NEVADA

I. Administration

- Agency regulating oil and gas exploration/production: <u>Nevada Commission on Mineral Resources</u>, <u>Division of Minerals</u>, 400 W. King St., Suite 106, Carson City, NV 89703-4212. Phone: (775) 684-7040, Fax: (775) 684-7052.
- 2. Contact for regulatory updates: Richard Perry, Administrator, Nevada Division of Minerals, 400 West King Street, Suite 106 Carson City, NV 89703-4212. Phone: (775) 684-7040. rmperry@minerals.nv.gov
- 3. Docketing procedure: The Division may act upon its own motion or upon the petition of any interested person concerning any matter within the jurisdiction to set a date for hearing without undue delay. The Division shall enter its order within 30 days after the hearing.
 - a. Emergency orders: Yes. The Division may issue emergency orders without notice and hearing.
 - b. Notice: Not less than 10 days prior to the date of the hearing. The Administrator of the Division of Minerals is responsible to give notice.
- 4. Agency regulating air emissions: Nevada Division of Environmental Protection.
- 5. Agency regulating water quality: Nevada Division of Environmental Protection.

II. License

- 1. License required: No license required to drill an oil or gas well. Driller must be licensed through the Nevada State Engineer to drill a water well.
- 2. Conditions of water well drilling license: NAC 534.282

III. Bond/Surety

- 1. Purpose of surety: Plugging and Abandonment.
- Plugging and restoration: Plugging and abandonment, including restoration of pad, <u>NAC 522.455</u>
- 3. Compliance bond required: Yes, a bond of not less than \$10,000 for an individual well and not less than \$50,000 for a statewide drilling bond is required. For wells drilled on federally managed lands, the Division acknowledges the bond is held by the BLM.
- 4. Types of surety accepted: Corporate surety licensed to do business in Nevada.

- 5. Conditions of bond: To ensure that a well, upon abandonment, is plugged in accordance with the regulations of the Division and that the well is operated and repaired in a manner which does not cause waste.
 - a. Minimum amount per well: \$10,000
 - b. Minimum amount of blanket bond: \$50,000

IV. Land Leasing Information

1. There is no leasing of State Lands for oil and gas exploration at this time.

V. <u>Setbacks</u>

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?

There are no setbacks for a conventional well. For a well that is to be hydraulically fractured there is a minimum 300 foot setback from the surface location of the well to an existing permitted structure.

VI. Spacing

- 1. Spacing requirements: Yes. In the absence of a special order of the Division establishing drilling units or authorizing different densities of wells or patterns of location for particular pools or parts of pools, the following requirements apply:
 - a. *Density:

Oil well - 5,000' or less: 40 acres - not less than 330' from boundary of quarter-quarter section.

Oil well - more than 5,000': 160 acres - not less than 330' from boundary of quarter section.

Gas well - 5,000' or less: 160 acres - not less than 660' from boundary of quarter section.

Gas well - more than 5,000': 640 acres - not less than 990' from boundary of section.

b. Lineal: Determined after hearing.

*The spacing requirements do not apply to federal units, working interest agreements, and areas subject to existing orders.

2. Exceptions: Yes.

- a. Basis: Exceptions to the regulations and spacing pattern may be granted where it is shown, after notice and hearing, that the unit is partly outside the pool, or for some other reason a well so located on the unit would be nonproductive, or topographical conditions are such as to make the drilling at such a location unduly burdensome (NRS 522.060).
- b. Approval: By hearing, after proper notice and order issued by the Division.

VII. Pooling

- 1. Authority to establish voluntary: Yes, NRS 522.060(3).
- 2. Authority to establish compulsory: Yes, NRS 522.060(3).

