

SERIES DRILLING, DEVELOPMENT, PRODUCTION AND ABANDONMENT

301. RECORDS, REPORTS, NOTICES-GENERAL

Any written notice of intention to do work or to change plans previously approved must be filed with the Director, and must reach the Director and receive approval before the work is begun, or such approval may be given orally and, if so given, shall thereafter be confirmed to the Director in writing.

In case of emergency, or any situation where operations might be unduly delayed, any notice or information required by these rules and regulations to be given to the Director may be given orally or by wire, and if approval is obtained the transaction shall be promptly confirmed in writing to the Director, as a matter of record.

Immediate notice shall be given to the Director when public health or safety is in jeopardy. Notice shall also be given to the Director of any other significant downhole problem or mechanical failure in any well within ten (10) days.

The owner shall keep on the leased premises, or at the owner's headquarters in the field, or otherwise conveniently available to the Director, accurate and complete records of the drilling, redrilling, deepening, repairing, plugging or abandoning of all wells, and of all other well operations, and of all alterations to casing. These records shall show all the formations penetrated, the content and quality of oil, gas or water in each formation tested, and the grade, weight and size, and landed depth of casing used in drilling each well on the leased premises, and any other information obtained in the course of well operation. Such records on each well shall be maintained by any subsequent owner.

Whenever a person has been designated as an operator by an owner or owners of the lease or well, such an operator may submit the reports as herein required by the Commission.

302. COGCC Form 1. REGISTRATION FOR OIL AND GAS OPERATIONS

- a. Prior to the commencement of its operations, all producers, operators, transporters, refiners, gasoline or other extraction plant operators, and initial purchasers who are conducting operations subject to this Act in the State of Colorado, shall, for purposes of the Act, file a Registration For Oil and Gas Operations, Form 1, with the Director in the manner and form approved by the Commission. Any producer, operator, transporter, refiner, gasoline or other extraction plant operator, and initial purchaser conducting operations subject to the Act who has not previously filed a Registration For Oil and Gas Operations, Form 1, shall do so. Any person providing financial assurance for oil and gas operators in Colorado shall file a Form 1 with the Director. All changes of address of the parties required to file a Form 1 shall be immediately reported by submitting a new Form 1.
- b. **Designation of Agent, Form 1A.** Operator employees approved to submit documents shall be listed on a completed Designation of Agent, Form 1A. A company/individual other than the operator may be designated as an agent, and its representatives shall be listed on a completed Designation of Agent, Form 1A. This agency shall remain in effect until it is terminated in writing by submitting a new Designation of Agent, Form 1A. All changes to reported agent information shall be immediately reported by submitting a new Designation of Agent, Form 1A.

303. REQUIREMENTS FOR FORM 2, APPLICATION FOR PERMIT-TO-DRILL, DEEPEN, RE-ENTER, OR RECOMPLETE, AND OPERATE; FORM 2A, OIL AND GAS LOCATION ASSESSMENT.

a. FORM 2. APPLICATION FOR PERMIT-TO-DRILL, DEEPEN, RE-ENTER, OR RECOMPLETE, AND OPERATE.

- (1) **Approval by Director.** Before any person shall commence operations for the drilling or re-entry of any well, such person shall file with the Director an application on Form 2 for a Permit-to-Drill, a completed (or, where it has been approved in advance, an approved) Oil and Gas Location Assessment, Form 2A, pay a filing and service fee established by the Commission (see Appendix III), and obtain the Director's approval before commencement of operations with heavy equipment.
 - (2) **Operational conflicts.** The Permit-to-Drill shall be binding with respect to any operationally conflicting local governmental permit or land use approval process.
 - (3) **Exemptions.** Wells drilled for stratigraphic information only shall be exempt from paying the filing and service fee. The re-entry of a well in a unitized, storage, or secondary recovery operation shall be exempt from the filing of Form 2 and from paying the filing and service fee. The notice of such intent to re-enter a well shall be filed on a Sundry Notice, Form 4.
- b. A request to recomplete or deepen a well to a different reservoir or to side-track a well shall be filed on an Application for Permit-to-Drill, Form 2, with a filing and service fee established by the Commission (see Appendix III), along with a Sundry Notice, Form 4, detailing the work, and a wellbore diagram.
- c. Attached to and part of the Permit-to-Drill, Form 2, as filed shall be a current 8½" by 11" scaled drawing of the entire section(s) containing the proposed well location with the following minimum information:
- (1) Dimensions on adjacent exterior section lines sufficient to completely describe the quarter section containing the proposed well shall be indicated. If dimensions are not field measured, state how the dimensions were determined.
 - (2) The latitude and longitude of the proposed well location shall be provided on the drawing with a minimum of five (5) decimal places of accuracy and precision using the North American Datum (NAD) of 1983 (e.g.; latitude 37.12345 N, longitude 104.45632 W). If GPS technology is utilized to determine the latitude and longitude, all GPS data shall meet the requirements set forth in Rule 215. a. through h.
 - (3) For directional drilling into an adjacent section, that section shall also be shown on the location plat and dimensions on exterior section lines sufficient to completely describe the quarter section containing the proposed productive interval and bottom hole location shall be indicated. (Additional requirements related to directional drilling are found in Rule 321.)
 - (4) For irregular, partial or truncated sections, dimensions will be furnished to completely describe the entire section containing the proposed well.

- (5) The field-measured distances from the nearer north/south and nearer east/west section lines shall be measured at ninety (90) degrees from said section lines to the well location and referenced on the plat. For unsurveyed land grants and other areas where an official public land survey system does not exist, the well locations shall be spotted as footages on a protracted section plat using Global Positioning System (GPS) technology and reported as latitude and longitude in accordance with Rule 215.
- (6) A map legend.
- (7) A north arrow.
- (8) A scale expressed as an equivalent (e.g. - 1" = 1000').
- (9) A bar scale.
- (10) The ground elevation.
- (11) The basis of the elevation (how it was calculated or its source).
- (12) The basis of bearing or interior angles used.
- (13) Complete description of monuments and/or collateral evidence found; all aliquot corners used shall be described.
- (14) The legal land description by section, township, range, principal meridian, baseline and county.
- (15) Operator name.
- (16) Well name and well number.
- (17) Date of completion of scaled drawing.

d. FORM 2A, OIL AND GAS LOCATION ASSESSMENT.

- (1) A completed Oil and Gas Location Assessment, Form 2A, shall be submitted for any new oil and gas location, unless exempted as set forth below. For purposes of this section, "new oil and gas location" shall mean surface disturbance at a previously undisturbed site or surface disturbance for purposes of modifying or expanding an oil and gas location in existence on May 1, 2009 on federal land or April 1, 2009 on all other land.
- (2) **Exemptions.** A new Form 2A shall not be required for the following:
 - A. Surface disturbance, other than drilling a new well or constructing a drilling or production pit, occurring at an existing oil and gas facility within the originally disturbed area, even if interim reclamation has been performed;
 - B. For an oil and gas location covered by an approved Comprehensive Drilling Plan and where such Comprehensive Drilling Plan contains information substantially equivalent to that which would be required for a Form 2A for the proposed oil and gas location and the Comprehensive Drilling Plan has been subject to procedures substantially equivalent to those

required for a Form 2A, including but not limited to consultation with surface owners, local governments, the Colorado Department of Public Health and Environment or Colorado Division of Wildlife, where applicable, and public notice and opportunity to comment, and where the operator does not seek a variance from the Comprehensive Drilling Plan or a provision of these rules that is not addressed in the Plan;

- C. Gathering lines;
- D. Seismic operations;
- E. Pipelines for oil, gas, or water; or
- F. Roads.

(3) **Information requirements.** In all instances, the Form 2A requires the attachment of the following information. Where the information required under this section has been included in a federal Surface Use Plan of Operations meeting the requirements of Onshore Oil and Gas Order Number 1 (72 Fed. Reg. 10308 (March 7, 2007)), or for a federal Right of Way, Form 299, then the operator may attach the completed pertinent information and identify on the Form 2A where the information required under this section may be found therein.

- A. A minimum of four (4) color photographs, one (1) of the staked location from each cardinal direction. Each photograph shall be identified by: date taken, well or location name, and direction of view.
- B. A list of major equipment components to be used in conjunction with drilling and operating the well(s), including all tanks, pits, flares, combustion equipment, separators, and other ancillary equipment and a description of any pipelines for oil, gas, or water.
- C. A scaled drawing showing all visible improvements within four hundred (400) feet of the proposed oil and gas location, with a horizontal distance and approximate bearing from the oil and gas location. Visible improvements shall include, but not be limited to, all buildings or residences, publicly maintained roads and trails, major above-ground utility lines, railroads, pipelines, mines, oil wells, gas wells, injection wells, water wells known to the operator and those registered with the Colorado State Engineer, known springs, plugged wells, known sewers with manholes, standing bodies of water, and natural channels including permanent canals and ditches through which water may flow. A description of surface uses within the four hundred (400) foot radius of a proposed oil and gas location, if any, shall be attached to the scaled drawing. If there are no visible improvements within four hundred (400) feet of a proposed oil and gas location, it shall be so noted on the Form 2A.
- D. A topographic map showing all surface waters and riparian areas within one thousand (1,000) feet of the proposed oil and gas location, with a horizontal distance and approximate bearing from the oil and gas location.
- E. An 8 1/2" by 11" vicinity or U.S. Geological Survey topographic map showing the access road from the highway or county road providing access to the proposed oil and gas location.

- F. Designation of the current land use(s) and landowner's designated final land use(s) and basis for setting reclamation standards.
- i. If the final land use includes residential, industrial/commercial, or cropland and does not include any other uses, the land use should be indicated and no further information is needed.
 - ii. If the final land use includes rangeland, forestry, recreation, or wildlife habitat, then a reference area shall be selected and the following information shall be submitted:
 - aa. A topographic map showing the location of the site, and the location of the reference area; and
 - bb. Four (4) color photographs of the reference area, taken during the growing season of vegetation and facing each cardinal direction. Each photograph shall be identified by date taken, well or oil and gas location name, and direction of view. Provided that these photographs may be submitted at any time up to twelve (12) months after the Form 2A.
- G. Natural Resources Conservation Service (NRCS) soil map unit description.
- H. If the oil and gas location disturbance is to occur on lands with a slope ten percent (10%) or greater, or one (1) foot of elevation gain or more in ten (10) foot distance, then the following shall be required:
- i. Construction layout drawing (construction and operation); and
 - ii. Location cross-section plot (construction and operation).
- I. Where the proposed oil and gas location is for multiple wells on a single pad, a drawing showing proposed wellbore trajectory with bottom-hole locations.
- J. A description of any applicant-proposed Best Management Practices or, where a variance from a provision of these rules is sought, any applicant-proposed measures to meet the standards for such a variance. With the consent of the surface owner, this may include mitigation measures contained in the relevant surface use agreement.
- K. Where the proposed oil and gas location is covered by a Comprehensive Drilling Plan accepted pursuant to Rule 216, a list of any conditions of approval.
- L. Contact information for the surface owner(s) and an indication as to whether there is a surface use agreement(s) or any other agreement(s) between the applicant and the surface owner(s) for the proposed oil and gas location.
- M. Designation of whether the proposed oil and gas location is within sensitive wildlife habitat or a restricted surface occupancy area.

- N. Where the proposed oil and gas location is within a zone defined in Rule 317B, Table 1, documentation that the applicant has provided notification of the application submittal to potentially impacted public water systems within fifteen (15) stream miles downstream.
- O. Any additional data as reasonably required by the Commission as a result of consultation with the Colorado Department of Public Health and Environment or the Colorado Division of Wildlife.

(4) Form 2A requiring approval.

- A. The Oil and Gas Location Assessment, Form 2A, requires Commission or Director approval prior to approval of Permits-to-Drill, Form 2, or other permit applications, in the following circumstances:
 - i. The proposed oil and gas location will disturb more than one (1) acre and is located in one of the following counties in Colorado:
 - aa. Garfield;
 - bb. Mesa;
 - cc. Gunnison; or
 - dd. Rio Blanco.
 - ii. The proposed oil and gas location requires consultation with the Colorado Division of Wildlife or the Colorado Department of Public Health and Environment, pursuant to Rules 306.c and 306.d, respectively;
 - iii. The local governmental designee requests consultation on the proposed oil and gas location pursuant to Rule 306.b; or
 - iv. Where the proposed oil and gas location requires submittal of a Form 2A and the proposed oil and gas facility:
 - aa. Is a production facility;
 - bb. Is servicing multiple wells; and
 - cc. Would not require any other Commission permit or facility registration.
- B. Where the Oil and Gas Location Assessment, Form 2A, requires approval, the operator shall file the Form 2A prior to or concurrent with a Permit-to-Drill, Form 2, for individual wells to be constructed at the oil and gas location.

(5) Form 2A informational report.

Where a proposed oil and gas location is outside those situations described in Rule 303.d.(4), the Oil and Gas Location Assessment, Form 2A, is a report that does not require approval prior to approval of Permits-to-Drill, Form 2.

In these circumstances, the Form 2A shall be submitted concurrently with the Application for Permit-to-Drill, Form 2, or other permit applications, and it will be subject to completeness review pursuant to Rule 303.h.

e. Processing time for approvals under this section.

(1) In accordance with Rule 216.f.(3), where a proposed oil and gas location is covered by an approved Comprehensive Drilling Plan and no variance is sought from such Plan or these rules not addressed in the Comprehensive Drilling Plan, the Director shall give priority to and approve or deny an Application for Permit-to-Drill, Form 2, or, where applicable, Oil and Gas Location Assessment, Form 2A, within thirty (30) days of a determination that such application is complete pursuant to Rule 303.h, unless significant new information is brought to the attention of the Director.

(2) If the Director has not issued a decision on an Application for Permit-to-Drill, Form 2, or, where approval is required, an Oil and Gas Location Assessment, Form 2A, within seventy-five (75) days of a determination that such application is complete, the operator may request a hearing before the Commission on the permit application. Such a hearing shall be expedited but will be held only after both the 20 days' notice and the newspaper notice are given as required by Section 34-60-108, C.R.S. However, the hearing can be held after the newspaper notice if all of the entities listed under Rule 503.b waive the 20-day notice requirement.

f. **Oil and gas locations in wetlands.** In the event that an operator, otherwise required to file a Form 2A, acquires an Army Corps of Engineers permit pursuant to 33 U.S.C.A. §1342 and 1344 of the Water Pollution and Control Act (Section 404 of the federal "Clean Water Act") for construction of an oil and gas location, the operator shall so indicate on the Oil and Gas Location Assessment, Form 2A.

g. **Revisions to Form 2 or Form 2A.** Prior to approval of the Form 2 or Form 2A permit application, minor revisions or requested information may be provided by contacting the COGCC staff. After approval, any substantive changes shall be submitted for approval on a Form 2 or Form 2A. A Sundry Notice, Form 4, shall be submitted, along with supplemental information requested by the Director, when non-substantive revisions are made after approval, and no additional fee shall be imposed.

h. **Incomplete applications.** Applications for Permit-to-Drill, Form 2, or Oil and Gas Location Assessments, Form 2A, which are submitted without the required information and attachments, the proper signature, or the required information, shall be considered incomplete and shall not be reviewed or approved. The COGCC staff shall notify the applicant in not more than ten (10) days of its receipt of the application of such inadequacies, except that the Director shall notify the applicant of inadequacies within three (3) business days of its receipt where the proposed oil and gas location is covered by an accepted Comprehensive Drilling Plan. The applicant shall then have thirty (30) days from the date that it was contacted to correct or provide requested information, otherwise the application shall be considered withdrawn and the fee shall not be refunded.

i. **Information requests after completeness determination.** Subsequent to deeming an Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, complete, the Director may request from the operator additional information needed to complete review of and make a decision on such an application. Such an information request shall not affect an operator's ability to request a hearing pursuant to Rule 303.e seventy-five (75) days from the date the Form 2 or Form 2A was originally determined to be complete pursuant to Rule 303.h.

j. Permit expiration.

