

## **NEW YORK**

### **I. Administration**

1. Agency regulating oil and gas exploration/production: [Department of Environmental Conservation \(DEC\), Division of Mineral Resources](#).
2. Contact for regulatory updates: DEC, Division of Mineral Resources.
  - a. Central Office: 625 Broadway, 3<sup>rd</sup> Floor, Albany, NY 12233-6500. Phone: (518) 402-8056.
  - b. Region 9 Sub-Office: 182 E. Union St., Allegany, NY 14706-1328. Phone: (716) 372-0645.
  - c. Region 8 Office: 6274 East Avon-Lima Road, Avon, NY 14414. Phone: (585) 226-2466.
3. Docketing procedure: Integration hearings are held on a regular schedule to address wells permitted in spacing units where compulsory integration of interests is required in accordance with statutory provisions which took effect in August 2005.

Other public hearings are held upon the DEC's own motion or upon application of any interested party. The DEC shall promptly fix a date for a hearing thereon. The hearings shall be held without undue delay after the filing of the petition. The DEC shall make its order within sixty days after the close of the hearing record.

- a. Emergency orders: The DEC may make an emergency order without notice or hearing, which shall be effective when made. No emergency order shall be effective for more than fifteen days.
- b. Notice:

Compulsory Integration Hearings: The well operator is responsible to provide notice to uncontrolled interests in spacing units and by publication at least 30 days prior to an integration hearing.

Other matters: At least ten days' notice, exclusive of the date of service. The DEC is responsible to give notice.

4. Agency regulating air emissions: [Department of Environmental Conservation, Division of Air Resources](#)
5. Agency regulating water quality: [Department of Environmental Conservation, Division of Water](#)

### **II. License**

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

### **III. Bond/Surety**

1. Purpose of surety: To guarantee the performance of well plugging and abandoning responsibilities - 6 NYCRR 551.4(a).
2. Plugging and restoration: Financial security required.
3. Compliance bond required: Yes, for all post-regulatory (June 5, 1973) wells, and only with respect to plugging and abandonment. Governmental entities are not required to furnish bonds.
4. Types of surety accepted: 1) surety bond in favor of the state on a form the department prescribes from a corporate surety authorized to do business as such in the state or 2) a personal bond in favor of the state accompanied by an irrevocable letter of credit from a financial institution authorized to do business in the state or 3) any other comparable financial security that the department accepts - 6 NYCRR 551.4(b).
5. Conditions of bond: A subsequent owner has filed financial security acceptable to the department and the department has approved the transfer to the subsequent owner or that the well be properly plugged and abandoned to the satisfaction of the department, all notices and reports be filed with the DEC, and the surface be restored to a condition similar to the adjacent terrain.
  - a. Amount per well:
    - (1) For wells less than 2,500 feet in depth - 6 NYCRR 551.5(a)(1):
      - (a) 1 to 25 wells: \$2,500 per well, up to a total of \$25,000.
      - (b) 26 to 50 wells: \$25,000 plus \$2,500 per well in excess of 25 wells, up to a total of \$40,000.
      - (c) 51 to 100 wells: \$40,000 plus \$2,500 per well in excess of 50 wells, up to a total of \$70,000.
      - (d) Over 100 wells: \$70,000 plus \$2,500 per well in excess of 100 wells, up to a total of \$100,000.
    - (2) For wells between 2,500 feet and 6,000 feet in depth - 6 NYCRR 551.5 (a)(2):
      - (a) 1 to 25 wells: \$5,000 per well, up to a total of \$40,000.
      - (b) 26 to 50 wells: \$40,000 plus \$5,000 per well in excess of 25 wells, up to a total of \$60,000.
      - (c) 51 to 100 wells: \$60,000 plus \$5,000 per well in excess of 50 wells, up to a total of \$100,000.
      - (d) Over 100 wells: \$100,000 plus \$5,000 per well in excess of 100 wells, up to a total of \$150,000.
    - (3) For wells over 6,000 feet in depth - 6 NYCRR 551.6: Amount set by the Department based upon the anticipated cost to plug the well. Not to exceed \$250,000 per well, up to a total of \$2,000,000.

- (4) If the operator has wells described in (1) and others in (2), instead of providing bonding to satisfy the provisions of each category, he/she may provide an amount as if all the wells were between 2,500 feet and 6,000 feet in depth - 6 NYCRR 551.5(b).

b. Amount of blanket bond: No bond required in excess of (a).

