells, and operator access to all Cretaceous age formations, without need to routinely secure Commission approval. Statewide setback rules of Rule 318.a. were becoming increasingly too restrictive, and an unnecessary impediment to reasonable development of the hydrocarbon resources of the GWA. The Rule was driven by intense interest in hydrocarbon development in the GWA, the complex nature of the tight sands of the GWA, and the need to mitigate conflicts between mineral rights developers and surface owners with predictable and reasonably protective rules.

The GWA Rule was most recently amended by the Commission on August 8, 2011 ("August 2011 Amendments"). The August 2011 Amendments were intended to promote the use of horizontal drilling to maximize resource recovery, while taking appropriate safeguards to protect public health, safety, and welfare, including the environment and wildlife resources. The August 2011 Amendments were also intended to reduce the number of applications filed by GWA operators seeking Commission approval for well location exceptions. The August 2011 Amendments also implement additional environmental reporting requirements.

The GWA Rule prior to the adoption of the August 2011 Amendments generally: 1) authorized comingling of hydrocarbon resources of Cretaceous age formations to the base of the Dakota Formation; 2) allowed defined drilling locations ("GWA Windows") to be used to drill wells; 3) established procedures for adaptive (wellbore) spacing units; 4) provided for the location of interior infill and boundary wells; and 5) limited the number of producing completions to eight per 160-acre governmental section.

GWA operators found themselves seeking Commission approval for well location exceptions with increasing frequency. Recent months have seen a significant increase in hearing applications, and this trend is expected to continue without modification of Rule 318A. The August 2011 Amendments are expected to eliminate the bulk of the well location exception requests and implement additional environmental reporting requirements without increasing the number of well sites unless a surface owner consents to the additional well site. August 2011 Amendments were developed with industry input and discussed with Weld County officials and representatives of homebuilder and environmental groups.

The following discussion identifies proposed amendments and explains the substance of and rationale behind the proposed amendments.

## IDENTIFICATION AND EXPLANATION OF AMENDMENTS

1. Definition of "Horizontal Well" (Rule 100 Series Definitions). One of the drivers for recently requested well location exceptions is horizontal drilling in the Niobrara Formation. The Niobrara Formation in the GWA has been drilled since the early 1980's, and the GWA is an ideal location for horizontal drilling. The proposed amendments require a definition of "Horizontal Well". The definition is self explanatory.

2. Repeal of 318A.(II). The City and County of Broomfield ("Broomfield") submitted written comments on the August 2011 Amendments objecting on numerous grounds. Broomfield's objection advocated, among other things, that the Commission should have provided a more lengthy comment period. An interim compromise that was acceptable to Broomfield was proposed prior to the Commission's August 8, 2011 hearing. The August 2011 Amendments adopted by the Commission incorporate the compromise. Namely, Broomfield was effectively excepted from the Amendments. Rule 318A.(I) contains the amendments to GWA rules approved by the Commission on August 8, 2011 and applies to GWA lands within Larimer, Boulder, Adams and Weld counties. Whereas Rule 318A.(II) applies only to GWA lands within Broomfield and contains the version of Rule 318A. as it existed immediately prior to the Commission's August 8, 2011 hearing. The purpose of the instant rulemaking is to remove Rule 318A.(II) from the August 2011 Amendments such that Rule 318A. would apply to all counties within GWA, including Broomfield.

The Commission's repeal of Paragraph 318A.(II) would extend the purview of the August 2011 Amendments to Broomfield and would result in the following changes:

A. Reduced Minimum Size Spacing Units (318A.a.(4)C.). This amendment allows wellbore spacing units to be smaller than 160 acres. The wellbore spacing unit commonly referred to as a "roving 160", has worked well, but there are occasions where it does not. These situations occur in unspaced areas, where the spacing unit may be central to two quarter-quarter sections but not to four. In these cases it makes sense to size the wellbore spacing unit at 80 acres and not 160 acres. This amendment would address this situation.

B. Flexible Horizontal Wellbore Spacing Sizes (318A.a.(4)D.). This amendment allows a horizontal wellbore spacing unit to include any quarter-quarter sections within 460 feet of the lateral wellbore in the producing formation. This will result in irregular unit boundaries along the edges of the included quarter-quarter sections along the length of the wellbore, but would allow for a more equitable sharing of oil



and gas revenues by mineral interest owners, when compared to requiring the unit to be an entire section. Each horizontal well would have its own unique unit.

C. Increased Area Allowed for Infill Wells (318A.e.). This amendment removes the infill well area geographic restriction of 318A.e., and allows infill wells throughout the GWA. New completion techniques have made hydrocarbon resources throughout the GWA attractive targets that were not considered economic six years ago. Additionally, removing this geographic constraint allows the drilling of horizontal wells between GWA windows, without requiring Commission approved exceptions. This amendment also makes the rules uniform over the entire GWA, providing for simpler administration and easier understanding by owners and operators.