- (1) **For Applications for Permit-to-Drill, Form 2.** Approval of a Form 2 for a well permitted pursuant to an application submitted on or after July 1, 2009 on federal land or April 1, 2009 on all other land, and for which a Form 2A was also submitted in compliance with the rules as amended in December 2008, shall become null and void if drilling operations on the permitted well are not commenced within two (2) years after the date of approval. Approval of a Form 2 for a well permitted pursuant to an application submitted before July 1, 2009 on federal land or April 1, 2009 on all other land, or for which a Form 2A was not submitted in compliance with the rules as amended in December 2008, shall become null and void if drilling operations are not commenced on the permitted well within one (1) year after the date of approval. The Director shall not approve extensions to applications for Permit-to-Drill, Form 2.
- (2) **For Oil and Gas Location Assessments, Form 2A.** If construction operations are not commenced on an approved oil and gas location within three (3) years after the date of approval, then the approval shall become null and void. The Director shall not approve extensions to Oil and Gas Location Assessments, Form 2A.

k. Permits in areas pending Commission hearing. The Director may withhold the issuance of a permit and the granting of approval of any Permit-to-Drill, Form 2, for any well or proposed well that is located in an area for which an application has been filed, or which the Commission has sought, by its own motion, to establish drilling units or to designate any tract of land as a high density area, in which case the hearing thereon shall be held at the next meeting of the Commission at which time the matter can be legally heard.

l. Special circumstances for permit issuance without notice or consultation. The Director may issue a permit at any time in the event that an operator files a sworn statement and demonstrates therein to the Director's satisfaction that:

- (1) The operator had the right or obligation under the terms of an existing contract to drill a well; and the owner or operator has a leasehold estate or a right to acquire a leasehold estate under said contract which will be terminated unless the operator is permitted to immediately commence the drilling of said well; or
- (2) Due to exigent circumstances (including a recent change in geological interpretation), significant economic hardship to a drilling contractor will result or significant economic hardship to an operator in the form of drilling standby charges will result.

In the event the Director issues a permit under this rule, the operator shall not be required to meet obligations to surface owners, local governmental designees, the Colorado Department of Public Health and Environment, or the Colorado Division of Wildlife under Rule 305 (except Rules 305.e.(4) and 305.e.(6), for which compliance will still be required) and 306. The Director shall report permits granted in such manner to the Commission at regularly scheduled monthly hearings.

m. Special circumstances for withholding approval of Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A.

- (1) The Director may withhold approval of any Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, for any proposed well or oil and gas

location when, based on information supplied in a written complaint submitted by any party with standing under Rule 522.a.(1), other than a local governmental designee, or by staff analysis, the Director has reasonable cause to believe the proposed well or oil and gas location is in material violation of the Commission's rules, regulations, orders or statutes, or otherwise presents an imminent threat to public health, safety and welfare, including the environment, or a material threat to wildlife resources. Any such withholding of approval shall be limited to the minimum period of time necessary to investigate and dismiss the complaint, or to resolve the alleged violation or issue. If the complaint is dismissed or the matter resolved to the dissatisfaction of the complainant, such person may consult with the parties identified in Rule 503.b.(7).

- (2) In the event the Director withholds approval of any Application for Permit-To-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, under this Rule 303.m., an operator may ask the Commission to issue an emergency order rescinding the Director's decision.
- n. **Suspending approved Permit-To-Drill, Form 2.** Prior to the spudding of the well, the Director shall suspend an approved Permit-to-Drill, Form 2, if the Director has reasonable cause to believe that information submitted on the Permit-to-Drill, Form 2 was materially incorrect. Under the circumstances described in Rule 303.l.(1) or (2), an operator may ask the Commission to issue an emergency order rescinding the Director's decision.
- o. **Reclassification of stratigraphic well.** If a test for productivity is made in a stratigraphic well, the well must be reclassified as a well drilled for oil or gas and is subject to all of the rules and regulations for well drilled for oil or gas, including filing of reports and mechanical logs.
- p. **Provisions for avoiding mine sites.** Any person holding, or who has applied for, a permit issued or to be issued under §34-33-101 to 137, C.R.S., may at their election, notify the Director of such permit or application. Such notice shall include the name, mailing address and facsimile number of such person and designate by legal description the life-of-mine area permitted, or applied for, with the Division of Reclamation, Mining, and Safety. As soon as practicable after receiving such notice and designation, the Director shall inform the party designated therein each time that a Permit-to-Drill, Form 2, is filed with the Director which pertains to a well or wells located or to be located within said life-of-mine area as designated. The provisions of Rule 303.l.(1) and (2) will not be applicable to this rule.

304. FINANCIAL ASSURANCE REQUIREMENTS

Prior to drilling or assuming the operations for a well an operator shall provide financial assurance in accordance with the 700 Series rules. When an operator's existing wells are not in compliance with the 700 Series, the Director may withhold action on an Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, until such time as a hearing on the permit application is held by the Commission. Such hearing shall be held at the next regularly scheduled Commission hearing at which time the matter can be legally heard.

305. NOTICE, COMMENT, APPROVAL

- a. **Applicability.** The provisions of Rule 305.e regarding surface owners shall not apply to federal or Indian-owned surface lands.

b. Posting.

(1) **Form 2A.** Upon receipt of an Oil and Gas Location Assessment, Form 2A, the Director shall, as provided by Rule 303.h, determine if the application is complete and, if so, post such Form 2A on the Commission's website. The Commission shall provide concurrent electronic notice of such posting to the relevant local governmental designee (LGD) and the Colorado Division of Wildlife (where consultation is triggered pursuant to Rule 306.c) and the Colorado Department of Public Health and Environment (where consultation is triggered pursuant to Rule 306.d). The website posting shall clearly indicate:

- A. The date on which the Form 2A was posted;
- B. The date by which public comments must be received to be considered;
- C. The address(es) to which the public may direct comments; and
- D. Where the proposed oil and gas location is covered by an accepted Comprehensive Drilling Plan, directions for review of the Plan.

(2) **Form 2.** If an Application for Permit-to-Drill, Form 2, is concurrently filed with a Form 2A, that fact shall be noted in the posting provided herein. If a Form 2 is subsequently filed, only a summary notice of such filing, indicating that a Form 2A covering the well has been previously accepted or approved, shall be posted, with concurrent notice to the local governmental designee and, where consultation with one of those agencies is triggered, the Colorado Division of Wildlife or Colorado Department of Public Health and Environment.

c. **Comment period.** The Director shall not approve the Form 2A, or any associated Form 2, for twenty (20) days from posting pursuant to Rule 305.b, and shall accept and post on the Commission's website immediately upon their receipt any comments received from the public, the local governmental designee, the Colorado Department of Public Health and Environment, or the Colorado Division of Wildlife regarding the proposed oil and gas location. The Director shall extend the comment period to thirty (30) days upon the written request during the twenty (20) day comment period by the local governmental designee, the Colorado Department of Public Health and Environment, the Colorado Division of Wildlife, the surface owner, or an owner of surface property who receives notice under Rule 305.e. The Director shall post the extension on the COGCC website within twenty-four (24) hours of receipt of the extension request.

d. **Conditions of approval; issuance of permit.** Upon the conclusion of the comment period and, where applicable, consultation with the Colorado Division of Wildlife or Colorado Department of Public Health and Environment pursuant to Rules 306.c. or 306.d, respectively, the Director may attach technically feasible and economically practicable conditions of approval to the Form 2 or Form 2A as the Director deems necessary to implement the provisions of the Act or these rules pursuant to Commission staff analysis or to respond to legitimate concerns expressed during the comment period. Provided, that an applicant under Rule 503 who claims that such a condition is not technically feasible, economically practicable, or necessary to implement the provisions of the Act or these rules, or to respond to legitimate concerns shall have the burden of proof on that issue before the Commission.

(1) **Notice of decision.** Upon making a decision on an Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, the Director shall promptly provide notification of the decision and any conditions of approval to the

operator and to any party with standing to request a hearing before the Commission pursuant to Rule 503.b, unless such a party has waived in writing its right to such notice and the Director has been provided a copy of such waiver.

(2) **Suspension of approval.** If a party with standing to do so requests a hearing before the Commission pursuant to Rule 503.b on an Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, then it shall notify the Director in writing within ten (10) days after the issuance of the decision, setting forth the basis for the objection. Upon receipt of such an objection, the Director shall suspend the approval of the Form 2 or Form 2A and set the matter for an expedited adjudicatory hearing. Such a hearing shall be expedited but will only be held after both the 20 days' notice and the newspaper notice are given as required by Section 34-60-108, C.R.S. However, the hearing can be held after the newspaper notice if all of the entities listed under Rule 503.b waive the 20-day notice requirement. If such an objection is not received, the permit shall issue as proposed by the Director.

(3) **Appeal.** If the approval of a Form 2 or Form 2A is not suspended as provided for herein, the issuance of the approved Form 2 or Form 2A by the Director shall be deemed a final decision of the Commission, subject to judicial appeal.

e. **Landowner notice; copy of advance notice to Local Governmental Designee.** An operator making application for approval of an Oil and Gas Location Assessment, Form 2A, shall, upon receipt of a completeness determination from the Director, promptly provide the surface owner and owners of surface property within five hundred (500) feet of the proposed oil and gas location with the information set out in Rule 305.e.(1).A, below ("landowner notice"); provided that notice to the owners of surface property within five hundred (500) feet of the proposed oil and gas location shall not be required in an area covered by Rules 318A or 318B. This notice is in addition to the statutorily required notice to surface owners ("advance notice"), which must be provided thirty (30) days in advance of commencement of operations with heavy equipment for the drilling of a well. The operator may rely on the tax records of the assessor for the county in which the affected lands are located to identify the surface owner and the owners of surface property within five hundred (500) feet of the proposed oil and gas location for purposes of this section. A copy of the advance notice shall also be provided to the local government in whose jurisdiction the well is to be drilled, if such local government has registered its local governmental designee with the Commission. The notices required herein shall be accomplished by hand delivery or by certified mail, return-receipt requested.

(1) **Content of notices.**

A. **Landowner Notice.** The landowner notice shall include the Form 2A itself (without attachments), a copy of the information required under Rule 303.d.(3).B, 303.d.(3).C, and 303.d.(3).E and any additional information the operator deems appropriate and inform the recipient that the complete application (including attachments) may be reviewed on the COGCC website and that he or she may submit comments to the Director, as provided on the COGCC website. For the surface owner, this notice shall include a copy of the COGCC Informational Brochure for Surface Owners, a postage-paid, return-addressed post card whereby the surface owner may request consultation pursuant to Rule 306, and, where the oil and gas location is not subject to a surface-use agreement, a copy of the COGCC Onsite Inspection Policy (See Appendix or COGCC website).

B. **Advance Notice.** The advance notice must provide the operator's name and contact information for a representative who may be contacted, describe on a site diagram or plat the proposed location of the well and any associated roads and production facilities, and indicate the expected date of commencement of operations with heavy equipment.

- (2) **Appointment of agent.** The surface owner may appoint an agent, including its tenant, for purposes of subsequent notice and for consultation under Rule 306. Such appointment shall be made in writing to the operator and must provide the agent's name, address, and telephone number.
- (3) **Tenants.** With respect to notices given under this Rule 305, it shall be the responsibility of the notified surface owner to give notice of the proposed operation to the tenant farmer, lessee, or other party that may own or have an interest in any crops or surface improvements that could be affected by such proposed operation.
- (4) **Notice of subsequent well operations.** An operator shall provide to the surface owner or agent at least seven (7) days advance notice of subsequent well operations with heavy equipment that will materially impact surface areas beyond the existing access road or well site, such as recompletion or refracturing of the well.
- (5) **Notice during irrigation season.** If a well is to be drilled on irrigated crop lands between March 1 and October 31, the operator shall contact the surface owner or agent at least fourteen (14) days prior to commencement of operations with heavy equipment to coordinate drilling operations to avoid unreasonable interference with irrigation plans and activities.
- (6) **Final reclamation notice.** Not less than thirty (30) days before any final reclamation operations are to take place pursuant to Rule 1004, the operator shall notify the surface owner. Final reclamation operations shall mean those reclamation operations to be undertaken when a well is to be plugged and abandoned or when production facilities are to be permanently removed. Such notice is required only where final reclamation operations commence more than thirty (30) days after the completion of a well.
- (7) **Waiver.** Any of the notices required herein may be waived in writing by the surface owner, its agent, or the local governmental designee, provided that a waiver by a surface owner or its agent shall not prevent the surface owner or any successor-in-interest to the surface owner from rescinding that waiver if such rescission is in accordance with applicable law.

f. **Posting.** The operator shall, concurrent with the advance notice, post a sign at the intersection of the lease road and the public road providing access to the well site, of not less than two-feet by two-feet, providing the name of the proposed well, the legal location thereof, and the estimated date of commencement. Such sign shall be maintained until completion operations at the well are concluded.

306. CONSULTATION.

The operator shall consult in good faith, as provided below.

a. **Consultation with surface owner.** In locating roads, production facilities, and well sites, or other oil and gas operations, and in preparation for reclamation and abandonment, the

operator shall consult in good faith with the surface owner, or the surface owner's appointed agent as provided for in Rule 305. Such consultation shall occur at a time mutually agreed to by the parties prior to the commencement of operations with heavy equipment upon the lands of the surface owner.

- (1) **Information provided by operator.** When consulting with the surface owner or appointed agent, the operator shall furnish a description or diagram of the proposed drilling location; dimensions of the drill site; topsoil management practices to be employed; and, if known, the location of associated production or injection facilities, pipelines, roads and any other areas to be used for oil and gas operations (if not previously furnished to such surface owner or if different from what was previously furnished).
- (2) **Good faith consultation.** Such good faith consultation shall allow the surface owner or appointed agent the opportunity to provide comments to the operator regarding preferences for the timing of oil and gas operations and preferred locations for wells and associated facilities.
- (3) **Waiver.** The requirement to consult with the surface owner may be waived by the affected surface owner or the surface owner's appointed agent at any time by submittal to the operator in writing.

b. Consultation with local government.

- (1) Local governments that have appointed a local governmental designee and have indicated to the Director a desire for consultation shall be given an opportunity to engage in such consultation concerning an application for Permit-to-Drill, Form 2, or an Oil and Gas Location Assessment, Form 2A, for the location of roads, production facilities and well sites prior to the commencing of operations with heavy equipment.
- (2) Within fourteen (14) days of its notification pursuant to Rule 305, the local governmental designee may notify the Commission and the Colorado Department of Public Health and Environment by electronic mail of its desire to have the Colorado Department of Public Health and Environment consult on a proposed oil and gas location, based on concerns regarding public health, safety, welfare, or impacts to the environment.

c. Consultation with the Colorado Division of Wildlife.

(1) **Consultation to occur.**

A. Subject to the provisions of Rule 1202.d, the Colorado Division of Wildlife shall consult with the Commission, the surface owner, and the operator on an Oil and Gas Location Assessment, Form 2A, where:

- i. Consultation is required pursuant to a provision in the 1200-Series of these rules;
- ii. The operator seeks a variance from a provision in the 1200-Series of these rules; or
- iii. The Colorado Division of Wildlife requests consultation because the proposed oil and gas location would be within areas of known occurrence or habitat of a federally threatened or endangered

species, as shown on the Colorado Division of Wildlife Species Activity Mapping (SAM) system.

- B. The Commission shall consult with the Colorado Division of Wildlife when an operator requests a modification of an existing Commission order to increase well density or otherwise proposes to increase well density to more than one (1) well per forty (40) acres, or the Commission develops a basin-wide order involving wildlife or wildlife-related environmental concerns or protections.
- C. Notwithstanding the foregoing, the requirement to consult with the Colorado Division of Wildlife may be waived by the Colorado Division of Wildlife at any time.

(2) Procedure for consultation.

- A. The operator shall provide:
 - i. A description of the oil and gas operation to be considered, including location;
 - ii. Any other relevant available information on the oil and gas operation, the affected wildlife resource, or the provision(s) of the 1200-Series Rules upon which the consultation is based; and
 - iii. Proposed mitigation for the affected wildlife resource.
- B. The Commission shall take into account the information submitted by the operator consistent with Rule 1202.c.
- C. The operator, the Commission, the surface owner, and the Colorado Division of Wildlife shall have forty (40) days to conduct the consultation called for in this section. Such consultation shall begin concurrent with the start of the public comment period. If no consultation occurs within such 40-day period, the requirement to consult shall be deemed waived, and the Director shall consider the operator's application on the basis of the materials submitted by the operator.

(3) Results of consultation under Rule 306.c.