#### **IV. Land Leasing Information**

1. Leasing method: Sealed bids. Negotiated lease option for small tracts. Negotiated non-competitive lease option for split mineral interests and small tracts necessary to consolidate production units.
2. Notice method: Published in the official newspaper or newspapers or otherwise in a newspaper designated for such purposes.
3. Minimum bidding \$ (per acre): \$500.00 for each nominated area + \$1 per acre, if the tract is 125 acres or less, then min. \$5 per acre. Minimum bid is \$15.00 per acre.
4. Qualification of the bidder: Any person in compliance with the law and regulations.
5. State statutes: [New York State Environmental Conservation Law \(ECL\) 23-1101](#).
6. Maximum acres: No established maximum.
7. Royalty rates: N/A
8. Agency in control of leasing: DEC, Division of Mineral Resources, Phone: (518) 402-8056, e-mail: [dec.sm.dmn.ce@dec.ny.gov](mailto:dec.sm.dmn.ce@dec.ny.gov)

#### **V. Setbacks**

1. 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?
  - a. Surface restrictions: Yes – 6 NYCRR 553.2. No well can be located nearer than:
    - (1) 100 feet from an inhabited private dwelling without written consent of owner.
    - (2) 150 feet from any public building or place of assembly.
    - (3) 75 feet from the travelled part of a state, county, township or municipal road.
    - (4) 50 feet from a stream, river, or other body of water.
2. Are there other sources of information on this matter that you could identify?

## VI. Spacing

### 1. Spacing requirements: Yes -ECL 23-0501, 6 NYCRR 553.1.

#### a. Density:

Gas wells outside of pre-January 1, 1995 discovered fields which are not being extended:

#### (1) For Medina gas pools at any depth.

Vertical: 40 acres +/- 10% with the wellbore within the target formation no less than 460 feet from any unit boundary.

Horizontal: 40-acres +/- 10% plus, if applicable, the number of additional acres necessary and sufficient to ensure the wellbore within the target formation is not less than 460 feet from any unit boundary.

#### (2) For Onondaga reef or Oriskany gas pools at any depth.

Vertical: 160 acres +/- 10% with the wellbore within the target formation no less than 660 feet from any unit boundary.

Horizontal: 160-acres +/- 10% plus, if applicable, the number of additional acres necessary and sufficient to ensure the wellbore within the target formation is not less than 660 feet from any unit boundary.

#### (3) For Fault-bounded Trenton and/or Black River hydrothermal dolomite gas pools.

Majority of pool between 4000 - 8000 feet deep: 320-acres +/- 10% with the wellbore within the target formation no less than one-half mile from any other well in another unit in the same pool and no less than 1,000 feet from any unit boundary that is not defined by a field-bounding fault but in no event less than 660 feet from any unit boundary.

#### (4) For Fault-bounded Trenton and/or Black River hydrothermal dolomite gas pools.

Majority of pool below 8000 feet: 640 acres +/- 5% with the wellbore within the target formation no less than one mile from any other well in another unit in the same pool and no less than 1,500 feet from any unit boundary that is not defined by a field-bounding fault but in no event less than 660 feet from any unit boundary.

#### (5) For Shale gas pools at any depth.

Vertical: 40-acres +/- 10% with the wellbore within the target formation no less than 460 feet from any unit boundary.

#### (6) For Shale gas pools at any depth.

Horizontal: With written agreement from operator to drill infill wells in the unit within three years. Up to 640-acres +/- 10% with initial horizontal wellbore or wellbores within the target formation approximately centered in

the unit and no wellbore in the target formation less than 330 feet from any unit boundary.

(7) For shale gas pools at any depth.

Horizontal: Without written agreement from operator to drill infill wells in the unit within 3 years. 40-acres +/- 10% plus the number of additional acres necessary and sufficient to ensure the wellbore within the target formation is not less than 330 feet from any unit boundary.

(8) For all other gas pools. Majority of pool is above a depth of 4,000 feet.

Vertical: 80-acres +/- 10% with the wellbore within the target formation no less than 460 feet from any unit boundary.

Horizontal: 80-acres +/- 10% plus, if applicable, the number of additional acres necessary and sufficient to ensure the wellbore within the target formation is not less than 460 feet from any unit boundary.

(9) For all other gas pools. Majority of pool is between 4,000 and 6,000 feet deep.

Vertical: 160-acres +/- 10% with the wellbore within the target formation no less than 660 feet from any unit boundary.

Horizontal: 160-acres +/- 10% plus, if applicable, the number of additional acres necessary and sufficient to ensure the wellbore within the target formation is not less than 660 feet from any unit boundary.

