<u>ILLINOIS</u>

Administration

1. Official name of agency regulating oil/gas exploration & production:

<u>Department of Natural Resources, Office of Oil and Gas Resource Management,</u> One Natural Resources Way, Springfield, IL 62702-1271. Phone (217) 782-7756.

- 2. Contact for regulatory updates: Mike Mankowski (217) 782-7756, <u>mike.mankowski@illinois.gov</u> or Doug Shutt (217) 782-7556, doug.shutt@illinois.gov
- 3. Docketing procedure: Upon receipt of proper application, the Department shall promptly fix a date for hearing and cause notice of the hearing to be given.
 - a. Emergency orders: Yes, for a period of 30 days or until a hearing is held.
 - b. Notice: Notice of hearings will be published at least ten days prior to date of hearing by the Department.
- 4. Agency regulating air emissions: <u>Illinois EPA</u>
- 5. Agency regulating water quality: <u>Illinois EPA</u>
- 6. Conventional Production Statutes: Illinois Oil and Gas Act, <u>225 ILCS 725/1 et. seq.</u> and Illinois Oil and Gas Act Rules, <u>62 Ill. Adm. Code 240.100 et. seq.</u>
- 7. High Volume Horizontal Hydraulic Fracturing Statutes: Hydraulic Fracturing Regulatory Act, <u>225 ILCS 732/1 et. seq.</u> and Hydraulic Fracturing Regulatory Act Administrative Rules, <u>62 Ill. Adm. Code 245.100 et. seq.</u>

License

- 1. License required: NA
- 2. Conditions of license: NA

Bond/Surety

- 1. Purpose of surety: Penalty
- 2. Plugging and restoration: Yes, Funded by ½ of the annual well fees and salvage of the well equipment. 225 ILCS 725/19.7

- Compliance bond required: Only for operators on record with the Department for less than two years. No bond required after that period. <u>225 ILCS 725/6</u>, <u>62</u> <u>Adm. Ill. Code 240.1500</u>
- 4. Types of surety accepted: Surety, Letter of Credit, and Certificate of Deposit. 225 ILCS 725/6, 62 Adm. Ill. Code 240.1520
- 5. Conditions of bond: Must be carried until two consecutive years of annual fees are paid or until the well or wells is/are plugged or transferred. 225 ILCS 725/6, 62 Adm. Ill. Code 240.1500
 - a. Amount per well: Amount per well: \$1,500 less than 2,000 feet. \$3,000 over 2,000 feet

b. Amount of blanket bond: 0 - 25 wells \$25,000 26 - 50 wells \$50,000 51 or more wells \$100,0000

Land Leasing Information

- 1. Leasing Method: Sealed competitive bids on lands designated by state. State may reject all bids. Drilling on lands owned by Department of Natural Resources is prohibited.
- 2. Notice Method: Public notice by publication in newspaper or other publications with statewide distribution and notice given to persons on department maintained lease notice list.
- 3. Minimum bidding \$ (per acre): Minimum acceptable royalty rate 6 no less than 12 ½ %. Minimum bonuses in addition to the set royalty provision established at time of bid solicitation.
- 4. Qualification of bidder: Post bond and have no outstanding violations of Oil and Gas Act.
- 5. State Statutes: Oil and Gas Wells on Public Lands Act 5 ILCS 615/1 et. seq. and Oil and Gas Wells on Public Lands Act Administrative Rules, 62 ILAC 250.10 et. seq.
- 6. Maximum acres: Variable, to be determined at time of bid solicitation.
- 7. Royalty rates: A minimum of 12 ½ %.
- 8. Agency in control of leasing: <u>IDNR</u> or <u>Illinois Department of Transportation</u>.

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? 62 Ill. Adm. Code 240.410(f) All new well locations shall not be less than 200 feet from the nearest occupied dwelling existing at the time the permit application is filed with the Department, unless the permittee obtains a written agreement with the surface owner upon which the dwelling is located specifically allowing for a closer well location.
- 2. Are there other sources of information on this matter that you could identify? N/A.

