

MARK-UP

RULE B-43: ESTABLISHMENT OF DRILLING UNITS FOR GAS PRODUCTION FROM CONVENTIONAL AND UNCONVENTIONAL SOURCES OF SUPPLY OCCURRING IN CERTAIN PROSPECTIVE AREAS NOT COVERED BY FIELD RULES

- (a) For purposes of this rule, unconventional sources of supply shall mean those common sources of supply that are identified as the Fayetteville Shale, the Moorefield Shale, and the Chattanooga Shale Formations, or their stratigraphic shale equivalents, as described in published stratigraphic nomenclature recognized by the Arkansas Geological Survey or the United States Geological Survey.
- (b) For purposes of this rule, conventional sources of supply shall mean all common sources of supply that are not defined as unconventional sources of supply in section (a) above.
- (c) This rule is applicable to all occurrences of conventional and unconventional sources of supply in Arkansas, Cleburne, Conway, Cross, Faulkner, Independence, Jackson, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis, Stone, Van Buren, White and Woodruff Counties, Arkansas and shall be called the "section (c) lands". The development of the conventional and unconventional sources of supply within the section (c) lands shall be subject to the provisions of this rule.
- (d) This rule is further applicable to all occurrences of unconventional sources of supply in Crawford, Franklin, Johnson, and Pope Counties, Arkansas and shall be called the "section (d) lands". The development of the unconventional sources of supply within the section (d) lands shall be subject to the provisions of this rule. For purposes of this rule, the section (d) lands and the section (c) lands may collectively be referred to as the "covered lands".
- (e) All Commission approved Fayetteville Shale and non-Fayetteville Shale fields that are situated within the section (c) lands and that are in existence on the date this rule is adopted (collectively, the "existing fields"), are abolished and the lands heretofore included within the existing fields are included within the section (c) lands governed by this rule. Further, all amendments that added the Fayetteville Shale Formation to previously established fields for conventional sources of supply occurring in the section (d) lands are abolished and continuing development of the Fayetteville Shale and other unconventional sources of supply in these lands shall be governed by the provisions of this rule. All existing individual drilling units however, contained within the abolished fields shall remain intact.
- (f) All drilling units established for conventional and unconventional sources of supply within the section (c) lands and all drilling units established for unconventional sources of supply within the section (d) lands shall be comprised of single governmental sections, typically containing an area of approximately 640 acres in size. Each drilling unit shall be characterized as either an "exploratory drilling unit" or an "established drilling unit". An "exploratory drilling unit" shall be defined as any drilling unit that is not an established drilling unit. An "established drilling unit" shall be defined as any drilling unit that contains a well that has been drilled and completed in a conventional or unconventional source of supply (a "subject well"), and for which the operator or other person

responsible for the conduct of the drilling operation has filed, with the Commission, all appropriate documents in accordance with General Rule B-5, and been issued a certificate of compliance. Upon the filing of the required well and completion reports for a subject well and the issuance of a certificate of compliance with respect thereto, the exploratory drilling unit upon which the subject well is located and all contiguous governmental sections shall be automatically reclassified as established drilling units.