- A. As a result of consultation called for in this subsection, the Colorado Division of Wildlife may make written recommendations to the Commission on conditions of approval necessary to minimize adverse impacts to wildlife resources. Where applicable, the Colorado Division of Wildlife may also make written recommendations on whether a variance request should be granted, under what conditions, and the reasons for any such recommendations.
- B. **Agreed-upon conditions of approval.** Where the operator, the Director, the Colorado Division of Wildlife, and the surface owner agree to conditions of approval for oil and gas locations as a result of consultation, these conditions of approval shall be incorporated into approvals of an Oil and Gas Location Assessment, Form 2A, or Application for Permit-to-Drill, Form 2, where applicable.

- C. **Permit-specific conditions.** Where the consultation called for in this subsection results in permit-specific conditions of approval to minimize adverse impacts to wildlife resources, the Director shall attach such permit-specific conditions only with the consent of the affected surface owner.
- D. **Standards for consultation and initial decision.** Following consultation and subject to subsection C above and Rule 1202.c, the Director shall decide whether to attach conditions of approval to a Form 2A or Form 2, where applicable. In making this decision, the Director shall apply the criteria of Rule 1202.
- E. **Notification of decision to consulting agency.** Where consultation occurs under Rule 306.c, the Director shall provide to the Colorado Division of Wildlife the conditions of approval for the Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, on the same day that he or she announces a decision to approve the application.

d. **Consultation with the Colorado Department of Public Health and Environment.**

(1) **Consultation to occur.**

- A. The Commission shall consult with the Colorado Department of Public Health and Environment on an Oil and Gas Location Assessment, Form 2A, where:
 - i. The local governmental designee requests, within fourteen (14) days of notice, the participation of the Colorado Department of Public Health and Environment in the Commission's consideration of an Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, based on concerns regarding public health, safety, welfare, or impacts to the environment;
 - ii. The operator seeks from the Director a variance from, or consultation is otherwise required or permitted under, a provision of one of the following rules intended for the protection of public health, safety, welfare, or the environment:
 - aa. Rule 317B. Public Water System Protection;
 - bb. Rule 325. Underground Disposal of Water;
 - cc. Rule 603. Drilling and Well Servicing Operations and High Density Area Rules;
 - dd. Rule 608. Coalbed Methane Wells;
 - ee. Rule 805. Odors and Dust.
 - ff. 900-Series E&P Waste Management; or
 - gg. Rule 1002.f. Stormwater Management.

All requests for variances from these rules must be made at the time an operator submits a Form 2A.

- B. The Commission shall consult with the Colorado Department of Public Health and Environment when an operator requests a modification of an existing Commission order to increase well density or otherwise proposes to increase well density to more than one (1) well per forty (40) acres, or the Commission develops a basin-wide order that can reasonably be anticipated to have impacts on public health, welfare, safety, or environmental concerns or protections.
- C. Notwithstanding the foregoing, the requirement to consult with the Colorado Department of Public Health and Environment may be waived by the Colorado Department of Public Health and Environment at any time.

(2) Procedure for consultation.

- A. Where required, the Commission and the Colorado Department of Public Health and Environment shall have forty (40) days to conduct the consultation called for in this section. Such consultation shall begin concurrent with the start of the public comment period. If no consultation occurs within such 40-day period, the requirement to consult shall be waived, and the Director shall consider the operator's application on the basis of the materials submitted by the operator.
- B. The consultation called for in this section shall focus on identifying potential impacts to public health, safety, welfare, or the environment from activities associated with the proposed oil and gas location, and development of conditions of approval or other measures to minimize adverse impacts.
- C. Where consultation occurs pursuant to Rule 306.d.(1).A, it may include:
 - i. Review of the permit application;
 - ii. Discussions with the local governmental designee to better understand local government's concerns;
 - iii. Discussions with the Commission, operator, surface owner, or those potentially affected; and
 - iv. Review of public comments.
- D. Where consultation occurs pursuant to Rule 306.d.(1).A.ii, the Colorado Department of Public Health and Environment shall have the opportunity to:
 - i. Review the permit application, the request for variance, and the basis for the request; and
 - ii. Discuss the request with the operator, the surface owner, and the Commission.
- E. Where consultation occurs pursuant to Rule 306.d.(1).B, the Colorado Department of Public Health and Environment shall have the opportunity to:

- i. Review the well-density increase application or draft Commission order; and
- ii. Discuss the request with the operator or proponent, the Commission, and the local governmental designee.

(3) Results of consultation under Rule 306.d.

- A. As a result of consultation called for in this subsection, the Colorado Department of Public Health and Environment may make written recommendations to the Commission on conditions of approval necessary to protect public health, safety, and welfare or the environment. Such recommendations may include, but are not limited to, monitoring requirements or best management practices. Where applicable, the Colorado Department of Public Health and Environment may also make written recommendations on whether a variance request should be granted, under what conditions, and the reasons for any such recommendations.
- B. **Agreed-upon conditions of approval.** Where the operator, the Director, the Colorado Department of Public Health and Environment, and the surface owner agree to conditions of approval for oil and gas locations as a result of consultation, these conditions of approval shall be incorporated into approvals of an Oil and Gas Location Assessment, Form 2A, or Applications for Permit-to-Drill, Form 2, where applicable.
- C. **Standards for consultation and Director decision.** Following consultation, the Director shall decide whether to attach conditions of approval recommended by the Colorado Department of Public Health and Environment to a Form 2A or Form 2, where applicable. This decision shall minimize significant adverse impacts to public health, safety, and welfare, including the environment, consistent with other statutory obligations.
- D. **Notification of decision to consulting agency.** Where consultation occurs under Rule 306.d, the Director shall provide to the Colorado Department of Public Health and Environment the conditions of approval for the Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, on the same day that he or she announces a decision to approve the application.
- e. **Final reclamation consultation.** In preparing for final reclamation and plugging and abandonment, the operator shall use its best efforts to consult in good faith with the affected surface owner (or the tenant when the surface owner has requested that such consultation be made with the tenant). Such good faith consultation shall allow the surface owner (or appointed agent) the opportunity to provide comments concerning preference for timing of such operations and all aspects of final reclamation, including, but not limited to, the desired final land use and seed mix to be applied.
- f. **Tenants.** Operators shall have no obligation to consult with tenant farmers, lessees, or any other party that may own or have an interest in any crops or surface improvements that could be affected by the proposed operation unless the surface owner appoints such person as its agent for such purposes. Nothing shall prevent the surface owner from including a tenant in any consultation, whether or not appointed as the surface owner's agent.

307. COGCC Form 4. SUNDRY NOTICES AND REPORTS ON WELLS

The Sundry Notice, Form 4, is a multipurpose form which shall be used by an operator to request approval from or provide notice to the Director as required by rule or when no other specific form exists, i.e., well name or number change. The rules requiring the use of the Sundry Notice, Form 4, are listed in Appendix I.

308A. COGCC Form 5. DRILLING COMPLETION REPORT

Within thirty (30) days of the setting of production casing, the plugging of a dry hole, the deepening or sidetracking of a well, or any time the wellbore configuration is changed, the operator shall transmit to the Director the Drilling Completion Report, Form 5, and two (2) copies of all logs run, be they mechanical, mud, or other, submitted as one (1) paper copy and, as available, one (1) digital LAS (log ASCII) formatted copy, or a format approved by the Director. Additionally, if drill stem tests, core analyses, or directional surveys are run, they shall be submitted at the same time and together with this completion report. All Sections 1 - 22 (if applicable) and the attachment checklist shall be completely filled out. The latitude and longitude coordinates in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum (NAD) of 1983 (e.g.; latitude 37.12345 N, longitude 104.45632 W), Position Dilution of Precision (PDOP) reading, instrument operator's name and the date of the measurement of the "as drilled" well location shall be reported on the Form 5. If GPS technology is utilized to determine the latitude and longitude, all GPS data shall meet the requirements set forth in Rule 215. a. through h.

Within thirty (30) days of the suspension of commenced drilling activities prior to reaching total depth, the operator shall file a Drilling Completion Report, Form 5, notifying the Director of the date of such suspension of drilling activity stating the reason for suspension and the anticipated date and method of resumption of drilling, showing the details of all work performed to date. In cases of an uncompleted well, the initial Drilling Completion Report, Form 5, shall state "preliminary" at the top of the form. A supplementary Form 5 shall be submitted within thirty (30) days of reaching total depth.

308B. COGCC Form 5A. COMPLETED INTERVAL REPORT

The Completed Interval Report, Form 5A, shall be submitted within thirty (30) days of completing a formation (successful or not), when a formation is temporarily abandoned or permanently abandoned, for a recompletion, reperforation or restimulation, or when a formation is commingled.

In order to resolve completed interval information uncertainties, the Director may require an operator to submit a Completed Interval Report, Form 5A.

308C. CONFIDENTIALITY

Upon submittal of a Sundry Notice, Form 4, request by the operator, completion reports, including Drilling Completion Reports, Form 5 and Completed Interval Reports, Form 5A, and mechanical logs of exploratory or wildcat wells shall be marked "confidential" by the Director and kept confidential for six (6) months after the date of completion, unless the operator gives written permission to release such logs at an earlier date.

309. COGCC Form 7. OPERATOR'S MONTHLY PRODUCTION REPORT

Each producer or operator of an oil or gas well shall file with the Commission, within forty-five (45) days after the month in which production occurs, a report on Operator's Monthly Production Report, Form 7, containing all information required by said form. In addition, all fluids produced

during the initial testing and completion shall be reported on Operator's Monthly Production Report, Form 7 within forty-five (45) days after the month in which testing and completion occurs.

310. COGCC Form 8. MILL LEVY

On or before March 1, June 1, September 1 and December 1 of each year, every producer or purchaser, whichever disburses funds directly to each and every person owning a working interest, a royalty interest, an overriding royalty interest, a production payment and other similar interests from the sale of oil or natural gas subject to the charge imposed by §34-60-122(1) (a) C.R.S., 1973, as amended, shall file a return with the Director showing by operator, the volume of oil, gas or condensate produced or purchased during the preceding calendar quarter, including the total consideration due or received at the point of delivery. No filing shall be required when the charge imposed is zero mill (\$0.0000) per dollar value.

The levy shall be an amount fixed by order of the Commission. The levy amount may, from time to time, be reduced or increased to meet the expenses chargeable against the oil and gas conservation and environmental response fund. The present charge imposed, as of July 1, 2007, is seven tenths of a mill (\$0.0007) per dollar value.

311. COGCC Form 6. WELL ABANDONMENT REPORT

Notice shall be given to the Director, and approval obtained in advance of the time the operator expects to abandon a well on Form 6. When filing an intent to abandon, the form shall be completed and attachments included to fully describe the proposed operations. This includes the proposed depths of mechanical plugs and casing cuts, the proposed depths and volumes of all cement plugs, the amount, size and depth of casing and junk to be left in the well, the volume and weight of fluid to be left in the wellbore and the nature and quantities of any other materials to be used in the plugging. If the well is not plugged within six (6) months of intent approval a new intent shall be filed.

Within thirty (30) days after abandonment, the Well Abandonment Report, Form 6, shall be filed with the Director. The abandonment details shall include an account of the manner in which the abandonment or plugging work was performed. Additionally, plugging verification reports detailing all procedures are required. A Plugging Verification Report shall be submitted for each person or contractor actually setting the plugs. The Well Abandonment Report, Form 6, and the Plugging Verification Reports shall detail the depths of mechanical plugs and casing cuts, the depths and volumes of all cement plugs, the amount, size and depth of casing and junk left in the well, the volume and weight of fluid left in the wellbore and the nature and quantities of any other materials used in the plugging. Plugging Verification Reports shall conform with the operator's report and both shall show that plugging procedures are at least as extensive as those approved by the Director. When filing a subsequent report of abandonment, the entire form shall be completed except for the second block, background information. (See Rule 319 for well abandonment requirements and procedures.)

312. COGCC Form 10. CERTIFICATE OF CLEARANCE AND/OR CHANGE OF OPERATOR

- a. Each operator of any oil or gas well completed after April 30, 1956, shall file with the Director, within thirty (30) days after initial sale of oil or gas a Certificate of Clearance and/or Change of Operator, Form 10, in accordance with the instructions appearing on such form, for each well producing oil or gas or both oil and gas. A Certificate of Clearance shall be filed for any well from which oil, gas or other hydrocarbon is being produced.

A Certificate of Clearance shall be filed within thirty (30) days should the oil transporter (first purchaser) and/or the gas gatherer (first purchaser) change. In addition, within

fifteen (15) days of an operator change for any well, a Change of Operator, Form 10, shall be filed with a filing and service fee as set by the Commission. (See Appendix III)

- b. Each operator of a Class II injection well shall file a new Form 10 with the Director within fifteen (15) days of the transfer of ownership.
- c. Whenever there shall occur a change in the producer or operator filing the certificate under Rule 310.a hereof, or whenever there shall occur a change of transporter from any well within the State, a new Form 10 shall be executed and filed within fifteen (15) days in accordance with the instructions appearing on such form. In the case of temporary use of oil for well treating or stimulating purposes, no new form need be executed. In the case of other temporary change in transporter involving the production of less than one (1) month, the producer or operator may, in lieu of filing a new certificate, notify the Commission and the transporter authorized by the certificate on file with the Commission by letter of the estimated amount to be moved by the temporary transporter and the name of such temporary transporter. A copy of such notice shall also be furnished such temporary transporter.
- d. In no instance shall the temporary transporter move any quantity greater than the estimated amount shown in said notice.
- e. The certificate, when properly executed and approved by the Commission, shall constitute authorization to the pipeline or other transporter to transport the authorized volume from the well named therein; provided that this section shall not prevent the production or transportation in order to prevent waste, pending execution and approval of said certificate. Permission for the transportation of such production shall be granted in writing to the producer and transporter.
- f. The certificate shall remain in force and effect until:
 - (1) The producer or operator filing the certificate is changed; or
 - (2) The transporter is changed; or
 - (3) The certificate is canceled by the Commission.
- g. A copy of each Form 10 to be filed hereunder shall be sent by the Director to those local governmental designees who so request.
- h. It is the operator's responsibility to mail approved copies of the Certificate of Clearance and/or Change of Operator, Form 10, to the transporter and/or gatherer for each well listed.
- i. A completed Form 10 shall be required for any change of operator for all oil and gas facilities, excluding gathering systems, gas-processing plants, and gas storage facilities as those shall be changed with a Form 12, Gas Facility Registration/Change of Operator.

313. COGCC Form 11. MONTHLY REPORT OF GASOLINE OR OTHER EXTRACTION PLANTS

All operators of gasoline or other extraction plants shall make monthly reports to the Director on Form 11 Such forms shall contain all information required thereon and shall be filed with the Director on or before the twenty-fifth (25th) day of each month covering the preceding month.

314. COGCC Form 17. BRADENHEAD TEST REPORT

Results of bradenhead tests, as required by Rule 207.b., shall be submitted to the Director within ten (10) days of completion. A wellbore diagram shall be submitted if not previously submitted or if the wellbore configuration has changed. If sampled, then the results of any gas and liquid analysis shall be submitted.

315. REPORT OF RESERVOIR PRESSURE TEST

Where the Director believes it is necessary to prevent waste, protect correlative rights, or prevent a significant adverse impact, the Director may require subsurface pressure measurements. Whenever such measurements are made, results shall be reported on Sundry Notice, Form 4, within twenty (20) days after completion of tests, or submitted on any company form approved by the Director containing the same information.

316A. COGCC Form 14. MONTHLY REPORT OF FLUIDS INJECTED

Except for fluids involved with fracturing, acidizing or other similar treatment elsewhere required to be reported on a Completed Interval Report, Form 5A, all operators engaged in the injection of fluids into any formation in dedicated injection wells shall file monthly with the Commission a detailed account of such operation on Form 14, or any company form containing the same information previously approved by the Director. Types of chemicals used to treat injection water, as well as the date of initial fluid injection for new injection wells, are to be reported on said form under Remarks. The type and amount of fluids received from transporters shall be included on the report. Operators of simultaneous injection wells shall, by March 1 of each year, report to the Director the calculated injected volume for the previous year by month on Form 14. Operators of gas storage projects shall, by March 1 of each year, report to the Director the amount of gas injected and withdrawn for the previous year and the amount of gas remaining in the reservoir as of December 31 of that year.

316B. COGCC Form 21. MECHANICAL INTEGRITY TEST

Results of mechanical integrity tests of injection wells or shut-in wells shall be submitted on Form 21, within thirty (30) days after the test. A pressure chart shall accompany this report. Not less than ten (10) days prior to the performance of any mechanical integrity test the Director shall be notified, in writing, of the scheduled date on which the test will be performed. The form shall be completely filled out except for Part II, which is required only if the well is a permitted or pending injection well.

