

1 ENERGY AND ENVIRONMENT CABINET

2 Department for Natural Resources

3 Division of Oil and Gas

4 (Amendment)

5 805 KAR 1:100. Commission's rules of procedure; spacing of deep well drilling; wildcat wells and
6 pooling of interests.

7 RELATES TO: KRS 353.651, 353.652

8 STATUTORY AUTHORITY: KRS [~~13A-100,~~] 353.565

9 NECESSITY, FUNCTION, AND CONFORMITY: KRS 353.565 requires the Kentucky
10 Oil and Gas Conservation Commission to administer and enforce the provisions of KRS 353.651
11 and 353.652 by regulating the spacing of deep well drilling, drilling units and pooling of interests.
12 This administrative regulation provides information necessary for owners and operators to comply
13 with requirements related to drilling deep vertical and deep horizontal wells in the Commonwealth.

14 Section 1. Definitions. [~~and Construction. Unless the context otherwise requires, the~~
15 ~~following words and terms shall have the following meanings when used in these administrative~~
16 ~~regulations:]~~

17 (1) "Commission" is defined in KRS 353.510(4).

18 (2) "Commissioner" is defined in KRS 353.510(2).

19 (3) "Correlative rights" is defined by KRS 353.510(6).

- 1 (4) Deep well" is defined by KRS 353.510(16).
- 2 (5) "Department" is defined by KRS 353.510(1).
- 3 (6) "Director" is defined by KRS 353.510(3).
- 4 (7) "Drilling unit" is defined by KRS 353.510(19).
- 5 (8) "Field" is defined by KRS 353.510(10).
- 6 (9) "Gas" is defined by KRS 353.510(8).
- 7 (10) "Horizontal well" is defined by KRS 353.510(25).
- 8 (11) "Just and equitable share of production" is defined by KRS 353.510(11).
- 9 (12) "Oil" is defined by KRS 353.510(7).
- 10 (13) "Operator" is defined by KRS 353.510(17).
- 11 (14) "Overriding Royalty Interest Owner" means a Person other than a royalty Owner,
12 that has a right to a percentage share of production, or the value derived from production, which
13 is free of all costs of drilling and production and which is created by the lessee or Working
14 Interest Owner and paid by the lessee or Working Interest Owner.
- 15 (15) "Person" is defined by KRS 353.510(5).
- 16 (16) "Pool" is defined by KRS 353.510(9).
- 17 (17) "Prevailing Royalty" is defined by KRS 353.510(27).
- 18 (18) "Royalty Owner" is defined by KRS 353.510(18).
- 19 (19) "Vertical well" is defined by KRS 353.510(26).
- 20 (20) "Well" is defined by KRS 353.510(14).
- 21 (21) "Wildcat well" means any deep vertical or horizontal well which is (a) drilled with
22 the intent of discovering or producing hydrocarbons from a formation or formations not
23 previously productive of oil or gas well within 10,000 feet of its location or (b) drilled under

1 such proven geological conditions that, even though located within 10,000 feet from the nearest
2 deep well previously productive of oil or gas, will not, if completed successfully, produce from a
3 previously productive pool.

4 (22) "Working interest owner" means an operator that has the obligation to bear all or a
5 proportionate share of the costs and expenses of unit operation.

6 [~~"Department" means the Department of Mines and Minerals as defined in KRS 353.010;~~

7 ~~(2) "Commissioner" means the Commissioner of the Department of Mines and Minerals as~~
8 ~~defined in KRS 351.010;~~

9 ~~(3) "Director" means the Director of Oil and Gas Conservation as provided in KRS~~
10 ~~353.530;~~

11 ~~(4) "Commission" means the Kentucky Oil and Gas Conservation Commission as provided~~
12 ~~in KRS 353.565;~~

13 ~~(5) "Person" means any natural person, corporation, association, partnership, receiver,~~
14 ~~governmental agency subject to KRS 353.500 to 353.720, trustee, so called common-law or~~
15 ~~statutory trust, guardian, executor, administrator or fiduciary of any kind;~~

16 ~~(6) "Correlative rights" means the reasonable opportunity of each person entitled thereto to~~
17 ~~recover and receive without waste the oil and gas in and under his tract or tracts, or the equivalent~~
18 ~~thereof;~~

19 ~~(7) "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of~~
20 ~~gravity, which are produced at the well in liquid form by ordinary production methods and which~~
21 ~~are not the result of condensation of gas after it leaves the underground reservoir;~~

22 ~~(8) "Gas" means all natural gas, including casinghead gas, and all other hydrocarbons not~~
23 ~~defined above as oil;~~

1 ~~(9) "Pool" means an underground reservoir containing a common accumulation of oil or~~
2 ~~gas or both. Each productive zone of a general structure which is completely separated from any~~
3 ~~other zone in the structure, or which for the purpose of KRS 353.500 to 353.720 may be so~~
4 ~~declared by the department, is covered by the word "pool" as used herein;~~

5 ~~(10) "Field" means the general area which is underlaid or appears to be underlaid by at least~~
6 ~~one (1) pool; and "field" includes the underground reservoir containing oil or gas or both. The~~
7 ~~words "field" and "pool" mean the same thing when only one (1) underground reservoir is~~
8 ~~involved; however, "field" unlike "pool" may relate to two (2) or more pools;~~

9 ~~(11) "Just and equitable share of production" means, as to each person, an amount of oil or~~
10 ~~gas or both substantially equal to the amount of recoverable oil or gas in that part of a pool~~
11 ~~underlying his tract or tracts;~~

12 ~~(12) "Well" means a borehole drilled, or proposed to be drilled, for the purpose of~~
13 ~~producing natural gas or petroleum, or one through which natural gas or petroleum is being~~
14 ~~produced, or A borehole drilled or proposed to be drilled for the purpose of injecting any water,~~
15 ~~gas or other fluid therein or one into which any water, gas or other fluid is being injected;~~