(10) For all other gas pools. Majority of pool is between 6,000 and 8,000 feet deep.

Vertical: 320-acres +/- 10% with the wellbore within the target formation no less than 1,000 feet from any unit boundary.

Horizontal: 320-acres +/- 10% plus, if applicable, the number of additional acres necessary and sufficient to ensure the wellbore within the target formation is not less than 1,000 feet from any unit boundary.

(11) For all other gas pools. Majority of pool is below 8,000 feet.

Vertical: 640-acres +/- 5% with the wellbore within the target formation no less than 1,500 feet from any unit boundary.

Horizontal: 640-acres +/- 5% plus, if applicable, the number of additional acres necessary and sufficient to ensure the wellbore within the target formation is not less than 1,500 feet from any unit boundary.

(12) For oil pools in the Bass Island, Trenton, Black River, Onondaga reef or other oil-bearing reefs at any depth.

Vertical: 40-acres +/- 10% with the wellbore within the target formation no less than 460 feet from any unit boundary.

Horizontal: 40-acres +/- 10% plus, if applicable, the number of additional acres necessary and sufficient to ensure the wellbore within the target formation is not less than 460 feet from any unit boundary.

(13) For all other oil pools at any depth.

Unit size not specified: Wellbore within target formation must be no less than 165 feet from any lease boundary.

All other non-exempt fields, pools or wells: 40 acres or in the center of a circle of radius 660 feet, subject to change under provision of a spacing order. Well must be 660 feet from the boundary line of any lease or unit and 1,320 feet from any other producing well completed or being drilled to the same pool.

b. Lineal:

Gas wells outside of pre-January 1, 1995 fields which are not being extended. See above section on "Spacing requirements."

2. Exceptions: Yes

a. Basis: Reasonable exceptions to protect correlative rights and prevent waste.

b. Approval:

Gas wells outside of pre-1995 fields which are not being extended: A spacing order is required before the well permit may be issued. The Order may be issued after notice and a comment period, without a hearing, if no substantive and significant issues are raised. A hearing will be scheduled if the DEC determines that a substantive and significant issue has been raised in a timely manner.

Approval, all other non-exempt fields, pools or wells: May be granted administratively after proper notice and if no objections are filed. A public hearing is required if a substantive and significant dispute exists.

Oil fields or pools discovered, developed and operated prior to 1/1/81 are exempt from spacing requirements.

Underground gas storage wells, solution salt mining wells, brine disposal wells, stratigraphic wells and geothermal wells are exempt from spacing requirements.

## **VII. Pooling**

1. Authority to establish voluntary: Yes.
2. Authority to establish compulsory: Yes.

## **VIII. Unitization**

1. Compulsory unitization of all or part of a pool or common source of supply:

2. Minimum percentage of voluntary agreement before approval of compulsory unitization: Yes.
  - a. Working interest: 60%
  - b. Royalty interest: 60%

#### **IX. Drilling Permit**

1. Permits required for:
  - a. Drilling a producing or service well: Yes – 6 NYCRR 552.1(a).
  - b. Seismic drilling: No.
  - c. Recompletion: Yes if completing in a different formation than originally permitted - 6 NYCRR 552.1(a).
  - d. Plugging and abandoning: Yes – 6 NYCRR 555.4(a).
  - e. Stratigraphic test well: Yes, if greater than 500 feet deep - ECL 23-0305(14).
  - f. Geothermal well: Yes, if greater than 500 feet deep - ECL 23-0305(14).
  - g. Brine disposal well: Yes, if greater than 500 feet deep - ECL 23-0305(14).
2. Permit fee:
  - a. Drilling: \$100 plus \$190 for each 500 feet of depth or portion thereof – ECL 23-1903(1).
  - b. Seismic drilling: No permit required.
  - c. Recompletion: If recompletion includes deepening the well to a lower zone, a permit fee is required; in other cases no fee is required.
  - d. Plugging and abandoning: None.
3. Require filing report of work performed: Yes.
4. Sundry notices used: No

#### **X. Vertical Deviation**

1. Regulation requirement: Yes.
  - a. When is a directional survey necessary: Upon DEC request and/or as a condition of permit to drill an intentionally deviated well.
  - b. Filing of survey required: Yes.
  - c. Format of filing: N/A