Spacing

- 1. Spacing requirements
 - a. Density: <u>62 Ill. Adm. Code 240.410</u> Oil 10 acres for an oil well in a sandstone, 20 acres for an oil well in limestone, 40 acres for an oil well deeper than 4,000 feet. Gas 10 acres for a gas well in a sandstone, 20 acres for a gas well in a limestone, 40 acres over 2,000 feet but less than 5,000 feet, 160 acres over 5,000 feet for discovery well, offset well spacing set by hearing.
 - b. Lineal: <u>62 Ill. Adm. Code 240.410</u> For an oil or gas well not less than 330 feet from the nearest external boundary lines of the drilling unit.
 - c. Non-High Volume Hydraulically Fractured Horizontal: <u>62 Ill.</u> <u>Adm. Code 240.455</u> (d) and (e)
 - d) If the proposed horizontal well is to be a primary recovery well:
 - 1) The spacing requirements shall comply with <u>Section</u> 240.410; or
 - 2) A horizontal drilling unit may be designated consisting of two or more drilling units of the same size, shape and location as that required for a well of the same depth in accordance with Section 240.410 set out in a north-south or east-west pattern. The north-south or east-west pattern of a horizontal drilling unit may cross section lines. In a reservoir in which the top lies less than 4,000 feet beneath the surface, all portions of the horizontal drainhole shall be no less than 330 feet from the nearest external boundary lines of the horizontal drilling unit nor less than 660 feet from the nearest location of a producing well, a well being drilled, or

a well for which a permit has previously been issued (but under which the well has not yet been drilled) using the same individual reservoir. In a reservoir in which the top lies at or below 4,000 feet beneath the surface, all portions of the horizontal drainhole shall be no less than 330 feet from the nearest external boundary lines of the horizontal drilling unit nor less than 900 feet from the nearest location of a producing well, a well being drilled, or a well for which a permit has previously been issued (but under which the well has not yet been drilled) using the same individual reservoir.

- e) If the proposed horizontal well is to be a post-primary recovery well:
 - 1) The spacing requirements shall comply with <u>Section</u> 240.410; or
 - 2) A horizontal drilling unit may be designated consisting of two or more drilling units of the same size, shape and location as that required for a well of the same depth in accordance with Section 240.410 and located in the same reservoir. At least one-half of the drilling units used to make up the horizontal drilling unit are required to contain at least one plugged or non-producing well. The horizontal drilling unit shall not contain any drilling unit of a well actively producing from the same individual reservoir. The horizontal drilling unit may cross section lines. In a reservoir in which the top lies less than 4,000 feet beneath the surface, all portions of the horizontal drainhole shall be no less than 330 feet from the nearest external boundary lines of the horizontal drilling unit nor less than 660 feet from the nearest location of a producing well, a well being drilled, or a well for which a permit has previously been issued (but under which the well has not yet been drilled) using the same individual reservoir. In a reservoir in which the top lies at or below 4,000 feet beneath the surface, all portions of the horizontal drainhole shall be no less than 300 feet from the nearest external boundary lines of the horizontal drilling unit nor less than 900 feet from the nearest location of a producing well, a well being drilled, or a well for which a permit has

previously been issued (but under which the well has not yet been drilled) using the same individual reservoir.

f) If a horizontal drilling unit configuration other than that allowed in subsection (d) or (e) is necessary because of geology or reservoir conditions, a modified or special drilling unit is required in compliance with Section 240.460 and/or Section 240.465.