317. GENERAL DRILLING RULES

Unless altered, modified, or changed for a particular field or formation upon hearing before the Commission the following shall apply to the drilling or deepening of all wells.

- a. **Blowout prevention equipment (“BOPE”)**. The operator shall take all necessary precautions for keeping a well under control while being drilled or deepened. BOPE, if any, shall be indicated on the Application for Permit to Drill, Deepen, Re-enter, or Recomplete and Operate (Form 2), as well as any known subsurface conditions (e.g. under or over-pressured formations). The working pressure of any BOPE shall exceed the anticipated surface pressure to which it may be subjected, assuming a partially evacuated hole with a pressure gradient of 0.22 psi/ft. [For BOPE requirements in high density areas see Rule 603.b.(4)B. For statewide BOPE specification, inspection, operation and testing requirements see Rule 603.f.]

- (1) The Director shall have the authority to designate specific areas, fields or formations as requiring certain BOPE. Any such proposed designation shall occur by notice describing the area, field or formation in question and shall be given to all operators of record within such area or field and by publication. The proposed designation, if no protest is timely filed, shall be placed on the Commission consent agenda for its next regularly scheduled meeting following the month in which such notice was given. The matter shall be approved or heard by the Commission in accordance with Rule 520. Such designation shall be effective immediately upon approval by the Commission, except as to any previously-approved Form 2.
 - (2) The Director shall have the authority, outside areas designated pursuant to Rule 317.a.(1), to condition approval of any application for permit to drill by requiring BOPE which the Director determines to be necessary for keeping the well under control. Should the operator object to such condition of approval, the matter shall be heard at the next regularly scheduled meeting of the Commission, subject to the notice requirements of Rule 507.
- b. **Bottom hole location.** Unless authorized by the provisions of Rule 321., all wells shall be so drilled that the horizontal distance between the bottom of the hole and the location at the top of the hole shall be at all times a practical minimum.
 - c. **Requirement to post permit at the rig and provide spud notice.** A copy of the approved Application for Permit to Drill, Deepen, Re-enter, or Recomplete and Operate, Form 2, shall be posted in a conspicuous place on the drilling rig or workover rig. A notice shall be provided to the Director on a Sundry Notice, Form 4, no later than five (5) days following the spudding of a well. The Director may apply a condition of approval for Application for Permit to Drill, Deepen, Re-enter, or Recomplete and Operate, Form 2 requiring not less than twenty-four (24) hours nor more than seventy-two (72) hours verbal or written notice prior to spud.
 - d. **Casing program to protect hydrocarbon horizons and ground water.** The casing program adopted for each well must be so planned and maintained as to protect any potential oil or gas bearing horizons penetrated during drilling from infiltration of injurious waters from other sources, and to prevent the migration of oil, gas or water from one (1) horizon to another, that may result in the degradation of ground water. A Sundry Notice, Form 4, including a detailed work plan and a wellbore diagram, shall be submitted and approved by the Director prior to any routine or planned casing repair operations. During well operations, prior verbal approval for unforeseen casing repairs followed by the filing of a Sundry Notice, Form 4, after completion of operations shall be acceptable.
 - e. **Surface casing where subsurface conditions are unknown.** In areas where pressure and formations are unknown, sufficient surface casing shall be run to reach a depth below all known or reasonably estimated utilizable domestic fresh water levels and to prevent blowouts or uncontrolled flows, and shall be of sufficient size to permit the use of an intermediate string or strings of casings. Surface casing shall be set in or through an impervious formation and shall be cemented by pump and plug or displacement or other approved method with sufficient cement to fill the annulus to the top of the hole, all in accordance with reasonable requirements of the Director. In the D–J Basin Fox Hills Protection Area surface casing will be set in accordance with Rule 317A. (See also subparagraph g.).
 - f. **Surface casing where subsurface conditions are known.** For wells drilled in areas where subsurface conditions have been established by drilling experience, surface casing, size at the owner's option, shall be set and cemented to the surface by the pump and plug or displacement or other approved method at a depth and in a manner sufficient to protect

all fresh water and to ensure against blowouts or uncontrolled flows. In the D–J Basin Fox Hills Protection Area surface casing shall be set in accordance with Rule 317A. (See also subparagraph g.).

- g. **Alternate aquifer protection by stage cementing.** In areas where fresh water aquifers are of such depth as to make it impractical or uneconomical to set the full amount of surface casing necessary to comply fully with the requirement to cover or isolate all fresh water aquifers as required in subparagraph e. and f., the owner may, at its option, comply with this requirement by stage cementing the intermediate and/or production string so as to accomplish the required result. If unanticipated fresh water aquifers are encountered after setting the surface pipe they shall be protected or isolated by stage cementing the intermediate and/or production string with a solid cement plug extending from fifty (50) feet below each fresh water aquifer to fifty (50) feet above said fresh water aquifer or by other methods approved by the Director in each case. In the D–J Basin Fox Hills Protection Area any stage cementing shall occur only in accordance with Rule 317A. If the stage cement is not circulated to surface, a temperature log or cement bond log shall be run to determine the top of the stage cement to ensure aquifers are protected.
- h. **Surface and intermediate casing cementing.** The operator shall ensure that all surface and intermediate casing cement required under this rule shall be of adequate quality to achieve a minimum compressive strength of three hundred (300) psi after twenty-four (24) hours and eight hundred (800) psi after seventy-two (72) hours measured at ninety-five degrees fahrenheit (95 °F) and at eight hundred (800) psi. All surface casing shall be cemented with a continuous column from the bottom of the casing to the surface. After thorough circulation of the wellbore, cement shall be pumped behind the intermediate casing to at least two hundred (200) feet above the top of the shallowest known production horizon and as required in 317.g. Cement placed behind the surface and intermediate casing shall be allowed to set a minimum of eight (8) hours, or until three hundred (300) psi calculated compressive strength is developed, whichever occurs first, prior to commencing drilling operations. If the surface casing cement level falls below the surface, to the extent safety or aquifer protection is compromised, remedial cementing operations shall be performed.
- i. **Production casing cementing.** The operator shall ensure that all cement required under this rule placed behind production casing shall be of adequate quality to achieve a minimum compressive strength of at least three hundred (300) psi after twenty-four (24) hours and eight hundred (800) psi after seventy-two (72) hours measured at ninety-five degrees fahrenheit (95 °F) and at eight hundred (800) psi. After thorough circulation of a wellbore, cement shall be pumped behind the production casing (200) feet above the top of the shallowest known producing horizon. All fresh water aquifers which are exposed below the surface casing shall be cemented behind the production casing. All such cementing around an aquifer shall consist of a continuous cement column extending from at least fifty (50) feet below the bottom of the fresh water aquifer which is being protected to at least fifty (50) feet above the top of said fresh water aquifer. Cement placed behind the production casing shall be allowed to set seventy-two (72) hours, or until eight hundred (800) psi calculated compressive strength is developed, whichever occurs first, prior to the undertaking of any completion operation.
- j. **Production casing pressure testing.** The installed production casing shall be adequately pressure tested for the conditions anticipated to be encountered during completion and production operations.
- k. **Protection of aquifers and production stratum and suspension of drilling operations before running production casing.** In the event drilling operations are suspended before production string is run, the Director shall be notified immediately and the operator shall take adequate and proper precautions to assure that no alien water enters oil or gas

strata, nor potential fresh water aquifers during such suspension period or periods. If alien water is found to be entering the production stratum or to be causing significant adverse environmental impact to fresh water aquifers during completion testing or after the well has been put on production, the condition shall be promptly remedied.

- l. **Flaring of gas during drilling and notice to local emergency dispatch.** Any gas escaping from the well during drilling operations shall be, so far as practicable, conducted to a safe distance from the well site and burned. The operator shall notify the local emergency dispatch as provided by the local governmental designee of any such flaring. Such notice shall be given prior to the flaring if the flaring can be reasonably anticipated, and in all other cases as soon as possible but in no event more than two (2) hours after the flaring occurs.
- m. **Protection of productive strata during deepening operations.** If a well is deepened for the purpose of producing oil and gas from a lower stratum, such deepening to and completion in the lower stratum shall be conducted in such a manner as to protect all upper productive strata.
- n. **Requirement to evaluate disposal zones for hydrocarbon potential.** If a well is drilled as a disposal well then the disposal zone shall be evaluated for hydrocarbon potential. The proposed hydrocarbon evaluation method shall be submitted in writing and approved by the Director prior to implementation. The productivity results shall be submitted to the Director upon completion of the well.
- o. **Requirement to log well.** For all new drilling operations, the operator shall be required to run a minimum of a resistivity log with gamma-ray or other petrophysical log(s) approved by the Director that adequately describe the stratigraphy of the wellbore. A cement bond log shall be run on all production casing or, in the case of a production liner, the intermediate casing, when these casing strings are run. These logs and all other logs run shall be submitted with the Well Completion or Recompletion Report and Log, Form 5. Open hole logs shall be run at depths that adequately verify the setting depth of surface casing and any aquifer coverage. These requirements shall not apply to the unlogged open hole completion intervals, or to wells in which no open hole logs are run.
- p. **Remedial cementing during recompletion.** The Director may apply a condition of approval for Application for Permit to Drill, Deepen, Re-enter, or Recomplete and Operate, Form 2, to require remedial cementing during recompletion operations consistent with the provisions for protecting aquifers and hydrocarbon bearing zones in this Rule 317.

317A. SPECIAL DRILLING RULES - D–J BASIN FOX HILLS PROTECTION AREA

The following special drilling rules shall apply to wells in the D–J Basin Fox Hills Protection Area as defined in the 100 Series of the Rules and Regulations:

- a. **Surface Casing - Minimum Requirements for Well Control.** In all wells drilled within the D–J Basin Fox Hills Protection Area, surface casing shall be run to a minimum depth of five percent (5%) of the projected total depth to which the well is to be drilled, provided that in no event shall the surface casing be run to a depth less than two hundred (200) feet. The Director may, on a case-by-case basis, grant variances in this five percent (5%) requirement where the Director finds that the well is a development well in which pressures can be accurately predicted and finds that, based upon those predictions, the five percent (5%) requirement should be varied to achieve effective well control. In all cases, however, the actual depth at which the surface casing is set shall be calculated to position the casing seat to a depth within a competent formation (preferably shale) which will contain the maximum pressure to which the casing will be exposed during normal drilling operations.

b. **Surface Casing - Aquifer Protection.** For purposes of aquifer protection, surface casing must be set as follows in wells which are not exploratory wells:

- (1) Surface casing shall be run to a depth at least fifty (50) feet below the Fox Hills transition zone in wells drilled within Townships 5 South through 5 North, Ranges 65 West through 70 West or within Townships 3 North through 5 North, Range 64 West.
- (2) With respect to Townships 5 South through 5 North, Ranges 58 West through 63 West, Townships 5 South through 2 North, Range 64 West; and Township 6 South, Ranges 65 West through 70 West, in all wells located within one (1) mile of a permitted producing water well, surface casing shall be set to a depth sufficient to protect the deepest permitted producing water well within such one mile area. Said depth shall be at least fifty (50) feet below the depth of the base of the aquifer from which said deepest water well is producing, or fifty (50) feet below the base of the Fox Hills Transition Zone if such deepest water well produces from the Fox Hills Aquifer.

Upon the request of the operator, the Director (or the Commission upon appeal) may grant a variance to the requirements of this subparagraph b. upon a showing to the Director, or the Commission upon appeal, that the variance does not violate the basic intent of said requirements. For such variance purpose, the basic intent of said requirements is stated to be to provide reasonable aquifer protection for the water well(s) which are permitted by the State of Colorado Division of Water Resources and are currently producing in the area potentially affected by the oil or gas well to be drilled.

c. **Exploratory Wells.** For purposes of the D–J Basin Fox Hills Protection Area only, the term exploratory well means any well:

- (1) Which targets the classically demonstrated zones with limited geographic extent such as channel, bar, valley fill and levee type sandstones that were deposited prior to the x-bentonite time stratigraphic event; or
- (2) Which can be demonstrated to be separated from a known producing horizon by a dry hole; or
- (3) Which can be demonstrated to be targeted to a horizon which is geologically separate from the producing horizon in an offsetting producing well, or
- (4) Which the Director, or the Commission upon appeal, may define as an exploratory well by variance, it being the basic intent of this definition that the requirements of subparagraph b. not operate to discourage the drilling of high risk wells.

317B. PUBLIC WATER SYSTEM PROTECTION

a. **Definitions.** For purposes of this Rule 317B:

- (1) **Drilling, Completion, Production and Storage (“DCPS”) Operations** shall mean operations at (i) well sites for the drilling, completion, recompletion, workover, or stimulation of wells or chemical and production fluid storage, and (ii) any other oil and gas location at which production facilities are operated. DCPS Operations shall exclude roads, gathering lines, pipelines, and routine operations and maintenance.

- (2) **Existing Oil and Gas Location** shall mean an oil and gas location, excluding roads, pipelines, and gathering lines, permitted or constructed prior to the later of May 1, 2009 for federal land or April 1, 2009 for all other land or the date that the oil and gas location becomes subject to Rule 317B by virtue of its proximity to a Classified Water Supply Segment.
- (3) **New Oil and Gas Location** shall mean an oil and gas location, excluding roads, pipelines, and gathering lines, that is not an existing oil and gas location.
- (4) **New Surface Disturbance** shall mean surface disturbance that expands the area of surface covered by an oil and gas location beyond that initially disturbed in the construction of the oil and gas location.
- (5) **Non-Exempt Linear Feature** shall mean a road, gathering line, or pipeline that is not necessary to cross a stream or connect or access a well or a gathering line.

b. Applicability Determination.

- (1) Rule 317B is applicable to DCPS Operations within Surface Water Supply Areas. The applicability of Rule 317B will be determined by reviewing the Public Water System Surface Water Supply Area Map, attached as part of Appendix VI, or by entering information into the Public Water System Surface Water Supply Area Applicability Determination Tool, also located on the Commission website.
- (2) The Public Water Systems subject to the protections of this Rule 317B are those listed in Appendix VI. Any additions or deletions to the Public Water Systems listed in Appendix VI or the Public Water System Surface Water Supply Area Map, also located in Appendix VI, shall be by Commission rulemaking, as provided in Rule 529.
- (3) DCPS Operations at New Oil and Gas Locations within a Surface Water Supply Area will be subject to the requirements in Rules 317B.c, 317B.d, or 317B.e based on the buffer zones defined in Table 1, below. DCPS Operations at Existing Oil and Gas Locations within a Surface Water Supply Area at which no new surface disturbance has occurred after the date Rule 317B became applicable to that oil and gas location will be subject to the requirements in Rule 317B.f.(1) based on the buffer zones defined in Table 1. DCPS Operations at Existing Oil and Gas Locations within a Surface Water Supply Area at which new surface disturbance has occurred after the date Rule 317B became applicable to that oil and gas location will be subject to the requirements in Rule 317B.f.(2) based on the buffer zones defined in Table 1.
- (4) For Classified Water Supply Segments that are perennial and intermittent streams, buffer zones shall be determined by measuring from the ordinary high water line of each bank to the near edge of the disturbed area at the oil and gas location at which the DCPS Operations will occur.
- (5) The buffer zones shall apply only to DCPS Operations located on the surface. The buffer zones shall not apply to subsurface boreholes and equipment or materials contained therein. The buffer zones shall not apply to DCPS Operations located in an area that does not drain to a classified water supply segment protected by this Rule 317B.

TABLE 1. Buffer Zones Associated with DCPS Operations.

Zone	Classified Water Supply Segments (ft)
Internal Buffer	0 - 300
Intermediate Buffer	301 - 500
External Buffer	501 - 2,640

c. Requirements for DCPS Operations Conducted at New Oil and Gas Locations in the Internal Buffer Zone.

DCPS Operations conducted and Non-Exempt Linear Features located at New Oil and Gas Locations within a Surface Water Supply Area may not occur in whole or in part within the Internal Buffer Zone identified in Table 1 unless a variance is granted pursuant to Rule 502.b and consultation with the Colorado Department of Public Health and Environment occurs pursuant to Rule 306.d and a Form 2A or Form 2 with appropriate conditions of approval has been approved, or the Director has approved a Comprehensive Drilling Plan pursuant to Rule 216 that covers the operation. In determining appropriate conditions of approval for such operations, the Director shall consider the extent to which the conditions of approval are required to prevent impacts to the Public Water System.