16 ~~(13) "Deep well" means any well drilled and completed below the depth of 4,000 feet or, in~~
17 ~~the case of a well located east of longitude line eighty four (84) degrees thirty (30) minutes, a well~~
18 ~~drilled and completed at a depth below 4,000 feet or below the base of the lowest member of the~~
19 ~~Devonian Brown Shale, whichever is deeper;~~

20 ~~(14) "Operator" means any owner of the right to develop, operate and produce oil and gas~~
21 ~~from a pool and to appropriate the oil and gas produced therefrom, either for himself or for himself~~
22 ~~and others; in the event that there is no oil and gas lease in existence with respect to the tract in~~
23 ~~question, the owner of the oil and gas rights therein shall be considered as "operator" to the extent~~

1 of seven eighths (7/8) of the oil and gas in that portion of the pool underlying the tract owned by
2 such owner, and as "royalty owner" as to one eighth (1/8) interest in such oil and gas; and in the
3 event the oil is owned separately from the gas, the owner of the right to develop, operate and
4 produce the substance being produced or sought to be produced from the pool shall be considered
5 as "operator" as to such pool;

6 (15) "Royalty owner" means any owner of oil and gas in place, or oil and gas rights, to the
7 extent that such owner is not an operator as defined in subsection (14) of this section;

8 (16) "Drilling unit" generally means the maximum area in a pool which may be drained
9 efficiently by one (1) well so as to produce the reasonable maximum recoverable oil or gas in such
10 area. Where the regulatory authority has provided rules for the establishment of a drilling unit and
11 an operator, proceeding within the framework of the rules so prescribed, has taken the action
12 necessary to have a specified area established for production from a well, such area shall be a
13 drilling unit.

14 (17) The singular shall include the plural, and the masculine gender shall include the
15 feminine and neuter.]

16 Section 2. Rules of Procedure. (1) Rules, administrative regulations, and orders of the
17 commission of general, or statewide, effect shall be submitted, published, and reviewed in
18 accordance with KRS Chapter 13A. Hearings on such rules, administrative regulations, or orders
19 shall be held, in accordance with KRS Chapter 13A.

20 (2) Rules, administrative regulations, or orders other than those of general, or statewide,
21 effect, including but not limited to orders establishing drilling units, pool or field-wide units, or
22 special field rules, shall be adopted only after notice and hearing in accordance with these rules and
23 consistently with provisions of KRS 353.500 to 353.720.

1 (3) All hearings before the commission shall be open to the public. Hearings shall be called
2 by the commission for the purpose of taking an action in respect to any matter within its
3 jurisdiction upon its own motion or upon the request [~~or application~~] of any interested party.
4 [~~Applications or~~] Requests for hearing (except as otherwise provided herein) shall be written and
5 may be in the form of a letter, shall be brief and concise, shall state in general terms the matter
6 upon which action of the commission is desired, the interest of the applicant, or person making the
7 request, the action sought, and the reasons therefor.

8 (4) The director shall maintain a docket book, for the commission. All [~~and all~~] applications
9 or requests for hearings and all hearings called on motion of the commission shall be docketed and
10 given a docket number, and a file carrying such number shall be opened by the director. All
11 applications for hearing, a copy of the notice of hearing, together with proof of its publication, the
12 originals of all instruments, documents, plats, and other data filed in connection with the hearing or
13 the subject matter thereof, a transcript of all evidence taken at the hearing, the originals or copies of
14 all correspondence with the commission concerning such hearing or the subject matter thereof shall
15 be stamped with the docket number of the hearing and placed and kept in the file carrying such
16 number. The docket book and all files pertaining to hearings shall be open to the public at all
17 reasonable times but shall not be removed from the custody of the commission or its employees.
18 Copies of all such instruments, documents, plats, other data, and correspondence shall be furnished
19 to any interested party upon payment of the cost of making such copies in accordance with the
20 Kentucky Open Records Act. All notices of hearing shall refer to the docket number thereof.
21 Copies of applications for hearing shall be furnished by the director to any person upon request in
22 accordance with the Kentucky Open Records Act.

1 (5) All hearings shall be held in Frankfort [~~Lexington~~], Kentucky, unless otherwise
2 ordered.

3 (6) Upon receipt of a proper request or completed application for hearing, the commission
4 shall call a hearing within thirty (30) days, and after such hearing and with all convenient speed,
5 and in any event within thirty (30) days after the conclusion of the hearing, shall take action with
6 regard to the subject matter thereof.

7 (7) Notice of all hearings shall be given by publication, as authorized by KRS 353.680, in
8 accordance with KRS Chapter 424. When required by KRS 353.651 or 353.652 to give personal
9 notice to all persons reasonably known to own an interest in the oil and gas in an area to be
10 unitized or for which special field rules are proposed, the commission shall give such notice by
11 registered mail unless a person has given a mailing address as provided in subsection (8) of this
12 section.

13 (8) The director shall maintain a general mailing list and shall place thereon the names and
14 addresses of all persons [~~, firms, or corporations~~] who make request in writing to be included on
15 such list. Each person [~~, firms, or corporations~~] on such mailing list shall be mailed by first class
16 mail at the address listed a copy of all notices and orders issued by the commission. The director
17 shall maintain a mailing list for each field in the state containing one or more deep wells [~~deep~~
18 ~~wells~~] and shall place on each such list the names and addresses of all persons [~~, firms, or~~
19 ~~corporations~~] who make request in writing to be included thereon. Each person included on the
20 mailing list for [~~of~~] any field shall be mailed by first class mail at the address listed a copy of all
21 notices and orders issued by the commission as to such field. The failure to mail a copy of a notice
22 to any such person [~~, firm, or corporation~~] shall not affect the validity of any hearing held pursuant
23 to the notice published in accordance with subsection (7) of this section or any rule, administrative

1 regulation, or order issued pursuant to such hearing, unless such person is one reasonably known to
2 own an interest in the oil and gas in an area to be unitized and for which special field rules are
3 proposed and who is thus entitled to personal notice by KRS 353.651 or 353.652. When a person
4 entitled to personal notice of a hearing has requested to be placed on either the general or a field
5 mailing list, a notice mailed by first class mail to the address given shall constitute compliance with
6 KRS 353.651 or 353.652, as the case may be.

