# **MARYLAND**

#### Administration

- Agency regulating oil and gas exploration/production: <u>Maryland Department of the Environment</u>, Land Management Administration, Minerals, Oil and Gas Division, 1800 Washington Blvd., Baltimore, MD 21230.
- 2. Contact for regulatory updates: Ed Larrimore, Mining Program Manager, Phone: (410) 537-3557. Email: Ed.Larrimore@Maryland.gov.
- 3. Docketing procedure: The Department may act either upon its own motion or the petition of any interested person and shall promptly fix a date for a hearing and cause notice of the hearing to be given. The public hearing shall be held at the time and place described by the Department. Any interested person is entitled to be heard by the Department. Section 14-114(a) and (d), Annotated Code of the Public General Laws of Maryland (PLM).
  - a. Emergency orders: The Department is authorized to issue an emergency order without notice or hearing. An emergency order may not remain effective for more than 15 days. <u>Section 14-114(b), PLM.</u>
  - b. Notice: Except for an emergency, a rule, regulation, order or amendment may not be made by the Department without a public hearing upon at least 10 days notice. The Department of the Environment is responsible to give notice. Section 14-114(a), PLM.
- 4. Agency regulating air emissions: <u>Air Quality Administration (Maryland Department Environment)</u>.
- 5. Agency regulating water quality: <u>Water Management Administration (Maryland Department of Environment)</u>.

#### License

- 1. License required: None.
- 2. Conditions of license: N/A

#### Bond/Surety

- 1. Purpose of surety: Site restoration.
- 2. Plugging and restoration: Included in the site restoration bond.
- 3. Compliance bond required: Yes.

- 4. Types of surety accepted: Surety bonds, Cash, Letters of Credit, or Certificates of Deposit.
- 5. Conditions of bond: A bond is required on the form obtained from the Department of the Environment with regard to drilling, plugging and abandoning wells drilled for oil and gas. Said bond will not be released until all of the permit holder's obligations under the laws have been fulfilled to the satisfaction of the Department. Section 14-111(a)(5),(d)(1), PLM, 26.19.01.06(c)(5) and 26.19.01.13 CMR.
  - a. Amount per well: No minimum.

\$100,000 maximum. . <u>Section 14-111(a)(5), PLM; 26.19.01.06(C)(5)(a)</u> CMR.

b. Amount of blanket bond: No minimum.

\$500,000 maximum. <u>Section 14-111(a)(5), PLM; 26.19.01.06(C)(5)(a)</u> CMR.

## Land Leasing Information

- 1. Leasing method: Statute was revised at Environment Article 15-1201 to include Maryland Dormant Minerals Interests Act. The creation of the Act was to make uniform the law governing dormant mineral interests among the states.
- 2. Notice method:
- 3. Minimum bidding \$ (per acre):
- 4. Qualification of the bidder:
- 5. State statutes:
- 6. Maximum acres:
- 7. Royalty rates:
- 8. Agency in control of leasing:

# 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? 1,000 ft. from occupied dwelling, school, church or well head protection area unless written permission from owners.

2. Are there other sources of information on this matter that you could identify? No, but regulations are currently under review.

#### **Spacing**

- 1. Spacing requirements: Yes.
  - a. Density: No proration units formed in Maryland for oil -- only voluntary units for gas.
  - b. Lineal: 2,000 ft. from existing gas well, 1,320 ft. from existing oil well, 1,000 ft. from property line, 1,000 ft. from any occupied house, school, church, public building or place of public meeting for both oil and gas wells, 26.19.01.09 (C,D,E,F & G) and 26.19.08.06, Code of Maryland Regulations (CMR) and Section 14-112(a),(b)(c), PLM. Drilling prohibited in the Chesapeake Bay or its tributaries 26.19.01.09(A).
- 2. Exceptions: Yes. <u>26.19.01.09</u> (C, D, E, F & G), CMR.
  - a. Basis: No permit will be issued to drill a well within 1,000 ft. of the boundary of a tract of land or the boundary of tracts of land included in a pooling agreement or within 1,000 ft. from any occupied dwelling house, school, church, public building or place of public meeting unless the permit holder has made a satisfactory written agreement with the oil and gas owner and lessee of such adjacent land or building. The Department may issue a permit to drill a well within 1,000 ft. of a boundary of a tract of land if it is impossible to locate a well 1,000 ft. or more from the boundaries of the tract.
  - b. Approval: Following notice and hearing by the Department.