(1) The Commission shall grant a variance if the operator demonstrates that:

A. The proposed DCPS Operations and applicable best management practices and operating procedures will result in substantially equivalent protection of drinking water quality in the Surface Water Supply area; and

B. Either:

i. Conducting the DCPS Operation outside the Internal Buffer Zone would pose a greater risk to public health, safety, or welfare, including the environment and wildlife resources, such as may be the case where conducting the DCPS Operations outside the Internal Buffer Zone would require construction in steep or erosion-prone terrain or result in greater surface disturbance due to an inability to use infrastructure already constructed such as roads, well sites, or pipelines; or

ii. Conducting DCPS Operations beyond the Internal Buffer Zone is technically infeasible and prevents the operator from exercising its mineral rights.

(2) At a minimum, for any DCPS Operation at a New Oil and Gas Location within the Internal Buffer Zone, the Director shall include as conditions of approval in the Form 2A, Form 2, or Comprehensive Drilling Plan, the requirements of Rule 317B.d.

d. Requirements for DCPS Operations at New Oil and Gas Locations in the Intermediate Buffer Zone.

The following shall be required for all DCPS Operations at New Oil and Gas Locations within a Surface Water Supply Area and in the Intermediate Buffer Zone as defined in Table 1.

- (1) Pitless drilling systems;
- (2) Flowback and stimulation fluids contained within tanks that are placed on a well pad or in an area with downgradient perimeter berming;
- (3) Berms or other containment devices shall be constructed in compliance with Rule 603.e.(12) around crude oil, condensate, and produced water storage tanks; and
- (4) When sufficient water exists in the Classified Water Supply Segment, collection of baseline surface water data consisting of a pre-drilling surface water sample collected immediately downgradient of the oil and gas location and follow-up surface water data consisting of a sample collected at the same location three (3) months after the conclusion of any drilling activities and operations or completion. The sample parameters shall include:
 - A. pH;
 - B. Alkalinity;
 - C. Specific conductance;
 - D. Major cations/anions (chloride, fluoride, sulfate, sodium);
 - E. Total dissolved solids;
 - F. BTEX/GRO/DRO;
 - G. TPH;
 - H. PAH's (including benzo(a)pyrene); and
 - I. Metals (arsenic, barium, calcium, chromium, iron, magnesium, selenium).

Current applicable EPA-approved analytical methods for drinking water must be used and analyses must be performed by laboratories that maintain state or nationally accredited programs.

Copies of all test results described above shall be provided to the Commission and the potentially impacted Public Water System(s) within three (3) months of collecting the samples. In addition, the analytical results and surveyed sample locations shall be submitted to the Commission in an electronic data deliverable format.

- (5) Notification of potentially impacted Public Water Systems within fifteen (15) stream miles downstream of the DCPS Operation prior to commencement of new surface disturbing activities at the site.
- (6) An emergency spill response program that includes employee training, safety, and maintenance provisions and current contact information for downstream Public

Water System(s) located within fifteen (15) stream miles of the DCPS Operation, as well as the ability to notify any such downstream Public Water System(s) with intake(s) within fifteen (15) stream miles downstream of the DCPS operations.

In the event of a spill or release, the operator shall immediately implement the emergency response procedures in the above-described emergency response program.

If a spill or release impacts or threatens to impact a Public Water System, the operator shall notify the affected or potentially affected Public Water System(s) immediately following discovery of the release, and the spill or release shall be reported to the Commission in accordance with Rule 906.b.(3), and to the Environmental Release/Incident Report Hotline (1-877-518-5608) in accordance with Rule 906.b.(4).

e. Requirements for DCPS Operations at New Oil and Gas Locations within the External Buffer Zone.

The following shall be required when DCPS Operations are conducted at New Oil and Gas Locations within a Surface Water Supply Area and in the External Buffer Zone as defined in Table 1.

- (1) Pitless drilling systems or containment of all drilling flowback and stimulation fluids pursuant to Rule 904; and
- (2) When sufficient water exists in the Classified Water Supply Segment, collection of baseline surface water data consisting of a pre-drilling surface water sample collected immediately downgradient of the oil and gas location and follow-up surface water data consisting of a sample collected at the same location three (3) months after the conclusion of any drilling activities and operations or completion. The sample parameters shall include:
 - A. pH;
 - B. Alkalinity;
 - C. Specific conductance;
 - D. Major cations/anions (chloride, fluoride, sulfate, sodium);
 - E. Total dissolved solids;
 - F. BTEX/GRO/DRO;
 - G. TPH;
 - H. PAH's (including benzo(a)pyrene); and
 - I. Metals (arsenic, barium, calcium, chromium, iron, magnesium, selenium).

Current applicable EPA-approved analytical methods for drinking water must be used and analyses must be performed by laboratories that maintain state or nationally accredited programs.

Copies of all test results described above shall be provided to the Commission and the potentially impacted Public Water System(s) within three (3) months of collecting the samples. In addition, the analytical results and surveyed sample locations shall be submitted to the Commission in an electronic data deliverable format.

- (3) Notification of potentially impacted Public Water Systems within fifteen (15) stream miles downstream of the DCPS Operation prior to commencement of new surface disturbing activities at the site.
- (4) An emergency spill response program that includes employee training, safety, and maintenance provisions and current contact information for downstream Public Water System(s) located within fifteen (15) stream miles of the DCPS Operation, as well as the ability to notify any such downstream Public Water System(s) with intake(s) within fifteen (15) stream miles downstream of the DCPS operations.

In the event of a spill or release, the operator shall immediately implement the emergency response procedures in the above-described emergency response program.

If a spill or release impacts or threatens to impact a Public Water System, the operator shall notify the affected or potentially affected Public Water System(s) immediately following discovery of the release, and the spill or release shall be reported to the Commission in accordance with Rule 906.b.(3), and to the Environmental Release/Incident Report Hotline (1-877-518-5608) in accordance with Rule 906.b.(4).

f. Requirements for DCPS Operations at Existing Oil and Gas Locations.

- (1) Existing Oil and Gas Locations and DCPS Operations at Existing Oil and Gas Locations within a Surface Water Supply Area and within zones specified in Table 1 shall be subject to the following requirements instead of the requirements of Rules 317B.c, 317B.d, or 317B.e provided that no new surface disturbance at the Existing Oil and Gas Location occurs after the later of May 1, 2009 for federal land or April 1, 2009 for all other land or the date Rule 317B became applicable to the oil and gas location:
 - A. Collection of surface water data from a Classified Water Supply Segment consisting of a sample collected immediately downgradient of the oil and gas operation will occur by the latest of June 1, 2009, within six (6) months after the date Rule 317B became applicable to the oil and gas location, or when sufficient water exists in the stream:
 - i. pH;
 - ii. Alkalinity;
 - iii. Specific conductance;
 - iv. Major cations/anions (chloride, fluoride, sulfate, sodium);
 - v. Total dissolved solids;
 - vi. BTEX/GRO/DRO;

- vii. TPH;
- viii. PAH's (including benzo(a)pyrene); and
- ix. Metals (arsenic, barium, calcium, chromium, iron, magnesium, selenium).

Current applicable EPA-approved analytical methods for drinking water must be used and analyses must be performed by laboratories that maintain state or nationally accredited programs.

Copies of all test results described above shall be provided to the Commission and the potentially impacted Public Water System(s) within three (3) months of collecting the samples. In addition, the analytical results and surveyed sample locations shall be submitted to the Commission in an electronic data deliverable format.

- B. An emergency spill response program that includes employee training, safety, and maintenance provisions and current contact information for downstream Public Water System(s) located within fifteen (15) stream miles of the DCPS Operation, as well as the ability to notify any such downstream Public Water System(s) with intake(s) within fifteen (15) stream miles downstream of the DCPS Operations.

In the event of a spill or release, the operator shall immediately implement the emergency response procedures in the above-described emergency response program.

If a spill or release impacts or threatens to impact a Public Water System, the operator shall notify the affected or potentially affected Public Water System(s) immediately following discovery of the release, and the spill or release shall be reported to the Commission in accordance with Rule 906.b.(3), and to the Environmental Release/Incident Report Hotline (1-877-518-5608) in accordance with Rule 906.b.(4).

- C. Operators shall employ and maintain Best Management Practices, as necessary, to comply with this rule.

- (2) Existing Oil and Gas Locations and DCPS Operations at Existing Oil and Gas Locations within a Surface Water Supply Area and within zones specified in Table 1 for which new surface disturbance occurs on or after the later of May 1, 2009 for federal land or on or after April 1, 2009 for all other land or the date Rule 317B became applicable to the oil and gas location shall be subject to the requirements of Rule 317B.f.(3) instead of the requirements of Rules 317B.c, 317B.d, or 317B.e where the additional new surface disturbance is addressed in a Comprehensive Drilling Plan accepted pursuant to Rule 216, or if:

- A. The new disturbance from the DCPS Operation will not increase the existing disturbed area prior to interim reclamation by more than one hundred (100) percent up to a maximum of three (3) acres, and

- B. The new surface disturbance occurs in a direction away from the stream or no closer to the stream if moving away from the stream would result in more

damaging surface disturbance such as location on a steep slope, in an area of high soil erosion potential, or in a wetland.

(3) Where the provisions of Rule 317B.f.(2) apply, the following zone requirements shall apply:

- A. For all zones, the requirements of Rule 317B.f.(1), except that the sampling parameters in Rule 317B.f.(1).A shall occur no later than six (6) months after commencing the DCPS Operations at the Existing Oil and Gas Location.
- B. For External and Intermediate Buffer Zones: pitless drilling systems or containment of drilling, flowback, and stimulation fluids with impervious liners, as provided in Rule 904.
- C. For Internal Buffer Zones:
 - i. Pitless drilling systems;
 - ii. Flowback and stimulation fluids contained within tanks and placed on a well pad or in an area with downgradient perimeter berming;
 - iii. Berms constructed in compliance with Rule 603.e.(12) around all crude oil, condensate, and produced water tanks; and
 - iv. Notification of potentially impacted Public Water Systems within fifteen (15) stream miles downstream of the DCPS Operation prior to commencement of new surface disturbing activities at the site.

318. LOCATION OF WELLS

All wells drilled for oil or gas to a common source of supply shall have the following setbacks:

- a. **Wells 2,500 feet or greater in depth.** A well to be drilled two thousand five hundred (2,500) feet or greater shall be located not less than six hundred (600) feet from any lease line, and shall be located not less than one thousand two hundred (1,200) feet from any other producible or drilling oil or gas well when drilling to the same common source of supply, unless authorized by order of the Commission upon hearing.
- b. **Wells less than 2,500 feet in depth.** A well to be drilled to less than a depth of two thousand five hundred (2,500) feet below the surface shall be located not less than two hundred (200) feet from any lease line, and not less than three hundred (300) feet from any other producible oil or gas well, or drilling well, in said source of supply, except that only one producible oil or gas well in each such source of supply shall be allowed in each governmental quarter-quarter section unless an exception under Rule 318.c. is obtained.
- c. **Exception locations.** The Director may grant an operator's request for a well location exception to the requirements of this rule or any order because of geologic, environmental, topographic or archaeological conditions, irregular sections, a surface owner request, or for other good cause shown provided that a waiver or consent signed by the lease owner toward whom the well location is proposed to be moved, agreeing that said well may be located at the point at which the operator proposes to drill the well and where correlative rights are protected. If the operator of the proposed well is also the operator of the drilling unit or unspaced offset lease toward which the well is proposed to

be moved, waivers shall be obtained from the mineral interest owners under such lands. If waivers cannot be obtained from all parties and no party objects to the location, the operator may apply for a variance under Rule 502.b. If a party or parties object to a location and cannot reach an agreement, the operator may apply for a Commission hearing on the exception location.

d. Exemptions to Rule 318.

- (1) This rule shall not apply to authorized secondary recovery projects.
- (2) This rule shall apply to fracture or crevice production found in shale, except from fields previously exempted from this rule.
- (3) In a unit operation, approved by federal or state authorities, the rules herein set forth shall not apply except that no well in excess of two thousand five hundred (2,500) feet in depth shall be located less than so hundred (600) feet from the exterior or interior (if there be one) boundary of the unit area and no well less than two thousand five hundred (2,500) feet in depth below the surface shall be located less than two hundred (200) feet from the exterior or interior (if there be one) boundary of the unit area unless otherwise authorized by the order of the Commission after proper notice to owners outside the unit area.

- e. **Wells located near a mine.** No well drilled for oil or gas shall be located within two hundred (200) feet of a shaft or entrance to a coal mine not definitely abandoned or sealed, nor shall such well be located within one hundred (100) feet of any mine shaft house, mine boiler house, mine engine house, or mine fan; and the location of any proposed well shall insure that when drilled it will be at least fifteen (15) feet from any mine haulage or airway.

318A(I). GREATER WATTENBERG AREA SPECIAL WELL LOCATION, SPACING AND UNIT DESIGNATION RULE (EXCEPT THE CITY AND COUNTY OF BROOMFIELD)

The provisions of Rule 318A(I),, recited below, pertain to those lands within the Greater Wattenberg Area defined herein, excepting those lands within the City and County of Broomfield, Colorado as it existed on August 8, 2011.

- 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 wellbore lateral penetrates the productive formation as well as any governmental quarter-quarter sections that are located less than four hundred sixty (460) feet from the portion of the wellbore lateral that penetrates the productive zone 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(I).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(I).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. 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(I).
- m. **Minimum intrawell 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.

318A(II). GREATER WATTENBERG AREA SPECIAL WELL LOCATION, SPACING AND UNIT DESIGNATION RULE (THE CITY AND COUNTY OF BROOMFIELD)

The provisions of Rule 318A(II)., recited below, pertain to those lands within the Greater Wattenberg Area within the City and County of Broomfield, Colorado as it existed on August 8, 2011.

- 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 recomple 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 four (4) governmental quarter-quarter sections nearest to the wellbore regardless of section or quarter section lines.
- 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.** This subsection applies to the following area of the GWA: Township 1 North, Ranges 66 West through 68 West; Township 1 North, Range 69 West: E½; Township 2 North, Ranges 64 West through 68 West; Township 2 North, Range 69 West: E½; Township 3 North, Ranges 64 West through 67 West; Township 4 North, Ranges 63 through 67 West; Township 5 North, Ranges 63 West through 67 West; Township 6 North, Ranges 63 West through 66 West, 6th P.M.
- (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 interior infill well or boundary well (“proposed GWA infill well”) drilled 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 GWA infill 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 GWA infill 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 GWA infill 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., the following process shall apply:

- A. Notice shall be given by certified mail by the operator of a proposed boundary well or 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.
 - B. Each owner shall have a twenty (20) day period after receipt of such notice to object in writing to the operator to such well location, proposed spacing unit, or additional producing formation. If a timely objection is received, the matter shall be set on the docket at the next available Commission hearing. Absent receipt of an objection by the operator from an owner within such twenty (20) day period, the Director may administratively approve the boundary well, wellbore spacing unit, or additional producing formation, provided that it does not exceed eight (8) producing completions in the "J" Sand, Codell or Niobrara Formations in the 160-acre governmental quarter section as set forth in subsection f. below. 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, a wellbore spacing unit, or an additional producing formation is proposed, shall also be filed with the Director in accordance with Rule 303.
- (7) The Commission shall review the effectiveness of this subsection e. no later than March 1, 2008 and may require operators to submit data related to infill drilling performed under this subsection.
- 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. However, absent Commission order otherwise, there shall be no more than eight (8) producing completions in the "J" Sand, Codell or Niobrara Formations in any 160-acre governmental quarter section.
 - 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. **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.
 - i. **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.
 - j. **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 and supersedes and replaces the "Policy on Staff Administrative

Application of the Greater Wattenberg Area Well Location Rule 318A.,” dated April 26, 1999.

- k. 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(II).

