# **MISSOURI**

#### I. Administration

- Agency regulating oil and gas exploration/production: <u>State Oil and Gas Council administered through the Geological Survey Program</u>, P. O. Box 250, Rolla, MO 65402. Phone: (573) 368-2143.
- 2. Contact for regulatory updates: State Geologist, P. O. Box 250, Rolla, MO 65402. Phone: (573) 368-2100.
- 3. Docketing procedure: Public hearing held at such time and place as may be prescribed by the Council
  - a. Emergency orders: By <u>Section 259.140 RSMo</u>. Council is authorized to issue an emergency order without hearing which shall be effective upon promulgation. Effective for no more than 15 days.
  - b. Notice: 10 days. State Oil and Gas Council. <u>Section 259.140</u> RSMo.
- Agency regulating air emissions: <u>Missouri Department of Natural Resources</u>, <u>Division of Environmental Quality</u>, <u>Air Pollution Control Program</u>, P.O. Box 176, Jefferson City, MO 65102, Phone: 1-800-361-4827.
- Agency regulating water quality: <u>Missouri Department of Natural</u> <u>Resources, Division of Environmental Quality, Water Protection Program,</u> P.O. Box 176, Jefferson City, MO 65102, Phone: 1-800-361-4827.

#### II. License

- 1. License required: Yes. Per 10 CSR 50-2.010, no person shall engage in oil or gas operations pursuant to Chapter 259, RSMo, and implementing regulations without first obtaining or renewing an operator license.
- 2. Conditions of license: Conditions and requirements appear in 10 CSR 50-2.010. Must renew annually and pay associated \$250 fee (\$50 for non-commercial gas operators) (10 CSR 50-1.050). If the state geologist determines that the applicant is in violation of any provision of Chapter 259, RSMo, or implementing regulations, the state geologist may deny the license. The state geologist may issue an order to suspend or revoke an operator license, per 10 CSR 50-2.010(4).

#### III. Bond/Surety

- 1. Purpose of surety: To ensure compliance with the provisions of Chapter 259, RSMo, and the rules of the council, specifically the proper plugging for abandonment of wells.
- 2. Plugging and restoration: Yes.
- 3. Compliance bond required: Yes.
- 4. Types of surety accepted: Surety Bond, Personal Bond, Letter of Credit.
- 5. Conditions of bond: Oil and Gas Well Bond Form. Bond is the obligation of the owner of producing well or wells or proposals to drill for oil or gas or for stratigraphic purposes. Oil and Gas Well Financial Assurance Instrument Certification. Financial Assurance Instrument is the monetary fund that financially secures the bond agreement.
  - a. Amount per well: <u>10 CSR 50-2.020</u>.

Depth (ft.)	<u>Amount</u>	
0- 500	\$1,100	
501-1,000	2,200	
1,001-2,000	3,300	
2,001 - 5,000	4,400	
5,001+	5,500 Plus \$2/ft. beyond 5,	001

b. Amount of blanket bond: 10 CSR 50-2.020.

of	Number	
		Open
Depth (ft.)	Amount	. Wells/Bond
0- 800	\$22,000	40
801-1,200	25,000	10

# IV. <u>Land Leasing Information</u>

NOTE - No regulations at this time.

- 1. Leasing method: Not required.
- 2. Notice method: Not required.
- 3. Minimum bidding \$ (per acre): Not required.
- 4. Qualification of the bidder: Not required.

5. State statutes: Not required.

6. Maximum acres: Not required.

7. Royalty rates: Not required.

8. Agency in control of leasing: Not required.

#### V. Setbacks

- 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? N/A
- 2. Are there other sources of information on this matter that you could identify? N/A

# VI. Spacing

- 1. Spacing requirements: Yes.
  - a. Density: 10 CSR 50-3.010

Oil (Primary production) – 10 acres; 2.5 acres for wells less than 1500 feet deep; may be exempted for oil pools as approved by State Geologist.

Gas (Primary production) – 40 acres; 10 acres for wells less than 1500 feet deep; may be excepted as approved by State Geologist.

