## <u>ARKANSAS</u>

### Administration

- 1. Agency regulating oil and gas exploration/production: <u>Arkansas Oil and Gas Commission</u>, 301 Natural Resources Drive, Suite 102, Little Rock, AR 72205. Phone: (501) 683-5814.
- 2. Contact for regulatory updates: Shane Khoury, Deputy Director / General Counsel.
- 3. Docketing procedure: Applications for hearings are required to be filed no less than 20 days prior to the date of the hearing. Hearings are typically scheduled for the fourth Tuesday of each month. Filing fee is \$500.00 for all matters except for appeals of a Director's decision which is \$250.
  - a. Emergency orders: The Commission can issue an emergency order without notice of a hearing. Said order remains in force until the next regularly scheduled Commission hearing.
  - b. Notice: Ten Days. Applicant supplies names and addresses of interested parties. Applicant mails notice to interested parties and provides to the Commission an affidavit of notice and a proof of publication in a newspaper of general circulation in the county(ies) containing the subject property or units.
- 4. Agency regulating air emissions: <u>Arkansas Department of Environmental Quality.</u>
- 5. Agency regulating water quality: Arkansas Department of Environmental Quality.

#### License

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

### **Bond/Surety**

- 1. Purpose of surety: Plugging, well repair, and restoration of well site.
- 2. Plugging and restoration: Yes.
- 3. Compliance bond required: Not in addition to plugging and restoration bond.
- 4. Types of surety accepted: Surety bond, irrevocable letter of credit, certificate of deposit, cash.

- 5. Conditions of bond: (Not including Class II Disposal or Class V Brine Wells, which have higher amounts)
  - a. Amount per well: Minimum = \$3,000
  - b. Amount of blanket bond:

No. of Wells Minimum Sum 1-25 25,000.00 26-100 50,000.00 Over 100 100.000.00

# **Land Leasing Information**

- 1. Leasing method: Sealed bids.
- 2. Notice method: In a newspaper of general circulation in this state for no fewer than 3 consecutive days and in a newspaper of general circulation in the county in which the property is located for not less than 1 day, a notice that an application has been filed.
- 3. Minimum bidding \$ (per acre): No statutory or set minimum bid amount. State looks at each application on a case by case basis and takes recommendations from the State Oil and Gas Commission staff.
- 4. Qualification of the bidder: Any person, firm, company, corporation or association.
- 5. State statutes: §22-5-805, §22-5-806, and §22-5-808.
- 6. Maximum acres: 1,500 acres.
- 7. Royalty rates: Minimum of 1/8<sup>th</sup>. State looks at each application on a case by case basis and takes recommendations from the Oil and Gas Commission, and other state agencies.

Agency in control of leasing: Commissioner of State Lands Offices

109 State Capitol Little Rock, AR 72201

Main Number: 501-324-9222

### <u>Setbacks</u>

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? Well setbacks are contained in Arkansas Fire Prevention Code. Minimum distance is 100 feet; however, the setback distance increases dependent upon the types and uses of buildings.

2. Are there other sources of information on this matter that you could identify? None for wells. However, the AOGC does have setbacks regarding the placement of gas well produced fluids storage tanks and crude oil tank batteries. General rule is 100 feet from a habitable dwelling (an exception may be granted to allow the placement up to 100 feet from a habitable dwelling if the owner agrees in writing), and 300 feet from a school, hospital or other type of public use building.

## **Spacing**

### 1. Spacing requirements:

- a. Density: No minimum for oil or gas wells in uncontrolled production areas. In controlled production areas for oil, units are normally 10 to 160 acres with exceptions. In controlled production areas for natural gas, units are normally 640 acre governmental sections with exceptions.
- b. Lineal: Oil well setbacks are variable as specified by field rule. Conventional gas well setbacks are 1320 or 1180 feet, with exceptions, from the unit line based on specific field rule. Unconventional (horizontal shale wells) are 560 feet from the unit line, with exceptions. A minimum of 280' from a governmental division line, lease line or property line for oil or gas wildcat wells and wells drilled in fields not covered by field rules.

## 2. Exceptions: Yes.

- a. Basis: If a well drilled at a different location is likely to prevent waste or protect correlative rights of owners within the unit, or both.
- b. Approval: A public hearing held and ruling granted by the Commission. Administrative exceptional locations can also be granted, with a notice given to the parties having the right to drill in the unit being encroached, if no objections are filed within 15 days of publication of notice in certain circumstances.

