SOUTH DAKOTA

Administration

- Agency regulating oil and gas exploration/production: <u>Department of Environment and Natural Resources</u>, <u>Minerals and Mining Program</u> 2050 W. Main Ste #1, Rapid City, SD 57702. Phone: (605) 773-4201, Fax: (605) 394-5317.
- 2. Contact for regulatory updates: Department at above address or phone number.
- 3. Docketing procedure: Make application to above address. Department will review for completeness and will set date of potential hearing. Exception location, underground injection, commingling, directional drilling, horizontal drilling, spacing, forced pooling, unitization orders will be issued administratively unless contested. (Note: if objection is filed within 20 days of the public notice publication date, a hearing will be scheduled). Hearings are held by the South Dakota Board of Minerals and Environment.
 - a. Emergency orders: Law allows issuance of emergency orders by the Board without notice and hearing that are effective for 15 days.
 - b. Notice: Notice of public hearing must be published at least 20 days in advance of hearing. Department will give notice.
- Agency regulating air emissions: <u>Department of Environment and Natural</u> <u>Resources, Air Quality Program</u>. Joe Foss Bldg, 523 E. Capitol Ave. Pierre, SD 57501. Phone: (605) 773-3151.
- 5. Agency regulating water quality: <u>Department of Environment and Natural Resources</u>, <u>Ground Water Quality</u> Phone: (605) 773-3296 and Surface Water Quality Programs Phone: (605) 773-3351. Joe Foss Bldg, 523 E. Capitol Ave. Pierre, SD 57501.

License

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

Bond/Surety

- 1. Purpose of surety: Ensure proper plugging and surface restoration.
- 2. Plugging and restoration: Yes.

- 3. Compliance bond required: A Plugging and Performance Bond (Form 3) is required.
- 4. Types of surety accepted: Corporate surety bond or certificate of deposit.
- 5. Conditions of bond:
 - a. Amount per well: \$10,000 for shallow (less than 5,500 feet deep) and \$30,000 for deep (5,500 feet or greater) wells.
 - b. Amount of blanket bond: \$30,000 for shallow and \$100,000 for deep wells.

Land Leasing Information

- 1. Leasing method: Public Auction
- 2. Notice method: The notice shall be published once each week for at least 2 consecutive weeks in the official newspapers of the county where the land is located. Also, online at http://sdpubliclands.com/mineral/auction.shtm
- 3. Minimum bidding \$ (per acre): No less than \$2.00 per acre in counties west of the Missouri river and \$.50 in counties east of the Missouri River.
- 4. Qualification of the bidder: None required.
- 5. State statutes: SDCL 5-7.
- 6. Maximum acres: 640 acres per tract.
- 7. Royalty rates: Minimum rate of 12.5 %. SDCL 5-7-24.
- 8. Agency in control of leasing: Office of School and Public Lands, State Capitol, 500 E. Capitol, Pierre, SD 57501. Phone: (605) 773-3303, Fax: (605) 773-5520.

Setbacks

- 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? N/A
- 2. Are there other sources of information on this matter that you could identify? N/A

Spacing

1. Spacing requirements: <u>Rule 74:12:02:04</u>, <u>74:12:02:05</u>, and <u>74:12:02:06</u> and <u>SDCL 45-9-20</u> through 45-9-29.

- a. Density: Oil- 40 acres, Gas- 640 acres
- b. Lineal: Oil- 500 feet from quarter-quarter boundary and 1,000 feet between wells. Gas- 500 feet from section line and 3,750 feet between wells.
- 2. Exceptions: Yes. Address request to Department at above address.
 - a. Basis: Topographic reasons, well at prescribed location cold not produce economically or other good cause shown. Rule 74:12:02:08.
 - b. Approval: Administratively by the Department. Applicant must provide evidence of "good cause," must provide affidavit of service by certified mail to "any person whose property may be affected by the hearing." The Department publishes a Notice of Recommendation on the matter in the official county newspaper. Upon 20 days' notice, if no objections are filed, the application may be approved. If objections are made, a hearing is required.

