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REGULATIONS COMPILER

ENERGY AND ENVIRONMENT CABINET

Department for Natural Resources

Division of Oil and Gas

(Amendment)

805 KAR 1:140. Directional and horizontal wells.

RELATES TO: KRS 349.015, 349.035, 349.040(3), 349.075, 349.120, 349.155, 353.050, 353.060, 353.180, 353.510, 353.520, 353.561 – 353.564, 353.590, 353.5901, 353.592, 353.610, 353.651, 353.652, 353.6601 – 353.6606, 353.730, 353.737, 353.991, Chapter 424

STATUTORY AUTHORITY: KRS 349.115, 353.540, 353.550

NECESSITY, FUNCTION, AND CONFORMITY: KRS 353.540 authorizes the department to promulgate administrative regulations to administer KRS 353.500 to 353.720. KRS 353.550 authorizes the department to regulate the drilling and casing of all wells and filing of all downhole surveys. KRS 349.110 authorizes the department to exercise supervision over the drilling, casing, plugging, and filling of all coalbed methane wells. This administrative regulation establishes the requirements for permitting directional and horizontal wells for the purpose of oil, [~~or~~] gas, or coalbed methane extraction.

Section 1. [~~Definitions. (1)"Blow-out preventer" or "BOP" means a device installed on the surface casing, which is the first and largest diameter casing installed in a well with the primary use to make the bore hole stand up and to protect a fresh water zone layer of strata capable of producing or receiving fluids, or installed on the intermediate casing, which is one (1) or more strings of pipes installed in a well in addition to the surface casing in which each string is smaller in diameter than~~

~~the previous. The device is used to prevent the escape of pressure either in the annulus, which is the space between two (2) strings of casing or between a string of casing and the bore hole wall, between casing and drill pipe, or in the open hole without drill pipe, and that is used during drilling operations.~~

~~(2) "Casing" is defined by KRS 353.010(3).~~

~~(3) "Deep well" is defined by KRS 353.510(16).~~

~~(4) "Directional survey" is defined by KRS 353.010(8).~~

~~(5) "Intersection length" means the horizontal distance between the point at which the well penetrates the top of the intended formation and the end point within that formation.~~

~~(6) "True vertical depth" means the depth of the well from any point in the well being measured to the surface of the ground above the point being measured.~~

~~Section 2.~~] Information Submittal. (1) Prior to drilling a directional or horizontal well, the operator shall submit:

(a) 1. A completed Application for Permit, Form OG-1, incorporated by reference in 805 KAR 1:010 for oil or gas well; and

2. [~~An Application for Permit, ED-1, for a permit to drill the well, with~~] A cover letter from the operator making a request for drilling the horizontal or directional well;

(b) Three (3) copies of a location plat satisfying the requirements of 805 KAR 1:030 (plan view), in addition to:

1. The surface location and proposed target formation with their respective Carter Coordinates;

2. The proposed path of the wellbore [~~course of the well~~]; and

3. The identification of the intersection length of the proposed well and the proposed producing formation. To avoid any conflicts with the spacing requirements, a dashed line shall be drawn around the intersection length in feet with regard to the spacing requirements in:

a. KRS 353.610 for an oil or gas well;

b. KRS 349.075 for a coal bed methane well; or[~~, for deep wells,~~]

c. 805 KAR 1:100 and KRS 353.651 and 353.652 for deep wells [~~This distance shall be clearly shown in feet~~];

(c) A bond as required in KRS 353.590(7) for oil or gas wells or KRS 349.120 for coalbed methane wells; and

(d) An application fee pursuant to the requirements in 805 KAR 1:010 [~~of $300~~].

(2)(a) In addition to the plan view required in this section, the operator shall submit three (3) copies of a plat that shows a vertical cross-section view of the area to be drilled by the well.

(b) This cross-section shall be prepared from the proposed "predrill hole" directional survey compiled by the contractor responsible for the directional drilling of the proposed wellbore [~~control mechanism and certified as required by 805 KAR 1:030, Sections 2 and 7(1)(k)~~].

(c) The cross-section shall include the area from the well site to the target made through the proposed course of the well.

(d) The surface shall be located as zero in reference to the depth and the lateral distance from the well site and true vertical depths shall be shown for:

1. The kick-off point or selected depth at which the deviation is started;

2. The known coal seams to be intersected;

3. The producing interval;

4. The proposed producing formation; and

5. The proposed target.

(3) Upon permit issuance, the operator shall provide verbal or written notice to the department field inspector at least forty-eight (48) hours in advance of the commencement of drilling operations.