7 (9) Notices of all hearings shall state the time and place of the hearing, the name of the
8 party requesting the hearing, the nature thereof, the action sought, and the docket number.

9 (10) No notice by personal service shall be necessary except as required by KRS 353.651
10 or 353.652 or by special order of the commission entered on its minutes.

11 (11) After notice of a hearing is once given, the hearing may be continued to another day
12 and from day to day by order of the commission entered on the day fixed for the hearing.

13 (12) The commission may adopt an emergency rule, administrative regulation, or order of
14 general, or statewide, effect without notice and hearing upon a finding of necessity to prevent
15 waste, prevent irreparable injury, or other cause and issuance by the Governor of an executive
16 order providing that it shall become effective upon submission to the Legislative Research
17 Commission in accordance with KRS Chapter 13A. Such a rule, administrative regulation, or order
18 shall provide that it will remain in force no longer than 120 days from the date of filing. If the
19 commission desires to make such a rule, administrative regulation, or order permanent, it shall
20 proceed as required by KRS Chapter 13A.

21 (13) The commission may adopt emergency rules, administrative regulations, or orders
22 other than those of general, or statewide, effect without notice and hearing upon a finding of
23 necessity to prevent waste, irreparable injury, or other cause. Any such rule, administrative

1 regulation, or order shall provide that it will remain in force no longer than forty-five (45) days
2 from its effective date. Immediately upon entering such a rule, administrative regulation, or order,
3 the commission shall call a hearing on the subject matter thereof, and such hearing shall be held
4 prior to the expiration of the rule, administrative regulation, or order.

5 (14) All interested persons [~~parties~~] shall have the right to be heard at all hearings and to
6 present witnesses and other evidence whether or not represented by legal counsel or technical
7 assistance. The commission may require any protest made to be reduced to writing and filed.

8 (15) In any proceeding before the commission subpoenas may be issued requiring the
9 attendance of witnesses and the production of books, records, maps, charts, diagrams, and other
10 pertinent documents material to the matters lawfully before the commission at the designated place
11 of hearing.

12 (16) Hearings shall be opened with the reading of the notice or notices. The request for
13 hearing, the notice or notices thereof, and proof of the due publication of the notice or notices of
14 the hearing shall be made a part of the record of the hearing.

15 (17) All witnesses shall be required to testify under oath, administered by a member of the
16 commission, to tell the truth, the whole truth, and nothing but the truth, and all witnesses shall be
17 subject, to direct and cross-examination by any member of the commission or by any [~~interested~~]
18 party or its legal [~~by his~~] representative.

19 (18) In all noncontested matters or in contested matters where those parties who appear in
20 person at the hearing agree thereto, sworn affidavits may be received in evidence. The commission
21 reserves the right to reject any and all such affidavits and to require the affiant to appear in person.

22 (19) The materiality, relevancy, and competency of any testimony or other evidence shall
23 be subject to challenge by any party to the hearing or by any member of the commission. When so

1 interposed, such objections shall be acted upon by the chairman or by the acting chairman, his
2 ruling thereon being subject to change by a majority vote of the commission members then sitting.

3 (20) All parties [~~persons~~] presenting exhibits shall file a total of eight (8) copies with the
4 reporter. All suggested forms of orders shall be presented in quintuplicate. These requirements may
5 be waived by the commission.

6 (21) The commission shall from time to time by order entered on its minutes appoint a
7 competent [~~shorthand~~] reporter. All hearings shall be recorded by a reporter appointed by the
8 commission and sworn faithfully to discharge his duties in accordance with law and the direction
9 of the commission. The reporter shall transcribe hearings only upon order of the commission.
10 When such an order has been entered, transcripts shall be available for inspection at the office of
11 the commission in Frankfort [~~Lexington~~], Kentucky and transcripts shall be available for purchase
12 by [~~interested~~] parties from the reporter at rates prescribed for transcripts of evidence in circuit
13 court proceedings in Kentucky, whether ordered transcribed by the commission or not.

14 [~~(22) Regular monthly meetings shall be held by the commission on the first Friday of each~~
15 ~~month. Where circumstances permit, the commission, after sounding the docket, shall first call up~~
16 ~~and dispose of all noncontested matters and motions for continuance.]~~

17 Section 3. Permitting and Spacing of Wildcat Wells. (1) The 10,000 feet from a horizontal
18 wildcat well shall be measured as 10,000 feet from any point along the lateral portion of the
19 wellbore that is located in the productive formation. [~~"Wildcat well" means either a deep well~~
20 ~~drilled with the intent of discovering and producing hydrocarbons from a formation or formations~~
21 ~~not previously productive of oil or gas from a well within 25,000 feet of its location, or a well~~
22 ~~drilled under such proven geological conditions that, even though located less than 25,000 feet~~
23 ~~from the nearest deep well previously productive of oil or gas, will not, if completed successfully,~~

1 ~~produce from a previously productive pool.]~~ Proof supporting permitting of a well located less than
2 10,000 ~~[25,000]~~ feet from the nearest deep well previously productive of oil or gas should be
3 submitted to the director with the permit application. The ~~[; the]~~ director may, however, require
4 additional proof. If a deep well encounters a formation or pool as to which it is not a wildcat well,
5 it may not be produced unless it is otherwise in compliance with the permit requirements and
6 spacing regulations for other wells in that formation or pool. The director may, in his discretion,
7 grant permission to test previously producing formations encountered in the drilling of a wildcat
8 well and may fix such conditions as, in his judgment, will protect the formation or formations
9 tested and the rights of the operator of any well or wells producing therefrom. If the director grants
10 permission for such testing, he shall inform the other members of the commission in writing of his
11 action. If an operator files an application for a wildcat well, pursuant to this section, which does
12 not meet the spacing provisions of this section, the director shall notify the commission. The
13 commission may hear the new application if it finds, from the new application, that conditions
14 may warrant an exception to this section.

