# **WEST VIRGINIA**

## I. <u>Administration</u>

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 57<sup>th</sup> 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.
  - 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 Division of Air Quality</u>.
- 5. Agency regulating water quality: <u>WV Department of Environmental Protection Division of Water and Waste Management</u>.

## II. License

1. License required: N/A

2. Conditions of license: N/A

# III. Bond/Surety

1. Purpose of surety: N/A

2. Plugging and restoration: N/A

3. Compliance bond required: Yes.

- Types of surety accepted: Surety bonds; collateral bonds (including cash and securities); letters of credit; establishment of an escrow account; selfbonding
- 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 § 22-6</u> and <u>W.Va. Code § 22-21</u>.)
  - b. Amount of blanket bond: \$50,000 and \$250,000 (wells under W.Va. Code

§ 22-6A.)

### IV. Land Leasing Information

1. Leasing method: N/A

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

### V. Setbacks

 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? <u>W.Va Code § 22-6-21</u> (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.

# VI. 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.
- 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.

#### VII. 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.

### VIII. Unitization

- 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

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

- 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.

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

\$100 \$150

\$400\*

A well fee to go into the reclamation fund.

\*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

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

- 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> <u>Legislative Rule § 35-8</u>.
  - b. Filing of survey required: Yes, if performed (for instance, directional drilling).
  - c. Format of filing: N/A

## XI. Casing and Tubing

- 1. Minimum amount required:
  - Surface casing: at least 30 ft. below fresh water for conventional wells and at least 50 ft. below freshwater for wells under <u>W.Va.</u> Code § 22-6A.
  - 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 <a href="W. Va. Code">W. Va. Code</a> § 22-6A.
  - c. Setting time: Yes. Minimum of 8 hours and 500 lb. compressive strength.
- 3. Tubing requirements:
  - a. Oil wells: No.
  - b. Gas wells: No.

### XII. 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 <u>W.Va. Legislative Rule §</u> 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

## XIII. <u>Underground Injection</u>

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).

#### XIV. 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.

# XV. 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 gasoil 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.
- 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 by March 31 of following year.

### XVI. 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.
  - c. Time limits: Annually by March 31 of following year.