## **Pooling**

- 1. Authority to establish voluntary: Yes. Section 14-113, PLM.
- 2. Authority to establish compulsory: No.

#### Unitization

- 1. Compulsory unitization of all or part of a pool or common source of supply: No.
- 2. Minimum percentage of voluntary agreement before approval of compulsory unitization:
  - a. Working interest: N/A
  - b. Royalty interest: N/A

# **Drilling Permit**

## 1. Permits required for:

- a. Drilling a producing or service well: Yes. Section 14-104, PLM, and 26.19.01.06(A), CMR. Conversion from exploration to production well requires permit modification, 26.19.01.09(K), CMR.
- b. Seismic drilling: Yes. Road access permit necessary from State Highway Administration if on state/federal roads. 26.19.01.03, CMR.
- c. Recompletion: Requires permit modification. 26.19.01.14(A)(1 & 2).
- d. Plugging and abandoning: No. Requires Departmental notification and affidavit of work performed, within Departmental guidelines, by operator. 26.19.01.12, CMR.
- 2. Permit fee: Authorized under <u>14-122</u> for authority. Regulations not yet developed to establish amount
  - a. Drilling:
  - b. Seismic drilling:
  - c. Recompletion:
  - d. Plugging and abandoning: No fee for filing completion report.
- 3. Require filing report of work performed: Yes. Completion report. <u>26.19.01.10(V)</u>, <u>CMR</u>.
- 4. Sundry notices used: None.

#### **Vertical Deviation**

- 1. Regulation requirement: Yes. No more than 3° from vertical, <u>26.19.01.11</u>, <u>CMR</u>.
  - a. When is a directional survey necessary: When correlative rights are in dispute, the Department may require directional and deviational surveys at the operators' expense, <u>26.19.01.11(D)</u>, <u>CMR</u>.
  - b. Filing of survey required: No.
  - c. Format of filing: Must state in the initial application. Otherwise limited to 3 degrees.

## Casing and Tubing

1. Minimum amount required:

- a. Surface casing: Yes. Surface casing to extend at least 100 ft. below the deepest known fresh water aquifer, or the deepest known workable coal seam, whichever is deeper. 26.19.01.10(O)(4), CMR.
- b. Production casing: Yes. The casing should be of a type and weight sufficient for the depth and formation pressures anticipated. 26.19.01.10(S).
- 2. Minimum amount of cement required:
  - a. Surface casing: Yes. Annular surface return. 26.19.01.10(P).
  - b. Production casing: Yes. <u>26.19.01.10(S)</u>.
  - c. Setting time: Yes. 12 hours. <u>26.19.01.10(P)(3) and 26.19.01.10(S)(4)</u>.
- 3. Tubing requirements:
  - a. Oil wells: No.
  - b. Gas wells: No.

# **Hydraulic Fracturing**

# Currently Under Review

- 1. Permitting:
  - a. Before drilling:
  - b. Before fracing:
  - c. How long before:
- 2. Reporting requirements:
  - a. Where reported:
  - b. When reported:
- 3. Source water requirements: Must be obtained from approved site. May require separate permit.
- 4. Mechanical integrity: Will be required.
  - a. Cementing log required:
  - b. Pressure testing:

- c. Pressure monitoring:
- d. Blowout preventer required:
- 5. Disposal of flowback fluids: Under review.
  - a. Retaining pits:
  - b. Tanks:
  - c. Approved discharge to surface water:
  - d. Underground injection:
- 6. Chemical disclosure requirement:
  - a. Mandatory:
  - b. Where disclosed:
  - c. When disclosed (pre-fracing, post-fracing, both):
  - d. Time limit to disclose:
  - e. Information required to be disclosed:
  - f. Trade secret protection:
  - g. Required disclosure to health/emergency personnel:

## **Underground Injection**

1. Agencies that control the underground injection of fluid by well class: Underground injection is not authorized.

## Completion

- 1. Completion report required: Yes. Section 14-111(a)(1), PLM and 26.19.01.10(V).
  - a. Time limit: Within 30 days after completion of the well.
  - b. Where submitted: Maryland Department of the Environment, Water Management Administration, Minerals, Oil & Gas Division, 2500 Broening Highway, Baltimore, MD 21224.
- 2. Well logs required to be filed: Yes. 26.19.01.10(V)(10), CMR.
  - a. Time limit: Within 30 days after completion of the well.