(4) Once the well has been drilled and completed, the following shall be submitted within thirty (30) days from the date of completion:

(a) Three (3) copies of an amended plan view of the well location plat required in subsection (1)(b)1. through 3. of this section, with the actual course drilled, the kick-off point, and the actual target superimposed on the proposed well location plat. A correction in the target Carter Coordinates, if necessary, shall then be issued by the department;

(b) Three (3) copies of the side or cross-sectional view plat required in subsection (2)(d)1 through 5 of this section [~~of this section~~] shall be amended for the actual path of the wellbore [~~well~~], showing the actual formation, coal seams, target formation, and kick-off point; and

(c) Copies of all directional surveys certified by the operator and the contractor responsible for the directional survey.

1. This survey shall be submitted for the entire well bore, and the operator shall be able to identify the path or depth of the well bore at any given time during and after the drilling of the directional or horizontal well.

2. The survey points shall be made at a maximum of 200 foot [~~feet~~] intervals or at any intervals more frequent.

(5) The operator shall satisfy spacing requirements for offset mineral boundary lines and between wells for the actual drilled path of the wellbore and its end point and the intersection of the wellbore and the producing formations in accordance with:

(a) KRS 353.610 for oil or gas wells;

(b) KRS 349.075 for coalbed methane wells; or

(c) [~~or, for deep wells,~~] 805 KAR 1:100 and KRS 353.651 and 353.652 for deep wells [~~of offset mineral boundary lines and between wells for the actual drilled course of the well and its end point and the intersection of the well bore and the producing formations~~].

(6) A coal operator or owner affected by the drilling of a directional or a horizontal well shall be provided a copy of the predrill plat and cross-section plat established in subsections (1)(b) and (2)(b) of this section [~~of this section~~] as required by KRS 353.050 and 353.060 for oil and gas wells or KRS 349.015 for coalbed methane wells. Within ten (10) days after the well is drilled, the operator shall submit to the coal operator or owner the revised plats and deviation survey log required in subsection (4) of this section.

(7) The requirements for a deep directional or horizontal well shall satisfy those requirements established in 805 KAR 1:100 and KRS 353.651 and 353.652 regarding the application process and spacing units. Prior to the deep directional or horizontal well being drilled, a hearing shall be held pursuant to KRS Chapter 13B and 805 KAR 1:100 before the Kentucky Oil and Gas Conservation Commission.

Section 3. If an application for a directional or horizontal permit is submitted to the department, the operator shall prepare a detailed drilling and casing plan on Casing and Cementing Plan, Form OG-7 [~~ED-7~~], for the review by and the approval or denial of the department. The items requested in 805 KAR 1:130, Section 3(1), (2), and (3) shall be submitted with this plan.

Section 4. The operator shall install a blow-out preventer with a minimum [~~blow-out prevention device capable of withstanding a~~] working pressure of 1,500 psi and a test pressure of

3,000 psi or a minimum working pressure greater than the maximum anticipated surface pressure, whichever is greater.

(1) A description of this device and its installation shall be included with the drilling and casing plan required in Section 3 of this administrative regulation.

(2) This BOP equipment shall be tested at intervals necessary to maintain its ability to operate at rated capacity. The results of these tests shall be kept at the drill site and made available to department personnel at their request.

Section 5. The requirements of 805 KAR 1:130, Sections 5, 6, and 7 shall also apply to this administrative regulation.

Section 6. An operator in noncompliance with the requirements of this administrative regulation shall be subject to penalties pursuant to KRS 353.991 for oil and gas wells or KRS 349.155 for coalbed methane wells.

Section 7. Incorporation by Reference. (1) [~~The following material is incorporated by reference:~~

~~(a) "Application for Permit", ED 1, June 2004; and~~

~~(b)~~] "Casing and Cementing Plan", OG-7, June 2019 [~~ED 7, March 2015~~] is incorporated by reference.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Division of Oil and Gas [~~Conservation~~], 300 Sower Boulevard, Frankfort, Kentucky 40601, Monday through Friday, 8 a.m. to 4:30 p.m.

805 KAR 1:140 approved for filing.
Pages (1-6)

7/10/2019
Date

Charles G. Snavely, Secretary
Energy and Environment Cabinet

PUBLIC HEARING AND PUBLIC COMMENT PERIOD: A public hearing on this administrative regulation shall be held on August 22, 2019 at 5:00 P.M. (Eastern Time) in Training Room C of the Energy and Environment Cabinet at 300 Sower Blvd, Frankfort, Kentucky. Individuals interested in being heard at this hearing shall notify this agency 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 through August 31, 2019. 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, 300 Sower Blvd, Frankfort, Kentucky 40601, phone: (502) 782-6720, fax: (502) 564-4245, email: michael.mullins@ky.gov.