318B. Yuma/Phillips County Special Well Location Rule

- a. This Special Well Location Rule (“WLR”) governs wells drilled to and completed in the Niobrara Formation for the following lands:

Township 1 North Range 44 West: Sections 7, 18, 19, 30 through 33 Range 45 West: Sections 7 through 36 Range 46 West: Sections 4 through 9 Range 47 West: All Range 48 West: All

Township 2 North Range 46 West: All Range 47 West: All Range 48 West: All

Township 3 North Range 45 West: Sections 1 through 18 Range 46 West: All Range 47 West: All Range 48 West: All

Township 4 North Range 45 West: All Range 46 West: All Range 47 West: All Range 48 West: All

Township 5 North Range 45 West: All Range 46 West: All Range 47 West: All Range 48 West: All

Township 6 North Range 45 West: All Range 46 West: All Range 47 West: All Range 48 West: All

Township 7 North Range 45 West: All Range 46 West: All Range 47 West: All

Township 8 North Range 45 West: All Range 46 West: All Range 47 West: All

Township 9 North Range 45 West: Sections 19 through 36 Range 46 West: Sections 19 through 36 Range 47 West: Sections 19 through 36

Township 1 South Range 44 West: Sections 3 through 10, 16 through 21, 27 through 34 Range 45 West: Sections 3 through 5 Range 46 West: Sections 4 through 9, 16 through 36 Range 47 West: All Range 48 West: All

Township 2 South Range 44 West: Sections 3 through 6 Range 45 West: Section 7: W½, Section 18: W½, Section 19: All Range 46 West: Sections 1 through 24 Range 47 West: All Range 48 West: All

Township 3 South Range 48 West: All

Township 4 South Range 48 West: All

Within the WLR Area, operators may conduct drilling operations to the Niobrara Formation as follows:

- (1) Four (4) Niobrara Formation wells may be drilled in any quarter section.
 - (2) No more than one (1) well may be located in any quarter quarter section.
 - (3) No minimum distance shall be required between wells producing from the Niobrara Formation in any quarter section
 - (4) Wells shall be located at least three hundred (300) feet from the boundary of said quarter section, and wells located outside any drilling units already established by the Commission in the WLR Area prior to this WLR's effective date (July 30, 2006) shall, in addition, be located at least three hundred (300) feet from any lease line. Further, wells shall be located not less than nine hundred (900) feet from any producible well drilled to the Niobrara Formation prior to this WLR's effective date (July 30, 2006) located in a contiguous or cornering quarter section unless exception is approved by the Director.
- b. Any well drilled to the Niobrara Formation in the WLR Area prior to the effective date (July 30, 2006) of this WLR which is legally located when this WLR becomes effective but is not located as listed above shall be treated as properly located for purposes of this WLR.
 - c. This WLR does not alter the size or configuration of any drilling units already established by the Commission in the WLR Area prior to this WLR's effective date (July 30, 2006).
 - d. This WLR 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 from the Niobrara Formation at locations herein authorized does not provide an equal opportunity to obtain their just and equitable share of oil and gas from such formation.
 - e. Well exception locations to this WLR shall be subject to the provisions of Rule 318.c.
 - f. This WLR is a well location rule and supersedes existing Commission orders in effect at the time of its adoption only to the extent that the existing orders relate to permissible well locations and the number of wells that may be drilled in a quarter section. Commission orders in effect when this Rule 318B. is adopted nonetheless apply with respect to the size of drilling units already established by the Commission in the WLR Area. This WLR is not intended to establish well spacing. Accordingly, when an area subject to Rule 318B. is otherwise unspaced, it does not act to space the area but instead provides the permissible locations for any new Niobrara Formation wells. Similarly, Rule 318B. does not affect production allocation for existing or future wells. An operator may allocate production in accordance with the applicable lease, contract terms or established drilling and spacing units recognizing the owner's right to apply to the COGCC to resolve any outstanding correlative rights issues.
 - g. The landowner notice provisions for 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 Rule 318B.

319. ABANDONMENT

The requirements for abandoning a well shall be as follows:

a. Plugging

- (1) A dry or abandoned well, seismic, core, or other exploratory hole, must be plugged in such a manner that oil, gas, water, or other substance shall be confined to the reservoir in which it originally occurred. Any cement plug shall be a minimum of fifty (50) feet in length and shall extend a minimum of fifty (50) feet above each zone to be protected. The material used in plugging, whether cement, mechanical plug, or some other equivalent method approved in writing by the Director, must be placed in the well in a manner to permanently prevent migration of oil, gas, water, or other substance from the formation or horizon in which it originally occurred. The preferred plugging cement slurry is that recommended by the American Petroleum Institute (API) Environmental Guidance Document: Well Abandonment and Inactive Well Practices for U.S. Exploration and Production Operations, i.e., a neat cement slurry mixed to API standards. However, pozzolan, gel and other approved extenders may be used if the operator can document to the Director's satisfaction that the slurry design will achieve a minimum compressive strength of three hundred (300) psi after twenty-four (24) hours and eight hundred (800) psi after seventy-two (72) hours measured at ninety-five degrees fahrenheit (95 °F) and at eight hundred (800) psi.
- (2) The operator shall have the option as to the method of placing cement in the hole by (a) dump bailer, (b) pumping a balanced cement plug through tubing or drill pipe, (c) pump and plug, or (d) equivalent method approved by the Director prior to plugging. Unless prior approval is given, all wellbores shall have water, mud or other approved fluid between all plugs.
- (3) No substance of any nature or description other than normally used in plugging operations shall be placed in any well at any time during plugging operations. All final reports of plugging and abandonment shall be submitted on a Well Abandonment Report, Form 6, and accompanied by a job log or cement verification report from the plugging contractor specifying the type of fluid used to fill the wellbore, type and slurry volume of API Class cement used, date of work, and depth the plugs were placed.
- (4) In order to protect the fresh water strata, no surface casing shall be pulled from any well unless authorized by the Director.
- (5) All abandoned wells shall have a plug or seal placed at the surface of the ground or the bottom of the cellar in the hole in such manner as not to interfere with soil cultivation or other surface use. The top of the pipe must be sealed with either a cement plug and a screw cap, or cement plug and a steel plate welded in place or by other approved method, or in the alternative be marked with a permanent monument which shall consist of a piece of pipe not less than four (4) inches in diameter and not less than ten (10) feet in length, of which four (4) feet shall be above the general ground level, the remainder to be embedded in cement or to be welded to the surface casing.
- (6) The operator must obtain approval from the Director of the plugging method prior to plugging, and shall notify the Director of the estimated time and date the plugging operation of any well is to commence, and identify the depth and thickness of all known sources of groundwater. For good cause shown, the Director may require that a cement plug be tagged if a cement retainer or bridge plug is not used. If requested by the operator, the Director shall furnish written follow-up documentation for a requirement to tag cement plugs.
- (7) **Wells Used for Fresh Water.** When the well, seismic, core, or other exploratory hole to be plugged may safely be used as a fresh water well, and such utilization is

desired by the landowner, the well need not be filled above the required sealing plug set below fresh water; provided that written authority for such use is secured from the landowner and, in such written authority, the landowner assumes the responsibility to plug the well upon its abandonment as a water well in accordance with these rules. Such written authority and assumption of responsibility shall be filed with the Commission, provided further that the landowner furnish a copy of the permit for a water well approved by the Division of Water Resources.

b. Temporary Abandonment.

- (1) A well may be temporarily abandoned when completed, upon approval of the Director, for a period not to exceed six (6) months provided the hole is cased or left in such a manner as to prevent migration of oil, gas, water or other substance from the formation or horizon in which it originally occurred. All temporarily abandoned wells shall be closed to the atmosphere with a swedge and valve or packer, or other approved method. The well sign shall remain in place. If an operator requests temporary abandonment status in excess of six (6) months the operator shall state the reason for requesting such extension and state plans for future operation. A Sundry Notice, Form 4, or other form approved by the Director, shall be submitted annually stating the method the well is closed to the atmosphere and plans for future operation.
- (2) The manner in which the well is to be maintained should be reported to the Commission, and bonding requirements, as provided for in Rule 304, kept in force until such time as the well is permanently abandoned.
- (3) A well which has ceased production or injection and is incapable of production or injection shall be abandoned within six (6) months thereafter unless the time is extended by the Director upon application by the owner. The application shall indicate why the well is temporarily abandoned and future plans for utilization. In the event the well is covered by a blanket bond, the Director may require an individual plugging bond on the temporarily abandoned well. Gas storage wells are to be considered active at all times unless physically plugged.
- (4) In addition to the requirements of Rule 326, an injection well that is shut-in or temporarily abandoned shall have a mechanical integrity test performed within two years after the shut-in date in order to be retained in shut-in or temporarily abandoned status.
- (5) If an injection well which has been shut-in or temporarily abandoned is determined not to have mechanical integrity as a result of any test required by the Commission rules and regulations, it must, within six (6) months following such a test, be either repaired and pass a mechanical integrity test or be plugged and abandoned.

320. LIABILITY

The owner and operator of any well drilled for oil or gas production or injection purposes, or any seismic, core, or other exploratory holes, whether cased or uncased, shall be liable and responsible for the plugging thereof in accordance with the rules and regulations of the Commission regardless of whether the cost of such plugging and abandonment exceeds the amount of security as set forth in Rule 304.

321. DIRECTIONAL DRILLING

If an operator intends to drill a horizontal or deviated wellbore utilizing controlled directional drilling methods, other than whipstocking due to hole conditions, the plans shall accompany an application for Permit-to-Drill, Form 2. In addition to the information required on the plat in Rule 303.c., the plat shall also show the surface and bottom hole location. If the surface location is in a different section than the bottom hole location, a plat depicting each section is required. Additionally, the proposed directional survey including two (2) wellbore deviation plots, one depicting the plan view and one depicting the side view, shall accompany the application.

Within thirty (30) days of completion the operator shall submit a Drilling Completion Report, Form 5, according to Rule 308., with a copy of the directional survey coordinate listing and the wellbore deviation plots (plan and side views). The survey data shall be provided in a single analysis report with sufficient detail to determine the location of the wellbore from the base of the surface casing to the kick off point and from that point to total depth. It shall be the operator's responsibility to ensure that the wellbore complies with the setback requirements in Commission orders or rules prior to producing the well.

322. COMMINGLING

The commingling of production from multiple formations or wells is encouraged in order to maximize the efficient use of wellbores and to minimize the surface disturbance from oil and gas operations. Commingling may be conducted at the discretion of an operator, unless the Commission has issued an order or promulgated a rule excluding specific wells, geologic formations, geographic areas, or field from commingling in response to an application filed by a directly and adversely affected or aggrieved party or on the Commission's own motion.

This rule supercedes the procedural requirements to establish commingling and allocation contained in any Commission order as of the effective date of this rule, but does not supersede any allocation made under such order.

323. OPEN PIT STORAGE OF OIL OR HYDROCARBON SUBSTANCES

Storage of oil or any other produced liquid hydrocarbon substance in earthen pits or reservoirs is considered to constitute waste, except in emergencies where such substances cannot be otherwise contained. In such cases, these substances must be reclaimed and such storage eliminated as soon as practicable after the emergency is controlled, unless special permission to delay or continue is obtained from the Director.

324A. POLLUTION

- a. The operator shall take precautions to prevent significant adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, including the environment and wildlife resources, taking into consideration cost-effectiveness and technical feasibility to prevent the unauthorized discharge or disposal of oil, gas, E&P waste, chemical substances, trash, discarded equipment or other oil field waste.
- b. No operator, in the conduct of any oil or gas operation shall perform any act or practice which shall constitute a violation of water quality standards or classifications established by the Water Quality Control Commission for waters of the state, or any point of compliance established by the Director pursuant to Rule 324D. The Director may establish one or more points of compliance for any event of pollution, which shall be complied with by all parties determined to be a responsible party for such pollution.
- c. No owner, in the conduct of any oil or gas operation, shall perform any act or practice which shall constitute a violation of any applicable air quality laws, regulations, and permits as

administered by the Air Quality Control Commission or any other local or federal agency with authority for regulating air quality associated with such activities.

- d. No injection shall be authorized pursuant to Rule 325 or Rule 401 unless the person applying for authorization to conduct the injection activities demonstrates that those activities will not result in the presence in an underground source of drinking water of any physical, chemical, biological or radiological substance or matter which may cause a violation of any primary drinking water regulation in effect as of July 12, 1982 and found at 40 C.F.R. Part 141, or may otherwise adversely affect the health of persons. An underground source of drinking water is an aquifer or its portion:

- (1) A which supplies any public water system; or

- B which contains a sufficient quantity of ground water to supply a public water system; and

- (i) currently supplies drinking water for human consumption; or

- (ii) contains fewer than 10,000 milligrams per liter total dissolved solids; and

- (2) which is not an exempted aquifer.

- e. No person shall accept water produced from oil and gas operations, or other oil field waste for disposal in a commercial disposal facility, without first obtaining a Certificate of Designation from the County in which such facility is located, in accord with the regulations pertaining to solid waste disposal sites and facilities as promulgated by the Colorado Department of Public Health and Environment.

324B . EXEMPT AQUIFERS

- a. **Criteria for aquifer exemption.** An aquifer or a portion thereof may be designated by the Director or the Commission as an exempted aquifer, in connection with the filing of an application pursuant to Rule 325, or Rule 401, and after notification to the Colorado Department of Public Health and Environment, Water Quality Control Division, if it meets the following criteria

- (1) It does not currently serve as a source of drinking water, and either subparagraph (2) or (3) below apply;

- (2) It cannot now and will not in the future serve as a source of drinking water because:

- A. It is mineral, hydrocarbon or geothermal energy producing, or can be demonstrated by a person filing an application pursuant to Rule 325, or Rule 401, to contain minerals or hydrocarbons that, considering their quantity and location, are expected to be commercially producible; or

- B. It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical; or

- C. It is so contaminated that it would be economically or technologically impractical to render the water fit for human consumption;

(3) The total dissolved solids content of the ground water is more than three thousand (3,000) and less than ten thousand (10,000) milligrams per liter and it is not reasonably expected to supply a public water system.

- b. **Aquifer exemption public notice.** If an aquifer exemption is required as part of an injection permit process, the injection well applicant shall apply for an aquifer exemption. This application shall contain data and information which show that applicable aquifer exemption criteria set forth in Rule 324B.a. are met. After evaluation of the application and prior to designating an aquifer or a portion thereof as an exempted aquifer, the Director shall publish a notice of proposed designation in a newspaper of general circulation serving the area where the aquifer is located. The notice shall identify such aquifer or portion thereof which the Director proposes to designate as exempted, and shall state that any person who can make a showing to the Director that the requested designation does not meet the criteria set forth in Rule 324B.a. may request the Commission to hold a hearing thereon.
- c. **Evaluation of written requests for public hearing.** Written requests for a public hearing before the Commission shall be reviewed and evaluated by the Director in consultation with the applicant to determine if the criteria set forth in Rule 324B.a. have been met. If, within thirty (30) days after publication of the notice, the Commission receives a hearing request for which the Director determines the criteria set forth in Rule 324B.a. have not been met, the Commission shall hold such a hearing in accordance with the provisions of §34-60-108, C.R.S., 1973, as amended, and shall make a final determination regarding designation.
- d. **Aquifer exemption designation.** If, within thirty (30) days after publication of the notice described in subparagraph b. above, the Commission does not receive a hearing request or receives a hearing request for which the Director determines the criteria set forth in Rule 324B.a. have been met, said aquifer or portion thereof shall be considered exempted thirty (30) days after publication of the notice.

324C. QUALITY ASSURANCE FOR CHEMICAL ANALYSIS

For the purpose of application for a permit for all wells authorized under Rule 323 and Rule 401, collection and analysis of water samples must comply with the Commission's approved quality assurance project plan.

324D. CRITERIA TO ESTABLISH POINTS OF COMPLIANCE

In determining a point of compliance, the Director shall take into consideration recommendations of the operator or any responsible party or parties, if applicable, including technical and economic feasibility, together with the following factors:

- a. The classified use established by the Water Quality Control Commission, for any groundwater or surface water which will be impacted by contamination. If not so classified, the Director shall consider the quality, quantity, potential economic use and accessibility of such water;
- b. The geologic and hydrologic characteristics of the site, such as depth to groundwater, groundwater flow, direction and velocity, soil types, surface water impacts, and climate;
- c. The toxicity, mobility, and persistence in the environment of contaminants released or discharged from the site;
- d. Established wellhead protection areas;

- e. The potential of the site as an aquifer recharge area; and
- f. The distance to the nearest permitted domestic water well or public water supply well completed in the same aquifer affected by the event.
- g. The distance to the nearest permitted livestock or irrigation water well completed in the same aquifer affected by the event.