#### **XI. Casing and Tubing**

1. Minimum amount required:

- a. Surface casing: below the deepest potable fresh water level – 6 NYCRR 554.1(d).
  - b. Production casing: Prevent migration between zones and commingling – 6 NYCRR 554.1(e).
2. Minimum amount of cement required:
- a. Surface casing: Cement to surface – 6 NYCRR 554.4(b).
  - b. Production casing: To a height sufficient to prevent any movement of oil, gas or water outside of the casing – 6 NYCRR 554.4(d). Also, for wells drilled with rotary tools where the subsurface formations and pressures to be encountered have been reasonably well established by prior drilling experience, the operator has the option of either running surface casing as called for in our regulations or of cementing the production casing from below the deepest potable fresh water level to the surface – 6 NYCRR 554.4(a)
  - c. Setting time: Yes. Prudent current industry practices, according to casing and cementing guidelines issued by our office - 6 NYCRR 554.4(b).
3. Tubing requirements:
- a. Oil wells: No.
  - b. Gas wells: No.

## **XII. Hydraulic Fracturing**

The responses below pertain to hydraulic fracturing operations which utilize less than 300,000 gallons of water as the base fluid for all stages per completion. Hydraulic fracturing operations which utilize 300,000 gallons or more of water as the base fluid are considered high-volume hydraulic fracturing and are prohibited in New York, per the 2015 Findings Statement to the Supplemental Generic Environmental Impact Statement (SGEIS) on the Oil, Gas and Solution Mining Regulatory Program (<http://www.dec.ny.gov/energy/75370.html>).

1. Permitting:
- a. Before drilling: Stimulation procedures are considered part of the action to drill a well and therefore are authorized by the permit to drill.
  - b. Before hydraulic fracturing: In accordance with conditions issued with the permit to drill, the appropriate DEC Regional office must be notified prior to the commencement of any stimulation operation.
  - c. How long before: N/A
2. Reporting requirements:
- a. Where reported: Well Drilling and Completion Report



- b. When reported: Within 30 days after completion of the well - 6 NYCRR 554.7
3. Source water requirements: All water withdrawal systems with the capacity to withdraw 100,000 gallons per day or more must apply for a Water Withdrawal Permit from the DEC's Division of Water and file an annual water withdrawal report. If within the Susquehanna or Delaware River Basins, the water withdrawal protocols of the Susquehanna River Basin Commission (SRBC) or Delaware River Basin Commission (DRBC), as appropriate, must be followed. If SRBC or DRBC approval has been granted, a Water Withdrawal Permit from the DEC is not necessary, although the annual reporting requirement will still apply.
4. Mechanical integrity:
  - a. Cementing log required: Upon DEC request
  - b. Pressure testing: N/A
  - c. Pressure monitoring: N/A
  - d. Blowout preventer required: Yes – 6 NYCRR 554.4(c)
5. Disposal of flowback fluids - 6 NYCRR 554.1(c):
  - a. Retaining pits: Must be constructed and maintained to prevent the escape of fluids. Fluids must be removed within 45 days of the cessation of drilling operations unless the operator has submitted either a request for an extension due to unforeseen circumstances or a plan to use the fluids in subsequent operations and the DEC has inspected and approved the pit.
  - b. Tanks: Container must be water-tight and must be constructed and maintained to prevent the escape of fluids. Fluids must be removed within 45 days of the cessation of drilling operations unless the operator has submitted either a request for an extension due to unforeseen circumstances or a plan to use the fluids in subsequent operations and the DEC has inspected and approved the pit.
  - c. Approved discharge to surface water: Direct discharge of fluids to surface water bodies is prohibited without approval under the DEC's Division of Water State Pollution Discharge Elimination System (SPDES) Program, which issues permits including specific effluent limitations and monitoring requirements. Any surface water discharge from a water treatment facility approved to receive these fluids, is also regulated under the SPDES Program. Note however, there are currently no water treatment facilities in New York approved to receive flowback fluids.
  - d. Underground injection: Regulated under the DDEC's SPDES Program and the federal Underground Injection Control (UIC) program. A well permit issued by the DEC's Division of Mineral

Resources is also required to drill or convert a well deeper than 500 feet for underground injection and such permit is not issued until the required UIC and SPDES permits have been approved.