Pooling

- 1. Authority to establish voluntary: Yes. SDCL 45-9-30.
- 2. Authority to establish compulsory: Yes <u>SDCL 45-9-31</u> et seq. Board has the authority to assess a penalty for risk on a non-participating owner in a spacing unit. <u>Rules 74:12:10:01 to 74:12:10:03</u>

Unitization

- 1. Compulsory unitization of all or part of a pool or common source of supply: Yes. If "Such operation is reasonably necessary to increase substantially the ultimate recovery of oil or gas; and the values of the estimated additional recovery of oil or gas exceeds the estimated additional cost incident to conducting such operations." SDCL 45-9-37, 45-9-38. Risk compensation is allowed up to 200% of a working interest owner's share and 100% of an unleased mineral owner's share of the reasonable actual unit expenses, exclusive of a one-eighth royalty, to be recovered out of production from the unit. Rules 74:12:10:04 to 74:12:10:06.
- 2. Minimum percentage of voluntary agreement before approval of compulsory unitization:

a. Working interest: 60%

b. Royalty interest: 60%

Drilling Permit

1. Permits required for:

a. Drilling a producing or service well: Yes. A permit is good for one year. The minimum requirements for obtaining a permit are the filing of the following: organization report, application for permit to drill, certified plat map, \$100 permit fee, plugging and performance bond, certificate of negotiation with surface owner or lessee, bonding company information sheet, plans and specifications showing the construction details for any proposed site, certification of applicant form, and the source of the applicant's legal right to enter and initiate drilling on the affected land.

Rule 74:12:02:01. An application for pit liner variance, Rule 74:12:02:10, may be made to the Department. The Department may attach conditions to both the application for permit to drill and to the application for pit liner variance.

Applications for horizontal wells must meet the minimum requirements for obtaining a permit to drill in addition to the following information: size, weight, and amount of all casing strings; top of cement behind each casing string; mud program; coordinates of the casing shoe; coordinates of the terminus; depth of kick-off point; azimuth of the horizontal segment; down-hole survey frequency; name and address of surveying contractor; and location of cementing tool. Rule 74:12:02.

- b. Seismic drilling: Yes. Contact Minerals and Mining Program, Department of Environment and Natural Resources, Joe Foss Bldg, 523 E. Capitol Ave. Pierre, SD 57501. Phone: (605) 773-4201.
- c. Recompletion: Yes, if recompletions involve deepening or new laterals. Rule 74:12:02:17. Other work should be submitted on a Sundry Notice.
- d. Plugging and abandoning: No, but Department must be contacted for approval of plugging program before plugging begins. A well may be converted to a water well upon notification of Department. Rule 74:12:03:02(4).

2. Permit fee:

- a. Drilling: \$100 per well
- b. Seismic drilling: \$250 per exploration notice of intent. SDCL 45-6C-17.
- c. Recompletion: \$100 per well
- d. Plugging and abandoning: No fee; requires subsequent plugging report (Form 7) within 30 days.
- 3. Require filing report of work performed: Yes. Completion report (Form 4), Plugging report (Form 7), Sundry Notice (Form 6). Require two copies each of the following: geologic report, drill-stem test reports, all geophysical logs, all

downhole surveys, core report and analyses, water analyses, and 10-foot sample cuttings.

4. Sundry notices used: Rule 74:12:02:17, Sundry notices used: To request approval from the secretary for the following: proposed cementing, proposed plugging, temporary abandonment, testing casing, drilling without a blowout preventer, extending term of permit beyond 12 months, using open burning as a soil remediation method, using produced water on roads for dust suppression, atmospherically discharging water produced from a gas well, completing surface restoration, constructing produced water handling facilities, or converting a mud pit to an evaporation pit, dissolving abandoned oil or gas fields, the method of determining production from separate pools prior to commingling fluids from separate pools, confidentiality of technical data, and the method of checking tank metering equipment.

To report the following information: spills, spudding, change of operator, change of elevation, change to dry hole marker, change of location, fracing, acidizing, perforating, working over, repairing, venting or flaring of gas, drilling program, drilling mud program, blowout preventer program, geologic an hydrologic conditions, gas-oil ratio, shut-in pressures, working fluid level, casing program, directions to a well site, casing test results, fire, releases, breaks, leaks, blowouts pursuant to 74:12:04:11, commencement and discontinuance of injection operations, mechanical problems, well failures, or malfunctions of injection system, and tank battery meter tests.

Vertical Deviation

1. Regulation requirement:

- a. When is a directional survey necessary: Required for all directional and horizontal wells; secretary may require deviation test if necessary; if spacing order does not specifically allow for directional drilling, then approval must be obtained utilizing Notice of Recommendation procedures for directional drilling. Rule 74:12:02:02.
- b. Filing of survey required: Yes, required on all directional and horizontal holes.
- c. Format of filing: N/A

Casing and Tubing

1. Minimum amount required:

a. Surface casing: Enough to protect freshwater resources as determined by the secretary, not less than 100 feet. Rule 74:12:02:12.