15 (2) Within ninety (90) days following the completion of testing by surface production test
16 of a wildcat well shown to be capable of production of oil or gas, or within ninety (90) days of
17 completion as a producible well, whichever occurs first, the operator thereof shall file with the
18 commission a plat showing a proposed unit for the well conforming to the rules provided in
19 Section 4(1) of this administrative regulation.

20 ~~[(3) No additional permits will be issued for the pool until a proposed unit plat is filed, and~~
21 ~~when the plat is filed for a wildcat well or any subsequent wells, no permits shall be issued which~~
22 ~~will violate the integrity of the proposed unit or the spacing regulations established by Section 4(2)~~
23 ~~to (4) of this administrative regulation.]~~

1 Section 4. Drilling and Spacing of Vertical Deep Oil and Gas Wells. (1) If a permit is
2 requested for a vertical deep gas well other than a wildcat well or a well drilled on a unit previously
3 formed by the commission, the application shall include a plat showing a proposed unit comprising
4 a square with sides of 3,500 feet if the well is to be drilled to a depth less than 7,000 feet and with
5 sides of 5,000 feet if the well is to be drilled to a depth of 7,000 feet or more. If the permit is for a
6 vertical deep oil well, the proposed unit plat shall comprise a square with sides of 1,750 feet if the
7 well is to be drilled to a depth of less than 7,000 feet and 2,500 feet if the well is to be drilled to a
8 depth of 7,000 feet or more. The first proposed unit for a pool shall be delineated so that the line
9 forming one (1) side of the square is a base line running from south to north parallel to the
10 Kentucky Coordinate System. All other north-south lines for that proposed unit and any additional
11 units for the same pool shall be drawn parallel to the base line.

12 (2) Except as provided in subsections (4) and (5) of this section no vertical deep gas well
13 drilled to a depth less than 7,000 feet shall be located within 1,072 feet of the boundary of the
14 proposed unit, and no vertical deep gas well drilled to a depth of 7,000 feet or more shall be drilled
15 within 1,532 feet of the boundary of the proposed unit.

16 (3) Except as provided in subsections (4) and (5) of this section no deep oil well drilled to a
17 depth less than 7,000 feet shall be located within 536 feet of the boundary of the proposed unit, and
18 no deep oil well drilled to a depth of 7,000 feet or more shall be drilled within 766 feet of the
19 boundary of the proposed unit.

20 (4)(a) Upon receiving evidence showing a necessity therefor, the director may in his
21 discretion grant permits with the following limitation on well location:

22 1. A vertical deep oil well at a depth less than 7,000 feet may be located no closer than 438
23 feet to the boundary of the proposed unit.

1 2. A vertical deep oil well at a depth of 7,000 feet or more may be located no closer than
2 625 feet to the boundary of the proposed unit.

3 3. A vertical deep gas well at a depth of less than 7,000 feet may be located no closer than
4 875 feet to the boundary of the proposed unit.

5 4. A vertical deep gas well at a depth of 7,000 feet or more may be located no closer than
6 1,250 feet to the boundary of the proposed unit.

7 (b) The director shall not grant a permit under the provisions of subsection (4)(a) of this
8 section except in the presence of evidence which reasonably substantiates that the proposed
9 location is justified by either topographical or geological conditions. Upon granting such a permit,
10 the director shall inform the other members of the commission of his action in writing.

11 (c) Prior to the time a certificate of compliance is granted and a well located in accordance
12 with subsection (4)(a) of this section is produced other than for the purpose of testing, the director
13 shall determine whether a hearing is necessary for the purpose of taking any special action that
14 may be required to offset any advantage resulting from the location of the well according to the
15 permit and thus protecting correlative rights of others with interests in the pool. If it is determined
16 that special action is necessary, the director shall call a hearing of the commission.

17 (5)(a) [~~Exception~~] Locations varying from the limitations provided in subsections (2) to (4)
18 of this section may be granted if the commission determines, after notice and hearing, and the facts
19 clearly support the determination, that a proposed unit or a previously formed unit is partly outside
20 the pool, or, for some other reason, a well located in accordance with the statewide rules could not
21 reasonably be expected to be productive or topographical conditions are such as to make the
22 drilling at such a location unduly burdensome. An application for an exception location shall be
23 accompanied by a plat drawn to the scale of not smaller than 1:12,000 accurately showing to scale

1 the proposed location of the well according to the Carter Coordinate System and all other deep
2 wells within two (2) locations of the proposed location. The application shall be verified by some
3 person acquainted with the facts.

4 (b) When an exception location is sought on the ground of topographical conditions, it must
5 be shown that the commission can effectively offset any advantage to the applicant accruing from
6 such variation.

7 (c) Whenever an exception location is granted, the commission shall take such concurrent
8 action as may be required to offset any advantage to the applicant and thus to protect the
9 correlative rights of others with interests in the pool. If the proposed unit or already formed unit is
10 of less acreage than that prescribed by the applicable spacing rule for a regular unit, whether
11 proposed or formed according to special field orders for the pool in question, such special unit shall
12 be allowed to produce only in the proportion that the acreage content of such special unit bears to
13 the acreage content of a regular unit.

14 (6) No portion of a proposed unit, or unit formed by order of the commission upon which a
15 well is located shall be attributed, in whole or in part, to any other drilling or producible well in the
16 same pool.

