

CHAPTER 3

OPERATIONAL RULES, DRILLING RULES

Section 1. Notices: General and Emergency.

(a) A written notice of intention to do work or to change plans previously approved on the original APD and/or drilling and completion plan (Chapter 3, Section 8(c)) must be filed with the Supervisor on the Sundry Notice (Form 4), unless otherwise directed, and must reach the Supervisor and receive his approval before the work is begun. Approval must be sought to acidize, cleanout, flush, fracture, or stimulate a well. The sundry notice must include depth to perforations or the openhole interval, the source of water and/or trade name of fluids, type of proppants, as well as estimated pump pressures. Routine activities that do not affect the integrity of the wellbore or the reservoir, such as pump replacements, do not require a sundry notice. The Supervisor may require additional information.

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

(c) Chapter 5 of this volume provides rules of practice and procedures for matters which are set to be heard before the Commission and also for actions which can be taken by the Supervisor as he administers Wyoming Conservation Law and the rules which have been adopted. The Supervisor, at his discretion, may set for hearing before the Commission any request for administrative approval of operations covered by the rules. The manner and time for giving notice is provided by the Wyoming Conservation Law and by the regulations. Further, WYO. STAT. ANN. § 30-5-111(f), provides that in addition to the notice prescribed by the rules, such additional notice as is deemed necessary and proper may be required. The Commission maintains a mailing list for persons interested in receiving notice of the matters scheduled to be considered at its monthly meetings.

Section 2. Location of Wells/Drilling and Spacing Units (All Lands Except Indian).

(a) In the absence of special orders of the Commission establishing drilling units or authorizing different well density or location patterns for particular pools or parts thereof, each oil and gas well shall be located in the center of a forty (40) acre governmental quarter quarter section or lot or tract or combination of lots or tracts substantially equivalent thereto as shown by the most recent governmental survey, with a tolerance of 200 feet in any direction from the center location (a "window" 400 feet square) provided:

Effective: 04/02/2008

(i) no oil or gas well shall be drilled less than 920 feet from any other well drilling to or capable of producing oil or gas from the same pool; and

(ii) no oil or gas well shall be completed in a known pool unless it is located more than 920 feet from any other well completed in and capable of producing oil or gas from the same pool.

(b) Any gas wells drilled in the area described as Township 12 North through Township 28 North and Range 89 West through Range 121 West shall be located in the center of a one hundred-sixty (160) acre subdivision, or lot or tract or combination of lots and tracts substantially equivalent thereto, not closer than one thousand one hundred-twenty feet (1,120') to the exterior boundaries of the quarter section. All areas subject to existing orders for drilling and spacing units in the above described area shall be exempt from the aforesaid gas well location requirements. Further, this rule is vacated for all federal exploratory units in the above described area provided that no gas well will be drilled closer than one thousand one hundred-twenty feet (1,120') to the exterior boundaries of the unit nor to any uncommitted acreage within the unit. Upon unit contraction, lands deleted from the unit shall thereafter be subject to this rule.

(i) The areas in the following townships shall be exempt from this subsection (b):

Township 13 North, Range 91 West through Range 94 West
Township 14 North, Range 91 West through Range 94 West
Township 15 North, Range 91 West through Range 99 West
Township 16 North, Range 91 West through Range 99 West
Township 17 North, Range 91 West through Range 98 West
Township 18 North, Range 91 West through Range 96 West
Township 18 North, Range 97 West
Sections 1 through 3
Sections 10 through 15
Sections 19 through 36
Township 19 North, Range 91 West through Range 96 West
Township 20 North, Range 91 West through Range 96 West
Township 21 North, Range 91 West through Range 96 West
Township 22 North, Range 91 West through Range 96 West
Township 23 North, Range 91 West through Range 95 West

Any gas well proposed to be drilled within the above described lands shall be located within a governmental quarter section of land, or a lot or tract, or combination of lots or tracts substantially equivalent thereto, not closer than four hundred-sixty feet (460') to the exterior boundary of such quarter section, providing that a maximum of two gas wells from the same pool shall be permitted in any one such quarter section, or lot or tract, or combination of lots or tracts substantially equivalent thereto, but exempting from these provisions all areas within these lands subject to existing orders from the Commission establishing drilling and spacing units for a

Effective: 04/02/2008

particular pool or reservoir, as to the pool or reservoir involved in such orders, and further exempting from these provisions all federal exploratory units within the described lands, provided that no gas well shall be drilled closer than four hundred-sixty feet (460') to the exterior boundaries of such a federal unit or to any uncommitted tract within such federal unit and, providing further that upon unit contractions, lands deleted from the unit shall again become subject to provisions of this rule.

(c) Any proposed exploratory wells in the Powder River Basin projected to test the Frontier, Muddy, and/or Dakota Formations in excess of 11,000 feet total depth shall be granted a temporary spacing unit of 640 acres consisting of the governmental section in which the well is proposed. The temporary spacing unit shall be for the purpose of providing for the orderly development of the anticipated pool and not for the establishment of property rights. The granting of a temporary spacing unit shall be deemed as a decision by the Commission to call a hearing for the establishment of drilling units and upon completion of the well, the Commission shall call such hearing or in the alternative shall vacate the temporary spacing unit, depending upon the data obtained from the completed well. Said well may be located anywhere within the 160 acre "window" (i.e. SE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$) but not less than one thousand three hundred-twenty feet (1,320') from the section line. Exceptions may be granted by the Commission for good cause.

(d) Any proposed well in the Powder River Basin projected to test the gas potential of any coal member or pool within the Fort Union and/or Wasatch Formations shall be granted a vertical ("standup") drilling and spacing unit of eighty (80) acres consisting of one-half of a governmental 160-acre quarter section or lot(s) or tract(s) or combination of lots or tracts substantially equivalent thereto and the authorized wells in such drilling and spacing units shall be located in the center of the northeast quarter and the center of the southwest quarter of the governmental 160-acre quarter section or lot(s) or tract(s) or combination of lots and tracts substantially equivalent thereto with a two-hundred foot (200') tolerance in any direction from such center locations. All areas subject to existing orders for drilling and spacing units for the Fort Union and/or Wasatch Formations in the Powder River Basin shall be exempt from the requirements of this subsection (d), as will all wells previously drilled or permitted; in addition, the unspaced areas as to the coals in the Wasatch and Fort Union Formations in the following townships shall be exempt from this subsection (d):

45 North, Ranges 71 and 72 West;
46 North, Ranges 71 and 72 West;
47 North, Ranges 71, 72 and 73 West;
48 North, Ranges 71, 72 and 73 West;
49 North, Ranges 71, 72, and 73 West;
50 North, Ranges 72 and 73 West;
51 North, Ranges 72 and 73 West;
52 North, Ranges 72 and 73 West.

Effective: 04/02/2008

Further, this rule is vacated for all federal exploratory units in the Powder River Basin for the Fort Union and/or Wasatch Formations provided that no well will be drilled closer than four-hundred sixty feet (460') from the exterior boundaries of a federal exploratory unit or any uncommitted tract within a federal exploratory unit. Upon contraction of a federal exploratory unit, lands deleted from the unit shall thereafter be subject to the requirements of this subsection (d).

(e) To the extent not previously herein exempted, this rule is vacated for all federal exploratory units in Wyoming, provided that no oil or gas wells shall be drilled closer than four-hundred sixty feet (460') from the exterior boundaries of a federal exploratory unit or any uncommitted tract within a federal exploratory unit. Upon contraction of a federal exploratory unit, lands deleted from the unit shall thereafter be subject to the requirements of this rule.

(f) The following conditions apply to any horizontal well as defined in Chapter 1, Section 2(x):

(i) The surface location may be anywhere on the leased premises;

(ii) In the absence of a special spacing order, no portion of the horizontal interval within the potentially productive formation shall be closer than six hundred sixty feet (660') to a drilling or spacing unit boundary, federal unit boundary, uncommitted tract within a unit, or boundary line of a lease not committed to the drilling of such horizontal well. The horizontal interval of wells drilled in the Powder River Basin below 11,000 feet to test the Frontier, Muddy, and/or Dakota Formations shall not be closer than one thousand three hundred-twenty feet (1,320') to the exterior governmental section line or federal unit boundary;

(iii) Any horizontal interval to be completed closer than 1,320 feet to such boundaries, tracts or lines must be oriented such that an azimuth of at least eighteen degrees (18°) is created between the well path and such boundaries, tracts or lines, allowing up to three degrees (3°) of azimuth tolerance for unintended drift;

(iv) Any horizontal interval shall be not closer than one thousand three hundred twenty feet (1,320') to any vertical well completed in and producing from the same formation. Vertical wells drilled to and completed in the same formation as is a horizontal well are subject to applicable drilling or spacing unit orders of the Commission or the other paragraphs of this rule which do not specifically pertain to horizontal wells and may be drilled and produced as provided therein;

(v) A temporary six hundred-forty (640) acre spacing unit, consisting of the governmental section in which the horizontal well is located, is established for the orderly development of the anticipated pool; and (vi) In addition to any other notice required by the statute or these rules, notice of the Application for Permit to Drill a horizontal well shall be given by certified mail to all owners within the boundaries of the designated temporary spacing unit.

Effective: 04/02/2008

(vii) Horizontal wells in federally supervised units or in API units are exempt from the above referenced conditions (iv), (v), and (vi).

(viii) Exceptions to any of the above referenced conditions (i) through (vi) may be approved upon proper application and notice for such exception(s) in accordance with Commission Chapter 3, Section 3, and Chapter 5, Sections 2, 3, and 16. Additional horizontal wells may be approved by Commission order after hearing brought upon application filed in accordance with WYO. STAT. ANN. § 30-5-109(a) and (d).

(g) If granting permission to drill a horizontal well is contested by those entitled to notice, permission shall be granted if doing so will prevent waste or protect correlative rights.

(h) The Supervisor shall have the discretion to determine the pattern location of wells adjacent to an area spaced by the Commission, or under application for spacing, where:

(i) there is sufficient evidence to indicate that the pool or reservoir spaced or about to be spaced may extend beyond the boundary of the spacing order or application; and

(ii) the uniformity of spacing patterns is necessary to insure orderly development of the reservoir or pool.

(i) Operators who apply for a permit to drill a gas well in the area described in subsections (b) and (c) may contemporaneously or subsequently file an application to establish spacing for an area not to exceed nine (9) sections, which application will be held in abeyance until the permitted well is completed. Notice of such application must be given to all owners within the area applied for. Upon completion of the permitted well, the application to establish spacing will either be heard by the Commission or dismissed, depending upon the data obtained from the completed well. During the pendency of the application to establish spacing, all permits to drill gas wells will be held in abeyance pursuant to the provisions of Section 8 of this chapter, provided that permits to drill will be approved for additional gas wells in the area subject to the application on not less than a six hundred-forty (640) acre pattern at a location consistent with the initial well. The area to be spaced may be increased in size prior to the hearing upon a proper showing of need to the Supervisor and after notice to all owners in the area to be added.

Section 3. Exceptions to Locations of Wells and Well Spacing Orders.

(a) Upon proper application therefore, the Supervisor may approve, as an administrative matter, an exception to Section 2 of this chapter, or any order of the Commission establishing well spacing for a pool. If for any reason the Supervisor shall fail or refuse to approve such an exception, the Commission may, after notice and hearing, grant the exception. If the Supervisor or the Commission approves the exception application, the approval will be valid for one year from the date it was granted.

Effective: 04/02/2008

(b) The application for an exception shall state fully the reasons why such an exception is necessary or desirable, and shall be accompanied by a plat showing:

(i) the location at which an oil or gas well could be drilled in compliance with Section 2 of this chapter or the applicable order;

(ii) the location at which the applicant requests permission to drill; and

(iii) the locations at which oil or gas wells have been drilled or could be drilled, in accordance with Section 2 of this chapter, or the applicable order, directly or diagonally offsetting the proposed exception.