325. UNDERGROUND DISPOSAL OF WATER

- a. No person shall commence operations for the underground disposal of water, or any other fluids, into a Class II well, or any well regulated by the Commission, nor shall any person commence construction of such a well, without having first obtained written authorization for such operations from the Director. Persons wishing to obtain authorization to conduct underground disposal activities shall file with the Director an Underground Injection Formation Permit Application, Form 31 and an Injection Well Permit Application, Form 33. If the disposal well is to be drilled, this application shall be submitted concurrently with the Application for Permit-to-Drill, Form 2, along with a service and filing fee to be determined by the Commission. (See Appendix III)
- b. **Withholding approval of underground disposal of water.** The Director may withhold the issuance of a permit and the granting of approval of any Underground Injection Formation Permit Application, Form 31 and any Injection Well Permit Application, Form 33 for any proposed disposal well when the Director has reasonable cause to believe that the proposed disposal well could result in a significant adverse impact on the environment or public health, safety and welfare. In the event such approval is not granted, the Director shall immediately advise the operator and bring the matter to the Commission at its next regularly scheduled hearing.
- c. The application for a dedicated injection well shall include the following information:
 - (1) The name, description and depth of the formation into which water is to be injected, and all underground sources of drinking water which may be affected by the proposed operation. A water analysis of the injection formation (if the total dissolved solids of the injection formation is determined to less than ten thousand (10,000) milligrams per liter, the aquifer must be exempted in accordance with Rule 322B.). The fracture pressure or fracture gradient of the injection formation.
 - (2) A base plat covering the area within one-quarter (1/4) mile of the proposed disposal well showing location of the proposed disposal well or wells and the location of all oil and gas wells, domestic and irrigation wells of public record and the identification of all oil and gas wells currently producing from the proposed injection zone within one-half (1/2) mile of the disposal zone. The names, addresses and holdings of all surface and mineral owners as defined in C.R.S. 34-60-103 (7), within one-quarter (1/4) mile of the proposed disposal well or wells, or all owners of record in the field if a field-wide system is proposed. These owners shall be specifically outlined and identified on the base plat. A list of all domestic and irrigation wells of public record, within one-quarter (1/4) mile of the proposed disposal well or wells, including their location and depth. (This information may be obtained at the Colorado Division of Water Resources.) Remedial action shall be required for any well within one-quarter (1/4) mile of the proposed disposal well or wells in which the injection zone is not adequately confined. The applicant shall include information regarding the need for remedial action on any well(s) penetrating the injection zone within one-quarter (1/4) mile of the proposed disposal well or wells, which the applicant may or may not

operate and a plan for the performance of any such remedial work. A copy of all plans and specifications for the system and its appurtenances.

- (3) A resistivity log, run from the bottom of the surface casing to total depth of the disposal well or wells or any well within one (1) mile together with a log from that well that can be correlated with the injection well. If the disposal well is to be drilled, a description of the typical stratigraphic level of the disposal formation in the disposal well or wells, and any other available logging or testing data, on the disposal well or wells.
- (4) A full description of the casing in the disposal well or wells. This shall include any information available on any remedial cement work performed to any casing string. This shall also include a schematic drawing showing all casing strings with cement volumes and tops, existing or as proposed, plug back total depth, depth of any existing open or squeezed perforations, setting depths of any bridge plugs existing or proposed, planned perforations in the injection zone, tubing and packer size and setting depth. A diagram of the surface facility showing all pipelines and tanks associated with the system. A listing of all leases connected directly by pipelines to the system.
- (5) A listing of all sources of water, by lease and well, to be injected shall be submitted on a Source of Produced Water for Disposal, Form 26.
- (6) Any proposed stimulation program.
- (7) The estimated minimum and maximum amount of water to be injected daily with anticipated injection pressures. Maximum injection pressure will be set by the Director upon approval.
- (8) The names and addresses of those persons notified by the applicant, as required by subparagraph i. of this rule.

d. The application for a simultaneous injection well shall include the following:

- (1) The name, description and depth of the formation into which water is to be injected, and all underground sources of drinking water which may be affected by the proposed operation. A water analysis of the injection formation (if the total dissolved solids of the injection formation is determined to be less than ten thousand (10,000) milligrams per liter, the aquifer must be exempted in accordance with Rule 324B.); a water analysis from the producing formation; and go fracture pressure or fracture gradient of the injection formation.
- (2) A base plat covering the area within one-quarter (1/4) mile of the proposed well showing the location of the proposed well or wells and the location of all oil and gas wells, domestic and irrigation wells of public record and the identification of all oil and gas wells currently producing from the proposed injection zone within one-half (1/2) mile of the disposal zone and the names, addresses and holdings of all mineral owners as defined in §34-60-103 (7), C.R.S., within one-quarter (1/4) mile of the proposed disposal well or wells, or all owners of record in the field if a field-wide system is proposed. These owners shall be specifically outlined and identified on the base plat. Remedial action shall be required for any well within one-quarter (1/4) mile of the proposed well or wells in which the injection zone is not adequately confined. The applicant shall include information regarding the need for remedial action on any well(s) penetrating the injection zone within one-quarter (1/4) mile of the proposed disposal well or wells, which

the applicant may or may not operate and a plan for the performance of any such remedial work and a copy of all plans and specifications for the system and its appurtenances.

- (3) A resistivity log, run from the bottom of the surface casing to total depth of the disposal zone or such log from a well within one (1) mile together with a log from that well that can be correlated with the simultaneous injection well. If the simultaneous injection well is to be drilled, a description of the typical stratigraphic level of the injection formation in the simultaneous injection well or wells, and any other available logging or testing data, on the simultaneous injection well or wells.
- (4) A full description of the casing in the simultaneous injection well or wells. This shall include any information available on any remedial cement work performed to any casing string. This shall also include a schematic drawing showing all casing strings with cement volumes and tops, existing or as proposed, plug back total depth, depth of any existing open or squeezed perforations, setting depths of any bridge plugs existing or proposed, planned perforations in the injection zone, downhole pump setting depth and any tubing and or packer size and setting depth.
- (5) Any proposed stimulation program.
- (6) The estimated amount of water to be injected daily.
- (7) Downhole pump specifications, together with a calculation of maximum discharge pressure created under proposed wellbore configuration. Downhole pump configurations shall be designed to inject below the injection zone fracture gradient.
- (8) The names and addresses of those persons notified by the applicant, as required by subparagraph j. of this rule.

The following rules shall apply to both dedicated injection well and simultaneous injection well applications.

- e. **Mechanical integrity testing requirement.** Prior to application approval, the proposed disposal well must satisfactorily pass a mechanical integrity test in accordance with Rule 326.
- f. **Centralized and commercial disposal well requirements.** Prior to application approval, the appurtenant centralized and commercial disposal well operations shall comply with the requirements of Rules 704. and 908.
- g. **Multiple well applications.** Application may be made to include the use of more than one (1) disposal well on the same lease, or on more than one (1) lease. Wherever feasible and applicable, the application shall contemplate a coordinated plan for the entire field.
- h. The designated operator of a unitized or cooperative project shall execute the application.
- i. Notice of the application for a dedicated injection well shall be given by the applicant by registered or certified mail or by personal delivery, to each surface owner and owner as defined in §34-60-103(7), C.R.S., within one-quarter (1/4) mile of the proposed well or wells and to owners and operators of oil and gas wells producing from the injection zone within one-half (1/2) mile of the disposal well or to owners of cornering and contiguous

units where injection will occur into the producing zones, whichever is the greater distance.

- j. Notice of the application for a simultaneous injection well shall be given by the applicant by registered or certified mail or by personal delivery, to each owner as defined in §34-60-103(7), C.R.S., within one-quarter (1/4) mile of the proposed well or wells and to owners and operators of oil and gas wells producing from the injection zone within one-half (1/2) mile of the disposal well or to owners of cornering and contiguous units where injection will occur into the producing zones, whichever is the greater distance.
- k. A copy of the notice of application shall be included with the disposal application filed with the Commission, and the applicant shall certify that notice by registered or certified mail or by personal delivery, to each of the owners specified in subparagraphs i. and j., has been accomplished.
- l. **Notice of application requirements.** The notice shall describe the proposed operation and shall state that any person who would be directly and adversely affected or aggrieved by the authorization of the underground disposal into the proposed injection zone may file, within fifteen (15) days of notification, a written request for a public hearing before the Commission, provided such request meets the protest requirements specified in subparagraph m. of this rule. The notice shall also state that additional information on the operation of the proposed disposal well may be obtained at the Commission office.
- m. **Evaluation of written requests for public hearing.** Written requests for public hearing before the Commission by a person, notified in accordance with subparagraphs i. and j. of this rule, who may be directly and adversely affected or aggrieved by the authorization of the underground disposal into the proposed injection zone, shall be reviewed and evaluated by the Director in consultation with the applicant. Written protests shall specifically provide information on:
 - (1) Possible conflicts between the injection zone's proposed disposal use and present or future use as a source of drinking water or present or future use as a source of hydrocarbons, or
 - (2) Operations at the well site which may affect potential and current sources of drinking water.
- n. **Dedicated injection well public notice.** The Director shall publish a notice of the proposed disposal permit for dedicated injection wells in a newspaper of general circulation serving the area where the well(s) is (are) located. The notice shall briefly describe the disposal application and include legal location, proposed injection zone, depth of injection and other relevant information. Comment period on the proposed disposal application shall end thirty (30) days after date of publication. If any data, information, or arguments submitted during the public comment period appear to raise substantial questions concerning potential impacts to the environment, public health, safety and welfare raised by the proposed disposal well permit the Director may request that the Commission hold a hearing.
- o. **Injection application deadlines.** If all of the data or information necessary to approve the disposal application has not been received within six (6) months of the date of receipt, the application will be withdrawn from consideration. However, for good cause shown, a ninety (90) day extension may be granted, if requested prior to the date of expiration.

326. MECHANICAL INTEGRITY TESTING

For the purpose of this rule, a mechanical integrity test of a well is a test designed to determine if there is a significant leak in the casing, tubing, or packer of the well, and there is significant fluid movement into an underground source of drinking water through vertical channels adjacent to the wellbore.

a. **Injection Wells** - A mechanical integrity test shall be performed on all injection wells.

(1) The mechanical integrity test shall include one (1) of the following tests to determine whether significant leaks are present in the casing, tubing, or packer:

- A. A pressure test with liquid or gas at a pressure of not less than three hundred (300) psi or the minimum injection pressure, whichever is greater, and not more than the maximum injection pressure; or
- B. The monitoring and reporting to the Director, on a monthly basis for sixty (60) consecutive months, of the average casing-tubing annulus pressure, following an initial pressure test; or
- C. In lieu of A. and B. any equivalent test or combinations of tests approved by the Director.

(2) The mechanical integrity test shall include one (1) of the following tests to determine whether there are significant fluid movements in vertical channels adjacent to the well bore:

- A. Cementing records which shall only be valid for injection wells in existence prior to July 1, 1986;
- B. Tracer surveys;
- C. Cement bond log or other acceptable cement evaluation log;
- D. Temperature surveys; or
- E. In lieu of A.-D., any other equivalent test or combination of tests approved by the Director.

(3) No person shall inject fluids into a new injection well unless a mechanical integrity test on the well has been performed and supporting documents including Mechanical Integrity Test, Form 14B, submitted and approved by the Director. Verbal approval may be granted for continuous injection following the test.

(4) Following the performance of the initial mechanical integrity test required by subparagraph (3), additional mechanical integrity tests shall be performed on each type of injection well as follows:

- A. Dedicated injection well. As long as it is used for the injection of fluids, mechanical integrity tests shall be performed at the rate of not less than one (1) test every five (5) years. The first five (5) year period shall commence on the date the initial mechanical integrity test is performed.
- B. Simultaneous injection well. No additional tests will be required after the initial mechanical integrity test.

- (5) Following the performance of the initial mechanical integrity test required by subparagraph (3), additional mechanical integrity tests shall be performed on each well, as long as it is used for the injection of fluids, at the rate of not less than one (1) test every five (5) years. The first five (5) year period shall commence on the date the initial mechanical integrity test is performed.

b. Shut-in Wells - All shut-in wells shall pass a mechanical integrity test.

- (1) A mechanical integrity test shall be performed on each shut-in well within two (2) years of the initial shut-in date. A mechanical integrity test shall be performed on each shut-in well on five (5) year intervals from the date the initial mechanical integrity test was performed. If, at any time, surface equipment is removed or the well becomes incapable of production, a mechanical integrity test must be performed within thirty (30) days. The mechanical integrity test for a shut-in well shall be:

- A. Isolation of the wellbore with a bridge plug or similar approved isolating device set one hundred (100) feet or less above the highest perforations and a pressure test with liquid or gas at a pressure of not less than three hundred (300) psi surface pressure or any equivalent test or combination of tests approved by the Director.
- B. Following the performance of the initial mechanical integrity test for shut-in wells, additional tests, other than the five (5) year interval test, may be required.

- c. Not less than ten (10) days prior to the performance of any mechanical integrity test required by this rule, any person required to perform the test shall notify the Director, in writing, of the scheduled date on which the test will be performed.
- d. All wells shall maintain mechanical integrity. All wells which lack mechanical integrity shall be repaired or plugged and abandoned within six (6) months of failing a mechanical integrity test or of a determination through any other means that the well lacks mechanical integrity, and the well site reclaimed in accordance with Rule 1004.a. All injection wells which fail a mechanical integrity test, or which are determined through any other means to lack mechanical integrity, shall be shut-in immediately.

327. LOSS OF WELL CONTROL

The operator shall take all reasonable precautions, in addition to fully complying with Rule 317. to prevent any oil, gas or water well from blowing uncontrolled and shall take immediate steps and exercise due diligence to bring under control any such well, and shall report such occurrence to the Director as soon as practicable, but no later than twenty-four (24) hours following the incident. Within fifteen (15) days after all occurrences the operator shall submit a written report giving all details. The Director shall maintain these written reports in a central file.

328. MEASUREMENT OF OIL

The volume of all oil production from a lease or a production unit shall be measured and recorded prior to removal from the lease or production unit. The volume of production of oil shall be computed in terms of barrels of clean oil on the basis of properly calibrated meter measurements or tank measurements of oil-level differences, made and recorded to the nearest one-quarter (1/4) inch of one hundred percent (100%) capacity tables, subject to the following corrections in items a., b., and c. below. This rule shall be used consistently with standards established by the American Society for Testing and Materials (ASTM), the American Petroleum Institute (API)

Manual of Petroleum Measurement Standards, the American Gas Association (AGA), the Gas Processors Association (GPA), or other applicable standards-setting organizations, and pursuant to contractual rights or obligations. Only those editions of standards cited within this rule shall apply to this rule; later amendments do not apply. The material cited in this rule is available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. In addition, these materials may be examined at any state publication depository library.

- a. **Correction for Impurities.** The percentage of impurities (water, sand and other foreign substances not constituting a natural component part of the oil) shall be determined to the satisfaction of the Director, and the observed gross volume of oil shall be corrected to exclude the entire volume of such impurities.
- b. **Temperature Correction.** The observed volume of oil corrected for impurities shall be further corrected to the standard volume of sixty degrees fahrenheit (60°F) in accordance with ASTM D-1250 Table 7, or any close approximation thereof approved by the Director.
- c. **Gravity Determination.** The gravity of oil at sixty degrees fahrenheit 60° F. shall be determined in accordance with ASTM D-1250 Table 5, or any close approximation thereof approved by the Director.
- d. **Tank Gauging.** Measurement by tank gauging shall be completed in accordance with industry standards as specified in API CH. 3 Gauging of Tanks (Section 3.1a Second Edition August 2005 and Section 3.1b Second Edition June 2001) and the API CH. 18.1, Measure Procedures for Crude Oil Gathered from Small Tanks by Truck (Second Edition April 1997).
- e. **Metering Station.** Measurement shall be completed in accordance with industry standards as specified in API CH. 4 Proving Systems (Section 2, Third Edition September 2003 and Section 8, First Edition November 1995), API CH. 5 Metering (CH. 5.1 Fourth Edition October 2005, CH. 5.2 Third Edition October 2005, CH. 5.3 Fifth Edition September 2005, CH. 5.4 Second Edition July 2005, CH. 5.5 Second Edition July 2005, and CH. 5.6 First Edition October 2002), API CH. 7 Temperature Determination (First Edition June 2001), API CH. 8 Sampling (CH. 8.1 Third Edition October 1995 and CH. 8.2 Second Edition October 1995), and the API CH. 12, Calculation of Quantities (CH. 12.1 Part 1 Second Edition November 2001).
- f. **Lact Meters.** Measurement utilizing lact units shall be in accordance with industry specifications or standards as specified in API SPEC. 6.1, Lease Automatic Custody Transfer Systems (Second Edition May 1991).
- g. **Sales Reconciliation.** In order to facilitate the resolution of questions regarding the payment of proceeds or sales reconciliation from a well, a payee may submit a Form 37 to the payer requesting additional information concerning the payee's interest in the well, price of the oil sold, taxes applied to the sale of oil, differences in well production and well sales, and other information as described in § 34-60-118.5, C.R.S. The payer shall return the completed form to the payee within sixty (60) days of receipt. Submittal of this form to the payer shall fulfill the requirement for "written request" described in § 34-60-118.5(2.5), C.R.S., and is a prerequisite to filing a complaint with the Commission. The payer shall use its best efforts to consult in good faith with the payee to resolve disputes regarding payment of proceeds or sales reconciliation.

