

## **OHIO**

### **I. Administration**

1. Agency regulating oil and gas exploration/production: [Department of Natural Resources, Division of Oil & Gas Resources Management](#), 2045 Morse Road, Building F, Columbus, OH 43229-6693. Phone: (614) 265-6922. Ohio's laws are found in [Ohio Revised Code \(O.R.C.\) 1509](#) and [Ohio Administrative Code \(O.A.C.\) 1501:9](#).
2. Contact for regulatory updates: Richard Simmers.
3. Docketing procedure: Upon the filing of an appeal of an administrative Chief's Order, the Oil & Gas Commission fixes the time and place at which the hearing on the appeal will be held. An appeal also may be filed through the courts.
  - a. Orders: The Chief may issue orders for the administration and enforcement of the Oil and Gas Laws. Any person adversely affected by an order may appeal the order to the Oil and Gas Commission within 30 days of the receipt of the order and notice of the appeal must be filed with the Chief within three (3) days after the appeal is filed with the Commission. An appeal may also be filed through the courts.
  - b. Notice: The Commission must give at least 10 days written notice by mail of the time set for the appeal.
4. Agency regulating air emissions: [Ohio Environmental Protection Agency](#).
5. Agency regulating water quality: [ODNR/Division of Oil & Gas Resources Management](#); [Ohio Environmental Protection Agency](#).

### **II. License**

1. License required: No.
2. Conditions of license: N/A

### **III. Bond/Surety**

1. Purpose of surety: To ensure compliance with violations, restoration, and plugging requirements.
2. Plugging and restoration: Each oil and gas well owner must restore the land surface within the area disturbed in siting, drilling, completing and producing the well. See [Section 1509.072 O.R.C.](#) Upon abandoning a

well, the owner must plug the well in the manner prescribed in regulations of the Division of Oil and Gas Resources Management. See [Chapter 1501:9-11 O.A.C.](#)

3. Compliance bond required: Any owner must execute and file with the Division of Oil & Gas Resources Management a surety bond before being issued a permit or before operating or producing from a well.
4. Types of surety accepted: A surety bond issued by a company authorized to transact a fidelity and surety business in Ohio; cash (or an official bank or certified check); or a certificate of deposit issued by any bank organized or transacting business in Ohio; or an irrevocable letter of credit issued from a bank organized or transacting business in Ohio; or at the Chief's discretion, a sworn financial statement.
5. Conditions of bond: A surety bond must name Ohio as the obligee. A surety bond is conditioned on compliance with the restoration requirements of [Section 1509.072 O.R.C.](#), plugging requirements of [Section 1509.12 O.R.C.](#), permit provisions of [Section 1509.13 O.R.C.](#), and all rules and orders of the Chief of the Division of Oil & Gas Resources Management relating to those requirements.
  - a. Amount per well: \$5,000 for a single well.
  - b. Amount of blanket bond: \$15,000 for two or more wells.

#### **IV. Land Leasing Information**

1. Leasing method: For any property owned or controlled by the State, state statutes require the Oil and Gas Leasing Commission to consider nominations of state property on whether to allow leasing of a formation within a parcel of state property.
2. Notice method: Under development.
3. Minimum bidding \$ (per acre): Under development.
4. Qualification of the bidder: Under development.
5. State statutes: [1509.70](#) – [1509.78 O.R.C.](#)
6. Maximum acres: Under development.
7. Royalty rates: Under development.
8. Agency in control of leasing: [House Bill 133](#) of the 129<sup>th</sup> General Assembly (effective September 30, 2011) established the Oil & Gas Leasing Commission for state lands that may be nominated for oil and gas

exploration and development. The State does not regulate leasing of private properties.