(c) No exception shall prevent any owner from drilling an oil or gas well on adjacent lands, directly or diagonally offsetting the exception, at locations permitted by Section 2 of this chapter, or any applicable order of the Commission establishing oil or gas well spacing units for the pool involved.

Section 4. Bonding Requirements (Forms 8, 8A, 8E, and 8F).

(a) Except where a bond in satisfactory form has been filed by the owner/operator in accordance with state, federal or Indian lease requirements, and evidence that such bond had been filed with and approved by the appropriate agency has been furnished the Supervisor, the Commission shall require from the owner/operator a good and sufficient bond running to the State of Wyoming conditioned that each well shall be operated and maintained in such a manner as not to cause waste or damage the environment and upon permanent abandonment each well shall be plugged in accordance with the rules and regulations of the Commission. The minimum amount of bond or bonds required to be furnished shall be as follows:

(i) for wells of less than 2,000 feet in depth an individual bond in the amount of \$10,000.00 for each such well;

(ii) for wells of 2,000 feet or more in depth an individual bond in the amount of \$20,000.00 for each such well;

(iii) or in the alternative, a blanket bond in the amount of \$75,000.00 covering all wells including wells less than 2,000 feet in depth. If the Commission has an acceptable blanket bond in the amount of \$25,000.00 from an owner/operator prior to July 1, 2000, such owner/operator is not required to post the additional coverage under this subsection (iii).

(b) The bond or bonds required by these rules shall remain in full force and effect until:

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(i) the permanent plugging and abandonment of the well or wells has been approved by the Supervisor;

(ii) the well has been properly converted to a water well in a manner approved by the Supervisor, in conjunction with the State Engineer;

(iii) the successive owner/operator or purchaser of the well or wells and/or the site(s) has provided a bond or other surety in an amount and form acceptable to the Commission; or

(iv) the bond has been released by the Commission.

(c) In the event an owner/operator has a blanket bond covering wells on fee or patented lands, the Commission will normally not ask for additional coverage if the wells are producing, monitoring, injecting, or disposing. Wells which are not producing, injecting, or disposing are deemed to be idle. The Supervisor may require an increased bonding level up to \$3.00 per foot for each idle well as soon as the operator's total footage of idle wells exceeds 8,300 feet or 25,000 feet depending upon which level of blanket bond is in place. As wells are removed from idle status up to \$3.00 per foot bonding requirements will be reduced accordingly.

(d) For wells on which the additional bonding is required, the Supervisor may allow the operator to post at least 5.55% of the new bond each month for eighteen (18) months or until the total amount of the bond has been posted.

(e) In lieu of additional bonding, the Supervisor may accept a detailed plan of operation which includes a time schedule to permanently plug and abandon idle wells or take such action as may be necessary to remove the well from idle status. This plan and time schedule is subject to approval by the Supervisor, and shall not exceed one (1) year from the date of filing. Plans filed by the first owner/operator go with the property in the event of a sale. The next owner/operator is responsible for completing the plans of the previous owner/operator unless the Supervisor accepts an alternate plan.

(f) In addition, the Supervisor must be advised by the owner on the Commission's Form 7 (Notice of Change of Owner) of all transfers of wells at least thirty (30) days before the closing date of the transfer. The purpose of the notice is to provide the Supervisor with an opportunity to evaluate the status and number of wells that may be involved in the transfer and determine the need for additional bonding by the new operator. In the event the Supervisor determines the new owner needs additional bonding, he shall notify the new owner of this no later than fifteen (15) days before the closing. The previous owner shall remain liable for plugging the wells until the new owner provides the additional requested bonding.

Effective: 04/02/2008

(g) Nothing in this rule shall be construed to prevent the Commission, upon notice and hearing and for good cause shown, from requiring bonds in special cases in amounts greater than set out in this rule.

(h) The Commission may require from the owner/operator a good and sufficient bond running to the State of Wyoming conditioned for or securing the performance that pits constructed to receive water produced in association with hydrocarbons, or noncommercial, centralized pits located within a lease, unit, or communitized area used for field operations shall be operated and maintained in such a manner as to not damage the environment or to not cause undue harm to health and safety of employees and people residing in close proximity to the pit and that upon permanent abandonment of the project or last use of the pit, the pit shall be closed and the adjacent areas reclaimed in accordance with the rules and regulations of the Commission.

(i) Separate bonding amounts for these pits, if required by the Commission, shall be set by the Supervisor following evaluation of site-specific conditions and circumstances. The owner/operator shall, within a reasonable time after a request by the Supervisor or his duly authorized agents, provide a written cost estimate prepared by a Wyoming registered professional engineer with expertise in surface pit remediation for closure of the pit and remediation of the surface and access areas closely adjacent to the pit. The surface landowner shall receive a copy of said cost estimate from the owner/operator prior to construction.

(ii) Because the construction of pits for the retention of water produced in association with the recovery of coalbed methane gas in the Powder River Basin may be of benefit to the landowner, the Supervisor, in his sole discretion, may waive the bonding for such pits otherwise provided for by this subsection (h) and allow such pits to remain open after the cessation of production operations if a notarized statement of acceptance signed by the landowner, sufficient to meet the satisfaction of the Supervisor and including, at a minimum, the following items, accompanies the Form 14 when it is provided to the Commission:

- (A) the surveyed location including latitude and longitude;
- (B) the exact size and depth of the pit; and
- (C) a statement accepting all future responsibility for the structure and its contents.

Prior to the waiving of bonding for pit closure and prior to acceptance by the surface landowner, the owner/operator shall provide the surface landowner a current written cost estimate for pit closure prepared by a Wyoming registered professional engineer with expertise in surface pit remediation.

Effective: 04/02/2008

(i) In the event that an operator is required to post a bond or other surety with the Commission as required by WYO. STAT. ANN. § 30-5-402, said surety bond must comply with the formatting requirements of the Commission. An operator may post a cashier's check, certificate of deposit or letter of credit if it complies with Chapter 3, Sections 5 and 6 as applicable. The minimum amount of bond shall be \$2,000.00 per well site. Upon approval of the Supervisor, after attempted good faith negotiations with the surface owner, the operator may submit a bond or other guaranty to cover all oil and gas operations on the surface owner's land as identified by an oil and gas operator in the written notice required under WYO. STAT. ANN. § 30-5-402(e), in an amount determined by the Supervisor.

(j) Within seven (7) days of receipt of a per well site surety bond or other guaranty, or blanket bond or other guaranty, the Commission shall give written notice of receipt to the surface owner, to be sent certified mail, return receipt requested. This notice shall be sent to the address provided to the Commission by the operator and shall contain the following information:

(i) a description of the amount and type of bond or guaranty received;

(ii) a copy of the statement filed by the operator with its APD pursuant to WYO. STAT. ANN. § 30-5-403(a); and

(iii) a statement that the surface owner has 30 days from receipt of this notice to file an objection with the Commission.

(k) In determining the amount of bond to be posted, whether a single well site bond or blanket bond, the Supervisor shall consider the proposed plan of work and operations submitted by the operator in its notice to the surface owner and may consider any other factors which would materially impact the bond amount needed to secure payment of damages, including, but not limited to the following:

(i) loss of production and income;

(ii) loss of land value;

(iii) and loss of value of improvements caused by oil and gas operations.

(l) If the surface owner files a written objection to the bond or guaranty amount within 30 days of receipt of the notice required in (j), the matter shall be set before the Commission at its next regularly scheduled meeting. Each interested party will have an opportunity, subject to the applicable procedural rules of the Commission, to present evidence in support of or in opposition to the bond amount. The Commission, in determining the accepted amount and type of surety bond or other guaranty shall consider the following:

Effective: 04/02/2008

- (i) the surety bond or guaranty objected to;
- (ii) any supporting evidence submitted by the oil and gas operator; and
- (iii) the surface owner's objections and supporting documents.

The Commission may consider any other relevant evidence and shall notify the parties of its decision in writing. Proof of the required surety shall be submitted within 30 days of the Commission's final order.

Section 5. Deposit of Cashier's Check or Certificate of Deposit Instead of Bond.

(a) **Generally.** Any person who is required to post a surety bond pursuant to Section 4 of this chapter or Chapter 4, Section 6, of the Commission's rules may instead deposit with the Commission a cashier's check or a certificate of deposit. Such a deposit will be accepted in lieu of a surety bond only if it satisfies all of the requirements of this section.

(b) **Deposit of a Cashier's Check.** A deposit of a cashier's check in lieu of a surety bond must satisfy all of the following conditions:

(i) The check must be drawn for an amount equal to or greater than the amount required by Section 4 of this chapter and Chapter 4, Section 6, for a surety bond;

(ii) The check must be drawn on a bank with its main office or any branch located in Wyoming or on any other bank that is acceptable to the Supervisor in his sole discretion;

(iii) The check must be payable to the order of "Wyoming Oil and Gas Conservation Commission";

(iv) The date on which the check is issued must be within ten (10) days before the date on which the deposit is received by the Commission;

(v) The operator must execute a valid, binding, first-priority pledge agreement as to the proceeds of the collected cashier's check, which agreement shall be on the current form approved by the Commission from time to time;

(vi) The cashier's check and the original of the fully-executed pledge agreement must be delivered to the Commission at the same time;

(vii) By submitting a deposit under this subsection, the operator authorizes and directs the Commission to deposit and collect the same upon receipt.

Effective: 04/02/2008

(c) **Deposit of a Certificate of Deposit (“CD”).** Deposit of a CD in lieu of a surety bond must satisfy all of the following conditions:

(i) The CD must be drawn for an amount equal to or greater than the amount required by Section 4 of this chapter and Chapter 4, Section 6, for a surety bond;

(ii) The CD must be issued by an FDIC-insured bank with its main office or any branch located in Wyoming or on any other bank that is acceptable to the Supervisor in his sole discretion;

(iii) The CD must be payable in current funds or such other manner as the Commission may determine at a bank located within the State of Wyoming;

(iv) The CD must be on the current form of certificate of deposit approved by the Commission from time to time;

(v) The CD must be issued for an initial term of not less than one (1) year and automatically renewable from year to year;

(vi) The operator must execute a valid, binding, first-priority pledge agreement as to the certificate of deposit, which agreement shall be on the current form approved by the Commission from time to time;

(vii) The originals of both the CD and the fully-executed pledge agreement must be delivered to the Commission at the same time.

(d) **Maturity of CD without Replacement.** If a CD is accepted and retained by the Commission under this section, and if the operator has not deposited an acceptable replacement surety bond or other guaranty within thirty (30) days before the CD’s maturity date, then the operator will be deemed to have authorized and directed the Commission to demand immediate payment on the CD and, upon receipt of the proceeds, retain the same as a deposit of the proceeds of a collected cashier’s check under Section 5(b) of this chapter.

(e) **No Interest on Deposits; Retention of Deposit.** Interest shall not accrue, nor be payable by the Commission, on any deposit received by the Commission under this section. Interest that is payable under a CD must be paid by the bank directly to the operator. The Commission will retain the deposit or CD until the sooner to occur of the following:

(i) The operator delivers a satisfactory surety bond or other guaranty to replace it;

(ii) The Commission demands payment of the CD, if applicable; or

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(iii) The operator satisfies the requirements of Section 5(g) of this chapter.

(f) **Replacement.** The operator may deliver at any time to the Commission an acceptable surety bond or other guaranty to replace a deposit retained by the Commission under this section. Upon its receipt and acceptance of such replacement, the Commission will deliver to the operator:

(i) in the case of a CD, the original CD suitably endorsed; or

(ii) in the case of a cashier's check, funds in an amount equal to the original deposit.