- (g) The filing of an application to integrate separately owned tracts within an exploratory drilling unit, as defined in Section (f) above and as contemplated by A.C.A. § 15-72-302(e), is permissible, provided that one or more persons who collectively own at least an undivided fifty percent (50%) interest in the right to drill and produce oil or gas, or both, from the total acreage assigned to such exploratory drilling unit support the filing of the application. In determining who shall be designated as the operator of the exploratory drilling unit that is being integrated, the Commission shall apply the following criteria:
- 1) Each integration application shall contain a statement that the applicant has sent written notice of its application to integrate the drilling unit to all working interest owners of record within such drilling unit. This notice shall contain a well proposal and AFE for the initial well and may be sent at the same time the integration application is filed.
 - 2) If any non-applicant working interest owner in the drilling unit owns, or has the written support of one or more working interest owners that own, separately or together, at least a fifty percent (50%) working interest in the drilling unit, such non-applicant working interest owner may (i) object to the applicant being named operator (a "section (g) operator challenge") or (ii) file a competing integration application (a "section (g) competing application") that challenges any aspect of the original integration application for such drilling unit. Any contested matter that is limited to a section (g) operator challenge shall be heard at the Commission hearing that was originally scheduled for such integration application. Any contested matter that involves the filing of a section (g) competing application shall be postponed until the next month's regularly scheduled Commission hearing if postponement is requested by either competing applicant.
 - 3) If a party desiring to be named operator of a drilling unit is supported by a majority-in-interest of the total working interest ownership in the drilling unit (the "majority owner"), the majority owner shall be designated unit operator.
 - 4) In the event two parties desiring to be named operator own, or have the written support of one or more working interest owners that own, exactly, an undivided 50% share of the drilling unit and either a section (g) operator challenge is submitted or a section (g) competing application is filed, operatorship shall be determined by the Commission, based on the factors it deems relevant and the evidence submitted by the parties or as otherwise provided by subsequent rule.
 - 5) If the person designated as operator by the Commission in the adjudication of a section (g) operator challenge or a section (g) competing application does not commence actual drilling operations on the drilling unit within the twelve (12) month period set out in the integration order, such operator shall not be entitled to be designated as operator under the subsequent integration of such drilling unit

unless (i) the operator's failure to commence such drilling operations was due to force majeure, or (ii) a majority-in-interest of the total working interest ownership in the drilling unit (excluding such designated operator) support such operator.

- (h) The filing of an application to integrate separately owned tracts within an established drilling unit, as defined in Section (f) above and as contemplated by A.C.A. § 15-72-303 is permissible, without a minimum acreage requirement, provided that one or more persons owning an interest in the right to drill and produce oil or gas, or both, from the total acreage assigned to such established drilling unit requests such integration. In determining who shall be designated as the operator of the established drilling unit that is being integrated, the Commission shall apply the following criteria:
- 1) Each integration application shall contain a statement that the applicant has sent written notice of its application to integrate the drilling unit to all working interest owners of record within such drilling unit. This notice shall contain a well proposal and AFE for the initial well and may be sent at the same time the integration application is filed.
 - 2) Any non-applicant working interest owner in the drilling unit may object to the applicant being named operator (a "section (h) operator challenge"). In addition, if an objecting party owns, or has the written support of one or more working interest owners that own, separately or together, a larger percentage working interest in the drilling unit than the applicant, such objecting party may file a competing integration application (a "section (h) competing application") that challenges any aspect of the original integration application for such drilling unit. Any contested matter that is limited to a section (h) operator challenge shall be heard at the Commission hearing that was originally scheduled for such integration application. Any contested matter that involves the filing of a section (h) competing application shall be postponed until the next month's regularly scheduled Commission hearing if postponement is requested by either competing applicant.
 - 3) If a party desiring to be named operator of a drilling unit is a majority owner (as defined in subsection (g)(3) above), the majority owner shall be designated unit operator.
 - 4) If a party desiring to be named operator of a drilling unit is not a majority owner, but is supported by the largest percentage interest of the total working interest ownership in the drilling unit (the "plurality owner"), there shall be a rebuttable presumption that the plurality owner shall be designated unit operator. If a section (h) operator challenge to a plurality owner being designated unit operator is submitted by a party that owns, or has the written support of one or more owners that own, separately or together, the next largest percentage share of the working interest ownership in the drilling unit (the "minority owner"), the Commission may designate the minority owner operator if the minority owner is able to show that, based on the factors the Commission deems relevant and the evidence submitted by the parties, the Commission should designate the minority owner as unit operator.