17 (7)(a) Unless authorization to intentionally deviate and directionally drill a well is granted
18 by the commission, every well shall be drilled in such a manner that at any measured depth the
19 actual or apparent location of the well bore shall be within a circle whose center is the surface
20 location and whose radius is equal to the measured depth multiplied by a factor 0.087156. The
21 actual or apparent resultant deviation of the well bore from the vertical shall not be in excess of
22 five (5) degrees at any measured depth. In the event a directional survey indicates that the well
23 bore is outside the above circle at any measured depth, the deviation must be corrected so that

1 drilling will be restored to the specified limit. Upon completion of a survey showing or in the
2 presence of knowledge giving rise to a reasonable belief that a well may be deviated beyond the
3 above prescribed tolerance, the operator shall inform the director. If [~~After~~] an operator has
4 commenced drilling a well and desires to change the bottom hole location by directionally
5 controlling and intentionally deflecting the well from the vertical, whether more or less than five
6 (5) degrees, unless done to straighten the hole or to sidetrack junk in the hole or because of other
7 mechanical difficulties, he shall first make application for an amended location showing by
8 attached plat the amended projected bottom hole objective and secure an amended permit to drill
9 before commencing such operations. The amended bottom hole location or objective shall comply
10 with all minimum distances from unit lines as prescribed by all statewide orders or applicable field
11 orders.

12 (b) In the event a well is to be drilled at a distance from a unit line where such distance is
13 less than the apparent resultant lateral deviation, as determined by multiplying the proposed total
14 depth of the well by the factor 0.087156, a permit to drill will be issued with the understanding that
15 the operator will be required to furnish the commission with inclination or directional survey data
16 as proof that the well will be completed in compliance with the provisions of this administrative
17 regulation [~~order~~] before a certificate of compliance is issued. An inclination survey shall be made
18 on all wells drilled with the first shot point at a depth not greater than that of the surface casing seat
19 and succeeding shot points not more than 1,000 feet apart. Inclination surveys conforming to these
20 requirements may be made either during the normal course of drilling or after the well has reached
21 total depth. Such survey data shall be certified by the operator's representative or drilling contractor
22 and shall indicate the resultant lateral deviation as the sum of the calculated lateral displacement
23 determined between each inclination survey point, assuming that all such displacement occurs in

1 the direction of the nearest unit line. If a directional survey determining the bottom of the hole is
2 filed with the commission upon completion of the well, it shall not be necessary to furnish the
3 inclination survey data.

4 (c) The commission may, at its discretion, require an operator to conduct inclination or
5 directional surveys under conditions other than those above specified.

6 (d) An applicant for a hearing to issue special field orders for a new pool or otherwise to
7 establish a drilling unit, or any interested party, may request that the commission pool the
8 interests of the owners and the royalty owners in any unit or units established as a result of the
9 hearing. A request to pool separately owned tracts concurrently with the establishment of a unit
10 or units must be submitted with the application for the hearing, or sufficiently in advance to
11 include notice of the request in the notices of hearing. When necessary, the commission may on
12 its own motion include the pooling of separately owned tracts in the notice of a hearing to
13 establish a unit or units. If separately owned tracts are not pooled as a result of the hearing to
14 establish a unit or units, any interested party may request pooling at any subsequent time;
15 provided, however, that if the owners and royalty owners have not agreed to pool their interests
16 within 120 days of the issuance of a certificate of compliance, the operator of the well shall apply
17 for a hearing to issue a pooling order.

18 (8) No additional permits for a deep vertical well will be issued for the pool until a
19 proposed unit plat is filed, and when the plat is filed for a wildcat well or any subsequent wells,
20 no additional permits for a deep vertical well shall be issued which will violate the integrity of
21 the proposed unit or the spacing regulations established by Section 4 of this administrative
22 regulation.

1 Section 5. Horizontal Unitization and Pooling for Deep Well Reservoirs. (1) Under the
2 procedures contained in this Section 5, the commission is authorized to unitize a productive deep
3 well reservoir for the drilling of deep horizontal wells for the purposes of achieving a greater
4 ultimate recovery of oil and gas from such reservoir, preventing waste and protecting the
5 correlative rights of the owners of oil and gas in the Unit.

6 (2) If the application to permit a single deep horizontal well has been submitted or well
7 permits have been submitted for multiple horizontal wells to be drilled from a single well pad,
8 the proposed operator of those wells may simultaneously or thereafter apply to create a unit for
9 the coordinated drilling and operation of such well or wells and the allocation of costs and
10 production from such well. An application to create such a unit, shall include all information
11 required by KRS 353.652 and applicable regulations and a plat of the proposed unit. For a single
12 deep horizontal well, the plat shall also include the surface location of the proposed well, the
13 directional path of the lateral portion of the wellbore, and the point of entry into any proposed
14 producing formation. For multiple deep horizontal wells to be drilled from a single well pad, the
15 plat shall show the plan of development for the unit which shall include the surface location of
16 each well, the directional path of the lateral portion of the wellbore, and the point of entry into
17 any proposed producing formation. The plan of development must be fair, reasonable and
18 equitable and shall meet all requirements of this Section 5 and KRS 353.651 and 353.652.

19 (3) If the director determines the permit requirements for the wells included in the
20 proposed deep horizontal well unit have been met, the director shall notify the commission
21 within five (5) working days of the pending application, and the commission will set a hearing
22 date for the commission to review and consider the requested unit. Such hearing shall be held
23 within a reasonable period of time, but not more than thirty (30) days from the date the director

1 has notified the commission of the pending application. The director will promptly forward to
2 the commission a complete copy of the applications for the deep horizontal well permits and unit
3 designation and all documents and information filed therewith. If, upon reviewing the
4 application for the unit, the commission determines that it does not have sufficient data to make
5 the findings required under KRS 353.652, it may request additional information from the
6 applicant prior to the hearing. If additional information is requested by the commission, the
7 commission will promptly so notify the operator, and the additional information may be filed
8 with the commission prior to the hearing or it may be presented to the commission at the hearing.
9 Upon the request of the operator, and the extent the commission is legally authorized to do so,
10 the commission shall keep confidential for a period of one (1) year following the date the deep
11 horizontal well is completed, any geological or technical information provided in support of a
12 proposed unit.