(g) **Return Upon Successful Completion.** If the Commission determines that the operator that has deposited the proceeds of a collected cashier's check under this section in lieu of a surety bond has complied with the Oil and Gas Conservation Law, the Rules of the Commission, and the orders of the Commission, the State Oil and Gas Supervisor, or their agents including, but not limited to, proper plugging of wells and seismic holes and reclamation of the surrounding affected area, with respect to all operations secured thereby, then the Commission shall deliver to the operator funds in an amount equal to the original deposit. If the Commission determines that the operator that has deposited a CD under this section in lieu of a surety bond has complied with the Oil and Gas Conservation Law, the Rules of the Commission, and the orders of the Commission, the State Oil and Gas Supervisor, or their agents including, but not limited to, proper plugging of wells and seismic holes and reclamation of the surrounding affected area, with respect to all operations secured thereby, then the Commission shall deliver to the operator the original CD suitably endorsed to the operator. The proceeds of a collected cashier's check or a CD deposited with the Commission pursuant to the Wyoming Split Estates Act shall be released in accordance with the procedures in Section 7(d) of this chapter.

Section 6. Letter of Credit Instead of Bond.

(a) **Generally.** Any person who is required to post a surety bond pursuant to Section 4 of this chapter or Chapter 4, Section 6, of the Commission's rules may instead deposit with the Commission a letter of credit ("LOC"). Such a deposit will be accepted in lieu of a surety bond only if the letter of credit satisfies all of the requirements of this section.

(i) The LOC must have a face amount equal to or greater than the amount required by Section 4 of this chapter and Chapter 4, Section 6, for a surety bond;

(ii) The LOC must be issued by an FDIC-insured bank with its main office or any branch located in Wyoming or on any other bank that is acceptable to the Supervisor in his sole discretion;

Effective: 04/02/2008

(iii) The LOC must be payable in current funds or such other manner as the Commission may determine at sight at the counters of an FDIC-insured bank located within the State of Wyoming;

(iv) The LOC must be on the current form of letter of credit approved by the Commission from time to time;

(v) The LOC shall be issued with an initial expiration date of not less than one (1) year from the date of its issuance and automatically extended from year to year.

(vi) The LOC must be received by the Commission within ten (10) days of its issue date.

(vii) The original LOC must be delivered to the Commission.

(b) **Expiration of LOC without Replacement.** If a LOC is accepted and retained by the Commission under this section, and if the operator has not deposited any acceptable replacement surety bond or other guaranty within thirty (30) days before the LOC's expiration date, then the operator will be deemed to have authorized and directed the Commission to draw the entire face amount of the LOC and, upon receipt of the proceeds, retain the same as a deposit of the proceeds of a collected cashier's check under Section 5(b) of this chapter

(c) **No Interest; Retention of LOC.** Interest shall not accrue, nor be payable by the Commission, on any LOC received by the Commission under this section. The Commission will retain the LOC until the sooner to occur of the following:

(i) the operator delivers a satisfactory surety bond or other guaranty to replace it;

(ii) the Commission demands payment under the LOC; or

(iii) the operator satisfies the requirements of Section 6(f) of this chapter.

(d) **Maturity without Replacement.** If, within thirty (30) days before the LOC's expiration date, the operator has not deposited a replacement for any LOC accepted and retained by the Commission under this section, then the operator will be deemed to have authorized and directed the Commission to demand immediate payment of the entire face amount of the LOC and, upon receipt of the proceeds, retain the same as a deposit of the proceeds of a collected cashier's check under Section 5 of this chapter.

(e) **Replacement.** The operator may deliver at any time to the Commission an acceptable surety bond or other guaranty to replace a LOC retained by the Commission under this

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section. Upon its receipt and acceptance of such replacement, the Commission will deliver to the operator the original LOC.

(f) **Return Upon Successful Completion.** If the Commission determines that the operator that has deposited a LOC under this section in lieu of a surety bond has complied with the Oil and Gas Conservation Law, the Rules of the Commission, and the orders of the Commission, the State Oil and Gas Supervisor, or their agents including, but not limited to, proper plugging of wells and seismic holes and reclamation of the surrounding affected area, with respect to all operations secured thereby, then the Commission shall deliver to the operator the original LOC. A LOC deposited with the Commission pursuant to the Wyoming Split Estates Act shall be released in accordance with the procedures in Section 7(d) of this chapter.

Section 7. Forfeiture, Release, or Return of Surety Bond or Other Guaranty.

(a) The purpose of a surety bond or other guaranty posted as security pursuant to the Commission's rules is to insure that the principal or person posting same complies with the Oil and Gas Conservation Law, the Commission's rules, and the orders of the Commission, the State Oil and Gas Supervisor, or their agents, including, but not limited to, proper plugging of wells and seismic holes and reclamation of the area affected by same. Site reclamation must be initiated within one (1) year of permanent abandonment of a well or last use of a pit and shall be completed in as timely a manner as climatic conditions allow. For just cause, the Supervisor may grant an administrative variance providing for additional time. Reclamation must be completed in accordance with the landowner's reasonable requests, and/or resemble the original vegetation and contour of adjoining lands. Where practical, topsoil must be stockpiled during construction for use in reclamation. All disturbed areas on state lands will be recontoured and reseeded unless the Office of State Lands and Investments approves otherwise. Appendix F includes information on reseeded.

(b) The proceeds of a surety bond or other guaranty become the property of the Commission and shall not be returned to the person posting same if the principal or person posting same fails to comply with the Oil and Gas Conservation Law, the Commission's rules, or the orders of the Commission, the State Oil and Gas Supervisor, or their agents. This shall be determined by the Commission after notice and hearing in accordance with these rules and the Oil and Gas Conservation Law. Notice of the hearing shall be given to the principal and surety on the bond or to the person posting the cash or certificate of deposit by mailing a copy of the notice of hearing and a copy of a complaint, stating the grounds for forfeiture or non-return to them, filed by the Commission staff. This shall be done by certified mail, return receipt requested, and addressed to their last known address listed with the Commission. If the principal or surety or person posting the cash or certificate of deposit has a defense to, or otherwise wishes to contest the complaint of the Commission Staff, he must file a written statement or answer setting forth same with the Commission at least three (3) working days prior to the Commission hearing. Any defense or reason for contesting the complaint is waived if he fails to do so. The Commission may treat the

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failure to file such a defense or reason to contest the complaint or the failure to appear at the hearing on same as a default by the party.

(c) If the Commission determines the principal on the bond delivered pursuant to Sections 4(a) through (e) of this chapter has complied with the Oil and Gas Conservation Law, the Rules of the Commission, and the orders of the Commission, the State Oil and Gas Supervisor, or their agents including, but not limited to, production facility removal, produced water pit closure, proper plugging of wells and seismic holes and reclamation of the surrounding affected area, with respect to all operations secured thereby, then the Commission shall release the obligation of the bond.

(d) Any oil and gas operator may request that its bond or other guaranty posted with the Commission pursuant to WYO. STAT. ANN. § 30-5-402(c) to secure the payment of damages to a surface owner be released upon the submission of a written request and a certified statement of the following:

(i) that compensation for damages has occurred;

(ii) an agreement for release has been reached by all parties;

(iii) final resolution of the judicial appeal process for any action for damages has occurred and all damages have been paid;

(iv) that the surface owner has failed to give written notice required under WYO. STAT. ANN. § 30-5-406(a) or;

(v) has failed to bring an action for damages within the required time period.

(e) Upon receipt of a request for release, the Commission shall notify the surface owner in writing, by certified mail, of the request. The Commission shall include a copy of the release request and supporting statement to the surface owner. The surface owner shall have 15 days from receipt of said notice to dispute the release request. If no dispute is received by the Commission, or it is satisfied that the oil and gas operator has complied with the above requirements, the bond may be released. If the original request contains a verified statement from the surface owner that he is in accord with the request to release, the Commission may dispense with the waiting period and proceed to release the bond or other guaranty forthwith. The Supervisor may release any bond or other surety for just cause.

Section 8. Application for Permit to Drill or Deepen a Well (Form 1).

(a) Before any persons shall spud in and begin the drilling of any well on fee, patented, state, or federal lands, or deepen any such wells by drilling to a lower formation, such persons shall file an Application for Permit to Drill or Deepen (Form 1) with the Commission and pay a fee of fifty dollars (\$50.00) for a permit effective May 1, 1996. No drilling activity shall commence until such application is approved and a permit to drill is issued by the Commission.

(b) For wells drilled on fee, patented and state land, prior to construction of the drilling location, approval of Form 14B (Application to Construct a Reserve Pit) must be obtained. The Application for Permit to Drill will not be processed until this requirement is met.

(c) The Application for Permit to Drill or Deepen (Form 1) shall be accompanied by an accurate plat showing the location of the proposed well with reference to the nearest lines of an established public survey. Information to be included in such notice shall be the type of tools to be used, proposed depth to which the well will be drilled, estimated depth to the top of the important markers, estimated depth to the top of objective horizons, the proposed casing program, including size and weight thereof, the depth at which each casing string is to be set, and the amount of cement to be used. Information shall also be given relative to the drilling plan, together with any other information which may be required by the Supervisor. Where multiple Applications for Permit to Drill will be sought for several wells proposed to be drilled to the same zone within an area of geologic similarity, approval may be sought from the Supervisor to file a comprehensive drilling plan containing the information required above which will then be referenced on each Application for Permit to Drill.

(d) The Application for Permit to Drill or Deepen (Form 1) shall also be accompanied by a statement of compliance with WYO. STAT. ANN. § 30-5-403 (Form 1A), if the application is not exempted from the Split Estates Act. Included in this statement shall be the surface owner's name, contact address, telephone number and any other relevant and necessary contact information. The statement shall certify that the oil and gas operator has done the following:

(i) provided notice of proposed oil and gas operations to the surface owner;

(ii) engaged in good faith negotiations to reach a surface use agreement with the surface owner, and

(iii) satisfied the conditions of WYO. STAT. ANN. § 30-5-402(c) and how they were satisfied. The oil and gas operator shall not file a copy of any surface use agreement, nor will the terms of any such agreement be disclosed.

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(e) Each Application for Permit to Drill or Deepen (Form 1) shall be accompanied by a sworn statement from the operator, on a form approved by the Commission, that all underground electrical conductors outside of its facilities, fenced enclosures, or posted areas will comply with the 2005 Electrical Code as adopted by the Department of Fire Prevention and Electrical Safety. Operator shall provide WOGCC at least twenty-four (24) hours notice prior to installation of underground electrical conductors outside of its facilities, fenced enclosures, or posted areas. With routine maintenance, emergency or repair work, the Operator shall provide the WOGCC notice within twenty-four (24) hours of completing the electrical work

(f) In addition to any other required form or attachment to the Application for Permit to Drill, the following shall be submitted:

(i) For directional wells a diagram clearly showing the proposed direction of the deviation and the proposed horizontal distance between the bottom of the hole and the surface location;

(ii) For horizontal wells a diagram shall be submitted clearly showing the wellbore path from the surface through the terminus of the lateral. A horizontal well's number shall be appended with an "H" suffix, denoting horizontal, in Block 8 of Form 1. If more than one lateral borehole extends from the same vertical wellbore, each such lateral must be permitted as an individual horizontal well with an "H" suffix. The surface location and the proposed footage locations of both the initial penetration into the productive formation and the terminus of the lateral shall be entered under "Location". If the application is for a permit to drill a horizontal well, notice of the application shall be given by certified mail to all owners within one-half (½) mile of any point on the entire length of the horizontal wellbore, from the surface location through the terminus of the lateral. In the absence of any special Commission order, notice is not required for horizontal wells in federally supervised units or in API units provided that no portion of the horizontal interval is closer than six hundred-sixty feet (660') from a drilling or spacing unit boundary or any uncommitted tract.