- 5) If two or more parties that desire to be named operator own, or have the support of one or more working interest owners that own, separately or together, the same working interest ownership in the drilling unit, operatorship shall be determined by the Commission, based on the factors it deems relevant and the evidence submitted by the parties or as otherwise provided by subsequent rule.
 - 6) If the person designated as operator by the Commission in the adjudication of a section (h) operator challenge or a section (h) competing application does not commence actual drilling operations on the drilling unit within the twelve (12) month period set out in the integration order, such operator shall not be entitled to be designated operator under the subsequent integration of such drilling unit unless (i) the original operator's failure to commence drilling operations on the initial well was due to force majeure, or (ii) a majority-in-interest of the total working interest ownership in the drilling unit (excluding the original operator) support the original operator.
- (i) The well setback from drilling unit lines and spacing between wells, for wells drilled in drilling units for unconventional sources of supply within the covered lands are as follows:
- 1) Each well location (as defined in Section (a)(2) of General Rule B-3) shall be at least 560 feet from any drilling unit boundary line, unless an exception is granted by the Commission after notice and hearing in accordance with General Rules A-2 and A-3, and other applicable hearing requirements, or in accordance with paragraph (o) below;
 - 2) ~~The Each perforated interval of the wellbore well location (as defined in Section (a)(2) of General Rule B-3)~~ shall be at least 560 feet in any direction from any other wellbore perforated interval in the same common source of supply that extends across or encroaches upon drilling unit boundaries ~~unless all owners, as defined in Ark. Code Ann. (1987) § 15-72-102(9), in all units consent in writing to well closer than 560 feet. Consent may be given prior to the drilling of a well, while a well is being drilled, or after a well has been drilled, but prior to commencement of production--an exception is granted in accordance with subparagraph (i)5) below;~~
 - 3) ~~The Each perforated interval of the wellbore well location (as defined in Section (a)(2) of General Rule B-3)~~ shall be at least 448 feet in any direction, an allowed 20% variance, from all other ~~well locations--wellbore perforated intervals~~ in the same common source of supply within an established drilling unit, ~~unless all owners, as defined in Ark. Code Ann. (1987) § 15-72-102(9), in the unit consent in writing to a well closer than 448 feet. Consent may be given prior to the drilling of a well, while a well is being drilled, or after a well has been drilled, but prior to commencement of production--an exception is granted in accordance with subparagraph (i)5) below;~~
 - 4) No more than 16 wells may be drilled per 640 acres for each separate unconventional source of supply within an established drilling unit unless an exception is granted by the Commission after notice and hearing in accordance with General Rules A-2 and A-3, and other applicable hearing requirements. For purposes of this subsection only, a well is any vertical well, directional well,

horizontal well with at a minimum 560 feet of perforated interval in the drilling unit, or if a horizontal does not contain a minimum of 560 feet of perforated lateral in any one drilling unit, then the horizontal well shall be counted in the drilling unit in which the majority of the perforated lateral occurs); and

- 5) Applications for exceptions to these well location provisions, relative to a drilling unit boundary or other locations in a common source of supply, may be brought before the Commission. The Director or his designee is authorized to approve an application requesting an exception to subsection (i)2) and/or (i)3) administratively, if the following conditions are met:

- A. Each such application shall be submitted on a form prescribed by the Director of Production and Conservation, and include the name and address of each owner, as defined in Ark. Code Ann. (1987) § 15-72-102(9), within each of the drilling units in which the proposed well is to be drilled and/or completed.
- B. Concurrently with the filing of the application for an exceptional location in accordance with subsection (i)2) and or (i)3) above, the applicant shall send to all owners, as defined in Ark. Code Ann. (1987) § 15-72-102(9), whose mailing addresses may reasonably be ascertained, in all affected units, a notice of the application's filing and verify such mailing by affidavit, setting out the names and addresses of all owners and the date(s) of mailing. Additionally, if there are any owners, as defined in Ark. Code Ann. (1987) § 15-72-102(9), whose addresses were not reasonably ascertained and notice was not mailed, then the applicant shall also submit proof of publication of such notice in a newspaper of general circulation within the county or counties within which all the units are located that appeared at least one time no earlier than three (3) days prior to filing the application, and no later than five (5) days after filing the application, prior to the Director approving the application administratively.
- C. Any owner, as defined in Ark. Code Ann. (1987) § 15-72-102(9), so noticed shall have the right to object to the granting of such application within fifteen (15) days after the receipt of the application by the Commission. Each objection must be made in writing and filed with the Director. If a timely written objection is filed, then the applicant shall be promptly furnished a copy and such application shall be denied, unless the objection is withdrawn within the original fifteen day time period after receipt of the application. If the application is denied under this section, the applicant may request to have the application referred to the Commission for determination in accordance with General Rules A-2 and A-3, and other applicable hearing requirements.
- D. If no timely objection is received, or if one is received and withdrawn within the original fifteen day time period after receipt of the application, the Director is authorized to approve the application administratively.
- E. An application may be referred to the Commission for determination when the Director deems it necessary that the Commission make such

determination for the purpose of protecting correlative rights of all parties, in order to prevent waste, or for any other reason. Promptly upon such determination, and not later than fifteen (15) days after receipt of the application, the Director shall give the applicant written notice, citing the reason(s) for referral to the full Commission for determination. If the application is referred under this section, the applicant shall file a request for a hearing, in accordance with General Rules A-2 and A-3, and other applicable hearing requirements, except that no additional filing fee is required.

F. If the Applicant has satisfied all applicable provisions, the Director has not notified the applicant of the determination to refer the application to the Commission within the fifteen (15) day period in accordance with the foregoing provisions, and if no objection is received at the office of the Commission within the fifteen (15) days as provided for in subsection (i)5C. above, the application shall be approved and a permit issued.

G. Any such application requesting administrative approval may be granted, provided the above criteria is satisfied, prior to the drilling of a well, while a well is being drilled, or after a well has been drilled and completed, but prior to commencement of production.

6) Applications for exceptions to these well location provisions, relative to a drilling unit boundary or other locations in a common source of supply, may be brought before the Commission.

- (j) The well spacing for wells drilled in drilling units for conventional sources of supply within the section (c) lands are as follows:
- 1) Only a single well completion will be permitted to produce from each separate conventional source of supply within each established drilling unit, unless additional completions are approved in accordance with General Rule D-19;
 - 2) Each well location (as defined in Section (a) 2) of General Rule B-3) shall be at least 1120 feet from any drilling unit boundary line;
 - 3) Well completions located closer than 1120 feet from all established drilling unit boundaries, shall be subject to approval in accordance with General Rule B-40; and
 - 4) Applications for exceptions to these well location provisions, relative to a drilling unit boundary or other location in a common source of supply, may be brought before the Commission.
- (k) The casing programs for all wells drilled in exploratory and established drilling units established by this rule and occurring in the covered lands specified by this rule shall be in accordance with General Rule B-15.
- (l) Wells completed in and producing from only conventional sources of supply, as defined in Section (b), shall be subject to the testing provisions of General Rule D-16 and production allowable provisions of General Rule D-21. Wells completed in and

producing from only unconventional sources of supply, as defined in Section (a), shall not be subject to the testing provisions of General Rule D-16 and allowable provisions of General Rule D-21. There shall be no production allowable established for wells producing from unconventional sources of supply located within the covered lands. Wells completed in and producing from only unconventional sources of supply, within the covered lands, shall report on a form prescribed by the Director, the highest twenty-four (24) hour production rate during the first forty (40) days of production, which form shall be filed within sixty (60) days of the date of first production from the well.