## **V. Setbacks**

1. What rules/regulations/policies does your jurisdiction have in regard to well setbacks from private residences and/or other habitable structures for use by humans or animals?
  - a. Urbanized areas- the surface location of a new well or a tank battery cannot be within 150 feet of an occupied dwelling unless the landowner consents in writing to waive the distance to not less than 100 feet.
  - b. Urbanized areas- the surface location of a well cannot be within 200 feet of an occupied dwelling that is located on land that has become part of the drilling unit pursuant to a mandatory pooling order issued under section [1509.27 O.R.C.](#), unless the landowner consents to waive the distance to not less than 100 feet.
  - c. Non-urbanized areas- the surface location of a well cannot be within 100 feet of an occupied private dwelling or of a public building that may be used as a place of assembly, education, entertainment, lodging, trade, manufacture, repair, storage, or occupancy by the public ([Section 1509.021 O.R.C.](#)).
2. Are there other sources of information on this matter that you could identify? Written consent of an owner of land requirements are found in O.R.C. 1509.021. See also [1501: 9-1-05 O.A.C for setback requirements.](#)

## **VI. Spacing**

1. Spacing requirements: [Rule 1501: 9-1-04 O.A.C.](#) No distinction is made between oil wells or gas wells. The general spacing regulations are as follows:
  - a. Density:
    - a) Wells drilled to a pool from zero to 1,000 feet in depth require a subject tract or drilling unit containing not less than one acre.
    - b) Wells drilled to a pool from 1,000 to 2,000 feet in depth require a subject tract or drilling unit containing not less than 10 acres.
    - c) Wells drilled to a pool from 2,000 to 4,000 feet require a subject tract or drilling unit containing not less than 20 acres.
    - d) Wells drilled to a pool from 4,000 feet or deeper require a subject tract or drilling unit containing not less than 40 acres.
  - b. Lineal: (note these correlate with the above density categories)

- a) Well 0 to 1,000 feet in depth: cannot be located less than 200 feet from any well drilling to, producing from, or capable of producing from the same pool. Well must be located not less than 100 feet from any boundary of the subject tract or drilling unit.
- b) Well 1,000 to 2,000 feet in depth: cannot be located less than 460 feet from any well drilling to, producing from, or capable of producing from the same pool. Well must be not less than 230 feet from any boundary of the subject tract or drilling unit.
- c) Well 2,000 to 4,000 feet in depth: cannot be located less than 600 feet from any well drilling to, producing from, or capable of producing from this same pool. Well must be located not less than 300 feet from any boundary of the subject tract or drilling unit.
- d) Well 4,000 feet or deeper: cannot be located less than 1,000 feet from any well drilling to, producing from, or capable of producing from the same pool. Well must be located not less than 500 feet from any boundary of the subject tract or drilling unit.

Note: the surface location of a new well cannot be within 150 of the property line of a parcel of land located in an urbanized area that has become part of a drilling unit pursuant to a mandatory pooling order under O.R.C. 1509.27 unless the owner of the land waives the distance to not less than 100 feet. If a permit applicant cannot identify the owner of the land or if the owner of the land is unresponsive to attempts by the applicant, the applicant may submit an affidavit attesting to such facts and the Chief must reduce the distance to not less than 75 feet. See O.R.C. 1509.021.

## 2. Exceptions:

- a. Offset wells: The Chief must grant an exception if an applicant can demonstrate that such exception will protect correlative rights and/or promote conservation by permitting oil and gas to be produced which could not otherwise be produced.
- b. Discovery well: For purpose of orderly development of a pool until ultimate spacing is determined, the Chief may order the temporary

minimum well spacing in vicinity of discovery wells. [Rule 1501: 9-1-04 \(D\) O.A.C.](#) requires approval of the Technical Advisory Council.

## **VII. Pooling**

1. Authority to establish voluntary: Yes. Section [1509.26 O.R.C.](#)
2. Authority to establish compulsory: Yes. Section [1509.27 O.R.C.](#)

## **VIII. Unitization**

1. Compulsory unitization of all or part of a pool or common source of supply: Yes, [Section 1509.28 O.R.C.](#)
2. Minimum percentage of voluntary agreement before approval of compulsory unitization:
  - a. Working interest: 65% of owners of the land overlying the pool
  - b. Royalty interest and fee owners: 65% of owners of the land overlying the pool

## **IX. Drilling Permit**

1. Permits required for:
  - a. Drilling a producing or service well: Yes. Permit required for drilling, reopen, deepen, convert, and plug-back.
  - b. Seismic drilling: No.
  - c. Recompletion: No for recompletion of an existing well in the same formation.
  - d. Plugging and abandoning: Yes.
2. Permit fee:
  - a. Drilling:
    - i. \$500 in townships with a population less than 10,000.
    - ii. \$750 in townships with a population of 10,000 or more but is less than 15,000.