- b. Where submitted: Maryland Department of the Environment, Water Management Administration, Minerals, Oil & Gas Division, 2500 Broening Highway, Baltimore, MD 21224.
- c. Confidential time period: Yes. All information is held confidential until the operator releases such information.
- d. Available for public use: Yes, after operator releases confidential information.
- e. Log catalog available: Yes.
- 3. Multiple completion regulation: Yes.
  - a. Approval obtained: Requires permit modification. <u>26.19.01.14(A)(1)</u>, CMR.
- 4. Commingling in well bore: Yes.
  - a. Approval obtained: Requires permit modification. <u>26.19.01.14(A)(2)</u>, CMR.

## Oil Production

- 1. Definition of an oil well: Oil" means crude petroleum oil and other hydrocarbons regardless of gravity, which are produced at the wellhead in liquid form, except liquid hydrocarbons known as distillate or condensate recovered or extracted from gas. An oil well would be the drilled hole through which oil is produced. Section 14-102(f), PLM, and 26.19.01.01(B)(32), CMR.
- 2. Potential tests required: Yes. 26.19.01.10(V)(8), CMR.
  - a. Time interval: Within 30 days after completion of the well.
  - b. Witness required: No.
- 3. Maximum gas-oil ratio: No.
  - a. Provision for limiting gas-oil ratio: N/A
  - b. Exception to limiting gas-oil ratio: N/A
- 4. Bottom-hole pressure test reports required: Yes. Initially. <u>26.19.01.10(V)(8)</u>, CMR.
  - a. Periodical bottom-hole pressure surveys: No.
- 5. Commingling oil in common facilities: Yes.

- 6. Measurement involving meters: Yes. The operator must verify the accuracy of oil meters. 26.19.01.10(N), CMR
- 7. Production reports:
  - a. By lease: No.
  - b. By well: Yes. <u>26.19.01.10(Y)</u>, CMR.
  - c. Time limit: The operator must file a monthly production report quarterly to the Maryland Department of the Environment, Minerals, Oil & Gas Division.

#### **Gas Production**

- Definition of a gas well: "Gas" means all natural gas and other fluid hydrocarbons, not defined as oil, which are produced from a natural reservoir. A gas well would be the drilled hole through which gas is produced. <u>Section 14-102(e)</u>, PLM, and <u>26.19.01.01(B)(20)</u>, CMR.
- 2. Pressure base: None statewide. Garrett County is <u>14.73</u> psia @ <u>60</u> degrees F. Public Local Law of Garrett County, Sec. 27-2(j) 1971 Edition, as amended in 1978.
- 3. Initial potential tests: Yes. 26.19.01.10(V)(8), CMR
  - a. Time interval: 30 days after completion of the well.
  - b. Witness required: No
- 4. Bottom-hole pressure test reports required: Yes, initially. <u>26.19.01.10(V)(8)</u>, CMR.
  - a. Periodical bottom-hole pressure surveys: No.
- 5. Commingling of gas in common facilities: Yes.
- Measurement involving meters: Yes. <u>Section 14-119(a)</u>, <u>PLM</u>. A person who is
  the owner or operator of any gas well may not willfully take gas from the well
  unless the gas is metered by a standard metering system. Also <u>26.19.01.10(N)</u>,
  CMR.
- 7. Production reports:
  - a. By lease: No.
  - b. By well: Yes. <u>26.19.01.10(Y)</u>, CMR.

c. Time limits: The operator must file a monthly production report quarterly to the Maryland Department of the Environment, Minerals, Oil & Gas Division.