13 (4) The commission shall consider the complete application for the proposed deep
14 horizontal well unit based on information and testimony presented by the operator at the hearing
15 that such unit is necessary to prevent waste and to protect correlative rights and that it will result
16 in the increased recovery of substantially more oil and gas from the reservoir than would
17 otherwise be recovered based upon, but not necessarily limited to, the following factors:

18 (a) Geological features existing with the proposed unit delineated by the geologically
19 defined limits of the producing reservoir;

20 (b) Unit size, determined by estimating the likely drainage area for the proposed deep
21 horizontal well(s), considering the well depth, the reservoir pressure, and other geophysical and
22 petrophysical characteristics of the particular formation;

23 (c) The proposed location or orientation of the proposed deep horizontal well;

1 (d) The length of the laterals of the proposed deep horizontal well;

2 (e) The proposed use of multilateral deep horizontal wells, if applicable;

3 (f) The anticipated principal fluid and anticipated total volume to be used in the well
4 treatment;

5 (g) Any combination thereof.

6 (5) After notice and hearing, the commission shall determine if:

7 (a) The proposed pooling and/or unitization of the reservoir is reasonably calculated to
8 increase the ultimate recovery of oil and gas from the reservoir through the use of horizontal well
9 technology;

10 (b) The use of horizontal well technology to drill the proposed deep horizontal wells in
11 the reservoir is feasible, will prevent waste, will protect correlative rights and will with
12 reasonable probability result in the increased recovery of substantially more oil and gas from the
13 reservoir within the unit than would otherwise be recovered; and

14 (c) The unitization and the use of horizontal well technology to drill the proposed deep
15 horizontal wells is for the common good and will result in the general advantage of the royalty
16 owners within the unit. Upon making these findings, the commission shall enter an order
17 approving the creation of the proposed drilling and production unit and providing for the pooled
18 or unitized operation of the deep well reservoir described in the order, all upon terms and
19 conditions as may be shown by the evidence to be fair, reasonable, equitable and which are
20 necessary or proper to protect and safeguard the respective rights and obligations of the working
21 interest owners and the royalty owners.

22 (6) The order of the commission creating the unit shall:

23 (a) Approve the size and shape of the unit;

1 (b) Approve and adopt the plan of development for the unit, with a copy thereof attached
2 to the order:

3 (c) Designate the unit operator; and

4 (d) Provide that the unit shall automatically terminate upon the expiration of all the well
5 permits for the proposed deep horizontal wells within the approved unit; and

6 (e) Provide that, within ninety (90) days of the expiration of the permits for the proposed
7 deep horizontal wells remaining undrilled in the approved plan of development, the designated
8 unit operator must apply for reformation of the drilling unit to conform the unit size and shape to
9 the actual development that occurred.

10 (7) From and after the effective date of the order of the commission approving the unit,
11 the interest of each royalty owner and overriding royalty interest owner in the unit shall be
12 defined as the percentage of interest owned by such royalty owner or overriding royalty interest
13 owner in each separate tract, multiplied by the proportion that the acreage in each separately
14 owned tract bears to the entire acreage of the unit. The order shall provide for the right of the
15 designated operator of the unit to drill through separately owned tracts that have been pooled
16 voluntarily or by order of the commission within the unit as necessary in order to efficiently
17 develop the pooled or unitized production.

18 (8) The costs incurred in connection with and the production and proceeds from the
19 wells in the unit shall be allocated to each separate tract in the unit and shall be borne or shared
20 by the working interest owners in each separate tract based upon and determined by the interest
21 of each working interest owner in the tract. For the purpose of this section, any owner or owners
22 of oil and gas rights in and under an unleased tract of land within the unit, shall be regarded as a

1 royalty interest owner to the extent of the Prevailing Royalty in and to the rights and a working
2 interest owner to the extent of the remaining interests therein.

3 Section 6. Certificate of Compliance. Prior to producing oil or gas from a deep
4 well, other than test production for a period not in excess of sixty (60) days, the operator thereof
5 shall apply for and obtain a certificate of compliance from the Director. The application for the
6 certificate of compliance must be verified, and shall provide information, including an "as-built"
7 plat of the well(s) in the unit, adequate to satisfy the Director that the permitted deep well as
8 proposed in the unit application and Plan of Development, if applicable, were completed as set
9 forth therein or in accordance with the final reformation of the drilling unit approved by the
10 commission. The Director shall issue the Certificate of Compliance or notify the operator of a
11 decision not to issue the Certificate of Compliance within fifteen (15) days of receipt of an
12 application.