- iii. \$10,000 in townships with a population of 15,000 or more and in all municipal corporations.
- iv. For a mandatory pooling application under R.C. 1509.27 an additional \$5,000 is required.

Note: For expedited permit seven day processing an additional \$250 fee is required. [Section 1509.06 O.R.C.](#)

- b. Seismic drilling: No.
  - c. Recompletion: \$250 for reopen, deepen, and plug-back. No fee for recompletion in same zone.
  - d. Plugging and abandoning: \$250 for a well that produced; none for dry hole. (Expedited permit for one to five day processing extra \$500 fee required).
3. Require filing report of work performed: Yes.
4. Sundry notices used: N/A

#### **X. Vertical Deviation**

1. Regulation requirement:
- a. When is a directional survey necessary: For all directional or wells with horizontal or near horizontal wellbores. A wellbore may not be deviated without a prior approval.
  - b. Filing of survey required: Yes.
  - c. Format of filing: Within 30 days of drilling completion, a copy of the borehole deviation survey, a revised surveyor's plat showing the actual wellbore and a \$50 fee must be filed.

#### **XI. Casing and Tubing**

1. Minimum amount required:
- a. Surface casing: Yes. Casing must be set at least 50 feet below the base of the deepest USDW.
  - b. Production casing: No. Open hole and cased hole completions allowed.
2. Minimum amount of cement required:

- a. Surface casing: Yes. Cement must be circulated from casing shoe to surface or to the bottom of the cellar.
  - b. Production casing: Yes. Cement must be circulated at least 500 feet above the seat in an open hole vertical completion or 500 feet above the uppermost perforation. For horizontal wells, cement must be circulated at least 1000 feet above the kickoff point. If a flow zone is present, including a hydrogen sulfide-bearing zone, the casing must be cemented in a manner that effectively isolates the strata with at least 500 feet of cement above the zone.
  - c. Setting time: The total cement must reach a comprehensive strength of at least 500 hundred pounds per square inch before drilling out the plug or initiating a pressure test.
3. Tubing requirements:
- a. Oil wells: No.
  - b. Gas wells: No.

## **XII. Hydraulic Fracturing**

1. Permitting:
  - a. Before drilling: No.
  - b. Before fracing: No.
  - c. How long before: N/A
2. Reporting requirements: The oil and gas inspector must be notified at least 24 hours prior to the commencement of the well completion.
  - a. Where reported: The owner must file a well completion report containing all electric logs, copies of the invoice, pumping rate and pressure charts for all stages, and disclose all chemical additives, except for those designated as trade secret, used to stimulate the well. Owners can submit chemical additive records to FracFocus or may submit a report to the Division on a form approved by the chief.
  - b. When reported: Within sixty days after the completion of drilling operations to the proposed total depth of the well.
3. Source water requirements: When applying for a permit for any well, the following must be provided on the permit application: source of ground and/or surface water used in the production operation, identification of the

watershed, estimated withdrawal rate, and total volume and if any of the water used is recycled.

4. Mechanical integrity:

- a. Cementing log required: The owner must submit a cement ticket for each cement job. The Division of Oil and Gas Resources Management requires cement bond logs and/or other tests if cement placement indicators indicate the cement job did not meet performance objectives.
- b. Pressure testing: Annular monitoring.
- c. Pressure monitoring: Rules require pressure testing of cemented casing strings prior to drill out, continued monitoring of annuli during stimulation, and life-of-the well annular pressure monitoring to prevent annular over-pressurization.
- d. Blowout preventer required: Yes, for exploratory wells, urban wells, horizontal wells, wells within 200 feet of an inhabited structure, and wells drilled to high pressure formations.