- b. Production casing: All freshwater zones are to be sealed or separated by casing and cement. Cement bond log is required on all completed wells. Rule 74:12:02:12.
- 2. Minimum amount of cement required:
 - a. Surface casing: Require cementing by pump and plug method until cement returns to the surface. Rule 74:12:02:12.
 - b. Production casing: Cement to seal or separate all freshwater zones not covered by the surface casing. Rule 74:12:02:12.
 - c. Setting time: N/A
- 3. Tubing requirements:
 - a. Oil wells: N/A
 - b. Gas wells: N/A

Hydraulic Fracturing

South Dakota does not currently have specific rules for hydraulic fracturing, although it must be reported when used by rule and frac fluid chemistry must be disclosed on the FracFocus web site. However, the Department of Environment and Natural Resources is aware of the issue and has been following developments both nationally and regionally. At this time, rules for hydraulic fracturing have not been adopted for the following reasons:

- There is currently no high volume, multi-stage hydraulic fracturing going on in South Dakota.
- Developing rules at this time is premature because EPA is conducting studies to determine if hydraulic fracturing warrants regulation under the federal Safe Drinking Water Act through the Underground Injection Control (UIC) program.
- South Dakota's UIC program is delegated to the state by the EPA under the authority of the Safe Drinking Water Act. South Dakota Codified Law 1-40-4.1 does not allow a delegated state program to be more stringent than the comparable federal program. The federal UIC program does not currently regulate non-diesel hydraulic fracturing applications. If the federal UIC program develops more extensive hydraulic fracturing regulations, the state would need to adopt similar rules in order to maintain EPA delegation.
- 1. Permitting: N/A

- a. Before drilling: N/A
- b. Before fracing: N/A
- c. How long before: N/A
- 2. Reporting requirements:
 - a. Where reported: Reported on Sundry Notice (Form 6) to Department at above address and on the FracFocus Chemical Disclosure Registry per ARSD 74:12:02:19.
 - b. When reported: Varies, see ARSD 74:12:02:17
- 3. Source water requirements: May require a water right/permit or temporary use permit from the <u>Department of Environment and Natural Resources</u>, <u>Water Rights Program</u> Joe Foss Bldg, 523 E. Capitol Ave. Pierre, SD 57501. Phone: (605) 773-3352. Summary of South Dakota water laws and rules.
- 4. Mechanical integrity: N/A
 - a. Cementing log required: N/A
 - b. Pressure testing: N/A
 - c. Pressure monitoring: N/A
 - d. Blowout preventer required: Blowout preventers are required on all wells per <u>ARSD 74:12:02:14</u>. Permission to drill without a blowout preventer may be granted through the Notice of Recommendation Procedure.
- 5. Disposal of flowback fluids: All water produced with oil and gas shall be disposed of by injection in a permitted disposal or enhanced recovery well, by evaporation in an approved pit, or by discharge into a surface water source through an outfall permitted under chapter 74:52:01. Rule 74:12:04:15.
 - a. Retaining pits:
 - b. Tanks:
 - c. Approved discharge to surface water:
 - d. Underground injection:
- 6. Chemical disclosure requirement:
 - a. Mandatory: Yes
 - b. Where disclosed: FracFocus Chemical Disclosure Registry

- c. When disclosed (pre-fracing, post-fracing, both): After.
- d. Time limit to disclose: N/A
- e. Information required to be disclosed: Fracture date; American Petroleum Institute number; the operator name, county, and state; well name and number, longitude, latitude, longitude/latitude projection, production type, true hydraulic fracturing fluid composition as follows: trade name, supplier, purpose, intentionally added ingredients, chemical abstract number, maximum ingredient concentration in additive, and maximum ingredient concentration in hydraulic fracturing fluid.
- f. Trade secret protection: Yes.
- g. Required disclosure to health/emergency personnel: N/A

Underground Injection

1. Agencies that control the underground injection of fluid by well class: Class II wells are regulated by the <u>Department of Environment and Natural Resources</u>, <u>Ground Water Quality Program</u>, Joe Foss Bldg, 523 E. Capitol Ave. Pierre, SD 57501. Phone: (605) 773-3296, Fax: (605) 773-6035.