(g) After receipt by the Commission at the office of the Supervisor of a proper application from an interested party requesting the establishment of drilling units or the revision of existing drilling units for the spacing of wells within a certain designated area, or upon a decision by the Supervisor or the Commission to call a hearing for the establishment of drilling units or the revision of existing drilling units within a certain designated area, any Application for Permit to Drill within any such designated area will be held in abeyance by the Commission until such time as the matter has been fully heard and determined; except, however, a permit shall be issued by the Supervisor if an owner files a sworn application and demonstrates therein to the Supervisor's satisfaction that on the date the application requesting such drilling units was filed:

(i) he has the right or obligation under the terms of an existing contract to drill said well; and

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(ii) he has a leasehold estate or right to acquire a leasehold estate under said contract which will be terminated unless he is permitted to commence the drilling of said well before the matter of spacing can be fully heard and determined by the Commission.

(h) If drilling is not commenced, the permit to drill shall not be valid after the expiration of a period of one (1) year from the date of the issuance thereof by the Commission or its authorized agents. A new application shall be submitted prior to the expiration date of the Permit to Drill, along with a \$50.00 extension fee, in order to request a one (1) year extension from such expiration date.

(i) All plats shall contain the following information:

- (i) section, township, range and county that the well is to be located within;
- (ii) north arrow;
- (iii) scale of drawing. This should include a bar graph and a ratio showing the scale of the map;
- (iv) a description of all monuments found, set, reset or replaced and notation of all distances measured between the corners used in establishing the section boundary in which the well is located;
- (v) distances from the nearest established section boundary lines to the proposed well;
- (vi) ungraded ground elevation of the well;
- (vii) basis of elevations;
- (viii) basis of bearings;
- (ix) signed Wyoming Registered Land Surveyor Certificate or statement indicating that the well was actually staked by the surveyor or others under his direct supervision as exhibited on the plat.
- (j) Latitude and longitude in degrees, with five (5) decimal places and the datum used, if not contained on the plat, is to be furnished within thirty (30) days of the completion of the well. Latitude and longitude values shall be accurate to within one hundred fifty feet (150').
- (k) Within the Special Sodium Drilling Area –A or –B (SSDA –A or –B) as defined in Chapter 1, Section 2 (qq) or (rr), a notice of the Application for Permit to Drill shall be given by certified mail to all trona producers holding current valid DEQ permits to mine trona.

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Section 9. Application for Permit to Drill Stratigraphic Test or Core Hole (Form 1).

A fifty dollar (\$50.00) filing fee shall be required for the drilling of a stratigraphic test or core hole, and an Application for Permit to Drill shall be filed with the Supervisor and approved by him prior to the drilling of such test or hole.

Section 10. Notice of Intention to Change Plans (Form 4).

Where unexpected conditions necessitate any material change in the plans of proposed work already approved, complete details of the changes must be submitted to the Supervisor and approval thereof obtained before the work is undertaken.

Section 11. Notice of Intention to Recomplete Well (Form 4).

Before commencing operations to recomplete a well in any pool other than the pool from which such well is then producing, a detailed written statement of the plan of work must be filed with the Supervisor and approval obtained before the work is started.

Section 12. Well Completion or Recompletion Report and Log (Form 3).

Upon completion or recompletion of a well, stratigraphic test or core hole, or the completion of any remedial work such as plugging back or drilling deeper, acidizing, shooting, formation fracturing, squeezing operations, setting a liner, gun perforating, or other similar operations not specifically covered herein, a report on the operation shall be filed with the Supervisor. Such report shall present a detailed account of the work done and the manner in which such work was performed; the daily production of oil, gas, and water both prior to and after the operation; the size and depth of perforations; the quantity of sand, crude, chemical, or other materials employed in the operation and any other pertinent information of operations which affect the original status of the well and are not specifically covered herein.

Section 13. Operator's Monthly Report of Wells (Form 2 and Form 16).

(a) A report of all oil, water, and gas production, injection for enhanced recovery purposes, and sales shall be filed with the State Oil and Gas Supervisor at Casper, Wyoming, on or before the last calendar day of the month succeeding the month covered by the report. Reports shall be submitted on Wyoming Oil and Gas Conservation Form 2 or electronic media as prescribed by the Commission for all wells located on fee or patented, state, federal, or Indian lands regardless of status. Production, sales and injection volumes and pressure data shall be reported on an individual well-by-well basis and by reservoir if the well produces from multiple reservoirs.

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(b) Operators of disposal wells shall file a monthly report on Form 16A unless the Supervisor has waived that requirement and approved their reporting on Form 2. Form 16B is an annual application for exclusion from filing the Operator's Monthly Disposal Well Report (Form 16A).

Section 14. Notice of Change of Owner (Form 7).

Any owner or part owner, as defined herein, who shall be bound under a performance bond and who shall convey his interest to another, shall file a Notice of Change of Owner (Form 7) with the Supervisor at least thirty (30) days prior to the conveyance. Prior to approval of the transfer, the transferee must submit proof of compliance with the Split Estates Act. Do not use Form 6, Designation of Agent or Operator, for this procedure.

Section 15. Notice of Intention to Abandon Well (Form 4).

(a) Before beginning abandonment work on any well, stratigraphic test, core hole, dry hole, or other exploratory hole, a Notice of Intention to Abandon shall be filed with the Supervisor and approval obtained as to method of abandonment before the work is started. The notice must show the reason for abandonment, and must give a detailed statement of proposed work including such information as kind, location, and length of plugs (by depths), and plans for mudding, cementing, shooting, testing, and removing casing, as well as any other pertinent information. This approval shall be valid for a period of one (1) year. After that time, a new Notice of Intent to Abandon the well shall be submitted.

(b) When the well 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 the owner/operator submits a written, notarized request for such use executed by the landowner which assumes the responsibility to plug the well upon its abandonment as a water well in accordance with applicable rules and a copy of the Application for Permit to Appropriate Ground Water form for the well which has been approved by the Office of the State Engineer. Such written request, assumption of responsibility, and a copy of the State Engineer's approved form attached to a sundry notice shall be filed with the Supervisor requesting that the well be released from the operator's bond.

Section 16. Temporarily Abandoned, Shut-In, or Dormant Wells (Form 4 and Form 2).

(a) A well may be maintained as temporarily abandoned or shut-in provided any change in the status of the well is reported to the Supervisor on Form 4 and every month subsequent to the reported change, the well is listed on Form 2.

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(b) A well may not be maintained as temporarily abandoned, dormant, or shut-in for more than twenty-four (24) consecutive months from the date the well was first reported as temporarily abandoned, dormant or shut-in on Form 4 unless the operator of the well applies for and receives approval for an extension from the Supervisor. The Supervisor may prescribe forms or other information to be submitted with the extension request. Extensions may be granted for periods up to two (2) years.

(c) Prior to approving a request for extension, the Supervisor may, upon a finding of good cause, require mechanical integrity testing in accordance with provisions of Chapter 4, Section 5(d) or other surveillance method approved by the Supervisor be performed on a temporarily abandoned or shut-in well. A temporarily abandoned or shut-in well which successfully passes a mechanical integrity or surveillance test shall not be required to undergo another test for five (5) years unless the Supervisor finds upon good cause that circumstances have substantially changed to alter the condition of the well.

(d) The Supervisor may require any well which has been temporarily abandoned or shut-in for more than twenty-four (24) consecutive months or any temporarily abandoned, shut-in, or dormant well which has not been mechanically integrity tested within the preceding five (5) year period to undergo a mechanical integrity or other surveillance test prior to change in operator. Mechanical integrity testing must be performed in a manner consistent with UIC program pressure testing rules.

(e) The manner in which the well is to be maintained must be reported to the Supervisor on Form 4 and approved by him. Bonding requirements, as provided in Sections 4, 5, and 6 of this chapter will be kept in force until such time as the well is permanently abandoned.

(f) The Commission may, in its sole discretion, approve the Supervisor's use of conservation funds collected in accordance with WYO. STAT. ANN. § 30-5-116(b), to plug wells and seismic holes and reclaim the surrounding area affected by them if the Commission is unable to enforce its regulations and laws, up to and including legal action when appropriate, requiring the owner, operator, geophysical/seismic company, client company, or hole plugger to plug and reclaim and if there exists neither a plugging bond nor other security adequate to properly plug and abandon and rehabilitate the surface. The Supervisor shall establish and maintain a well plugging schedule which prioritizes wells for plugging through an assessment of the well's potential to adversely impact public health, public safety, surface or groundwaters, surface use or other mineral resources.

Section 17. Subsequent Report of Abandonment (Form 4).

(a) If a well, stratigraphic test or core hole is plugged and abandoned, a notarized Subsequent Report of Abandonment (Sundry Notice Form 4) must be filed with the Supervisor within thirty (30) days of the date of the plugging. The reverse side of the Subsequent Report of

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Abandonment (Form 4, Affidavit of Plugging) must be notarized and signed by both the notary and the person appearing before the notary. The Subsequent Report of Abandonment shall give a detailed account of the manner in which the abandonment or plugging work was carried out, including the weight of mud and nature and quantities of materials used in plugging and the location and extent (by depths) of the plugs of different materials 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 of slurry volume of API Class cement used, date of work, and the depth of plugs placed. Records of any test or measurement made, and records of the amount, size and location (by depths) of casing must be included.

(b) Site reclamation must be initiated within one (1) year of permanent abandonment of a well or last use of a pit and shall be completed in as timely a manner as climatic conditions allow. For just cause, the Supervisor may grant an administrative variance providing for additional time. Reclamation must be completed in accordance with the landowner's reasonable requests, and/or resemble the original vegetation and contour of adjoining lands. Where practical, topsoil must be stockpiled during construction for use in reclamation. All disturbed areas on state lands will be recontoured and reseeded unless the Office of State Lands and Investments approves otherwise. Appendix F includes information on reseeded.

(c) When rehabilitation of the surface is complete and the well is ready for inspection and bond release, the operator or owner shall so advise the Supervisor by submitting a Sundry Notice (Form 4) marking the area on the form advising such. Inspections for the purpose of bond release will not be made by the Commission staff until that request is provided by the operator or owner. The SRA will be approved only after the site has been inspected and recommended for bond release by a Commission staff member.

(d) The Commission accepts copies of reports prepared to satisfy the requirements of the Bureau of Land Management when that agency has jurisdiction over the subject well.

Section 18. Plugging of Wells, Stratigraphic Tests, Core, or Other Exploratory Holes (Form 4).

(a) It shall be the duty of any owner or person, who assumes ownership, operator, or contractor, drilling any well, seismic, stratigraphic test, core, or other exploratory hole, whether cased or uncased, regardless of diameter, to plug said hole in accordance with the requirements of the Supervisor or as set forth hereinafter and in a manner sufficient to properly protect all fresh water bearing formations and possible or probable oil or gas bearing formations.

(b) For wells as defined in Chapter 1, Section 2, (ddd) of these rules and regulations, and all stratigraphic test wells being abandoned, plugging must be accomplished by the following:

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(i) Wells without production casing must be plugged by placing cement plugs of at least one hundred feet (100') length over the following:

- (A) open hole porous and permeable formations;
- (B) at least every two thousand five hundred feet (2,500') if porous and permeable formations are not encountered;
- (C) in the base of the surface casing; and
- (D) at any other depth as required by the Supervisor.

(c) The interval between all cement plugs must be filled with a heavy mud-laden fluid approved by the Supervisor.