2. Exceptions

- Basis: Topographical conditions, irregular section, secondary recovery operations, location over mine, or geological conditions. 62 Ill. Adm. Code 240.420, 62 Ill. Adm. Code 240.430
- Approval: Administratively after verification of submitted information or by hearing depending on basis stated above. 62 Ill. Adm. Code 240.420, 62 Ill. Adm. Code 240.430

Pooling

- 1. Authority to establish voluntary: Yes
- 2. Authority to establish compulsory: Yes, 62 Ill. Adm. Code 240.132

Unitization

- 1. Compulsory unitization of all or part of a pool or common source of supply: Yes, 62 Ill. Adm. Code 240.131
- 2. Minimum percentage of voluntary agreement before approval of compulsory unitization: 62 Ill. Adm. Code 240.131

a. Working interest: 51%

b. Royalty interest: 51%

Drilling Permit

- 1. Require permits for:
 - a. Drilling a producing or service well: Yes, 62 Ill. Adm. Code 240.200, 62 Ill. Adm. Code 240.1900
 - b. Seismic drilling: No

- c. Recompletion: Yes, if well drilled deeper or converted for use other than originally permitted. 62 Ill. Adm. Code 240.200
- d. Plugging and abandoning: No

2. Permit fee:

- a. Drilling: \$300, <u>62 III. Adm. Code 240.210</u>
- b. Seismic drilling: NA
- c. Recompletion: \$300, if well drilled deeper or converted for use other than originally permitted. 62 Ill. Adm. Code 240.210
- d. Plugging and abandoning: No
- e. Require filing report of work performed: Yes, 62 Ill. Adm. Code 240.640
- 3. Sundry notices used: Yes

Vertical Deviation

- 1. Regulation requirement:
 - a. When is a directional survey necessary: A proposed vertical deviation filed with permit application with actual survey required to be filed after well drilled. 62 Ill. Adm. Code 240.240, 62 Ill. Adm. Code 240.450
 - b. Filing of survey required: Yes, 62 Ill. Adm. Code 240.240
 - c. Format of filing: paper

Casing and Tubing

1. Minimum amount required:

Surface casing: Yes, depth based on local conditions. <u>62 Ill. Adm. Code</u> <u>240.610</u>

Production casing: Yes, set no higher than 50 feet above the top of the uppermost producing interval. 62 Ill. Adm. Code 240.610

- 2. Minimum amount of cement required:
 - a. Surface casing: Circulated to surface. 62 Ill. Adm. Code 240.610

- b. Production casing: yes, minimum of 250 feet above producing interval. 62 Ill. Adm. Code 240.610
- c. Setting time: yes, minimum of four hours for surface casing before commencing drilling. No requirements for production casing. 62 Ill. Adm. Code 240.610

3. Tubing requirements:

a. Oil wells: No

b. Gas wells: No

Hydraulic Fracturing

- Permitting: Hydraulic Fracturing Regulatory Act (HFRA) and Rules only apply to High Volume Horizontal Hydraulic Fracturing (HVHHF) operations defined as all stages of a stimulation treatment of a horizontal well by the pressurized application of more than 80,000 gallons in any single stage or more than 300,000 gallons in total of hydraulic fracturing fluid to initiate or propagate fractures in a geologic formation to enhance extraction or production of oil or gas. 225 ILCS 732/1-5. Conventional hydraulic fracturing activities only require filing of a completion report. 62 Ill. Adm. Code 240.640
 - a. Before drilling: May be able to fracture an existing well, but a permit will be required prior to the HVHHF activity.
 - b. Before fracing: Yes a permit is required under the Hydraulic Fracturing Act, 225 ILCS 732/1 et. seq. and Rules 62 Ill. Adm. Code 245.100 et. seq.
 - c. How long before: No minimum found in HFRA, however, permit to drill required if drilling new HVHHF well. 62 Ill. Adm. Code 245.120 Permit to drill expires one year from the date of issuance unless acted upon by commencement of drilling, deepening or converting operations authorized by the permit, which are to be continued with due diligence, but not to exceed 2 years from date of commencement of drilling or conversion operations, at which time the well shall be plugged, production casing set or conversion operations completed. 62 Ill. Adm. Code 240.250
- 2. Reporting Requirements: <u>62 Ill. Adm. Code 245.860</u>
 - a. Where reported: To Department of Natural Resources, Office of Oil and Gas Resource Management, One Natural Resources Way, Springfield, IL 62702
 - b. When reported: Within 60 calendar days after the conclusion of Fracturing Operations. 225 ILCS 732/1-75(f) and 62 Ill. Adm. Code 245.860

