

## STATE OF NEW YORK

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## IN SENATE

May 7, 2008

Introduced by Sens. YOUNG, MARCELLINO, LIBOUS -- (at request of the Department of Environmental Conservation) -- read twice and ordered printed, and when printed to be committed to the Committee on Environmental Conservation -- reported favorably from said committee and committed to the Committee on Rules -- committee discharged, bill amended, ordered reprinted as amended and recommitted to said committee

AN ACT to amend the environmental conservation law, in relation to statewide spacing for oil and gas wells

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

1 Section 1. Subparagraph 1 of paragraph b of subdivision 1 of section  
2 23-0501 of the environmental conservation law, as added by chapter 386  
3 of the laws of 2005, is amended to read as follows:

4 (1) "Statewide spacing" means spacing units for gas or oil wells that  
5 are within ten percent of the following sizes, as applicable, unless  
6 another percentage is specifically stated:

7 (i) For Medina [~~poils and shale~~] gas pools at any depth, 40 acres with  
8 the wellbore within the target formation no less than [~~660~~] 460 feet  
9 from any unit boundary, plus, if applicable, the number of additional  
10 acres necessary and sufficient to ensure that any horizontal wellbore  
11 within the target formation is not less than 460 feet from any unit  
12 boundary;

13 (ii) For Onondaga reef or Oriskany gas pools at any depth, 160 acres  
14 with the wellbore within the target formation no less than 660 feet from  
15 any unit boundary, plus, if applicable, the number of additional acres  
16 necessary and sufficient to ensure that any horizontal wellbore within  
17 the target formation is not less than 660 feet from any unit boundary;

18 (iii) For fault-bounded Trenton and/or Black River hydrothermal dolom-  
19 ite gas pools where the majority of the pool is between 4,000 and 8,000  
20 feet deep, 320 acres with the proposed productive section of the well-  
21 bore within the target formation no less than one-half mile from any  
22 other well in another unit in the same pool and no less than [~~1000~~]

EXPLANATION--Matter in italics (underscored) is new; matter in brackets  
[-] is old law to be omitted.

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1 1,000 feet from any unit boundary that is not defined by a field-bound-  
2 ing fault but in no event less than 660 feet from any unit boundary;

3 (iv) For fault-bounded Trenton and/or Black River hydrothermal dolom-  
4 ite gas pools where the majority of the pool is below [~~8000~~] 8,000 feet,  
5 within five percent of 640 acres with the proposed productive section of  
6 the wellbore within the target formation no less than one mile from any  
7 other well in another unit in the same pool and no less than [~~1500~~]  
8 1,500 feet from any unit boundary that is not defined by a field-bound-  
9 ing fault but in no event less than 660 feet from any unit boundary;

10 (v) For shale gas pools at any depth, for a vertical well outside any  
11 existing spacing unit for the same formation, 40 acres with the wellbore  
12 within the target formation no less than 460 feet from any unit bounda-  
13 ry;

14 (vi) For shale gas pools at any depth, for a horizontal well outside  
15 any existing spacing unit for the same formation and with a written  
16 commitment from the well operator to drill infill wells pursuant to  
17 subdivision 4 of section 23-0503 of this title, with all horizontal  
18 infill wells in the unit to be drilled from a common well pad within  
19 three years of the date the first well in the unit commences drilling,  
20 notwithstanding the ten percent tolerance specified in this subpara-  
21 graph, up to 640 acres with the initial horizontal wellbore or wellbores  
22 within the target formation approximately centered in the spacing unit  
23 and no wellbore in the target formation less than 330 feet from any unit  
24 boundary;

25 (vii) For shale gas pools at any depth, for a horizontal well outside  
26 any existing spacing unit for the same formation and in the absence of a  
27 written commitment from the well operator to drill infill wells pursuant  
28 to subdivision 4 of section 23-0503 of this title, 40 acres with the  
29 wellbore within the target formation no less than 330 feet from any unit  
30 boundary plus the number of additional acres necessary and sufficient to  
31 ensure that the wellbore within the target formation is not less than  
32 330 feet from any unit boundary;

33 (viii) For all other gas pools where the majority of the pool is above  
34 the depth of 4,000 feet, 80 acres with the wellbore within the target  
35 formation no less than [~~660~~] 460 feet from any unit boundary, plus, if  
36 applicable, the number of additional acres necessary and sufficient to  
37 ensure that any horizontal wellbore within the target formation is not  
38 less than 460 feet from any unit boundary;

39 [~~(vii)~~] (ix) For all other gas pools where the majority of the pool is  
40 4,000 to 6,000 feet deep, 160 acres with the wellbore within the target  
41 formation no less than 660 feet from any unit boundary, plus, if appli-  
42 cable, the number of additional acres necessary and sufficient to ensure  
43 that any horizontal wellbore within the target formation is not less  
44 than 660 feet from any unit boundary;