6. Chemical disclosure requirement:
  - a. Mandatory: Disclosure is not required by law or regulation, but this information is consistently requested from applicants according to internal guidance to staff.
  - b. Where disclosed: DEC's Division of Mineral Resources, Central Office, Albany, NY
  - c. When disclosed (pre-fracing, post-fracing, both): Pre-fracing, as part of the Application for Permit to Drill
  - d. Time limit to disclose: A Permit to Drill will not be issued until the necessary chemical disclosures have been received by the DEC.
  - e. Information required to be disclosed: Trade name of each product, Safety Data Sheet for each product, identity of all chemical components, including those considered to be trade secret, of each product by chemical name and CAS Number, and percent by weight of each chemical component within each product.
  - f. Trade secret protection: Information considered to be trade secret must be handled in accordance with 6 NYCRR 616.7, which requires that the information be accompanied by a written request for exception from disclosure and state the reasons why exception from disclosure is necessary. The DEC then reviews the request and justification and issues a determination. The DEC's determination can be appealed by either the record owner (if they disagree with the determination) or by an entity requesting the information under the Freedom of Information Law.
  - g. Required disclosure to health/emergency personnel: Not on a routine basis.

### **XIII. Underground Injection**

1. Agencies that control the underground injection of fluid by well class: NYS does not have primacy for the Underground Injection Control (UIC) program. Therefore, the UIC program is directly implemented by the USEPA Region II office.

### **XIV. Completion**

1. Completion report required: Yes.
  - a. Time limit: Filed with DEC within 30 days after completion of any well - 6 NYCRR 554.7.
  - b. Where submitted: DEC's Division of Mineral Resources office responsible for the area where well is located.

2. Well logs required to be filed: Yes – 6 NYCRR 554.7(b).
  - a. Time limit: Within 30 days after completion of any well.
  - b. Where submitted: DEC’s Division of Mineral Resources office responsible for the area where well is located.
  - c. Confidential time period: DEC will hold well logs and completion data confidential for six months from spud date. This period may be extended an additional six months if drilling has been continuous throughout the first six-month period. An operator may request a maximum of two years confidentiality pursuant to Section 23-0313 of the New York State Oil, Gas and Solution Mining Law.
  - d. Available for public use: Yes. Access is available after the applicable six month or two-year confidentiality period expires.
  - e. Log catalog available: No.
3. Multiple completion regulation: Yes - [6 NYCRR 554.6](#).
  - a. Approval obtained: Prior permission is required for a multiple completion.
4. Commingling in well bore: Yes, with permission of the Department.
  - a. Approval obtained: By application. Approval may be granted on an administrative basis or after public hearing at the DEC's discretion.

#### **XV. Oil Production**

1. Definition of an oil well: No definition in statute or regulation, but the DEC can classify or reclassify wells as oil or gas wells as per ECL 23-0305(8)(c).
2. Potential tests required: No. If production tests are performed, the results must be reported on the DEC’s Well Drilling and Completion Report.
  - a. Time interval: No.
  - b. Witness required: No.
3. Maximum gas-oil ratio: 2,000 cu. ft./bbl. unless otherwise specified but ratio can be changed by application and public hearing - 6 NYCRR 556.1(e).
  - a. Provision for limiting gas-oil ratio: Yes.
  - b. Exception to limiting gas-oil ratio: Only on a pool basis. By application and public hearing.
4. \*Bottom-hole pressure test reports required: No
  - a. Periodic bottom-hole pressure surveys: No

\*The DEC may require the periodic testing of any oil well in such a manner as the DEC may prescribe as per ECL 23-0305(8)(i).

5. Commingling oil in common facilities: Yes, upon application to and with prior approval of the DEC.
6. Measurement involving meters: No.
7. Production reports – 6 NYCRR 551.2:
  - a. By lease: No
  - b. By well: Yes, annually.
  - c. Time limit: Three months after close of calendar year to which report pertains. "Bass Island" well production is reported on a quarterly basis, filed within 60 days after the close of the quarter concerned.

#### **XVI. Gas Production**

1. Definition of a gas well: No definition.
2. Pressure base 14.73 psia @ 60 degrees F. This is not covered in regulation or statute.
3. Initial potential tests: No – If production tests are performed, the results must be reported on the department's Well Drilling and Completion Report.
  - a. Time interval: No.
  - b. Witness required: No.
4. \*Bottom-hole pressure test reports required: No
  - a. Periodical bottom-hole pressure surveys: No

\*The department may require the periodic testing of any gas well in such a manner as the department may prescribe - 6 NYCRR 556.2(d).
5. Commingling of gas in common facilities: Yes, upon application to and with prior approval of the Department
6. Measurement involving meters: Yes - 6 NYCRR 556.2(e).
7. Production reports - 6 NYCRR 551.2:
  - a. By lease: No.
  - b. By well: Yes, if available.
  - c. Time limits: Three months after close of calendar year to which report pertains. "Bass Island" well production is reported on a quarterly basis, filed within 60 days after the close of the quarter concerned.