(ii) Wells with production casing:

(A) All perforations must be isolated, by squeeze cementing. If access to the perforated areas of the wellbore has been lost, alternative procedures may be proposed by the operator. The Supervisor shall determine or approve which method and the quantity of cement that shall be used or the alternative method of plugging if access to perforations are lost;

(B) The operator may leave the production casing in place, provided that the operator demonstrates that the casing exhibits mechanical integrity in a manner prescribed or approved by the Supervisor. If casing fails a mechanical integrity test, the Supervisor may require additional perforation and squeeze cementing or the placing of a balanced plug inside the casing.

(C) If it is determined that any formation containing fresh water and potable water as defined under Chapter 1, Section 2(s), of these rules and regulations was not sealed or separated when production casing was cemented, the Supervisor may also require additional perforating and squeeze cementing. The Supervisor may also require the production casing to be perforated at a depth of the shoe of the surface casing and that cement be squeezed or circulated through the perforations through the uncemented zone; and;

(D) If an attempt is made to recover production casing after the retrievable part of the production casing has been removed, cement must be circulated to fill at least a 100-foot (100') interval, of which 50 feet (50') must be inside the casing stub. The remainder of the hole shall be plugged in the manner prescribed under Subsection(b)(i) of this section, wells without casing.

(d) In plugging horizontal wells, a continuous cement plug shall be placed from at least one hundred feet (100') into the lateral back to one hundred feet (100') into the vertical portion of the

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wellbore, unless an alternate plugging program is approved by the Supervisor. The remaining portion of the vertical wellbore shall then be plugged in accordance with the preceding requirements.

(e) No substance of any nature or description other than those normally used in plugging operations shall be placed in any well at any time during plugging operations.

(f) Verbal approval to plug and abandon or approval of a Notice of Intention to Abandon (NIA-Form 4) must be obtained prior to commencing actual plugging operations. Under Chapter 4, Section 11, special plugging orders or variances from normal practice may be obtained or set forth when conditions dictate to protect fresh water bearing formations.

(g) When the well has been plugged, a notarized Subsequent Report of Abandonment (SRA-Form 4) accompanied by a job log or cement verification report from the plugging contractor specifying the type of fluid used to fill the wellbore, type of slurry volume of API Class cement used, date of work, and depth of plugs placed must be submitted to the Supervisor. Copies of plugging reports or other pertinent information for wells drilled on federal lands must be filed with the Commission in a timely manner in order that field information for UIC area reviews be current.

(h) In addition to the requirements under (b) of this section, all wells within the Special Sodium Drilling Area – A as defined in Chapter 1, Section 2(qq), shall have a directional survey run from the base of the Trona Interval to surface if not previously run. A cement bond log or other appropriate log shall be run from the base of the Trona Interval to top of cement to determine the integrity of the cement in casing annuluses.

(i) In addition to the requirements under (b) of this section, all wells in the SSDA – A or – B shall be plugged by placing a continuous cement plug, at a minimum, through the Trona Interval in all open zones, open casing zones, and all open or inadequately cemented casing annuluses. Perforation and squeeze cementing shall be used where required by the Supervisor.

Section 19. Well Designations and Markers.

(a) The owner shall mark each drilling, producing, or injection well in a conspicuous place with his name, name of lease, number of well, and legal description of the location of the well. All signs shall be maintained in a legible condition.

(b) Plugged and abandoned wells shall be marked with a permanent monument on which shall be shown the operator, the lease, the number, and location of the well. The monument shall consist of a piece of pipe not less than four inches (4") in diameter and not less than ten feet (10') in length of which four feet (4') shall be above the ground level, the remainder being securely imbedded in cement. The top of the pipe must be permanently sealed.

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(c) In order to lessen visual impact of a large number of dry hole markers, or for other reasonable cause, the Supervisor may waive the requirement to erect a dry hole marker. Petitions for approval of this procedure shall be submitted on the notice of intent to abandon (NIA) or on a separate sundry notice (Form 4). If that option is desired, the well casing must be cut off at least three feet (3') below the recontoured surface and a plate with well designation as provided in part (b) permanently welded onto the top of the casing stub. In the event a marker is not erected, the operator must leave a temporary steel fence post marked with the well number and location adjacent to the well bore so the field inspectors can easily find the location.

Section 20. Well Records and Reports.

The owner shall keep on the leased premises, or at his headquarters in the field, or otherwise conveniently available to the Supervisor, accurate and complete records of the drilling, re-drilling, 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 kinds, weight, size, and landed depth of casing used in drilling each well on the leased premises, and any other information obtained in the course of the well operation.

Section 21. Filing of Well Logs.

(a) Within thirty (30) days after logs are run on any well or within thirty (30) days after the completion of any further operation on it, if such operations involve drilling deeper or re-drilling any formation, the owner shall submit to the Supervisor two (2) copies of the well log on the form prescribed by the Commission as well as two (2) copies of the electrical, radioactive, or other similar conventional logs run. If requested by the owner, the Supervisor may grant an extension to the thirty (30) day reporting period for any well. The Commission would appreciate receiving logs, if available, in digital form or disc in addition to those mentioned above. The format shall be LAS, Log ASCII standard, or any other format approved by the Supervisor.

(b) In addition, operators shall file one (1) copy of drillstem test charts, directional deviation surveys that portray the bottomhole location, formation water analyses, porosity, permeability or fluid saturations, core analyses, and lithologic log or sample descriptions and bottomhole pressure data subsequent to initial completion within thirty (30) days of being run or compiled by the operator.

(c) As prescribed under Chapter 2, Section 6 for horizontal wells, the directional deviation, and/or measurement-while-drilling (MWD) survey shall be filed within thirty (30) days of being run. Further, said directional deviation, and/or MWD survey shall not be held confidential as provided hereinafter for other logs.

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(c) The making and filing of reports, well logs, and directional surveys on exploratory or "wildcat" wells marked confidential shall be kept confidential for six (6) months after the filing due date as required by subsection (a) of this section unless the owner gives written permission to release such information at an earlier date. When an Application for Permit to Drill is received marked "Confidential", the Commission will release the first page of the Commission's Form 1 or the Bureau of Land Management's Form No. 3160-3 and the surveyor's plat to the public and news media. Permission to extend the confidential status for periods longer than the original six (6) month period must be obtained from the Supervisor, however, if a well has been completed and/or production is being reported on it, subsequent requests to keep it confidential shall be denied.

Section 22. General Drilling Rules.

(a) The following shall apply to the drilling of all wells unless altered, modified, or changed for a particular well, pool, unit, area or lands upon hearing before the Commission:

(i) 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. Fresh water flows detected during drilling including seismic, core, or other exploratory holes shall be recorded on Form 19 (Report of Fresh Water Flows) and reported to the Commission on the next business day. Information contained on the form shall describe the depth at which the sand was encountered, the thickness, and the rate of water flow, if known. In areas where pressures and formations are unknown, surface casing shall be of sufficient size to permit the use of an intermediate string or strings of casing. Surface casing shall be set in or through an impervious formation and shall be cemented by the 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 Supervisor. If cement is not circulated to the surface during the primary operation, the operator shall perform supplemental cementing operations to assure that the annular space from the casing shoe to the surface is filled with cement;

(ii) Unless otherwise provided by specific order of the Commission for a particular well or wells or for a particular pool or parts thereof, cemented casing string shall stand under pressure until the cement at the shoe has reached a compressive strength of 500 pounds per square inch. In addition, the API free-water separation for all cement slurries used shall average no more than four milliliters per 250 milliliters of cement. All cements used shall achieve a minimum compressive strength of 100 psi in 24 hours measured at 80 degrees Fahrenheit. Testing for these properties shall be in accordance with accepted industry standards. The term "under pressure" as used herein shall be complied with if one float valve is used or if pressure is otherwise held;

(iii) There shall be installed and maintained on all wells blowout preventers and related equipment in accordance with Chapter 3, Section 23 (i);

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(iv) Setting depths of all casing strings shall be determined by taking into account formation fracture gradients and the maximum anticipated pressure to be maintained within the wellbore;

(v) If and when it becomes necessary to run a production string, such string shall be cemented by the pump and plug method and shall be properly tested by the pressure method before cement plugs are drilled;

(vi) Natural gas which may be encountered in a substantial quantity in any section of cable tool drilled hole above the ultimate objective shall be shut off with reasonable diligence either by mudding, by casing, or other approved method, and confined to its original source to the satisfaction of the Supervisor. 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.

(b) Before drilling commences, approval to construct proper and adequate reserve pits for the reception and confinement of mud and cuttings and to facilitate the drilling operation shall be applied for and received in accordance with Chapter 4, Section 1. Special precautions, including but not limited to, an impermeable liner and/or membrane, monitoring systems, or closed systems, shall be taken, if necessary, to prevent contamination of streams and potable water and to provide additional protection to human health and safety in instances where drilling operations are conducted in close proximity to water supplies, residences, schools, hospitals, or other structures where people are known to congregate. Pits, wellheads, pumping units, tanks, and treaters shall be located no closer than three hundred fifty feet (350') from any of the aforementioned items. The Supervisor may impose greater distances for good cause and likewise grant exceptions to the 350-foot rule.

(c) Before drilling commences, the operator shall notify the Commission of his intent to spud the well and an approximate time the BOP test will be run.

(d) For each well drilled within the Special Sodium Drilling Area – A or – B (SSDA –A or – B) as defined in Chapter 1, Section 2, (qq) and (rr) a complete proposed casing and cementing program shall be submitted on the application for the Permit to Drill (Form 1). For the life of the well each drilling and casing program, unless altered, modified, or changed for a particular well, pool, unit, area or lands upon hearing before the Commission, each casing program shall be designed to:

- (i) provide suitable and safe operating conditions for the total measured depth proposed;
- (ii) confine fluids to the wellbore;
- (iii) prevent migration of fluids from one stratum to another;

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(iv) assure control of well pressures encountered;

(v) prevent contamination of freshwater; prevent significant damage to Trona Mineral Resources; and provide well control until the next casing is set; all pertinent factors for well control should be considered, including formation fracture gradients, formation pressures, casing setting depths, proposed total depth, and projected mining.

(e) In addition, the following requirements apply to all wells drilled within the Special Sodium Drilling Area – A (SSDA – A) as defined in Chapter 1, Section 2(qq) unless altered, modified, or changed for a particular well, pool, unit, area or lands upon hearing before the Commission:

(i) Any oil or gas wells that will be drilled within the area of influence of underground trona mining shall be (1) designed and installed to withstand the forces and potentially damaging influences from mining as certified by a Registered Professional Engineer registered in the State of Wyoming or (2) demonstrated to be located outside the mining influence area. Mining influence includes surface subsidence and underground formation collapse, faulting fracturing and related stresses that may provide avenues for communication with active or inactive underground mine works, open mine voids, and corrosive mine fluids that may cause well casing corrosion or failure as a result of mining.

(ii) Conductor casing must be set to a depth of at least forty feet (40'), or into a competent stratum whichever is greater. The casing must be cemented with a quantity of cement to fill the annular space up to the surface and topped off if not at the surface. Cement fill must be verified by observation of cement returns.

(iii) Centralized surface casing shall be set below the Trona Interval from the surface. Centralizers shall be spaced to insure enough casing annulus is maintained on all sides of the casing to allow cement fill space throughout the cased interval. The casing shall be set into a competent stratum and cemented with sufficient cement in the annulus to circulate to the surface. If cement does not circulate to the surface, the open annulus must be cemented to the surface before drilling ahead. A cement bond log or cement evaluation tool must be run to verify adequate cement around surface casing. Remedial cementing may be required if it is determined that insufficient bonding occurred.

(iv) Prior to well completion, a directional survey shall be run from the base of the Trona Interval to surface to verify wellbore location relative to surface location. Results of the survey shall be submitted to the Supervisor pursuant to Chapter 3, Section 21.