- 3. Source water requirements: Yes, <u>225 ILCS 732/1-35(b)(10)</u>, <u>62 Ill. Adm. Code</u> <u>245.210</u>
- 4. Mechanical Integrity: Yes, <u>225 ILCS 732/1-70(d)(16) and (17)</u> and <u>62 Ill. Adm. Code 245.540</u>
 - a. Cementing log required: Yes, <u>62 Ill. Adm. Code 245.520(h)</u>
 - b. Pressure testing: A pressure test of the blowout preventer and related equipment must be performed prior to fracturing operations per 225 ILCS 732/1-70(e)(5), 62 Ill. Adm. Code 245.540(a)
 - c. Pressure monitoring: During high volume horizontal hydraulic fracturing operations, all annulus pressures, the injection pressure, and the rate of injection shall be continuously monitored and recorded. 225 ILCS 732/1-75(b)(4)
 - d. Blowout preventer required: Yes, the operator shall use blowout prevention equipment after setting casing with a competent casing seat. 225 ILCS 732/1-70(e)(1)
- 5. Disposal of flowback fluids:
 - a. Retaining pits: The plan shall describe the capacity of the tanks to be used for the capture and storage of flowback and of the lined reserve pit to be used, if necessary, to temporarily store any flowback in excess of the capacity of the tanks. 225 ILCS 732/1-35(b)(11). Any excess hydraulic fracturing flowback captured for temporary storage in a reserve pit as provided in paragraph (2) of this subsection must be removed from the well site within 7 days. 225 ILCS 732/1-75(c)(5), 62 Ill. Adm. Code 245.830
 - b. Tanks: hydraulic fracturing additives, hydraulic fracturing fluid, hydraulic fracturing flowback, and produced water shall be stored in above-ground tanks during all phases of drilling, high volume horizontal hydraulic fracturing, and production operations until removed for proper disposal. For the purposes of centralized storage off site for potential reuse prior to disposal, hydraulic fracturing additives, hydraulic fracturing fluid, hydraulic fracturing flowback, and produced water shall be stored in above-ground tanks. 225 ILCS 732/1-75(c)(5), 62 Ill. Adm. Code 245.850(c)
 - c. Approved discharge to surface water: It is unlawful to inject or discharge hydraulic fracturing fluid, produced water, BTEX, diesel, or petroleum distillates into fresh water. 225 ILCS 732/1-25(c)
 - d. Underground injection: Hydraulic fracturing flowback may only be disposed of by injection into a Class II injection well that is below

interface between fresh water and naturally occurring Class IV groundwater. Produced water may be disposed of by injection in a permitted enhanced oil recovery operation. Hydraulic fracturing flowback and produced water may be treated and recycled for use in hydraulic fracturing fluid for high volume horizontal hydraulic fracturing operations. 225 ILCS 732/1-75(c)(8), 62 Ill. Adm. Code 245.850(g)

- 6. Chemical disclosure requirement: Yes
 - a. Mandatory: Yes to the Department, public disclosure may be limited due to trade secret, 225 ILCS 732/1-35(b)(8), 1-75(f)(9), 1-77 and 62 Ill. Adm. Code 245.700
 - b. Where disclosed: The Department will create a website, 225 ILCS 732/1-110 and 62 Ill. Adm. Code 245.720(b)
 - c. When disclosed (pre-fracing, post-fracing, both): Both
 - d. Time limit to disclose: The Department has 5 calendar days to post the permit application which may include the chemical disclosure. 62 Ill. Adm. Code 245.240 The Department has 14 calendar days to post up-to-date copies of the master list. 62 Ill. Adm. Code 245.720(a)
 - e. Information required to be disclosed: Yes, unless trade secret.
 - f. Trade secret protection: Yes, <u>225 ILCS 732/1-77(e)</u> and <u>62 Ill. Adm.</u> Code 245.720
 - g. Required disclosure to health/emergency personnel: Yes, <u>225 ILCS</u> 732/1-77(e) and 62 Ill. Adm. Code 245.730

<u>Underground Injection</u>

1. Agencies that control the underground injection of fluid by well class: IDNR for Class II, IEPA for Class I, IV, and V, USEPA for VI.