- (m) The commingling of completions for unconventional and/or conventional sources of supply within each well situated on an established drilling unit, shall be subject to the provisions and approval process outlined in General Rule D-18. If an unconventional source of supply is approved to be commingled with a conventional source of supply within a well situated on an established drilling unit, the well shall be subject to the production allowable provisions of General Rule D-21.
- (n) The reporting requirements of General Rule B-5 shall apply to all wells subject to the provisions of this rule. In addition, the operator of each such well shall be required to file monthly gas production reports in accordance with General Rule D-8.
- (o) The Commission specifically retains jurisdiction to consider applications brought before the Commission from a majority in interest of all owners, as defined by Ark. Code Ann. (1987) § 15-72-102(9), in two or more adjoining drilling units seeking the authority to drill, produce and/or share the costs of and the proceeds of production from one or more separately metered wells that extend across or encroach upon drilling unit boundaries and that are drilled and completed in one or more unconventional sources of supply within the covered lands. All such applications shall contain a proposed agreement on the formula for the sharing of costs, production and royalty from the affected drilling units.
 - 1) **Encroaching Wells.** If a well encroaches upon but does not cross the drilling unit boundary of an adjoining drilling unit (an "encroaching well"), the Commission shall not consider the encroached upon drilling unit to be held by production from the encroaching well.
 - 2) **Administrative Approval of Wells that Extend Across or Encroach Upon Drilling Unit Boundaries.** If the majority in interest of all owners, as defined by Ark. Code Ann. (1987) § 15-72-102(9), within each drilling unit agree to share a proposed well, a well that is being drilled, or a well which has been drilled, but prior to commencement of production, between two or more adjoining drilling units which are all integrated or are 100% leased utilizing the below methodology for sharing of costs, production and royalty among the affected drilling units, the Director or his designee is authorized to approve the application administratively, if the following conditions are met:
 - A. The application provides proof that:
 - i) There is at least one well located, as defined in subsection (a)(2) of General Rule B-3, at a non-exceptional well location and located entirely within each included drilling unit that is producing or capable of producing gas; or

- ii) Within twelve (12) months following the date the well for which administrative approval is granted is spud, there will be at least one well located, as defined in subsection (a)(2) of General Rule B-3, at a non-exceptional well location and located entirely within each included drilling unit that is either a well that is producing gas, or a well that is capable of producing gas and awaiting connection to a pipeline; or
 - iii) There is at least one well or a combination of multiple wells, including cross unit wells and/or encroaching wells located, as defined in subsection (a)(2) of General Rule B-3, within each included drilling unit that have a total combined perforated lateral length within the drilling unit of not less than 4160 feet, and are producing or are capable of producing gas; or
 - iv) Within twelve (12) months following the date the well for which administrative approval is granted is spud, there will be at least one well or a combination of multiple wells, including cross unit wells and or encroaching wells located, as defined in subsection (a)(2) of General Rule B-3, within each included drilling unit that have a total combined perforated lateral length within the drilling unit of not less than 4160 feet, and are producing or are capable of producing gas and awaiting connection to a pipeline; or
 - v) At least seventy five percent (75%) of the fee mineral ownership within each included drilling unit that does not contain one or more wells satisfying the requirements of subpart 2)A.i) or subpart 2)A. iii) above agree in writing to the well; and
- B. Notice has been given to all owners, as defined by Ark. Code Ann. (1987) § 15-72-102(9) and no objections were received by the Director in accordance with subsection 2) I) below; and
- C. The application includes detailed plat maps indicating current well locations and potential future well development plans in all included drilling units.
- D. If administrative approval is granted, based upon either or both of subsection 2)A.ii) or iv) above, and the applicant fails to satisfy one of the conditions specified in subsection 2)A.ii) or iv) above, the drilling permit and all other authorities for the well shall be automatically revoked, and the well shall be shut in, unless the applicant has filed a request in accordance with General Rule A-2, A-3, and other applicable hearing procedures prior to the expiration of the time period specified in such subsections, or the Commission otherwise approves the application.
- E. The method for sharing the costs of and the proceeds of production from one or more separately metered wells shall be based on acreage allocation as follows:

- i) An area measured 560 feet along and on both sides of the entire length of the horizontal perforated section of the well, and including an area formed by a 560 feet radius from the beginning point of the perforated interval, and a 560 feet radius from the ending point of the perforated interval shall be calculated for each such separately metered well (the "calculated area").
 - ii) Each calculated area shall be allocated and assigned to each drilling unit according to that portion of the calculated area occurring within each drilling unit.
- F. Each such application for utilizing the above methodology shall be submitted on a form prescribed by the Director of Production and Conservation, accompanied by an application fee of \$500.00 and include the name and address of each owner, as defined in Ark. Code Ann. (1987) § 15-72-102(9), within each of the drilling units in which the proposed well is to be drilled and/or completed.
- G. Concurrently with the filing of an application utilizing the above methodology, the applicant shall send to each owner specified in subsection 2)F. above a notice of the application filing and verify such mailing by affidavit, setting out the names and addresses of all owners, as defined by Ark. Code Ann. (1987) § 15-72-102(9), and the date(s) of mailing.
- H. Any owner, as defined by Ark. Code Ann. (1987) § 15-72-102(9), noticed in accordance with subsection 2) G) above shall have the right to object to the granting of such application within fifteen (15) days after the receipt of the application by the Commission. Each objection must be made in writing and filed with the Director. If a timely written objection is filed as herein provided, then the applicant shall be promptly furnished a copy and such application shall be denied. If the application is denied under this section, the applicant may request to have the application referred to the Commission for determination, in accordance with General Rules A-2 and A-3, and other applicable hearing requirements, except that no additional filing fee is required.
- I. An application may be referred to the Commission for determination when the Director deems it necessary that the Commission make such determination for the purpose of protecting correlative rights of all parties, in order to prevent waste, or for any other reason. Promptly upon such determination, and not later than fifteen (15) days after receipt of the application, the Director shall give the applicant written notice, citing the reason(s) for referral to the full Commission for determination. If the application is referred under this section, the applicant shall file a request for a hearing, in accordance with General Rules A-2 and A-3, and other applicable hearing requirements, except that no additional filing fee is required.

- J. If the Director has not notified the applicant of the determination to refer the application to the Commission within the fifteen (15) day period in accordance with the foregoing provisions, and if no objection is received at the office of the Commission within the fifteen (15) days as provided for in subsection 2)I, the application shall be approved and a drilling permit issued.
 - K. Upon receipt of the drilling permit, the applicant shall give the other owners, as defined by Ark. Code Ann. (1987) § 15-72-102(9), written notice that the drilling permit has been issued. The owners, as defined by Ark. Code Ann. (1987) § 15-72-102(9), who have not previously made an election, shall have fifteen (15) days after receipt of said notice within which to make an election to participate in the well or be deemed as electing non-consent and subject to the non-consent penalty set out in the existing Joint Operating Agreement(s) covering their respective drilling unit or units.
 - L. Following completion of the well and prior to the issuance of the Certificate of Compliance to commence production, the final location of the perforated interval shall be submitted to the Director to verify the proposed portion of the calculated area occurring within each drilling unit as specified in subsection 2) E) above.
- 3) Filing of Affidavit. The Applicant shall also file an affidavit or other document showing the calculated area allocated and assigned to each drilling unit, according to the final calculation of the area, occurring within each drilling unit with the Director and in the real estate property records in all counties where any portion of the drilling units are located.
- (p) The Commission shall retain jurisdiction to consider applications, brought before the Commission, from a majority in interest of working interest owners in two or more adjoining governmental sections seeking the authority to combine such adjoining governmental sections into one drilling unit for the purpose of developing one or more unconventional sources of supply. In any such multi-section drilling unit, production shall be allocated to each tract therein in the same proportion that each tract bears to the total acreage within such drilling unit.
 - (q) The Commission shall retain jurisdiction to consider applications, brought before the Commission, from a majority in interest of working interest owners in a drilling unit seeking the authority to omit any lands from such drilling unit that are owned by a governmental entity and for which it can be demonstrated that such governmental entity has failed or refused to make such lands available for leasing.