WEST VIRGINIA

Administration

1. Agency regulating oil and gas exploration/production:

West Virginia Oil and Gas Conservation Commission and Department of Environmental Protection, Office of Oil and Gas, both located at 601 57th Street, SE, Charleston, WV 25304. Phone: (304) 926-0450, Fax: (304) 926-0452.

- 2. Contact for regulatory updates: James Martin.
- 3. Docketing procedure: (a) Monthly meeting of Commission, (b) Hearing upon application not less than 20 days nor more than 45 days following receipt, time and location of hearing specified in notice; proposed order 30 days following hearing; opportunity to comment 15 days following proposed order; thereafter issue order as appropriate.
 - a. Emergency orders: Yes.
 - b. Notice: 10 days. Certified mail to well operators and pertinent coal operators, and regular mail to all parties requesting receipt of notice.
- 4. Agency regulating air emissions: <u>WV Department of Environmental Protection</u> Division of Air Quality.
- 5. Agency regulating water quality: <u>WV Department of Environmental Protection</u> <u>Division of Water and Waste Management</u>.

License

- 1. License required: N/A
- 2. Conditions of license: N/A

Bond/Surety

- 1. Purpose of surety: N/A
- 2. Plugging and restoration: N/A
- 3. Compliance bond required: Yes.
- 4. Types of surety accepted: N/A
- 5. Conditions of bond: Bond is for the life of the well through plugging and reclamation.

- a. Amount per well: \$5,000 and \$50,000 (wells under <u>W.Va. Code</u> § 22-6 and W.Va. Code § 22-21.)
- b. Amount of blanket bond: \$50,000 and \$250,000 (wells under <u>W.Va. Code</u> § 22-6A.)

Land Leasing Information

1. Leasing method: N/A

2. Notice method: N/A

3. Minimum bidding \$ (per acre): N/A

4. Qualification of the bidder: N/A

5. State statutes: N/A

6. Maximum acres: N/A

7. Royalty rates: N/A

8. Agency in control of leasing: WV Division of Natural Resources

Setbacks

1. What rules/regulations/policies does your jurisdiction have regarding well setbacks from private residences and/or other habitable structures for use by humans or animals? W.Va Code § 22-6-21 (conventional wells); no oil or gas well shall be drilled nearer than 200' from an existing water well or dwelling.

W.Va Code § 22-6A-12 (horizontal well act); wells may not be drilled within 250' of an existing water well or developed spring; center of well pads may not be located within 625' of an occupied dwelling structure or a building 2500 sq. ft. or larger used to house or shelter dairy cattle or poultry husbandry; wells may not be drilled within 100' from a perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within 300' of a naturally reproducing trout stream; no well pad may be located within 1000' of a surface or ground water intake of a public water supply.

2. Are there other sources of information on this matter that you could identify? No.

Spacing

1. Spacing requirements

General rule: deep wells; 3,000' from existing wells and permitted locations, producing from, or capable of producing from, the same formation and 400' from lease line; shallow wells; under certain circumstances, 1000' for wells less than 3000' deep and 1500' for wells greater than 3,000' deep, and for which an objection has been made by a coal entity. Coalbed methane wells; 1600' without consent from coal owner/operator between wells and 100' from lease line.

- a. Density: Maximum 640 acres for gas wells and 160 acres for oil wells in a unit.
- b. Lineal: Deep wells only 3,000' from wells producing from the same formation except by special field rules; none for shallow wells for gas or oil.
- 2. Exceptions: Yes
 - a. Basis: Economic, geological or topographic or reservoir necessity.
 - b. Approval: By application, hearing and order.

Pooling

- 1. Authority to establish voluntary: Yes.
- 2. Authority to establish compulsory: Yes, Oil and Gas Conservation Commission, Deep wells in primary production; all wells in enhanced recovery. CBM wells and the Coalbed Methane Review Board.

Unitization

- 1. Compulsory unitization of all or part of a pool or common source of supply: N/A
- 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.
 - b. Seismic drilling: No.
 - c. Recompletion: Yes.

- d. Plugging and abandoning: Yes.
- 2. Permit fee: (see below)
 - a. Drilling: \$400.00.
 - b. Seismic drilling: N/A
 - c. Recompletion: \$400.00.
 - d. Plugging and abandoning: \$0.00.

A well work fee for shallow well work except plugging.

\$400*

A fee for permit to construct a pit and/or dispose of well work wastes.

\$100

A well fee to go into the reclamation fund.