5. Disposal of flowback fluids:

- a. Retaining pits: No. The Division has authority to adopt rules for temporary waste storage in impoundments. Rules have not been promulgated; therefore, impoundments are not used.
- b. Tanks: Yes.
- c. Approved discharge to surface water: No.
- d. Underground injection: Yes.

6. Chemical disclosure requirement:

- a. Mandatory: Yes, including Safety Data Sheets for all materials used to complete the well. Safety Data Sheets are posted on the Division's website.
- b. Where disclosed: Posted on the Division's website and/or FracFocus.
- c. When disclosed (pre-fracing, post-fracing, both): Post-fracing.
- d. Time limit to disclose: Within sixty days after completion of the well to proposed total depth.

- e. Information required to be disclosed: The trade name and the total volume of all products, fluids, and substance, and the supplier of each product, fluid, or substance used to stimulate the well. Cement and its constituents and designated trade secret information is excluded.
- f. Trade secret protection: Yes.
- g. Required disclosure to health/emergency personnel: Yes, if request for diagnosis or treatment. But emergency personnel generally precluded from disclosing.

### **XIII. Underground Injection**

1. Agencies that control the underground injection of fluid by well class: [Division of Oil & Gas Resources Management](#) oversees Class II and III wells. The [Ohio Environmental Agency, Division of Drinking and Ground Waters](#) oversees Class I, IV and V wells.

### **XIV. Completion**

1. Completion report required: Yes, [Section 1509.10 O.R.C.](#)
  - a. Time limit: within 60 days after the completion of drilling operations to the proposed total depth. If a well is not completed within 60 days after the completion of drilling operations, the owner must file a supplemental well completion record within 60 days after the completion of the well.
  - b. Where submitted: [Division of Oil & Gas Resources Management](#).
2. Well logs required to be filed: Yes.
  - a. Time limit: Not later than 60 days after the completion of drilling operations to the proposed total depth.
  - b. Where submitted: [Division of Oil & Gas Resources Management](#).
  - c. Confidential time period: A well owner may retain the logs up to six months or additional time granted by the Chief in writing.
  - d. Available for public use: Yes.
  - e. Log catalog available: Yes, from the [Ohio Division of Geological Survey](#).
3. Multiple completion regulation: A well owner must submit a well completion report within 60 days that discloses all materials placed into a formation to refracture, restimulate, or newly complete a well.

- a. Approval obtained: Generally no, but if multiple formations are targeted for simultaneous completions, authorizations are required in the permit.
- 4. Commingling in well bore: No regulation but each case is considered on its own merits.
  - a. Approval obtained:

#### **XV. Oil Production**

- 1. Definition of an oil well: None.
- 2. Potential tests required: Reported with well completion.
  - a. Time interval: None.
  - b. Witness required: None.
- 3. Maximum gas-oil ratio: None.
  - a. Provision for limiting gas-oil ratio: None.
  - b. Exception to limiting gas-oil ratio: None.
- 4. Bottom-hole pressure test reports required: None.
  - a. Periodic bottom-hole pressure surveys: None.
- 5. Commingling oil in common facilities: Yes.
- 6. Measurement involving meters: No.
- 7. Production reports: Yes, required by [Section 1509.11 O.R.C.](#)
  - a. By lease: No.
  - b. By well: Yes.
  - c. Time limit: Annually for vertical wells and quarterly for horizontal shale wells.

#### **XVI. Gas Production**

- 1. Definition of a gas well: None.
- 2. Pressure base 14.73 psia @ 60 degrees F.
- 3. Initial potential tests: Yes, must be submitted with well completion report.

- a. Time interval: None.
- b. Witness required: No.
- 4. Bottom-hole pressure test reports required: No.
  - a. Periodical bottom-hole pressure surveys: No.
- 5. Commingling of gas in common facilities: Yes.
- 6. Measurement involving meters: Yes.
- 7. Production reports: Yes, required by [Section 1509.11 O.R.C.](#)
  - a. By lease: No.
  - b. By well: Yes.
  - d. Time limits: Annually for vertical wells and quarterly for horizontal shale wells.