A Form 37 requesting information concerning payment of proceeds may be submitted by the payee at any time. A Form 37 requesting information concerning sales volume reconciliation shall be submitted by the payee within one year of receipt of payment or the notification of a revised payment. The Commission may act to prohibit or terminate

any abuse of the reconciliation process, such as the submittal by a payee of multiple repeated requests for sales volume reconciliation regarding the same well. Such action by the Commission may include, but is not limited to, relieving the payer from its obligation to answer the request and limiting or prohibiting the payee's submittal of additional requests.

329. MEASUREMENT OF GAS

The volume of all gas produced from a lease or a production unit shall be measured and recorded prior to removal from the lease or production unit. Production of gas of all kinds shall be measured by meter unless otherwise agreed to by the Director. For computing volume of gas to be reported to the Commission, the standard pressure base shall be fourteen point seventy-three (14.73) psia, regardless of atmospheric pressure at the point of measurement, and the standard temperature base shall be sixty degrees fahrenheit (60°F). All volumes of gas to be reported to the Commission shall be adjusted by computation to these standards, regardless of pressures and temperatures at which the gas was actually measured, unless otherwise authorized by the Director. This rule shall be used consistently with standards established by the American Society for Testing and Materials (ASTM), the American petroleum Institute (API) Manual of Petroleum Measurement Standards, the American Gas Association (AGA), the Gas Processors Association (GPA), or other applicable standards-setting organizations, and pursuant to contractual rights and obligations. Only those editions of standards cited within this rule shall apply to this rule; later amendments do not apply. The material cited in this rule is available for public inspection during normal business hours from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203. In addition, these materials may be examined at any state publication depository library.

- a. **Metering Station.** Installation and operation of gas measurement stations shall be in accordance with industry standards as specified in API CH. 14.3, Orifice Measurement (Part 2, Fourth Edition April 2000 and Part 3, Third Edition August 1992 and Part 4, Third Edition November 1992); API CH. 21.1, Electronic Measurement (gas) (First Edition September 1993); AGA Report #7, Turbine Measurement (January 2006); AGA Report #9, Ultrasonic Measurement (April 2007); and AGA Report #11, Coriolis Measurement (January 2003).
- b. **Metering Equipment.** The devices used to measure the differential, line pressure, and temperature shall have accepted accuracy ratings established in industry standards as specified in API CH. 22, Testing Protocol Standards (CH. 22.1 First Edition November 2006 and CH. 22.2 First Edition August 2005).
- c. **Meter Calibration.** Meters shall be calibrated annually unless more frequent calibration is required by contractual obligations or by the Director. All calibration reports shall be created, maintained, and made available as operation records pursuant to Rule 205. In the event two consecutive meter calibrations exceed a 2% error, the operator shall report the test results to the Director who may require the operator to show cause why the meter should not be replaced.
- d. **Gas Quality.** The heating value of produced natural gas shall be representative of the flowing gas stream at the lease or unit boundary, as determined by chromatographic analysis of a sample obtained in close proximity to the volume measurement device and shall be reported on an Operator's Monthly Production Report, Form 7. Gas sampling and analysis shall occur annually unless more frequent sampling is required by contractual obligations or by the Director. Gas sampling, gas chromatography, and the resulting analysis data shall be in accordance with industry standards as specified in API CH. 14.1, Gas Sampling (Fifth Edition February 2006); GPA 2166, Gas Sampling (Revised 2005); GPA 2261, Gas Analysis (Revised 2000); GPA 2286, Extended Analysis; GPA 2145, Gas Physical Properties (Revised 2003); and GPA 2172, Gas Heating Value (Revised 1996).

- e. **Sales Reconciliation.** In order to facilitate the resolution of questions regarding the payment of proceeds or sales reconciliation from a well, a payee may submit a Form 37 to the payer requesting additional information concerning the payee's interest in the well, price of the gas sold, taxes applied to the sale of gas, differences in well production and well sales, and other information as described in § 34-60-118.5, C.R.S. The payer shall return the completed form to the payee within sixty (60) days of receipt. Submittal of this form to the payer shall fulfill the requirement for "written request" described in § 34-60-118.5(2.5), C.R.S., and is a prerequisite to filing a complaint with the Commission. The payer shall use its best efforts to consult in good faith with the payee to resolve disputes regarding payment of proceeds or sales reconciliation.

A Form 37 requesting information concerning payment of proceeds may be submitted by the payee at any time. A Form 37 requesting information concerning sales volume reconciliation shall be submitted by the payee within one year of receipt of payment or the notification of a revised payment. The Commission may act to prohibit or terminate any abuse of the reconciliation process, such as the submittal by a payee of multiple repeated requests for sales volume reconciliation regarding the same well. Such action by the Commission may include, but is not limited to, relieving the payer from its obligation to answer the request and limiting or prohibiting the payee's submittal of additional requests.

330. MEASUREMENT OF PRODUCED AND INJECTED WATER

- a. The volume of produced water shall be computed and reported in terms of barrels on the basis of properly calibrated meter measurements or tank measurements of water-level differences, made and recorded to the nearest one-quarter (1/4) inch of one hundred (100%) percent capacity tables. If measurements are based on oil/water ratios, the oil/water ratio must be based on a production test performed during the last calendar year. Other equivalent methods for measurement of produced water may be approved by the Director.
- b. The volume of water injected into a Class II dedicated injection well shall be computed and reported in term of barrels on the basis of property calibrated meter measurements or tank measurements of water-level differences made and recorded to the nearest one-quarter (1/4) inch of one hundred percent (100%) capacity tables. If water is transported to an injection facility by means other than direct pipeline, measurement of water is required by a properly calibrated meter
- c. The volume of water injected and produced in simultaneous injection wells shall be computed and reported in terms of barrels on the basis of calculated pump volumes, on the basis of property calibrated meter measurements, or on the basis of a produced gas to water ratio based on an annual production test.

331. VACUUM PUMPS ON WELLS

The installation of vacuum pumps or other devices for the purpose of imposing a vacuum at the wellhead or on any oil or gas bearing reservoir may be approved by the Director upon application therefore, except as herein provided. The application shall be accompanied by an exhibit showing the location of all wells on adjacent premises and all offset wells on adjacent lands, and shall set forth all material facts involved and the manner and method of installation proposed. Notice of the

application shall be given by the applicant by registered or certified mail, or by delivering a copy of the application to each producer within one-half (1/2) mile of the installation.

In the event no producer within one-half (1/2) mile of the installation or the Commission itself files written objection or complaint to the application within fifteen (15) days of the date of application, then the application shall be approved, but if any producer within one-half (1/2) mile of said installation or the Commission itself files written objection within fifteen (15) days of the date of application, then a hearing shall be held as soon as practicable.

332. USE OF GAS FOR ARTIFICIAL GAS LIFTING

Gas may be used for artificial gas lifting of oil where all such gas returned to the surface with the oil is used without waste. Where the returned gas is not to be so used, the use of gas for artificial gas lifting of oil is prohibited unless otherwise specifically ordered and authorized by the Commission upon hearing.

333. SEISMIC OPERATIONS

- a. COGCC Form 20, Notice of Intent to Conduct Seismic Operations. Seismic operations require an approved Form 20 which shall be submitted to the Director prior to commencement of shothole drilling or recording operations. An informational copy of the Form 20 shall be filed by the operator with the local governmental designee at or before the time of filing with the Director. Any change of plans or line locations may be implemented without Director approval provided that after such change is performed, the Director shall receive written notice of the change within five (5) days.

A map shall be included with the notice. This map shall be at a scale of at least 1:48,000 showing sections, townships and ranges and providing the location of the proposed seismic lines, including source and receiver line locations.

The Notice of Intent to Conduct Seismic Operations, Form 20, shall be in effect for six (6) months from the date of approval. An extension of time may be granted upon written request submitted prior to the expiration date.

- b. **Surface owner consultation.** Prior to the commencement of any seismic operation, a good faith effort shall be made to consult with all surface owners of the lands included in the seismic project area.

c. **Exploration requiring the drilling of shotholes:**

- (1) **Explosive storage.** All explosives shall be legally and safely stored and accounted for in magazines when not in use in accordance with relevant regulations of the Alcohol, Tobacco and Firearms Division of the Federal Department of the Treasury.

- (2) **Blasting safety setbacks.** Blasting shall be kept a safe distance from a building unit, water well or spring, unless by special written permission of the surface owner or lessee, according to the following minimum setback distances:

CHARGES IN LBS. GREATER THAN	CHARGES IN LBS. UP TO AND INCLUDING	MINIMUM SETBACK DISTANCE IN FEET
0	2	200
2	5	300

CHARGES IN LBS. GREATER THAN	CHARGES IN LBS. UP TO AND INCLUDING	MINIMUM SETBACK DISTANCE IN FEET
5	6	360
6	7	420
7	8	480
8	9	540
9	10	600
10	11	649
11	12	696
12	13	741
13	14	784
14	15	825
15	16	864
16	17	901
17	18	936
18	19	969
19	20	1000
20		1320

(3) Prior to any shothole drilling, the operator shall contact the Utility Notification Center of Colorado at 1-800-922-1987.

(4) **Drilling and plugging.** The following guidelines shall be used to plug shotholes unless the operator can demonstrate that another method will provide adequate protection to ground water quality and movement and long-term land stability:

- A. Any slurry, drilling fluids, or cuttings which are deposited on the surface around the seismic hole shall be raked or otherwise spread out to at least within one (1) inch of the surface, such that the growth of the natural grasses or foliage shall not be impaired.
- B. All shotholes shall be preplugged or anchored to prevent public access if not immediately shot. In the event the preplug does not hold, seismic holes shall be properly plugged and abandoned as soon as practical after the shot has been fired. However, a fired hole shall not be left unplugged for more than thirty (30) days without approval of the Director. In no event shall shotholes be left open, but shall be covered with a tin hat or other similar cover until they are properly plugged. The hats shall be imprinted with the seismic contractor's name or identification number or mark.
- C. The hole shall be filled to a depth of approximately three (3) feet below ground level by returning the cuttings to the hole and tamping the returned cuttings to ensure the hole is not bridged. A non-metallic perma-plug either imprinted or tagged with the operator name or the identification number or mark described in the notice of intent shall be set at a depth of three (3) feet, and the remaining hole shall be filled and tamped to the surface with cuttings and native soil. A sufficient mound of native soil shall be left over the hole to allow for settling.
- D. When non-artesian water is encountered while drilling seismic shotholes, the holes shall be filled from the bottom up with a high grade coarse ground

bentonite to ten (10) feet above the static water level or to a depth of three (3) feet from the surface; the remaining hole shall be filled and tamped to the surface with cuttings and native soil, unless the operator otherwise demonstrates that use of another suitable plugging material may be substituted for bentonite without harm to ground water resources.

E. If artesian flow (water rising above the depth at which encountered) is encountered in the drilling of any seismic hole, cement or high grade coarse ground bentonite shall be used to seal off the water flow with the selected material placed from the bottom of the hole to the surface or at least fifty (50) feet above the top of the water-bearing material, thereby preventing cross-flow between aquifers, erosion or contamination of fresh water supplies. Said holes shall be plugged immediately.

d. **COGCC Form 20A, Completion Report for Seismic Operations.** A Form 20A shall be submitted to the Director within sixty (60) days after completion of the project. The report shall include: maps (with a scale not less than 1:48,000) showing the location of all receiver lines, energy source lines and any shotholes. Shotholes encountering artesian flow shall be indicated on the map.

If the program included any shotholes, then the completion report shall be accompanied by the following:

- (1) a certification by the party responsible for plugging the holes that all shotholes are plugged as prescribed by these rules and approved by the Director, and
- (2) the latitude and longitude of each shothole location. The latitude and longitude coordinates shall be referenced in decimal degrees to an accuracy and precision of five decimals of a degree using the North American Datum (NAD) of 1983 (e.g.; latitude 37.12345 N, longitude 104.45632 W) or reported in other form as approved by the Director. If GPS technology is utilized to determine the latitude and longitude, all GPS data shall meet the requirements set forth in Rule 215. a. through h.

e. **Bonding Requirements.** The company submitting the Notice of Intent to Conduct Seismic Operations, Form 20, shall file financial assurance in accordance with Rule 705. prior to the commencement of operations. The bond shall remain in effect until a request is made by the company to release the bond for the following reasons:

- (1) The shotholes have been properly plugged and abandoned, and source and receiver lines have been reclaimed in accordance with this Rule 333., and
- (2) There are no outstanding complaints received from surface owners that have not been investigated by the Director and addressed as provided for in Rule 522.

f. **Reclamation requirements.** Upon completion of seismic operations the surface of the land shall be restored as nearly as practicable to its original condition at the commencement of seismic operations. Appropriate reclamation of disturbed areas will vary depending upon site specific conditions and may include compaction alleviation and revegetation. All flagging, stakes, cables, cement, mud sacks or other materials associated with seismic operations shall be removed.

334. PUBLIC HIGHWAYS AND ROADS

All persons subject to the act and these rules and regulations while using public highways or roads shall be subject to the State Vehicles and Traffic Laws pursuant to Title 42, C.R.S. and the State Highway and Roads Laws, Title 43, C.R.S., pertaining to the use of public highways or roads within the state.

335. COGCC Form 15. PIT CONSTRUCTION REPORT/PERMIT

A Pit Construction Report/Permit, Form 15, shall be submitted for approval by the Director in accordance with Rule 903.

336. COGCC Form 18. COMPLAINT FORM

Any party who wishes to file a complaint regarding oil and gas operations is encouraged to submit a Form 18. The Director shall investigate any complaint and determine what, if any, action shall be taken in accordance with Rule 522.

337. COGCC Form 19. SPILL/RELEASE REPORT

All spills and releases of E&P waste exceeding five (5) barrels shall be reported on a Spill/Release Report, Form 19. Form 19 shall be filed with the Director pursuant to the reporting requirements in Rule 906.

338. COGCC Form 24. SOIL ANALYSIS REPORT

Soil Analysis Report, Form 24, shall be submitted where soil composition data is required, in accordance with Rule 910.

339. COGCC Form 25. WATER ANALYSIS REPORT

Water Analysis Report, Form 25, shall be submitted where water quality data is required, in accordance with Rule 910.

340. COGCC Form 27. SITE INVESTIGATION AND REMEDIATION WORKPLAN

Site Investigation and Remediation Workplan, Form 27, shall be submitted when required in accordance with Rule 909.

341. BRADENHEAD MONITORING DURING WELL STIMULATION OPERATIONS

The placement of all stimulation fluids shall be confined to the objective formations during treatment to the extent practicable.

During stimulation operations, bradenhead annulus pressure shall be continuously monitored and recorded on all wells being stimulated.

If at any time during stimulation operations the bradenhead annulus pressure increases more than 200 psig the operator shall verbally notify the Director as soon as practicable, but no later than twenty-four (24) hours following the incident. Within fifteen (15) days after the occurrence, the operator shall submit a Sundry Notice, Form 4, giving all details, including corrective actions taken.

If intermediate casing has been set on the well being stimulated, the pressure in the annulus between the intermediate casing and the production casing shall also be monitored and recorded.

The operator shall keep all well stimulation records and pressure charts on file and available for inspection by the Commission for a period of at least five (5) years. Under Rule 502.b.(1), an operator may seek a variance from these bradenhead monitoring, recording, and reporting requirements under appropriate circumstances.