10 CSR 50-3.020

Oil (Enhanced recovery project) – Number of wells and well spacing as approved by the state geologist upon application and plan submission by an operator.

b. Lineal: <u>10 CSR 50-3.010</u>

Oil well – 330 feet (or 165 feet for wells less than 1500 feet deep) from unit line, lease boundary or property line.

Gas well – 660 feet (or 330 feet for wells less than 1500 feet deep) from unit line, lease boundary or property line.

Noncommercial gas well – 165 from lease line.

2. Exceptions: Yes. 10 CSR 50-3.010.

- a. Basis: To protect against offset drainage from wells drilled prior to enactment of Chapter 259, RSMo., enhanced recovery projects per 10 CSR 50-3.020, and special project development (10 CSR 50-5.010).
- b. Approval: Upon application to the State Geologist who is administrator. 10 CSR 50-3.010.

# VII. Pooling

- 1. Authority to establish voluntary: <u>10 CSR 50-4.010</u>.
- 2. Authority to establish compulsory: <u>10 CSR 50-4.010</u>.

# VIII. Unitization

- 1. Compulsory unitization of all or part of a pool or common source of supply: Yes. <u>10 CSR 50-4.020</u>.
- 2. Minimum percentage of voluntary agreement before approval of compulsory unitization: Chapter 259.120 RSMo.
  - a. Working interest: 75%
  - b. Royalty interest: 75%

#### IX. <u>Drilling Permit</u>

- 1. Permits required for:
  - a. Drilling a producing or service well: Yes. 10 CSR 50-2.030.
  - b. Seismic drilling: Yes. 10 CSR 50-2.030.
  - c. Recompletion: Yes. 10 CSR 50-2.030.
  - d. Plugging and abandoning: A form (not a permit) is required. <u>10</u> CSR 50-2.060.
- 2. Permit fee:
  - a. Drilling: \$100. <u>10 CSR 50-1.050</u>.
  - b. Seismic drilling: \$100. <u>10 CSR 50-1.050</u>.
  - c. Recompletion: \$100. <u>10 CSR 50-1.050</u>.
  - d. Plugging and abandoning: \$50. 10 CSR 50-1.050.

- Require filing report of work performed: Yes. <u>10 CSR 50-2.050</u> and 10 CSR 50-2.060. <u>Well Completion or Recompletion Report and Well Log</u> and Well Plugging Report.
- 4. Sundry notices used: No.

# X. <u>Vertical Deviation</u>

- 1. Regulation requirement: 10 CSR 50-2.040.
  - a. When is a directional survey necessary: For horizontal wells, a directional survey must be submitted. 10 CSR 50-2.040(9)
  - b. Filing of survey required: Yes. <u>10 CSR 50-2.040 and 10 CSR 50-</u>2.050.
  - c. Format of filing: Must be submitted with a well completion or recompletion report.

# XI. Casing and Tubing

- 1. Minimum amount required: 10 CSR 50-2.040.
  - a. Surface casing: Yes.
  - b. Production casing: No.
- 2. Minimum amount of cement required: 10 CSR 50-2.040
  - a. Surface casing: Yes to surface.
  - b. Production casing: As necessary to protect all water, oil or gas bearing strata, etc.
  - c. Setting time: Yes. Minimum 8 hours and has reached a compressive strength of 300 lbs/in.
- 3. Tubing requirements: 10 CSR 50-2.040
  - a. Oil wells: All wells drilled shall be completed with tubing, packer, and a string(s) of casing. For wells drilled to producing strata at a depth of no greater than 1500 feet, an operator may set a single casing string with no tubing or packer, if the well is cemented from the bottom of the casing to the surface to seal off and protect any underground source of drinking water.
  - Gas wells: All wells drilled shall be completed with tubing, packer, and a string(s) of casing. For wells drilled to producing strata at a

depth of no greater than 1500 feet, an operator may set a single casing string with no tubing or packer, if the well is cemented from the bottom of the casing to the surface to seal off and protect any underground source of drinking water.