### **Pooling**

- 1. Authority to establish voluntary: Yes.
- 2. Authority to establish compulsory: Yes, Act 536 of 1963. Ark. Code Ann § 15-72-303.

## **Unitization**

- 1. Compulsory unitization of all or part of a pool or common source of supply: Yes.
- 2. Minimum percentage of voluntary agreement before approval of compulsory unitization:

- a. Working interest: 75%.
- b. Royalty interest: 75% of royalty and overriding interests.

## **Drilling Permit**

- 1. Permits required for:
  - a. Drilling a producing or service well: Yes.
  - b. Seismic drilling: Yes.
  - c. Recompletion: No.
  - d. Plugging and abandoning: No.
- 2. Permit fee:
  - a. Drilling: \$300.
  - b. Seismic drilling: minimum \$250, maximum \$500.
  - c. Recompletion: None.
  - d. Plugging and abandoning: None.
- 3. Require filing report of work performed: Yes.
- 4. Sundry notices used: Yes. Available on webpage and sent to appropriate Regional Office.

### Vertical Deviation

- 1. Regulation requirement:
  - a. When is a directional survey necessary: When a wellbore is thought to have deviated in excess of 3 degrees from the vertical.
  - b. Filing of survey required: (a) in all cases where the operator has proposed to deliberately drill a directional well from an exceptional surface location and/or to an exceptional bottom hole location; (b) prior to a permit being issued, if an off-set operator requests a directional survey and agrees in writing to pay all costs and expenses of such survey and to assume liability for all risks associated with the survey and further posts a bond in sufficient sum as determined by the Commission as security against all costs and risks associated with the survey or, (c) at any time, by order of the Commission, if the Commission is first presented with substantial evidence that it is likely that the well was drilled other than at the location permitted or that the well has deviated in the direction of a unit boundary

to a bottom location which would necessitate an increased penalty upon the well's production allowable.

c. Format of filing: Paper filing.

### **Casing and Tubing**

- 1. Minimum amount required:
  - a. Surface casing: Yes.
  - b. Production casing: Yes.
- 2. Minimum amount of cement required:
  - a. Surface casing: Yes.
  - b. Production casing: Yes.
  - c. Setting time: Minimum 24 hours unless accelerators are used.
- 3. Tubing requirements:
  - a. Oil wells: Yes.
  - b. Gas wells: No.

## **Hydraulic Fracturing**

- 1. Permitting:
  - a. Before drilling: Notification required at time of issuance of permit to drill.
  - b. Before fracing: Yes.
  - c. How long before: Prior to commencement of hydraulic fracturing operation.
- 2. Reporting requirements:
  - a. Where reported: Appropriate AOGC Regional Office.
  - b. When reported: Within 30 days of the original completion, recompletion or workover of the well and prior to commencement of production.
- 3. Source water requirements: Yes.
- 4. Mechanical integrity:

- a. Cementing log required: If requested by the Director.
- b. Pressure testing: No.
- c. Pressure monitoring: Yes.
- d. Blowout preventer required: Yes.
- 5. Disposal of flowback fluids:
  - a. Retaining pits: Yes.
  - b. Tanks: Yes.
  - c. Approved discharge to surface water: No.
  - d. Underground injection: Yes.
- 6. Chemical disclosure requirement:
  - a. Mandatory: Yes.
  - b. Where disclosed: AOGC files and website.
  - c. When disclosed (both pre-fracing and post-fracing): Master list of companies performing hydraulic fracturing operations within Arkansas is disclosed. Post-fracturing report for specific well is also required.
  - d. Time limit to disclose: Master list of companies performing hydraulic fracturing operations within Arkansas is disclosed prior to use in Arkansas. Post-fracturing report for specific well is also required to be filed within 30 days of the completion of the well.
  - e. Information required to be disclosed: On a well specific basis, a list of all base fluids, a list of all additives (expressed as gallons per thousand gallons or pounds per thousand gallons, and as a total percentage of the entire hydraulic frac job), and a list of all chemical constituents and associated CAS numbers. Additionally, all base fluids, additives, and chemical constituents and CAS numbers are disclosed on master list of companies performing hydraulic fracturing operations.
  - f. Trade secret protection: Yes. If approved, the chemical family name may be submitted as opposed to the chemical constituent and associated CAS number.
  - g. Required disclosure to health/emergency personnel: Yes.