45 [~~(vii)~~] (x) For all other gas pools where the majority of the pool is  
46 6,000 to 8,000 feet deep, 320 acres with the wellbore within the target  
47 formation no less than [~~1000~~] 1,000 feet from any unit boundary, plus,  
48 if applicable, the number of additional acres necessary and sufficient  
49 to ensure that any horizontal wellbore within the target formation is  
50 not less than 1,000 feet from any unit boundary; [~~and~~

51 [~~(viii)~~] (xi) For all other gas pools where the majority of the pool is  
52 below 8,000 feet, within five percent of 640 acres with the wellbore  
53 within the target formation no less than [~~1500~~] 1,500 feet from any unit  
54 boundary, plus, if applicable, the number of additional acres necessary  
55 and sufficient to ensure that any horizontal wellbore within the target  
56 formation is not less than 1,500 feet from any unit boundary;

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1 (xii) For oil pools in the Bass Island, Trenton, Black River, Onondaga  
2 reef or other oil-bearing reefs at any depth, 40 acres with the wellbore  
3 within the target formation no less than 460 feet from any unit  
4 boundary, plus, if applicable, the number of additional acres necessary  
5 and sufficient to ensure that any horizontal wellbore within the target  
6 formation is not less than 460 feet from any unit boundary; and

7 (xiii) For all other oil pools at any depth, the wellbore within the  
8 target formation shall be no less than 165 feet from any lease boundary.

9 Wells completed under a well permit issued pursuant to clause (xii) or  
10 (xiii) of this subparagraph that do not produce oil may not commence  
11 production of natural gas prior to modification of the spacing unit  
12 pursuant to applicable provisions of this title.

13 § 2. Subdivision 4 of section 23-0503 of the environmental conserva-  
14 tion law, as added by chapter 386 of the laws of 2005, is amended to  
15 read as follows:

16 4. The department may issue permits to drill infill wells on a reason-  
17 ably uniform pattern within the spacing unit after an integration order  
18 has been issued, if required, and only if it determines that drilling  
19 infill wells is necessary to satisfy the policy objectives of section  
20 23-0301 of this article. The distances from the unit boundaries set  
21 forth in paragraph b of subdivision 1 of section 23-0501 of this title  
22 shall apply to any infill wells. For purposes of this section, new  
23 lateral wellbores drilled from the original wellbore in the unit are not  
24 considered infill wells if they are drilled prior to the first product  
25 sales from the original surface location. In a spacing unit established  
26 pursuant to clause (vi) of subparagraph 1 of paragraph b of subdivision  
27 1 of section 23-0501 of this title, infill wells shall be deemed neces-  
28 sary, and the number of infill wells required to satisfy the policy  
29 objectives of section 23-0301 of this article must be drilled within  
30 three years of the date the first well in the unit commences drilling.

31 § 3. Subdivision 6 of section 23-0503 of the environmental conserva-  
32 tion law, as added by chapter 386 of the laws of 2005, is amended to  
33 read as follows:

34 6. ~~An order establishing~~ Unless it is extinguished pursuant to  
35 subdivision seven of this section, a spacing unit established by the  
36 department shall be binding upon all persons and their heirs, successors  
37 and assigns. Upon good cause shown, an order establishing a spacing unit  
38 or a spacing unit which conforms to statewide spacing may be modified by  
39 the department without conducting a hearing if a finding has been made  
40 that no facts are in dispute after all affected persons have been  
41 provided a reasonable opportunity to comment. In a spacing unit estab-  
42 lished pursuant to clause (vi) of subparagraph 1 of paragraph b of  
43 subdivision 1 of section 23-0501 of this title, failure to drill infill  
44 wells pursuant to subdivision 4 of this section shall constitute good  
45 cause for the department to initiate a modification of the spacing unit.

46 If necessary, upon issuance of ~~a modified~~ an order which changes unit  
47 boundaries, the well operator shall adjust the accounts for owners with-  
48 in the original and modified units to reflect the modified boundary. Any  
49 participation by new owners and any adjustment of revenue or royalties  
50 ~~based thereon~~ resulting from participation by new owners shall be on a  
51 prospective basis only. If the initial risk penalty phase pursuant to  
52 title 9 of this article is in effect, any new owner added to the unit  
53 may elect to be integrated as a participating owner, a non-participating  
54 owner or an integrated royalty owner as defined by title 9 of this arti-  
55 cle. Full well costs shall be assessed against new participating owners  
56 and non-participating owners and included in the risk penalty calcu-

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1 lation. If the initial risk penalty phase has concluded, any new owner  
2 added to the spacing unit may elect to be integrated as a participating  
3 owner or an integrated royalty owner on a prospective basis only.  
4 § 4. This act shall take effect immediately.