13 ~~[Certificate of Compliance. (1) Prior to production from a deep well, other than test~~
14 ~~production for a period not in excess of fifteen (15) days, the operator thereof shall apply for and~~
15 ~~obtain a certificate of compliance from the director. The application, which must be verified, shall~~
16 ~~disclose information adequate to satisfy the director that:~~

17 ~~(a) All working interests in the drilling unit or proposed unit are identically owned, or have~~
18 ~~been pooled by voluntary agreement or order of the commission, or that the well may be produced~~
19 ~~without violating the correlative rights of any owner in the unit; and~~

20 ~~(b) The operator in the location, drilling, and completion of the well has complied with the~~
21 ~~conservation laws of the Commonwealth and the rules and administrative regulations established~~
22 ~~by the Director of the Division of Oil and Gas and the commission applicable thereto.~~

1 ~~(2) A certificate of compliance for a well for which a unit has not been established may be~~
2 ~~conditioned by the director by limiting its duration to a period of not more than 180 days unless a~~
3 ~~unit has been established and separately owned tracts have been pooled voluntarily or by order of~~
4 ~~the commission.]~~

5 Section 7 [6]. Application for Special Field Orders for Wells. (1) When a new pool is
6 penetrated and a well is proven by surface production test to be capable of producing oil or gas in
7 paying quantities, the operator thereof shall, within 120 days after the test is completed or after the
8 well is completed as a producible well, whichever occurs first, or within sixty (60) days of the
9 completion of a confirmation well in the pool, whether drilled by him or another operator, apply
10 for a hearing to issue special field orders governing the spacing of wells and establishment of units
11 in the pool.

12 (2) An application for special field orders shall contain a plat showing all wells in the pool
13 affected and the unit or units proposed for the pool.

14 (3) If upon testing a discovery well an operator believes that the confirmation well should
15 not or cannot reasonably be located in accordance with the statewide spacing rules, he shall
16 proceed by applying for a hearing to obtain an exception location.

17 ~~[Section 7. Pooling of Interests in Units Established by Order of the Commission. (1) An~~
18 ~~applicant for a hearing to issue special field orders for a new pool or otherwise to establish a~~
19 ~~drilling unit, or any interested party, may request that the commission pool the interests of the~~
20 ~~owners and the royalty owners in any unit or units established as a result of the hearing. A request~~
21 ~~to pool separately owned tracts concurrently with the establishment of a unit or units must be~~
22 ~~submitted with the application for the hearing, or sufficiently in advance to include notice of the~~
23 ~~request in the notices of hearing. When in its judgment it is necessary, the commission may on its~~

1 ~~own motion include the pooling of separately owned tracts in the notice of a hearing to establish a~~
2 ~~unit or units.~~

3 ~~(2) If separately owned tracts are not pooled as a result of the hearing to establish a unit or~~
4 ~~units, any interested party may request pooling at any subsequent time; provided, however, that if~~
5 ~~the owners and royalty owners have not agreed to pool their interests within 120 days of the~~
6 ~~issuance of a certificate of compliance, the operator of the well shall apply for a hearing to issue a~~
7 ~~pooling order.]~~

8 Section 8. Reformation of Drilling Units. (1) Drilling units approved [~~formed~~] by the
9 commission may be reformed upon notice and hearing as required by KRS 353.651, to exclude
10 previously included acreage or to include new acreage, or both.

11 (2) A request for a hearing to reform drilling units must specify that there is new geological
12 or geophysical data or there was a change in the proposed drilling of well(s) in the approved unit
13 and Plan of Development which will form a basis for the requested reformation and generally
14 describe the source and nature of the data. Units will not be reformed in the absence of such data.
15 Generally, "new data" must be data not in existence at the time of the hearing resulting in the
16 formation of the units proposed for reformation. Reinterpretation of data existing at the time of the
17 prior hearing will not serve as a basis for reformation.

18 Section 9. Testing of Water Sources near Deep Wells Employing High-Volume Horizontal
19 Fracturing. At least twenty (20) days prior to commencement of the high-volume horizontal
20 fracturing treatment on a horizontal deep well, an owner or operator shall conduct baseline water
21 testing from a groundwater source used for domestic, agricultural, or industrial purposes within
22 one-thousand (1,000) feet of a deep horizontal wellhead pursuant to Section 6(1) of SB 186 2015
23 GA.

1 (1) The owner or operator shall complete an Analysis of Groundwater Source within
2 1,000 ft of Deep High-Volume Horizontal Fracturing Treatment, Form ED-XX, identifying the
3 following:

4 (a) Well operator;

5 (b) Well Name and Number; Division of Oil & Gas permit number;

6 (c) Water source to include domestic water well, ponds, springs, and streams;

7 (d) Water source owner and permanent address;

8 (e) Distance water source from wellhead; and

9 (f) Dates of Initial baseline and subsequent (after fracturing treatment and well
10 completion) water analysis.


11 (2) Water well quality testing to establish baseline parameters shall be completed and
12 submitted to the Division of Oil and Gas thirty (30) days prior to hydraulic fracturing pursuant to
13 Section 6(2) of SB 186 2015 GA:

14 Section 10. Incorporation by Reference. (1) " Analysis of Groundwater Source within
15 1,000 ft of Deep High-Volume Horizontal Fracturing Treatment", Form ED-40, April 2015, is
16 incorporated by reference.

17 (2) This material may be inspected, copied, or obtained, subject to applicable copyright
18 law, at the Kentucky Division of Oil and Gas, 1025 Capital Center Drive, Frankfort, Kentucky
19 40602-2244, Monday through Friday, 8 a.m. to 4:30 p.m.

805 KAR 1:100 approved for filing.
Pages (1-24)

4/2/15
Date



Leonard K. Peters, Secretary
Energy and Environment Cabinet

PUBLIC HEARING AND PUBLIC COMMENT PERIOD: A public hearing on this administrative regulation shall be held on May 26, 2015 at 10:00 A.M. (Eastern Time) at Conference Room D-16 of the Department for Natural Resources at #2 Hudson Hollow, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify this agency in writing by May 19, 2015, five workdays prior to the hearing, of their intent to attend. If no notification of intent to attend the hearing is received by that date, the hearing may be cancelled. This hearing is open to the public. Any person who wishes to be heard will be given an opportunity to comment on the proposed administrative regulation. A transcript of the public hearing will not be made unless a written request for a transcript is made. If you do not wish to be heard at the public hearing, you may submit written comments on the proposed administrative regulation. Written comments shall be accepted until June 1, 2015. Send written notification of intent to attend the public hearing or written comments on the proposed administrative regulation to the contact person.