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(iv) Intermediate and/or production casings, if required to be cemented, shall be cemented with a sufficient quantity of cement to provide annular fill up from the surface casing shoe to two hundred feet (200') above the Trona Interval. All casing annuluses reaching the production zones shall be cemented for two hundred feet (200') or more above the highest producing zone. All casings shall be centralized throughout their cemented annulus intervals. Before drilling ahead, all casings shall be tested in accordance with (vii) of this section.

(vi) Liners may be set and cemented as an extension of casings provided that the cemented liner has a minimum of two hundred feet (200') of cemented lap within the next larger

casing. Before drilling ahead, a cemented liner and lap must test in accordance with (vii) of this section, to determine that a seal between the liner top and next larger casing has been achieved.

(vii) Before drilling out the liner after cementing, all casing, liners, and liner laps must be tested to a surface pressure of one thousand five hundred (1,500) psig, or 0.25 psi/ft multiplied by the true vertical depth of the casing shoe, whichever is greater; however, surface pressure must not subject the casing to a hoop stress that will exceed seventy percent (70%) of the minimum yield strength of the casing. Sufficient notice of pressure test must be given, so that a representative of the Commission may witness the test. A cement bond log or other appropriate log shall be obtained to evaluate cement integrity in each cemented zone for each cemented casing annulus and the results submitted to the Supervisor for approval, pursuant to Chapter 3, Section 21. If there are indications of improper cementing, or the pressure declines more than ten percent (10%) in 30 minutes, corrective measures shall be taken.

(viii) Casing annuluses not cemented through the Trona Interval that extend to the surface shall be continually monitored for leaks by equipping the surface termination with a rupture disk (fail open) pressure relief valve with tattle-tale (or similar device) to detect, alarm, and relieve excess annular pressure build up. The device shall be set to fail open at one hundred (100) psi. Blocking of this pressure relief valve in an open position shall be prohibited. In the event the monitored casing pressure exceeds one hundred (100) psi, the Supervisor and the trona producers holding valid Wyoming DEQ permits to mine trona shall be notified as soon as possible and remedial actions shall be implemented with the Supervisor's approval. The pressure relief device shall be tested every two (2) years to insure it is functioning properly. Tattle-tale monitoring units that cease to monitor or communicate shall be promptly repaired. Pressure devices shall be repaired or replaced immediately upon failing a pressure test or following a rupture.

If a well has not been tested for mechanical integrity within five (5) years and is shut-in for an extended period the casing strings capable of being tested shall be evaluated for mechanical integrity during the shut-in period.

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(ix) Cathodic protection or other equivalent corrosion prevention shall be applied to all casing strings.

(f) Within the Special Sodium Drilling Area – A or – B as defined in Chapter 1, Section 2(qq) or (rr) or all wells defined in Chapter 1, Section 2 unless altered, modified, or changed upon hearing before the Commission, or shown to contain no Trona Mineral Resources, shall only use stimulation methods that do not significantly damage the Trona Mineral Resources. A plan of work for any stimulation operation shall be submitted to the Supervisor and approved before the work is undertaken.

(i) Well stimulation operations within the Trona Interval shall include a post stimulation survey that identifies the extent of induced fractures. Results of the survey shall be submitted to the Supervisor for evaluation to determine if induced fractures have significantly intersected the Trona Mineral Resources and if corrective action is required.

(ii) Stimulation fluids shall be designed to prevent significant dissolution to the Trona Mineral Resources. The Supervisor shall require corrective action if it is determined that significant damage to the Trona Mineral Resources has, or is likely to occur.

(g) Within the boundaries of the Special Sodium Drilling Area – A or – B, as defined in Chapter 1, Section 2(qq) or (rr), all wells defined in Chapter 1, Section 2, unless altered, modified, or changed upon hearing before the Commission, shall use drilling fluids that will not significantly dissolve the Trona Mineral Resource.

Section 23. Blowout Preventers.

(a) Blowout preventers (BOPs) and related equipment shall be installed and maintained during the drilling of all wells in accordance with the following rules unless altered, modified, or changed, for a particular pool or pools, upon hearing before the Commission.

(i) **General Rules:**

(A) The required working pressure rating of all blowout preventers and related equipment shall be based on known or anticipated subsurface pressure, geologic conditions, or accepted engineering practices, and shall equal or exceed the maximum anticipated pressure to be contained at the surface. In the absence of better data, the maximum anticipated surface pressure shall be determined by using a normal pressure gradient of 0.22 psi per foot and assuming a partially evacuated hole. A schematic diagram of the BOP and wellhead assembly shall be submitted to the Supervisor with the Application for Permit to Drill (APD). The schematic diagram should indicate the minimum size and pressure rating of all components of the wellhead and blowout preventer assembly.

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(B) The Supervisor, on a site specific basis, may require the use of blowout preventers or other methods of controlling shallow coalbed methane wells, at which time all current BOP rules shall be applicable.

(C) All blowout preventers, choke lines, and choke manifolds shall be installed above ground level. Casingheads and optional spools may be installed below ground level provided they are visible and accessible.

(D) Blowout preventer equipment and related casingheads and spools shall have a vertical bore no smaller than the inside diameter of the casing to which they are attached.

(E) Pressure tests on blowout preventers and related equipment shall be tested as outlined in this section, at least:

- (I) prior to spud or upon installation;
- (II) after the disconnection or repair of any pressure containing seal in the BOP stack, choke and kill lines, or choke manifold, but limited to the affected component; and
- (III) every 30 days after initial installation, or as determined by the Supervisor.

(F) The Supervisor may require an affidavit covering the initial pressure tests after installation signed by the operator or contractor attesting to the satisfactory pressure tests. The Supervisor is to be advised at least twenty-four (24) hours in advance of all tests.

(G) Blowout prevention equipment used when reasonable expectations of encountering hydrogen sulfide or sour gas formations that could potentially result in the partial pressure of the hydrogen sulfide or sour gas exceeding 0.05 psia (00034 MPa) in the gas phase at the maximum anticipated pressure, shall be suitable for use in such areas.

(H) All ram BOPs shall be equipped with hydraulic locking devices or manual locking devices with hand wheels extending outside of the rig's substructure.

(I) Blowout prevention equipment installed on the well shall have a rated working pressure equal to, or higher than, the working pressure specified in the approved APD.

(J) In addition to the minimum BOP requirements outlined in this section, wells drilled while using tapered drill strings shall require either a variable bore pipe ram preventer

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(K) or additional ram type blowout preventers to provide a minimum of one set of pipe rams for each size of drill pipe in use, and one set of blind rams.

(ii) **Minimum requirements for 2,000 psi system:**

(A) BOP equipment shall consist of at least one double-gate preventer with pipe and blind rams or two single-ram type preventers; one equipped with pipe rams, and the other with blind rams. Ram preventers or a drilling spool must have side outlets with a minimum inside diameter of two inches to accommodate choke and kill lines. Outlets on the casinghead may not be used to attach choke or kill lines. One annular BOP may be substituted for ram type BOPs, providing the annular BOP is pressure tested in the CSO (complete shut off) configuration.

(B) Additional BOP equipment shall include one upper kelly cock, and one drill pipe safety valve with subs to fit all drill string connections in use.

(C) Choke manifold and related equipment shall consist of one kill line valve, one choke line valve, choke line, two manual adjustable chokes each with one valve located upstream of the choke, one bleed line valve and one mud service pressure gauge with a valve upstream of the gauge. The arrangement of the valves shall be a functional equivalent of the arrangement outlined in Appendix G, Figure 3-1 or 3-1A.

(D) All choke manifold valves, choke and kill line valves and the choke line shall be full bore. Choke line valves, choke line and bleed line valves shall have an inside diameter equal to or greater than the minimum requirement for the BOP or drilling spool outlet.

(E) The choke line should be as straight as possible, and any required turns shall be made with flow targets at bends and on block tees. Choke hoses with flanged connections designed for that purpose will be accepted in lieu of a steel choke line.

(F) The accumulator shall have sufficient capacity to operate the BOP equipment as outlined in this section, and have one independently powered pump system. BOP controls may be located at the accumulator or on the rig floor.

(iii) **Minimum requirements for 3,000 psi system:**

(A) BOP equipment shall consist of at least one annular BOP and one double-gate preventer with pipe and blind rams or two single-ram type preventers; one equipped with pipe rams and the other with blind rams. Ram preventers or a drilling spool must have side outlets with a minimum inside diameter of two inches on the kill side, and three inches on the choke side to accommodate choke and kill lines. Outlets on the casinghead may not be used to attach choke or kill lines.

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(B) Additional BOP equipment shall include one upper kelly cock, and one drill pipe safety valve with subs to fit all drill string connections in use.

(C) Choke manifold and related equipment shall consist of one kill line valve, one check valve, two choke line valves, choke line, two manual adjustable chokes each with one valve located upstream of the choke, one bleed line valve and one mud service pressure gauge with a valve upstream of the gauge. The arrangement of the valves shall be a functional equivalent of the arrangement outlined in Appendix G, Figure 3-2.

(D) All choke manifold valves, choke and kill line valves and the choke line shall be full bore. Choke line valves, choke line and bleed line valves shall have an inside diameter equal to or greater than the minimum requirement for the BOP or drilling spool outlet.

(E) The choke line should be as straight as possible, and any required turns shall be made with flow targets at all bends and on block tees. All connections exposed to well bore pressure shall be welded, flanged or clamped. Choke hoses with flanged connections designed for that purpose will be accepted in lieu of a steel choke line.

(F) The accumulator shall have sufficient capacity to operate the BOP equipment as outlined in this section, and have two independently powered pump systems connected to start automatically after a 200 psi drop in accumulator pressure, or one independently powered pump system connected to start automatically after a 200 psi drop in accumulator pressure and an emergency nitrogen back-up system connected to the accumulator manifold. BOP controls may be located at the accumulator or on the rig floor.

(iv) **Minimum requirements for 5,000 psi system:**

(A) BOP equipment shall consist of at least one annular BOP and one double-gate preventer with pipe and blind rams or two single-ram type preventers; one equipped with pipe rams and the other with blind rams. Ram preventers or a drilling spool must have side outlets with a minimum inside diameter of two inches on the kill side, and three inches on the choke side to accommodate choke and kill lines. Outlets on the casinghead may not be used to attach choke or kill lines.

(B) Additional BOP equipment shall include one upper kelly cock, lower kelly cock, one drill pipe safety valve and one inside BOP with subs to fit all drill string connections in use.

(C) Choke manifold and related equipment shall consist of two kill line valves, one check valve, one choke line valve, one remote controlled choke line valve, choke line, one manual adjustable choke and one remote controlled adjustable choke each with two valves

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located upstream of the choke, two bleed line valves and one mud service pressure gauge with a valve upstream of the gauge. The arrangement of the valves shall be a functional equivalent of the arrangement outlined in Appendix G, Figure 3-3.

(D) All choke manifold valves, choke and kill line valves and the choke line shall be full bore. Choke line valves, choke line and bleed line valves shall have an inside diameter equal to or greater than the minimum requirement for the BOP or drilling spool outlet.

(E) The choke line should be as straight as possible, and any required turns shall be made with flow targets at all bends and on block tees. All connections exposed to well bore pressure shall be welded, flanged or clamped. Choke hoses with flanged connections designed for that purpose will be accepted in lieu of a steel choke line.

(F) The accumulator shall have sufficient capacity to operate the BOP equipment as outlined in this section, and have two independently powered pump systems connected to start automatically after a 200 psi drop in accumulator pressure, plus an emergency nitrogen back-up system connected to the accumulator manifold. BOP controls shall be located on the accumulator with additional remote controls located on the rig floor.