VIII. Unitization

- 1. Compulsory unitization of all or part of a pool or common source of supply: Yes NRS 522.0824.
- 2. Minimum percentage of voluntary agreement before approval of compulsory unitization:
 - a. Working interest: 62.5%
 - b. Royalty interest: 62.5%

IX. 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, Sundry Notice and Report on Wells.

2. Permit fee:

- a. Drilling: \$1000.00 (conventional), \$3500.00 (unconventional on federal lease), and \$4500.00 (unconventional on private lease).
- b. Seismic drilling: None.

- c. Recompletion: None (\$300.00 sundry notice fee).
- d. Plugging and abandoning: Plugging and abandonment program by Sundry Notice, Administrator approval required (\$100.00 sundry notice fee).
- 3. Require filing report of work performed: Yes, Oil and Gas Completion Report; Oil, Gas and Geothermal Well Plugging Report.
- 4. Sundry notices used: Yes.

X. Vertical Deviation

- 1. Regulation requirement: Yes.
 - a. When is a directional survey necessary: Upon well completion, bottom hole surveys are required. However, directional surveys may be required during drilling operations due to spacing requirements.
 - b. Filing of survey required: Yes.
 - c. Format of filing: Hard copy and digital.

XI. Casing and Tubing

- 1. Minimum amount required:
 - a. Conventional wells:
 - i. Surface casing not less than 500 feet
 - ii. Intermediate casing not required, but if used must overlap shoe of previous casing by not less than 100 feet
 - iii. Production casing/tubing not specified, tubing must overlap shoe of previous casing by 100 feet
 - b. Wells to be hydraulically fractured, casing must meet minimum specifications prescribed by API Spec 5CT.
 - i. Surface casing not less than 500 feet
 - ii. Intermediate casing required from bottom of shoe to surface
 - iii. Production casing/tubing required, tubing must overlap shoe of previous casing by not less than 100 feet
- 2. Minimum amount of cement required:
 - a. Surface casing: Entire length of surface casing.

- b. Intermediate casing(s): 500 feet above bottom of casing or 500 feet above uppermost zone of hydrocarbon producing zone of interest, whichever is highest in the annular space.
- c. Production casing: 500 feet above bottom of casing or 500 feet above uppermost zone of hydrocarbon producing zone of interest, whichever is highest in the annular space.
- d. Setting time: Yes minimum compressive strength of 300 psi at bottomhole conditions must be attained.

3. Tubing requirements:

a. For wells to be hydraulically fractured, tubing must meet minimum specifications prescribed by API Spec 5CT.

XII. Hydraulic Fracturing

- 1. Permitting: Submit an APD with intent to hydraulically fracture indicated. All information required for the Area of Review must be submitted with the application to drill.
 - a. Before drilling: Notify Division at least 24 hours prior to spudding.
 - b. Before fracing: Submit a list of chemicals to be used that are not identified as an approved chemical on Division's web site at least 30 days prior to hydraulic fracturing procedure. Chemical approval must be granted by the Division before usage. Sundry Notice describing all aspects of the proposed hydraulic fracturing operation must be approved by the Division before hydraulic fracturing procedure. Written notice to property owners within one mile, written notice to county commission, and submit affidavit certifying that strata is sealed.
 - c. How long before: Applications are processed within 30 days for wells to be drilled on non-federally managed lands, assuming all required information has been submitted to the Division.

2. Reporting requirements:

- a. Where reported: FracFocus.org.
- b. When reported: Within sixty days of completion of the hydraulic fracturing operation.
- 3. Source water requirements: Must be approved by the State Engineer, Division of Water Resources.
- 4. Mechanical integrity:

- a. Cementing log required: Yes
- b. Pressure testing: Yes
- c. Pressure monitoring: Yes
- d. Blowout preventer required: Yes
- 5. Disposal of flowback fluids:
 - a. Retaining pits: Only upon approval by the Nevada Division of Environmental Protection.
 - b. Tanks: Yes
 - c. Approved discharge to surface water: No
 - d. Underground injection: Yes, permitted by the <u>Nevada Division of Environmental Protection within the Underground Injection Control</u> (UIC) program.
- 6. Chemical disclosure requirement:
 - a. Mandatory: Yes
 - b. Where disclosed: FracFocus.org
 - c. When disclosed (pre-fracing, post-fracing, both): Post-fracing
 - d. Time limit to disclose: Sixty days post fracing to FracFocus.org.
 - e. Information required to be disclosed: Name of operator, well name and number, API number, date of hydraulic fracturing, county, location coordinates, true vertical depth, and total volume of water (or other base fluid) used. The identity of each chemical intentionally added to the base fluid, the maximum concentration, measured in percent by mass, of each chemical, the Chemical Abstracts Service Registry Number for each chemical intentionally added to the base fluid, if applicable.
 - f. Trade secret protection: Yes (NRS 600A)
 - g. Required disclosure to health/emergency personnel: Upon request for information

XIII. <u>Underground Injection</u>

1. Agencies that control the underground injection of fluid by well class:
Underground Injection Control (UIC) at the Nevada Division of Environmental Protection.

XIV. Completion

- 1. Completion report required: Yes.
 - a. Time limit: 30 days.
 - b. Where submitted: Division of Minerals.
- 2. Well logs required to be filed: Yes -2 hard copies, 1 digital copy, and an .las file if relevant.
 - a. Time limit: 30 days after completion.
 - b. Where submitted: Division of Minerals.
 - c. Confidential time period: Yes, 1 year upon request.
 - d. Available for public use: Yes.
 - e. Log catalog available: Yes, found online at the Nevada Bureau of Mines and Geology web site: http://www.nbmg.unr.edu/Oil&Gas/NVWellInfo.html
- 3. Multiple completion regulation: Yes.
 - a. Approval obtained: Must be approved by the Administrator.
- 4. Commingling in well bore: Yes, must be approved by the Administrator.
 - a. Approval obtained: Production from one pool shall not be commingled with that from another pool in the same field before gauging.

XV. Oil Production

- 1. Definition of an oil well: "Oil well" means any well which is not a gas well and which is capable of producing oil or condensate.
- 2. Potential tests required: No.
 - a. Time interval: No provision.
 - b. Witness required: No provision.
- 3. Maximum gas-oil ratio: Established after notice and hearing for wells in a pool.
 - a. Provision for limiting gas-oil ratio: Yes. No well shall be permitted to produce gas in excess of the maximum ratio determined by the Division for a pool after notice and hearing.

- b. Exception to limiting gas-oil ratio: Yes, if excess is returned to the pool from which it was produced.
- 4. Bottom-hole pressure test reports required: No, unless wells are to be commingled.
 - a. Periodic bottom-hole pressure surveys: No, unless wells are to be commingled.
- 5. Commingling oil in common facilities: Yes. Common tankage may be used to receive the production from any number of wells, provided adequate tankage and other equipment is installed so that production for each well can be accurately determined at reasonable intervals.
- 6. Measurement involving meters: Not required.
- 7. Production reports:
 - a. By lease: Not required.
 - b. By well: Yes Oil and Gas Producers Monthly Report.
 - c. Time limit: 30 days.

XVI. Gas Production

- 1. Definition of a gas well: "Gas well" means a well which produces primarily natural gas or any well classified as a gas well by the Division.
- 2. Pressure base 14.73 psia @ 60 degrees F.
- 3. Initial potential tests: Each gas well must be tested initially by the multipoint back pressure method at a time prescribed by the Division.
 - a. Time interval: No provision.
 - b. Witness required: No provision.
- 4. Bottom-hole pressure test reports required: No provision.
 - a. Periodical bottom-hole pressure surveys: Only if commingling.
- 5. Commingling of gas in common facilities: Yes. Common tankage may be used to receive the production from any number of wells, provided adequate tankage and other equipment is installed so that production for each well can be accurately determined at reasonable intervals.
- 6. Measurement involving meters: Yes.

7. Production reports:

a. By lease: Not required.

b. By well: Yes.

c. Time limits: 30 days.