CONTACT PERSON: Michael Mullins, Regulation Coordinator, #2 Hudson Hollow, Frankfort, Kentucky 40601, phone (502) 564-6940, fax (502) 564-5698, email Michael.Mullins@ky.gov.

REGULATORY IMPACT ANALYSIS
AND TIERING STATEMENT

Administrative Regulation No.: 805 KAR 1:100
Contact Person: Michael Mullins, Regulation Coordinator

(1) Provide a brief summary of:

(a) What this administrative regulation does: This administrative regulation provides information necessary for owners and operators to comply with requirements related to drilling deep vertical and deep horizontal wells in the Commonwealth. The administrative regulation also provides information on the functions of the Kentucky Oil and Gas Conservation Commission.

(b) The necessity of this administrative regulation: This administrative regulation is necessary to provide information related to drilling deep wells in the Commonwealth. The administrative regulation is also necessary to provide information to owners and operators on the operations and involvement of the Kentucky Oil and Gas Conservation Commission.

(c) How this administrative regulation conforms to the content of the authorizing statutes: KRS 353.565 requires the Kentucky Oil and Gas Conservation Commission to administer and enforce the provisions of KRS 353.651 and 353.652 by regulating the spacing of deep well drilling, drilling units and pooling of interests. This administrative regulation complies with those requirements.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: KRS 353.565 requires the Kentucky Oil and Gas Conservation Commission to administer and enforce the provisions of KRS 353.651 and 353.652 by regulating the spacing of deep well drilling, drilling units and pooling of interests. This administrative regulation provides the necessary details for drilling a deep well in the commonwealth as well as the commission's role in pooling and spacing of those deep wells.

(2) If this is an amendment to an existing administrative regulation, provide a brief summary of:

(a) How the amendment will change this existing administrative regulation: This amendment provides information on horizontal unitization and pooling for deep well reservoirs. The amendment also includes definitional amendments that are the result of the passage of SB 186.

(b) The necessity of the amendment to this administrative regulation: This amendment is necessary to provide the necessary detail for drilling horizontal deep wells in the Commonwealth and the commission's involvement in the pooling and unitization of those wells.

(c) How the amendment conforms to the content of the authorizing statutes: KRS 353.565 requires the Kentucky Oil and Gas Conservation Commission to administer and enforce the provisions of KRS 353.651 and 353.652 by regulating the spacing of deep well drilling, drilling units and pooling of interests. This administrative regulation includes horizontal deep wells.

(d) How the amendment will assist in the effective administration of the statutes: KRS 353.565 requires the Kentucky Oil and Gas Conservation Commission to administer and enforce the provisions of KRS 353.651 and 353.652 by regulating the spacing of deep well drilling, drilling units and pooling of interests. This amendment provides the necessary information authorized by the statutory amendments related to horizontal deep well drilling.

(3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation: This administrative regulation will impact approximately 1,000 oil and gas operators within the Commonwealth. It will also have an impact to the members of the Kentucky Oil and Gas conservation Commission. The commission consists of 5 members.

(4) Provide an analysis of how the entities identified in question (3) will be impacted by either the implementation of this administrative regulation, if new, or by the change, if it is an amendment, including:

(a) List the actions that each of the regulated entities identified in question (3) will have to take to comply with this administrative regulation or amendment: The entities listed above will be required to meet requirements of this administrative regulation related to horizontal deep wells.

(b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3): The costs associated with this proposal are difficult to predict as they will depend on the depth at which the well is drilled.

(c) As a result of compliance, what benefits will accrue to the entities identified in question (3): Owners or operators that intend to drill a deep well will be able to do so horizontally.

(5) Provide an estimate of how much it will cost the administrative body to implement this administrative regulation:

(a) Initially: These amendments will not increase the costs of the agency to implement.

(b) On a continuing basis: These amendments will not increase the costs of the agency on a continuing basis.

(6) What is the source of the funding to be used for the implementation and enforcement of this administrative regulation: A combination of general funds and restricted funds will be used.

(7) Provide an assessment of whether an increase in fees or funding will be necessary to implement this administrative regulation, if new, or by the change if it is an amendment: There will not be a need to increase fees or funding related to the proposed amendments.

(8) State whether or not this administrative regulation established any fees or directly or indirectly increased any fees: The amendments to this administrative regulation do not increase or establish any fees.

(9) TIERING: Is tiering applied? (Explain why or why not) No. All entities that drill a horizontal deep well will be treated in the same manner.

FISCAL NOTE ON STATE OR LOCAL GOVERNMENT

Admin. Regulation No. 805 KAR 1:100

Contact Person: Michael Mullins, Regulation Coordinator

1. What units, parts or divisions of state or local government (including cities, counties, fire departments, or school districts) will be impacted by this administrative regulation? The Division of Oil and Gas and the Kentucky Oil and Gas Conservation Commission.

2. Identify each state or federal statute or federal regulation that requires or authorizes the action taken by the administrative regulation. KRS 353.565.

3. Estimate the effect of this administrative regulation on the expenditures and revenues of a state or local government agency (including cities, counties, fire departments, or school districts) for the first full year the administrative regulation is to be in effect.

(a) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for the first year? This new administrative regulation will not generate any new revenue for the state or local government.

(b) How much revenue will this administrative regulation generate for the state or local government (including cities, counties, fire departments, or school districts) for subsequent years? This new administrative regulation will not generate revenue in subsequent years.

(c) How much will it cost to administer this program for the first year? There will not be a cost increase associated with the amendments to this administrative regulation.

(d) How much will it cost to administer this program for subsequent years? Future costs would remain essentially unchanged related to this amendment.

Note: If specific dollar estimates cannot be determined, provide a brief narrative to explain the fiscal impact of the administrative regulation.

Revenues (+/-): NA

Expenditures (+/-): NA

Other Explanation: NA