(v) **Minimum requirements for 10,000-15,000-20,000 psi systems:**

(A) BOP equipment shall consist of at least one annular BOP and one double-gate preventer with pipe and blind rams or two single-ram type preventers; one equipped with pipe rams and the other with blind rams located above a drilling spool. One drilling spool with side outlets with a minimum inside diameter of two inches on the kill side, and three inches on the choke side. One ram-type preventer with pipe rams, located below the drilling spool. Outlets on the casinghead may not be used to attach choke or kill lines.

(B) Additional BOP equipment shall include an upper kelly cock, lower kelly cock, one drill pipe safety valve and one inside BOP with subs to fit all drill string connections in use.

(C) Choke manifold and related equipment shall consist of two kill line valves, one check valve, one choke line valve, one remote controlled choke line valve, choke line, two manual adjustable chokes and one remote controlled adjustable choke each with two valves located upstream of the choke, two bleed line valves and one mud service pressure gauge with a valve upstream of the gauge. The arrangement of the valves shall be a functional equivalent of the arrangement outlined in Appendix G, Figure 3-4.

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(D) All choke manifold valves, choke and kill line valves and the choke line shall be full bore. Choke line valves, choke line and bleed line valves shall have an inside diameter equal to or greater than the minimum requirement for the BOP or drilling spool outlet.

(E) The choke line shall be a steel line and be as straight as possible, and any required turns shall be made with flow targets at all bends and on block tees. All connections exposed to well bore pressure shall be welded, flanged, or clamped.

(F) The accumulator shall have sufficient capacity to operate the BOP equipment as outlined in this section, and have two independently powered pump systems connected to start automatically after a 200 psi drop in accumulator pressure, plus an emergency nitrogen back-up system connected to the accumulator manifold. BOP controls shall be located on the accumulator with additional remote controls located on the rig floor.

(vi) **Minimum requirements for diverter systems:**

(A) The diverter system shall consist of a low-pressure diverter or an annular blowout preventer with large diameter vent lines installed below the diverter and extending to a flare pit a safe distance from the well.

(B) The valves on the vent lines shall be full bore and full opening, and be hydraulically controlled in a manner to insure that at least one vent line valve is opened before the diverter packer closes.

(C) The diverter and all valves shall be function tested when installed and at appropriate times during the operation.

(vii) **Minimum requirements for BOP equipment testing:**

(A) All blowout preventers and related equipment that may be exposed to well pressure shall be tested first to a low pressure and then to a high pressure.

(I) A stable low of 200-300 psi shall be maintained for at least five (5) minutes prior to initiating the high-pressure test.

(II) When performing the low-pressure test, it is not acceptable to apply a higher pressure and bleed down to the low-test pressure. The higher pressure could initiate a seal that may continue to seal after the pressure is lowered and therefore misrepresent a low-pressure condition.

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(III) The high-pressure test shall be to the rated working pressure of the ram type BOPs and related equipment, or to the rated working pressure of the wellhead on which the stack is installed, whichever is lower. A stable high-pressure test shall be maintained for ten (10) minutes.

(IV) Annular BOP shall be high pressure tested to 50% of the rated working pressure, and maintain a stable pressure for ten (10) minutes.

(V) Manual adjustable chokes not designed for complete shut off (CSO) shall be pressure tested only to the extent of determining the integrity of the internal seating components to maintain back pressure. Hydraulic chokes designed for CSO shall be pressure tested to 50% of the rated working pressure.

(B) All casing below the conductor pipe shall be pressure tested to 0.22 psi per foot or 1,500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield strength of the casing. A stable pressure shall be maintained for thirty (30) minutes.

(C) During BOP pressure testing the casing shall be isolated with a test plug set in the wellhead, and the appropriate valve opened below the test plug to detect any leakage that may occur due to failure of the test plug.

(D) The choke and kill line valves, choke manifold valves, upper and lower kelly cocks, drill pipe safety valves and inside BOP shall be tested with pressure applied from the wellbore side. All valves, including check valves, located downstream of the valve being pressure tested, will be in the open position.

(E) All manually operated valves and chokes on the BOP stack, choke and kill lines, or choke manifold shall be equipped with a handle provided by the manufacturer, or a functionally equivalent fabricated handle, and be lubricated and maintained to permit operation of the valves without the use of additional wrenches or levers.

(F) Operators may install BOP equipment of a higher pressure rating than that specified in the approved APD. In that event the BOP equipment shall be pressure tested at the working pressure specified in the approved APD.

(G) All operational components of the BOP equipment shall be functioned at least once a week to verify the components' intended operations.

(H) The results of all BOP equipment pressure tests and function tests shall be recorded on the tour sheet and shall include the type of test, testing sequence, low and high pressures, duration of each test, and results of each test.

(viii) **Minimum requirements for accumulator system testing:**

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(A) The precharge pressure on each accumulator bottle shall be checked prior to each BOP pressure test, and adjusted if necessary. The minimum precharge pressure for a 3,000 psi working pressure accumulator unit should be 1,000 psi. The minimum precharge pressure for a 2,000 psi working pressure accumulator unit should be 1,000 psi. The minimum precharge pressure for a 1,500 psi working pressure accumulator unit should be 750 psi. Only nitrogen gas shall be used for accumulator precharge. The precharge should be adjusted to within 100 psi of the selected pressure.

(B) Accumulator response time is the elapsed time between activation and the complete operation of a function. The accumulator system shall be capable of closing each ram BOP within thirty (30) seconds. Closing time shall not exceed thirty (30) seconds for annular BOPs smaller than 18 ¾ inches nominal bore, and forty-five (45) seconds for annular BOPs of 18 ¾ inches nominal bore and larger, when closed on the smallest diameter drill string component in use.

(C) BOP accumulator systems shall have sufficient usable hydraulic fluid volume (with pumps inoperative) to close one annular BOP, two ram BOPs from a full open position, open one hydraulic valve against zero wellbore pressure, and retain 200 psi or more above the minimum recommended precharge pressure.

(D) The accumulator pump system shall have sufficient quantity and sizes of pumps to satisfactorily perform the following: with the accumulator bottles isolated from service, the accumulator pump system shall be capable of closing the annular BOP on the minimum size drill pipe being used, or one ram-type BOP if the stack does not include an annular BOP, and open the hydraulic choke line valve within two (2) minutes.

Section 24. Vertical Drilling.

Unless otherwise ordered by the Commission upon hearing, 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. Horizontal wells are exempt from this rule.

Section 25. Directional Drilling.

(a) Before beginning controlled directional drilling, other than whipstocking because of hole conditions, when the intent is to direct the bottom of the hole away from the vertical, notice of intention to do so shall be filed with the Supervisor and his approval obtained. The approval will be valid for one year from the date it was granted. Such notice shall state clearly:

- (i) the depth;
- (ii) exact surface location of the wellbore;

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(iii) proposed direction of deviation; and

(iv) proposed horizontal distance between the bottom of the hole and surface location.

(b) If approval is obtained, the owner shall file with the Supervisor within thirty (30) days after the completion of the work an accurate and complete copy of the survey made.

(c) Additional notice to directional drill shall not be required if the proposed bottomhole location will be drilled to an authorized location pursuant to Section 2 of this chapter, a drilling and spacing order, or any other special order of the Commission.

(d) This rule also applies to horizontal wells, and the horizontal well diagram submitted with the Application for Permit to Drill shall serve as the above-required notice to the Supervisor.

Section 26. Protection of Productive Strata.

The owner shall not drill, deepen, complete, or recomplete an oil or gas well for the purpose of producing oil or gas from a lower or upper stratum until all productive strata are protected to the satisfaction of the Supervisor.

Section 27. Open Flows and Control of "Wild" Wells.

The owner shall take reasonable precaution to prevent any oil, gas, or water well from blowing open or "wild" and shall take immediate steps and exercise due diligence to bring under control any such well or burning oil or gas well. Within the boundaries of the Special Sodium Drilling Area – A, as defined in Chapter 2, Section 2(qq), the Supervisor and adjacent trona mine operators shall be notified as soon as possible upon detecting a leak at or below the surface. All leaks shall be corrected as quickly as possible or plugged by cementing methods outlined in Chapter 3, Section 18.

Section 28. Use of Gas for Artificial Lifting.

Gas may be used for artificial 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 lifting of oil is prohibited unless otherwise specifically authorized by the Supervisor.

Section 29. Classification of Gas Production.

Whenever in any pool the Commission after due notice and hearing, limits the total amount of gas which may be produced to an amount less than that which the pool could produce if no restriction was imposed, then, for the purpose of allocating and distributing the allowable production of such gas as required by WYO. STAT. ANN. § 30-5-102, each well in said pool the principal production of which at the mouth of the well is oil, which also unavoidably produces with said oil, gas in excess of the amount required for lease fuel or other lease purposes, and in quantities found by the Commission, after due notice and hearing, to be sufficient to make it economically feasible for the producer to save or use all or any part of such gas shall be classified as a gas well under WYO. STAT. ANN. § 30-5-101, and as an oil well under WYO. STAT. ANN. § 30-5-101(vii), as applicable, so that each producing property will have the opportunity to produce or to receive its just and equitable share of both oil and gas.

Section 30. Measurement of Oil.

(a) The volume of production of oil shall be computed in terms of barrels of clean oil on the basis of meter measurements or tank measurements of oil-level difference, made and recorded to the nearest one-quarter inch (1/4") of one hundred-percent-capacity tables, subject to the following corrections:

(i) 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 Supervisor, and the observed gross volume of oil shall be corrected to exclude the entire volume of such impurities;

(ii) Temperature Correction: The observed volume of oil corrected for impurities shall be further corrected to the standard volume of 60° Fahrenheit in accordance with A.S.T.M. D-1250, Table 6 or Table 7, or any revisions thereof and any supplements thereto or any close approximation thereof approved by the Supervisor; and

(iii) Gravity Determination: The gravity of oil at 60° Fahrenheit shall be determined in accordance with A.S.T.M. D-1250, Table 5, or any revisions thereof and any supplements thereto approved by the Supervisor.

Section 31. Measurement of Gas.

(a) Gas of all kinds shall be measured by meter unless otherwise authorized by the Supervisor. For computing the volume of gas to be reported to the Supervisor, the standard pressure base shall be 14.73 pounds per square inch absolute (psia), regardless of the atmospheric pressure at the point of measurement, and the standard temperature base shall be 60° Fahrenheit. All volumes of

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gas to be reported to the Supervisor 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 Supervisor.

(b) Conversion from some common measurement bases is accomplished as follows:

<u>Measured Volume At</u>		<u>Factor</u>		<u>Equals Volume At</u>
14.4 psia	x	.9776	=	14.73 psia
14.65 psia	x	.9945	=	14.73 psia
14.73 psia	x	1.0000	=	14.73 psia
16.4 psia	x	1.1134	=	14.73 psia

Section 32. Open Pit Storage of Oil.

The owner shall not, except during an emergency or except by special permission of the Supervisor, permit oil to be temporarily stored or retained in earthen reservoirs or in any receptacle in which there may be undue waste of oil.

Section 33. Report for Gasoline or Other Extraction Plants (Form 9, Sheets 1 and 2).

All operators of gasoline or other extraction plants shall make monthly reports to the Commission on Form 9, Sheets 1 and 2. Such forms shall contain all information required therein and shall be filed with the Supervisor by the 20th of the succeeding month.

Section 34. Vacuum Pumps.

The installation of vacuum pumps or other devices for the purpose of imposing a vacuum at the well head on any oil or gas well or any oil or gas bearing reservoir is permitted only upon order of the Commission, or upon approval of the Supervisor, obtained pursuant to an application therefore filed in accordance with the Rules of Practice and Procedure. The application shall set forth the names of all owners within one-half (1/2) mile of the affected well or wells and shall be accompanied by a plat showing the location of all wells on an applicant's lease and all offset wells of interested parties which have been or may be capable of being completed in the same pool or pools.