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address horizontal drilling. ECL §23-0503 provides that the DEC may approve infill wells and that spacing orders are binding upon all persons and may be modified by the DEC upon good cause shown.

ECL §23-0503(2) provides that DEC shall issue a permit if the proposed spacing unit conforms to statewide spacing and is of approximately uniform shape with other spacing units within the same field or pool, and abuts other spacing units in the same pool, unless sufficient distance remains between units for another unit to be developed.

#### PRIOR LEGISLATIVE HISTORY:

This is a new proposal.

#### STATEMENT IN SUPPORT:

The existing Oil and Gas Law provides for regulation of oil and gas wells and similar wells in New York State. One provision of the law dealt with how wells are spaced from each other, to ensure efficient and economic recovery of oil and gas resources while protecting the correlative rights of mineral resource owners (i.e., ownership rights, usually of the surface owners). The law establishes standard, statewide spacing for wells, which varies according to the target geologic formation and depth, and provides flexibility for spacing units of plus or minus ten percent to account for site-specific circumstances that may require movement of surface location. Setback distances are also established for spacing units to help ensure that wells do not drain oil and gas from under adjacent spacing units.

Chapter 386 of the Laws of 2005 amended the Oil and Gas Law., That Chapter established the current statewide spacing provisions for gas but did not address oil wells or horizontal wells or make provision for adjusting the required 660-foot setback when a spacing unit is smaller than 40 acres by the authorized 10-percent tolerance. Horizontal wells are being used increasingly in New York; these are wells that are drilled vertically to a point above the target formation, then drilled at an angle to reach the target formation and subsequently drilled horizontally across the formation to provide more efficient recovery of the resource., Horizontal drilling requires that unit sizes be expanded to accommodate the length of the wellbore.

This bill, therefore, amends Title 5 of the Oil and Gas Law to expand the definition of statewide spacing to: (1) address oil wells and horizontal wells; (2) provide a 330-foot setback for horizontal shale wells; (3) decrease the setback from 660 feet to 460 feet for vertical shale wells and smaller units in other pools; and (4) make other technical corrections. Absent this legislation, oil wells in new fields must be drilled on 40 acres, which would not always foster efficient resource recovery, The DEC projects a significant increase in the number of horizontal wells to be proposed, especially to target shale formations, which is not contemplated by the existing statute.

The vast majority of proposals that are expected for oil wells and horizontal wells would not conform to current statewide spacing sizes, and would therefore require notice, public comment and possibly a hearing on an individual well basis. With hundreds of such wells likely to be proposed in the near future, the potential burden on the DEC and the industry would be substantial, with no commensurate benefit in ensuring that the policy objectives of ECL §23-0301 are met.

In addition, this bill creates three categories of shale unit development: (1) vertical wells (40 acres with 460-foot setbacks); (2) single-well horizontal units (40 acres plus acreage necessary to maintain a 330foot setback); and (3) multi-well horizontal units (up to 640 acres

with 330-foot setbacks, allowing operators with smaller acreage positions to develop smaller units). The provision for multi-well shale units allows operators to drill several wells from a centralized location, reducing the extent of surface environmental disturbance. Infill drilling necessary to fully develop the acreage is required in multi-well units, and failure to drill infill wells would be good cause for DEC to initiate a unit modification.

The geological characteristics of shale are such that distinct lateral pools and spacing units separated by excluded acreage are not likely. Nevertheless, DEC staff will continue to review every unit proposed to conform to statewide spacing to ensure that it is uniformly shaped with other units in the pool or field and abuts other: units in the same pool unless sufficient distance remains for another: uniformly shaped unit to be formed This prevents well operators from leaving "stranded" undrillable acreage between units in a common pool or from configuring units based on lease position.

Proposals which do not meet this criteria but which DEC staff determine may meet the policy objectives of the statute are subject to the public review process set forth in ECL §23-0503(3). This ensures that affected owners are aware that a non-abutting or non-uniformly shaped unit has been proposed and have the opportunity to be heard. The stated unit sizes will only be expanded if the length of the proposed horizontal wellbore is such that the minimum required setback cannot be met within the specified number of acres.

At the time of permitting when the spacing unit is set, only the acreage necessary and sufficient to maintain minimum setbacks for the entire length of the wellbore in the target formation and at both ends of the wellbore in the target formation will be allowed Thus, the bill provides protection to ensure that both the single-well and multi-well horizontal units are regularly shaped and will not create "islands" of undrillable acreage.

By accommodating smaller oil field spacing and the length of horizontal wellbores but requiring protective setbacks, and when appropriate, the drilling of infill wells, this bill furthers the policy objectives of preventing waste of the State's oil and gas resources and development of oil and gas properties in a manner that results in a greater ultimate recovery, while protecting the rights of mineral rights owners and the general public.

**BUDGET IMPLICATIONS:**

None.

**EFFECTIVE DATE:**

This bill takes effect upon enactment

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