Completion

- 1. Completion report required: Yes. Well Completion or Recompletion Report and Log (Form 4).
 - a. Time limit: 30 days.
 - b. Where submitted: Department of Environment and Natural Resources, 2050 W. Main Ste #1, Rapid City, SD 57702.
- 2. Well logs required to be filed: Yes. All electrical and geophysical logs, downhole surveys, geologic reports, water analyses, DST reports, core analyses, and any other geological or engineering data.
 - a. Time limit: 30 days
 - b. Where submitted: Department, at above address.
 - c. Confidential time period: 6 months, if requested in writing.
 - d. Available for public use: Yes, after confidential period is over.
 - e. Log catalog available: No.

- 3. Multiple completion regulation: Yes. Approval may be granted administratively by the Department utilizing the Notice of Recommendation procedure. Rule 74:12:04:04.
 - a. Approval obtained: Applicant must provide an affidavit of service by certified mail to any person whose property may be affected by the hearing. The Department publishes a Notice of Recommendation on the matter in the required newspaper. Upon 20 days' notice, if no material objections are filed, the application is approved. If objections are made a hearing is required.
- 4. Commingling in well bore: Approval may be granted administratively by the Department.
 - a. Approval obtained: Applicant must provide an affidavit of service by certified mail to any person whose property may be affected by hearing. The Department publishes a Notice of Recommendation on the matter in required newspaper. Upon 20 days' notice, if no material objections are filed, the application is approved. If objections are made a hearing is required.

Oil Production

- 1. Definition of an oil well: A well capable of producing oil. Rule 74:12:01:01(12).
- 2. Potential tests required: Yes. Results should be reported on completion or recompletion report and log (Form 4). Rule 74:12:04:02.
 - a. Time interval: 24 hours.
 - b. Witness required: At discretion of Department.
- 3. Maximum gas-oil ratio: The Board may require that wells not be operated with inefficient gas-oil or water-oil ratios. In addition, the Board may fix their ratios and limit production from wells with inefficient gas-oil or water-oil ratios. SDCL 45-9-10.
 - a. Provision for limiting gas-oil ratio: Yes, found in <u>SDCL 45-9-10</u>.
 - b. Exception to limiting gas-oil ratio: Yes. Exception may be granted administratively if no objections are received by the Department, through use of the Notice of Recommendation procedure. Rule 74:12:04:01.
- 4. Bottom-hole pressure test reports required: Yes, subsurface pressure tests shall be conducted on new wells. The operator shall report the results to the secretary within 30 days after the completion of the well. Rule 74:12:04:02.
 - a. Periodical bottom-hole pressure surveys: N/A

- 5. Commingling oil in common facilities: Yes, production from different pools may be commingled provided the amount of production from each pool is determined by a method approved by the Department. Rule 74:12:04:03.
- 6. Measurement involving meters: The use of calibrated meter measurements or tank measurements is allowed. Rule 74:12:04:07.
- 7. Production reports:
 - a. By lease: No.
 - b. By well: Yes. The operator must report oil, gas, and water produced on Form 5. Forms should be submitted to the Department at the above address. Rule 74:12:04:14.
 - c. Time limit: Production shall be reported by the 25th day of the month following production. Rule 74:12:04:14.

Gas Production

- 1. Definition of a gas well: A well capable of producing gas from a common source of gas supply as determined by the Board, excluding gas that cannot be sold for use. Rule 74:12:01:01(3).
- 2. Pressure base <u>65</u> psia @ <u>60</u> degrees F.
- 3. Initial potential tests: Required to report on Form 4.
 - a. Time interval: 24 hours.
 - b. Witness required: At discretion of Department.
- 4. Bottom-hole pressure test reports required: No. Each operator shall measure the shut-in pressure on all wells with a calibrated gauge annually. Shut-in pressure tests shall be performed after the well has been shut-in for at least 24 hours and the results shall be filed with the secretary. Rule 74:12:05:02.
 - a. Periodical bottom-hole pressure surveys: N/A, Annual requirement for shut-in pressure tests.
- 5. Commingling of gas in common facilities: N/A
- 6. Measurement involving meters: Gas must be metered. Produced gas must be reported by the operator whether or not delivered to a gas transportation facility. The operator is required to report all produced gas to the Department. Rule 74:12:05:03.
- 7. Production reports:

- a. By lease: No.
- b. By well: Yes. The operator must report oil, gas, and water produced on Form 5. Forms should be submitted to the Department at the above address. Rule 74:12:05:03.
- c. Time limits: Production shall be reported by the 25th day of the month following production. Rule 74:12:04:14.