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Section 35. Surface Commingling of Production or Multiple Zone Completion or Commingling in One Wellbore.

(a) The multiple zone completion of a well and the production of oil or gas from more than one pool from one well without segregation of such production are permitted only upon order of the Commission, or approval of the Supervisor, pursuant to an application filed in accordance with the Rules of Practice and Procedure, Chapter 5.

(b) The application shall set forth:

(i) the manner and method of completion proposed, including a diagrammatic sketch of the mechanical installation for a multiple zone completion;

(ii) the names of all owners within one-half (1/2) mile of the well or wells in which the multiple zone completion is to be attempted or in which the production is to be commingled; and

(iii) a plat showing the location of all wells on the applicant's lease and all offset wells on direct and diagonally offsetting leases which have been or may be capable of being completed in the same pool or pools.

(c) The Supervisor may require such tests as he deems necessary to determine the effectiveness of the segregation of the different productive zones in a multiple zone completion.

(d) The production from each well must be measured by meters, gauge or by some other method the Commission has approved after notice and opportunity for hearing. An operator may not, prior to metering or measurement as required under Chapter 3, Section 13(a), 30(a) or 31(a), commingle production from two or more oil or gas wells with diverse working interest or royalty interest ownership, specifically excluding overriding royalty interests, without prior approval of the Commission after notice and opportunity for hearing. Notice must be provided to working interest and royalty interest owners.

(e) If commingled wells have common working interest and royalty interest ownership, specifically excluding overriding royalty interests, the production from each well need not be measured at the wellhead if the owner of the wells demonstrates to the Supervisor that the production from each well can be accurately determined at reasonable intervals by other means.

Section 36. Production Test and Gas-Oil Ratio Report. (Forms 10 through 13).

(a) Gas-oil ratio reports can be required by the Supervisor on certain wells if it is deemed necessary to obtain information of this nature.

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(b) An initial gas well test can be required by the Supervisor when such test is deemed necessary; the initial tests shall be multipoint back-pressure tests (stabilized multipoint or constant time multipoint or isochronal multipoint) or acceptable one-point back-pressure tests. The results shall be furnished to the Supervisor on acceptable forms. The methods prescribed in the Interstate Oil and Gas Compact Commission's "Manual of Gas Well Testing" or an alternate method approved by the Supervisor shall be used.

(c) As a guideline for multipoint tests, each flow rate duration shall be set at a minimum of thirty (30) minutes and a maximum of two (2) hours depending on stabilization. The shut-in period shall be a minimum of seventy-two (72) hours.

(d) On one-point tests, the flow rate shall be a minimum of twenty-four (24) hours, and the shut-in period shall be a minimum of seventy-two (72) hours.

(e) Gas-oil ratio reports for horizontal wells shall be filed upon initial completion and annually thereafter on Form 10.

Section 37. Procedure in Case of Default.

The Supervisor or the authorized agent with the approval and order of the Commission has authority to shut down any operation and place under seal any property or equipment for failure to comply with these oil and gas operating regulations or orders issued hereunder.

Section 38. Designation of Agent or Operator (Form 6).

A Designation of Agent or Operator (Form 6) shall be submitted to the Supervisor prior to the commencement of operations. A Designation of Agent or Operator will be accepted as authority of agent to fulfill the obligations of the owner and to sign any papers or reports required under these oil and gas operating regulations, and all authorized orders or notices given by the Supervisor when given in the manner hereinafter provided shall be deemed service of such orders or notices upon the owner and the lessee. All changes of address and any termination of the agent's or operator's authority shall be immediately reported in writing to the Supervisor and in the latter case the designation of a new agent or operator shall be immediately made. If the designated agent or operator shall at any time be incapacitated for duty or absent from his or their address, the owner shall designate in writing a substitute to serve in his or their stead and in the absence of such owner or of notice of appointment of a substitute then in such case notices may be given by the Supervisor by delivering a registered letter to the United States Post Office at Casper, Wyoming, directed to the agent or operator at the address shown on the current Designation of Agent or Operator on file in the Supervisor's office, and such notice will be deemed service upon the owner and lessee.

Section 39. Oil Mining Requirements.

Before beginning oil mining operations, the owner shall first apply for and obtain a permit to do so from the Commission or Supervisor, and shall furnish the Commission with a bond or other security approved under the Commission's rules. The application for a permit may be denied or the permit revoked by the Supervisor if he finds the oil mining operation will violate or has violated the rules and orders of the Commission, the orders of the Supervisor, or the Commission or their agents, or the Oil and Gas Conservation Law. If denied or revoked, the oil mining owner has the right to a hearing before the Commission, which may deny or revoke the permit on the same grounds as noted above for denial or revocation by the Supervisor. The conditions of the bond or other security shall be in compliance with the Wyoming Conservation Act, the Commission's rules and orders, and the orders of the Supervisor, the Commission, or their agents. The bond or other security may be forfeited or released under the procedure specified under Section 7 of this chapter of these rules. Before changing an oil mining operation as approved by the Commission or Supervisor under the permit, the oil mining owner shall notify the Commission by Sundry Notice (Form 4). Oil mining operations shall comply with the Commission's rules, except where compliance is waived in writing by the Supervisor. The Commission shall regulate oil mining for the purpose of conservation of oil, gas, and environmental resources and to protect correlative rights.

Section 40. Authorization for Flaring and Venting of Gas.

(a) Venting or flaring under the following circumstances has not and does not constitute waste and is authorized by the Commission:

(i) Emergencies or upset conditions: During temporary emergency situations, such as compressor or other equipment failures, relief of abnormal system pressures, or other conditions which result in the unavoidable short-term venting or flaring of gas at a lease, gas plant or other facility;

(ii) Well purging and evaluation tests: During the unloading or cleaning up of a well during routine purging or drillstem, producing, or evaluation tests;

(iii) Production tests: During initial or recompletion evaluation tests not exceeding a period of fifteen (15) days, unless a longer test period is authorized by the Supervisor.

(b) Low rate casinghead gas. Unless it is determined by the Supervisor or the Commission that waste is occurring, up to 60 MCF of gas per day is authorized to be vented or flared from individual oil wells. Venting or flaring is authorized either at the well or at a lease facility which serves several wells.

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(c) Unless flaring or venting is authorized under paragraph (a) or (b) of this section, an owner must apply for retroactive or prospective venting or flaring authorization under (c) or (d) of this section. Authorization may be granted upon review of an application, provided that the venting or flaring does not constitute waste. An application to vent or flare shall contain the following items as a minimum:

- (i) a statement of reason for venting or flaring;
- (ii) the estimated duration of venting or flaring;
- (iii) the estimated daily volume of gas in thousands of standard cubic feet per day (MCFD);
- (iv) the estimated daily volume and type of associated produced fluids, gas or plant products in barrels, MCF's, gallons or tons per day, as applicable;
- (v) a compositional analysis of the gas if hydrogen sulfide is present or if the gas stream has a low BTU content;
- (vi) a legal description of the well(s), plant or facility and distance to the nearest potential sales point or pipeline(s); and
- (vii) a discussion of applicable safety factors and plans such as use of a constant flare igniter, facility pressure release, or emergency protection practices.

(d) The Supervisor may grant temporary authorization of verbal requests, including plant start-up/shut down. Follow-up documentation of the request may be requested of the applicant containing, at a minimum, the items set forth in subsection (c) above within fifteen (15) days of the initial request.

(e) All operations shall be conducted in a safe and workmanlike manner. If the gas is sour and venting would present a safety hazard, a constant flare igniter system may be required.

Section 41. Tertiary Certification.

(a) Certification of tertiary projects and determination of base level production for projects qualifying for the tertiary oil tax exemption shall be accomplished in the following manner:

- (i) In order for tertiary production to qualify for the severance tax exemption provided under WYO. STAT. ANN. § 39-14-205(c), the applicant shall present evidence

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demonstrating that the recovery technique or techniques utilized in the project area qualify for a tertiary determination and the Commission must certify the project as a tertiary project.

(ii) For tertiary projects certified by the Commission after March 31, 2003, and before March 31, 2008:

(A) As part of the process of certifying tertiary projects which qualify for the severance tax exemption under WYO. STAT. ANN. § 39-14-205(c), the applicant shall furnish the Commission an extrapolation of expected non-tertiary oil production from the project. The extrapolation shall be for not less than seventy-two (72) months commencing with the first month after the month in which the application for tertiary certification is made. The extrapolation shall be based on production history, reservoir and production characteristics and the application of generally accepted petroleum engineering practices. The extrapolated production volumes approved by the Commission shall serve as the base level production for purposes of determining the tertiary oil production which qualifies for the tax exemption; and

(B) The applicant shall provide a statement as to all assumptions made in preparing the extrapolation and any other information concerning the project that the Commission may reasonably require in order to evaluate the applicant's extrapolation.

(iii) An application for tertiary certification may be approved administratively by the Supervisor. The Supervisor shall review the material within fifteen (15) days after receipt of the application and advise the applicant of the decision. If the operator disagrees with the Supervisor's decision, they may request a hearing before the full Commission. The Supervisor, on his own motion, may also refer the matter to the Commission if the proper decision is in doubt.

Section 42. Payment of Conservation Tax (Form OG-001).

(a) Purchasers and producers of oil and gas who are responsible for payment of conservation tax shall notify the Commission in order to receive reporting forms from the Commission's staff. Reporting forms will be available on the Commission's website. Forms will be mailed to the operator only upon written request of the producer or purchaser. Producers whose tax liability is thirty dollars (\$30.00) or less per month may make semi-annual reports with payments due the periods ending June 30th and December 31st of each year.

(b) The form of the tax return shall be prescribed by the Commission. The gross amount of sales of oil and gas shall be the total of the monthly amounts reported on the Commission's Form 2 (Operator's Monthly Report of Wells). The fair cash market value of sales for conservation mill tax calculations shall be the same as used by an operator in making its calculation for severance tax purposes to the Wyoming Department of Revenue and Taxation for return for tax assessment to the

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State Board of Equalization of Wyoming, Ad Valorem Tax Division, pursuant to WYO. STAT. ANN. § 39-14-201, *et seq.*

(c) Payments and corresponding forms must be submitted on or before the 25th day of the month following receipt of the form. Any tax not paid within the time herein specified shall bear interest at a rate of one percent (1%) per month from the date of delinquency until paid. This tax, together with the interest, is a lien upon the oil or gas against which it is levied and assessed. A tax due of less than one dollar (\$1.00) does not need to be remitted.

(i) Checks submitted for payment of taxes should include and identify the taxpayer's name, address, and phone number. Cash or coin are not acceptable methods of payment of the tax.

(ii) Tax returns must be signed prior to submission to the Commission.

(d) Purchasers have the option of paying the tax for producers, but doing so does not reduce the producer's liability for full payment of the tax. Purchasers and producers shall make arrangements between themselves to ensure that there will be no duplication of taxes paid. If the purchaser pays the tax, the producer shall still submit a return showing volumes, values, and name of the company paying the tax.

(e) Operators are responsible for making settlements with the non-operators in leases or units according to their customary joint interest accounting.

Section 43. Unit Operations.

Any person desiring to obtain the benefits of WYO. STAT. ANN. § 30-5-110, insofar as the same relates to any method of unit or cooperative development or operation of a field or pool or a part of either, shall file an application with the Supervisor for approval of such agreement which shall have attached a copy of such agreement.

Section 44. Change of Address.

Any owner/operator of a well shall, at all times, keep the Commission apprised of their current mailing and physical address. This shall be done on a Sundry Notice, Form 4 or in the form of a letter.