REGULATORY IMPACT ANALYSIS AND TIERING STATEMENT

Administrative Regulation No.: 805 KAR 1:140
Contact Person: Michael Mullins

Contact number: (502) 782-6720
Email: michael.mullins@ky.gov

(1) Provide a brief summary of:

(a) What this administrative regulation does: This administrative regulation establishes the requirements for permitting directional and horizontal wells for the purpose of oil or gas extraction.

(b) The necessity of this administrative regulation: This administrative regulation is necessary to establish requirements for permitting directional and horizontal wells for the purpose of oil or gas extraction.

(c) How this administrative regulation conforms to the content of the authorizing statutes: KRS 353.540 authorizes the department to promulgate administrative regulations to administer KRS 353.500 to 353.720. This administrative regulation conforms to the authorizing statutes by establishing requirements for permitting directional and horizontal wells for the purpose of oil or gas extraction.

(d) How this administrative regulation currently assists or will assist in the effective administration of the statutes: This administrative regulation assists in the effective administration of the statutes by providing requirements for permitting directional and horizontal wells for the purpose of oil or gas extraction.

(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 will incorporate information related to permitting directional and horizontal wells for the purpose of coalbed methane extraction. This information was previously in 805 KAR 9:070.

(b) The necessity of the amendment to this administrative regulation: This amendment is necessary to consolidate two administrative regulations into one administrative regulation related to permitting directional and horizontal wells for the purpose of oil, gas, or coalbed methane extraction.

(c) How the amendment conforms to the content of the authorizing statutes: The amendment consolidates permitting information for directional and horizontal wells from 805 KAR Chapter 9 into this administrative regulation.

(d) How the amendment will assist in the effective administration of statutes: These amendments will assist in the effective administration of the statutes by consolidating two administrative regulations related to permitting directional and horizontal wells.

(3) List the type and number of individuals, businesses, organizations, or state and local governments affected by this administrative regulation. There are approximately 1,060 active oil and gas operators in the commonwealth

(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 regulated entities identified in question (3) will meet the same requirements related to directional and horizontal wells. However, the information as it relates to coalbed methane drilling will now be in this administrative regulation instead of 805 KAR 9:070.

(b) In complying with this administrative regulation or amendment, how much will it cost each of the entities identified in question (3): There will be no additional costs related to these amendments.

(c) As a result of compliance, what benefits will accrue to the entities identified in question (3): As a result of compliance, entities will be able to find all information related to directional and horizontal wells in one administrative regulation.

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

(a) Initially: The division will not incur any additional costs for the implementation of this administrative regulation.

(b) On a continuing basis: The division will not incur any additional costs for the implementation of this administrative regulation.

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

(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. No increase in fees or funding is necessary to implement this amendment.

(8) State whether or not this administrative regulation establishes any fees or directly or indirectly increases any fees. This administrative regulation does not establish any fees, nor does it directly or indirectly increase any fees.

(9) TIERING: Is tiering applied? (Explain why tiering was or was not used.)
No, tiering was not used. The provisions in this administrative regulation will apply equally to all oil and gas operators.

FISCAL NOTE ON STATE AND LOCAL GOVERNMENT

Administrative Regulation No.: 805 KAR 1:140
Contact Person: Michael Mullins

Contact number: (502) 782-6720
Email: michael.mullins@ky.gov

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?
This administrative regulation applies almost entirely to the Division of Oil and Gas.

2. Identify each state or federal statute or federal regulation that requires or authorizes action taken by the administrative regulation. KRS 349.115, 353.540, and 353.670.

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 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? The proposed administrative regulation will not generate revenue in the first year.

(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? The proposed administrative regulation will not generate revenue in subsequent years.

(c) How much will it cost to administer this program for the first year? The cabinet's current operating budget will be used to administer this program for the first year.

(d) How much will it cost to administer this program for subsequent years? The cabinet's operating budget will be used to administer this program for subsequent years.

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

Revenues (+/-):	There is no known effect on current revenues.
Expenditures (+/-):	There is no known effect on current expenditures.
Other Explanation:	There is no further explanation.

SUMMARY OF MATERIAL INCORPORATED BY REFERENCE
805 KAR 1:140

This administrative regulation incorporates the following documents:

I. Casing and Cementing Plan, Form OG-7, (June 2019) This form is submitted by the owner or operator of a well to the division and contains the operator's plan for casing and cementing the well. This is a new form and consists of 1 page.