# XII. Hydraulic Fracturing

- 1. Permitting: No.
  - a. Before drilling: No.
  - b. Before fracing: No.
  - c. How long before: N/A
- 2. Reporting requirements: 10 CSR 50-2.055.
  - a. Where reported: Notification must be provided in writing to the state geologist regarding the nature of the project.
  - b. When reported: At least five business days prior to commencement.
- 3. Source water requirements: N/A
- 4. Mechanical integrity: No.
  - a. Cementing log required: No.
  - b. Pressure testing: No.
  - c. Pressure monitoring: No.
  - d. Blowout preventer required: No.
- 5. Disposal of flowback fluids: No.
  - a. Retaining pits: No.
  - b. Tanks: No.
  - c. Approved discharge to surface water: No.
  - d. Underground injection: No.
- 6. Chemical disclosure requirement: <u>10 CSR 50-2.055</u>.
  - a. Mandatory: Yes.

- b. Where disclosed: in writing to state geologist
- c. When disclosed (pre-fracing, post-fracing, both): post-fracing
- d. Time limit to disclose: within 30 calendar days after completion of project.
- e. Information required to be disclosed: Copies of treatment/frac tickets, including documentation of the materials injected.
- f. Trade secret protection: N/A
- g. Required disclosure to health/emergency personnel: No.

# XIII. Underground Injection

 Agencies that control the underground injection of fluid by well class: <u>Geological Survey Program</u>, P. O. Box 250, Rolla, MO 65402. Phone: (573) 368-2143.

# XIV. Completion

- 1. Completion report required: Yes, <u>10 CSR 50-2.050</u>.
  - a. Time limit: 120 calendar days after spud date.
  - b. Where submitted: State Geologist, P.O. Box 250, Rolla, MO 65402.
- 2. Well logs required to be filed: Yes, <u>10 CSR 50-2.050</u>.
  - a. Time limit: 120 calendar days
  - b. Where submitted: State Geologist, P.O. Box 250, Rolla, MO 65402.
  - c. Confidential time period: Yes, One year if requested. If requested, confidentiality may be extended for a second year.
  - d. Available for public use: Yes.
  - e. Log catalog available: No.
- Multiple completion regulation: 10 CSR 50-2.040.
  - a. Approval obtained: Yes.
- 4. Commingling in well bore: No.
  - a. Approval obtained: No.

# XV. Oil Production

- 1. Definition of an oil well: Any hole drilled in the earth for, or in connection with, the exploration, discovery, or recovery of crude petroleum oil and other hydrocarbons regardless of gravity which are produced at the wellhead in liquid form and the liquid hydrocarbons known as distillate or condensate recovered or extracted from gas other than gas produced in association with oil and commonly known as casinghead gas. The term oil also includes hydrocarbons that do not flow to a wellhead but are produced by other means, including those contained in oil-shale and oil-sand. Chapter 259.050(10) and Chapter 259.050(16).
- 2. Potential tests required: No.
  - a. Time interval: No.
  - b. Witness required: No.
- 3. Maximum gas-oil ratio: No.
  - a. Provision for limiting gas-oil ratio: Yes. Chapter 259.070(5)(1)(f) RSMo.
  - b. Exception to limiting gas-oil ratio: No.
- 4. Bottom-hole pressure test reports required: No.
  - a. Periodical bottom-hole pressure surveys: No.
- 5. Commingling oil in common facilities: No.
- 6. Measurement involving meters: Yes. Chapter 259.070(5)(1)(h), RSMo.
- 7. Production reports: 10 CSR 50-2.080.
  - a. By lease: Yes.
  - b. By well: Yes if requested.
  - c. Time limit: 45 calendar days.

#### XVI. Gas Production

- 1. Definition of a gas well: Any hole drilled in the earth for, or in connection with, the exploration, discovery, or recovery of all natural gas and all other fluid hydrocarbons, which are produced at the wellhead and not defined as oil. Chapter 259.050(5) and Chapter 259.050(16).
- 2. Pressure base Not Stated psia @ \_\_\_\_\_degrees F.

- 3. Initial potential tests: No.
  - a. Time interval: No.
  - 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: No.
- 6. Measurement involving meters: Chapter 259.070(5)(1)(h).
- 7. Production reports: 10 CSR 50-2.080.
  - a. By lease: Yes
  - b. By well: Yes, if requested
  - c. Time limits: 45 calendar days