\$150

*For wells under <u>W.Va. Code § 22-6A</u> this fee is \$10,000 for the first well on the pad and \$5,000 for subsequent wells.

- 3. Require filing report of work performed: Yes.
- 4. Sundry notices used: N/A

Vertical Deviation

- 1. Regulation requirement: Yes.
 - a. When is a directional survey necessary: Deep wells. Additionally, asdrilled wellbore location information for horizontal wells per <u>W.Va.</u> Legislative Rule § 35-8.
 - b. Filing of survey required: Yes, if performed (for instance, directional drilling).
 - c. Format of filing: N/A

Casing and Tubing

- 1. Minimum amount required:
 - a. Surface casing: below fresh water.
 - b. Production casing: No.
- 2. Minimum amount of cement required:
 - a. Surface casing: To surface

- b. Production casing: Adequate for separation of producing zones and high pressure zones. Additionally, to a point at least 500' above the shallowest producing zone for wells permitted under W. Va. Code § 22-6A.
- c. Setting time: Yes. Minimum of 8 hours and 500lb. compressive strength.
- 3. Tubing requirements:
 - a. Oil wells: No.
 - b. Gas wells: No.

Hydraulic Fracturing

- 1. Permitting: Covered in drilling permit
 - a. Before drilling:
 - b. Before fracing:
 - c. How long before:
- 2. Reporting requirements:
 - a. Where reported: WVDEP Office of Oil and Gas.
 - b. When reported: within 90 days of completion of permitted well work.
- 3. Source water requirements: Yes for wells under W.Va. Code § 22-6A.
- 4. Mechanical integrity:
 - a. Cementing log required: Can be required.
 - b. Pressure testing: Can be required under W.Va. Legislative Rule § 35-8.
 - c. Pressure monitoring:
 - 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 for wells under W.Va. Code § 22-6A.
 - b. Where disclosed: Disclosed in the permit application and completion report.
 - c. When disclosed (pre-fracing, post-fracing, both): Both.
 - d. Time limit to disclose: 90 Days.
 - e. Information required to be disclosed: Chemicals, other than trade secrets, CAS registry number and concentrations.
 - f. Trade secret protection: Yes, if provided.
 - g. Required disclosure to health/emergency personnel: Yes, in an emergency

Underground Injection

1. Agencies that control the underground injection of fluid by well class: WVDEP Office of Oil and Gas (Class 2 and 3). WVDEP Division of Water and Waste Management (Class 1 and 5).

Completion

- 1. Completion report required: Yes.
 - a. Time limit: 90 days.
 - b. Where submitted: <u>Department of Environmental Protection</u>, <u>Office of Oil and Gas.</u>
- 2. Well logs required to be filed: Deep wells only.
 - a. Time limit: 90 days.
 - b. Where submitted: Oil and Gas Conservation Commission.
 - c. Confidential time period: Yes. One year, additionally to three total years for good cause.
 - d. Available for public use: Yes.
 - e. Log catalog available: Yes.
- 3. Multiple completion regulation: Yes, deep wells.
 - a. Approval obtained: Justification at hearing.

- 4. Commingling in well bore: Yes.
 - a. Approval obtained: Justification at hearing.

Oil Production

- 1. Definition of an oil well: "Oil Well" shall mean any well which produces less than 6,000 cubic feet of gas to each barrel of oil on the basis of initial gas-oil ratio test, defining oil and gas as in the Statute.
- 2. Potential tests required: GOR.
 - a. Time interval: 24 hour minimum.
 - b. Witness required: No.
- 3. Maximum gas-oil ratio: Less than 6,000 cubic feet of gas to one barrel of oil.
 - a. Provision for limiting gas-oil ratio: No.
 - 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: No.
- 7. Production reports:
 - a. By lease: Yes, for secondary recovery fields; otherwise, no.
 - b. By well: Yes.
 - c. Time limit: Annually before March 31 of following year.

Gas Production

- 1. Definition of a gas well: "Gas Well" shall mean any well which produces 6,000 cubic feet or more of gas to each barrel of oil on the basis of the initial gas-oil ratio test, defining oil and gas in the Statute.
- 2. Pressure base 14.73 psia @ 60 degrees F.
- 3. Initial potential tests: Yes.
 - a. Time interval: Not less than 24 hours.

- 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: Yes.
- 7. Production reports:
 - a. By lease: Yes, for secondary recovery fields; otherwise, no.
 - b. By well: Yes, MCF.
 - c. Time limits: Annually before March 31 of following year.