### **Underground Injection**

Agencies that control the underground injection of fluid by well class: Class II
and Class V brine related wells – Arkansas Oil and Gas Commission and
Arkansas Department of Environmental Quality work together. Oil and Gas
Commission handles the underground disposal and Department of Environmental
Quality handles surface disposal. Arkansas Department of Environmental Quality
controls the remaining types.

### Completion

- 1. Completion report required: Yes.
  - a. Time limit: Within 30 days of completion date and prior to commencement of production.
  - b. Where submitted: Appropriate Arkansas Oil and Gas Commission Regional Office.
- 2. Well logs required to be filed:
  - a. Time limit: Within 30 days of completion date and prior to commencement of production.
  - b. Where submitted: Appropriate Arkansas Oil and Gas Commission Regional Office.
  - c. Confidential time period: Yes, maximum of 90 days from completion date.
  - d. Available for public use: Yes.
  - e. Log catalog available: No.
- 3. Multiple completion regulation: Yes.
  - a. Approval obtained: Wells may be completed as a multiple completion if the Commission staff is assured that the zones are separated in the wellbore by approved methods.
- 4. Commingling in well bore: Yes.
  - a. Approval obtained: Gas wells commingling authorized in certain circumstances by Rule. Oil wells -A field-wide hearing is held to consider the feasibility of commingling marginal zones. If it appears feasible, the Commission staff is authorized to review and approve or disapprove application for commingling on an individual well basis.

### Oil Production

1. Definition of an oil well: Any well capable of producing oil in paying quantities not a gas well. An oil well is considered to be a well completed in a reservoir

containing liquid hydrocarbons at original reservoir conditions (pressure, temperature, etc.)

- 2. Potential tests required: Yes.
  - a. Time interval: At commencement of production.
  - b. Witness required: Initial tests are typically witnessed on high gas-oil ratio wells.
- 3. Maximum gas-oil ratio: Yes. The standard gas-oil ratio is 2000/1.
  - a. Provision for limiting gas-oil ratio: Yes. Wells are penalized if the GOR exceeds the 2000/1 GOR limit (or the limiting GOR as set out in a specific Field Rule Order). The allowable is:

Bbls/day = Bbls (Normal Oil Allowable) x 2000 (or limit in Field Rule Order).

Actual Producing GOR

- b. Exception to limiting gas-oil ratio: Yes. The Commission may approve a higher GOR limit for a pool after public hearing.
- 4. Bottom-hole pressure test reports required: The initial BHP is listed on the Completion Report.
  - a. Periodical bottom-hole pressure surveys: Only in pools that have volumetric formulas used in allowable computations.
- 5. Commingling oil in common facilities: Upon proof that production is produced from wells having common ownerships, unless specifically prohibited by Field Rule or Commission Order.
- 6. Measurement involving meters: Yes. Measurement of oil by meters must be approved by the Commission.
- 7. Production reports:
  - a. By lease: Yes. Purchaser reports uncontrolled production by lease on a monthly basis.
  - b. By well: Yes. Operator reports controlled production by well on a monthly basis with the exception of unitized pools.
  - c. Time limit: On or before the 15th of the next succeeding month.

### **Gas Production**

- 1. Definition of a gas well: (1) a well which produces natural gas only; (2) any well capable of producing gas in commercial quantities and also producing oil from the same common source of supply but not in commercial quantities; (3) any well classed as a gas well by the Arkansas Oil and Gas Commission for any reason; or (4) a well that contains no liquid hydrocarbons in the reservoir. A gas well is considered to be a well completed in a reservoir containing hydrocarbons in a gaseous state at original reservoir conditions.
- 2. Pressure base 14.65 psia @ 60 degrees F.
- 3. Initial potential tests: Yes.
  - a. Time interval: Within 10 days after a new well has commenced production.
  - b. Witness required: No.
- 4. Bottom-hole pressure test reports required: No, however, annual back pressure test required.
  - a. Periodical bottom-hole pressure surveys: No.
- 5. Commingling of gas in common facilities: Yes, with AOGC approval.
- 6. Measurement involving meters: Yes.
- 7. Production reports:
  - a. By lease: No.
  - b. By well: Yes.
  - c. Time limits: Within 45 days following month of production.