D. Water Well Sampling (318A.e.(4)). By eliminating the special area of 318A.e. with amendment 4 above, the entire GWA is covered by the water well sampling requirement. The intent with this amendment is to get a water well sample in every section within the GWA based on a requirement for the test with the next proposed well in the section, regardless of its drainage area.

E. Notice and Hearing Procedures (318A.e.(6)). This amendment covers notice and hearing procedures for wells utilizing the wellbore spacing unit concept. Because this concept creates units across original traditional units established by early spacing orders, each well would have different mineral owners. This amendment establishes the process to inform mineral owners of the intent of an operator to create the new unit and drill a new well. The idea is to provide operators a simple method to create a wellbore spacing unit and only utilize the Commission adjudicatory process when the parties cannot agree on terms. The notification consists of a letter sent to the mineral owners in the proposed unit describing the operation and the affected lands. This notice requires the recipient to object to the proposal within 30 days or the assumption will be that there is no objection to the proposed operation. This provision establishes a procedure and requirements of an objection, before parties proceed with a formal hearing before the Commission. Finally, if the operator fails to file an Application for Permit to Drill, Form 2, within 90 days of the expiration of the 30-day notice period, the notice will be considered withdrawn. A notice provision is included in the current rule, but this amendment clarifies the process and provides an action deadline which does not currently exist.

F. Elimination of Outdated Effectiveness Review (318A.e.(7)). This amendment eliminates an effectiveness review of the GWA infill provisions, from the previous Rule 318A. amendment, that was required to be completed by March 1, 2008.

G. Elimination of Limitation of Eight Completions (318A.f.). This proposed amendment eliminates the restriction on the number of wellbore completions per quarter section, and thus the requirement that any increase in the number of completions beyond eight requires Commission approval. The current limitation of eight completions has driven a significant increase in the demand for Commission hearings in recent months. With the increasing demand for horizontal wells in the GWA, this trend will continue in the absence of this amendment.

The limitation of eight wellbores commonly causes an operator to seek a well number exception because the current rule is not conducive to operator utilization of optimum infill well locations for recovery of the resource. Sometimes the drilling sequence of wells resulted in bypassed reserves, as the eight-well limit would be reached before reaching each otherwise authorized infill location. The amendment provides greater flexibility for the operator to match the number and location of wells to that necessary to fully develop the resource. This amendment does not eliminate the surface use limitation imposed in the original GWA Rule. Utilization of GWA drilling windows and twinning existing wells are still required.

H. Waste Management Plans (318A.h.). This amendment requires an operator filing an Oil and Gas Location Assessment, Form 2A, to file a waste management plan in accordance with Rule 907.a. The waste management plan will require the operator to describe its basic exploration and production waste handling operations at the location, including: 1) storage; 2) transportation method; 3) transportation frequency; 4) disposal sites; and 5) any planned re-use and recycling. It is not intended that the waste management plan be particularly detailed. It is intended to demonstrate the operator's conceptual plan for dealing with: 1) drill cuttings, produced water, and tank bottoms; 2) what the operator will do with the waste when it is generated; 3) how the operator will be transport the waste; and 4) how the waste will be disposed.

I. No Impact on Existing Orders (318A.k.). The amended rules will not override any existing Commission order establishing the authorized number of horizontal wells per spacing unit. This provision was requested by industry to protect settled expectations of parties to existing orders. Any increase in the number of horizontal wells beyond that established by existing Commission order, may be authorized by application to the Commission and approval of a new order to that effect, just as this opportunity existed before the amendments.

J. Minimum Interwell Distance (318A.m.). Operators were concerned about the possibility of new horizontal wells encroaching upon existing or other permitted wells. The proposed amendments establish a minimum distance of 150 feet between any new horizontal well and any existing or permitted wellbore, unless



waived by the operator of the encroached wellbore.

3. Elimination of Unnecessary Language in Rule 318A.(I). As a result of the August 2011 Amendments, Rule 318A.(I) states that it has no application to lands within the City and County of Broomfield, Colorado. The proposed amendments to Rule 318A. will make the GWA uniform across the entire GWA, including Broomfield. Accordingly, the limiting language contained in Rule 318A.(I) will be removed, and the rule will be re-labeled, 318A.

4. Clarification of Existing Rules Applicable to Horizontal Wellbore Spacing Units. The Amendments eliminate an ambiguity present in the August 2011 Amendments by clarifying that, for purposes of establishing horizontal wellbore spacing units, the productive portion of a wellbore lateral, instead of the entire length of the wellbore lateral, is the relevant consideration.

#### CONCLUSION

These proposed amendments to Rule 318A., and Rule 100 Series definition of "horizontal well" will make the GWA uniform across the entire GWA, including Broomfield. In doing so, the rules are expected to allow further development of the GWA in a logical and cooperative manner, to the benefit of mineral owners, residents, and industry, while continuing to provide balanced, reasonable protections to surface owners and the environment.