Completion

- 1. Completion report required: Yes, <u>62 Ill. Adm. Code 240.780(a)</u>
 - a. Time limit: Within 30 days of the completion of the well.
 - b. Where submitted: <u>Department of Natural Resources</u>, <u>Office of Oil and Gas Resource Management</u>, One Natural Resources Way, Springfield, IL 62702-1271.
- 2. Well logs required to be filed: Yes, <u>62 Ill. Adm. Code 240.780(c)</u>

- a. Time limit: Within 90 days after drilling ceases, <u>62 Ill. Adm. Code</u> <u>240.780(c)</u>
- b. Where submitted: <u>Illinois State Geological Survey</u>, Geological Records Unit, 615 East Peabody Drive, Champaign, IL 61820.
- c. Confidential time period: Yes, if requested. Two years from date of permit. 62 Ill. Adm. Code 240.790
- d. Available for public use: Yes
- e. Log catalog available: Yes
- 3. Multiple completion regulation: No, unless well spacing is affected by multiple zones
 - a. Approval obtained: Authorization obtained during permit process.
- 4. Commingling in well bore: Yes
 - a. Approval obtained: Not Required

Oil Production

Definition of an oil well: "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary production methods or by the use of an oil and gas separator and which are not the result of condensation of gas after it leaves the underground reservoir. 225 ILCS 725/1 "Well" means any drill hole required to be permitted under Section 6(2) of the Act, including coal or mineral groundwater monitoring wells, structure test holes, coal test holes, and mineral test holes, and any other well required to be permitted under Sections 6 and 12 of the Act, including oil and gas production wells, water supply wells, Class II UIC injection wells, gas storage and gas storage monitoring wells, orphan wells, unpermitted leaking drill holes and plugged wells. 62 Ill. Adm. Code 240.10 õOil Wellö not specifically defined in Oil and Gas Act or associated Rules, however commonly defined as õany well drilled for the production of oil.ö

- 1. Potential tests required: No
 - a. Time interval: NA
 - b. Witness required: NA
- 2. Maximum gas-oil ratio: No
 - a. Provision for limiting gas-oil ratio: NA
 - b. Exception to limiting gas-oil ratio: NA

- 3. Bottom-hole pressure test reports required: No
 - a. Periodical bottom-hole pressure surveys: No
- 4. Commingling oil in common facilities: No
- 5. Measurement involving meters: No
- 6. Production reports: No for conventional wells, Yes for HVHHF wells <u>35 ILCS</u> <u>450/1 et. seq.</u>
 - a. By lease: NA
 - b. By well: Yes for HVHHF wells, <u>35 ILCS 450/1 et. seq.</u>
 - c. Time limit: NA

Gas Production

Definition of a gas well: "Gas Well" means a well with a gas to oil production ratio equal to or greater than 10,000 cubic feet of gas to one barrel of oil. 62 Ill. Adm. Code 240.400

- 1. Pressure base 14.73 psia @ 60 degrees F.
- 2. Initial potential tests: No
 - a. Time interval: NA
 - b. Witness required: NA
- 3. Bottom-hole pressure test reports required: NA
 - a. Periodical bottom-hole pressure surveys: NA
- 4. Commingling of gas in common facilities: NA
- 5. Measurement involving meters: NA
- 6. Production reports: No for conventional wells, Yes for HVHHF wells <u>35 ILCS</u> <u>450/1 et. seq.</u>
 - a. By lease: NA
 - b. By well: Yes for HVHHF wells, 35 ILCS 450/1 et. seq.
 - c. Time limits: NA