STATE OF NEW YORK

1928

2017-2018 Regular Sessions

IN SENATE

January 11, 2017

Introduced by Sen. AVELLA -- read twice and ordered printed, and when printed to be committed to the Committee on Environmental Conservation

AN ACT to amend the environmental conservation law, in relation to natural gas development using hydraulic fracturing

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

Section 1. Legislative declarations and purpose. 1. The legislature recognizes that the expansion of natural gas development in the state of New York using hydraulic fracturing poses unique threats to human health and to the environment. The legislature further recognizes that New York's current laws are inadequate to protect against these threats.

2. As natural gas development expands, it is the highest priority of this state to protect human health as well as to ensure the safety of irreplaceable natural assets such as safe drinking water, clean air, wildlife, and the aesthetic beauty of the state.

3. Hydraulic fracturing utilizes components that are often toxic, that are non-biodegradable, and that are virtually impossible to remove once they enter the natural environment. Many of these hazardous chemicals are known carcinogens and others can cause other life threatening illnesses. Drinking water contamination from hydraulic fracturing can lead to exposure to endocrine disrupting agents and to other chemicals that can cause kidney, liver, heart, blood, brain damage and other hazardous health effects.

4. Hydraulic fracturing operations withdraw millions of gallons of water from the ground and surface waters of the state, which are a precious, finite and invaluable resource, upon which there is likely to be an ever-increasing demand for present, new and competing uses. The withdrawal of ground and surface waters of the state should be regulated in a manner that benefits the people of the state and is compatible with long-range water resource planning and with managing such waters in the public trust for the benefit of all New Yorkers.

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

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5. Hydraulic fracturing operations result in wastewater that returns to the surface laden with salt, heavy metals, other chemicals and radioactive elements. In other states, this wastewater is often stored in open pits until transported for ultimate disposal. Chemicals evaporate from these open pits, contributing to air pollution. Leaks and spills of chemicals from the trucks and waste pits may cause contamination of surface waters. Fracturing fluid left underground could migrate or seep through fractures in underground formations, cracks in well-bore casings, through abandoned wells, or otherwise to pollute groundwater. Given the increased prevalence of natural gas drilling in the state, these negative effects may increase if the process of natural gas extraction is not carefully and thoughtfully regulated.

6. One of the chief environmental and infrastructure assets of the state of New York is its drinking water systems, which play a fundamental role in the economic productivity and public health of the state. The policy of the state with respect to the management of shale gas extraction must be one of zero drinking water risk.

7. Furthermore, natural gas exploration must be carried out in a manner that is sensitive to the ecological richness and aesthetic beauty of the state. Widespread, uncontrolled natural gas development using hydraulic fracturing will diminish or destroy the natural beauty of the land and disrupt the natural habitat of wildlife. The legislature finds that natural gas development must be carried out to minimize these effects to the maximum extent possible.

8. Natural gas extraction can impose both monetary and non-monetary costs on municipalities and cause property damage or otherwise reduce the property value of private land owners. It is the intention of the legislature that all persons who undertake natural gas development in the state of New York take full responsibility for their actions, and act consistent with local concerns.

9. Although natural gas development provides the promise of economic benefit for the state of New York, the state must ensure that the benefits outweigh the costs. It is the policy of the state that natural gas development practices will be sustainable, respectful, and safe. This act is intended to ensure that goal is met.

§ 2. The environmental conservation law is amended by adding a new section 17-0709 to read as follows:

§ 17-0709. Wastewater treatment facilities.

Notwithstanding anything to the contrary contained in subdivision twenty-one of section 17-0105 of this article, the commissioner shall, after holding a public hearing with due notice, promulgate regulations establishing a standard of performance for the control of the discharge of pollutants from facilities which treat wastewater from hydraulic fracturing operations. This standard of performance shall reflect the greatest degree of effluent reduction which the commissioner determines to be achievable through application of the best available demonstrated control technology, processes, operating methods, or other alternatives, including, where practicable, a standard permitting no discharge of pollutants. This standard of performance shall remain in effect until such time that the federal government determines that a greater degree of effluent limitation is achievable by this category of facilities, at which time this standard of performance shall be superseded by such federal standard.

§ 3. Section 23-0101 of the environmental conservation law, as amended by chapter 846 of the laws of 1981 and subdivision 1 as amended by chapter 891 of the laws of 1984, is amended to read as follows:

§ 23-0101. Definitions.

As used in this article, unless the context otherwise requires:

1. **"Air pollutant" means volatile organic compounds (VOCs) as defined at 40 CFR 51.100(s), hazardous air pollutants (HAPs) as defined at 42 USC § 7412(b) and 40 CFR 63, nitrogen oxides (NOX), carbon monoxide (CO), methane (CH4), ethane (C2H6), particulate matter (PM10 and PM2.5), ozone (O3), lead (Pb), sulfur dioxide (SO2) and other air contaminants as may be identified by the department.**

2. "Best management practices (BMPs)" are practices that are designed to prevent or reduce impacts caused by oil and gas operations to air, water, soil, or biological resources, and to minimize adverse impacts to public health, safety and welfare, including the environment and wildlife resources.

3. "Buffer zone" means all that area outside and surrounding the underground gas storage reservoir which the department approves as appropriate to protect the integrity of the reservoir, no part of which shall be more than thirty-five hundred linear feet from the boundary thereof.

[~~2.~~] **4.** "Cavity" means an open or partially open space left after a salt has been solution mined.

[~~3.~~] **5. "Closed-loop system" means a system for handling oil or gas exploration, stimulation, or production wastes, including but not limited to drilling fluids and cuttings, hydraulic fracturing flowback, produced water, and residual sludges or brines, without the need for pits.**

6. "Commissioner" means the commissioner of environmental conservation.

[~~4.~~] **7. "Consequences of any hazardous discharge" as used in this section means any detrimental effect to the health, safety, welfare, or aesthetic enjoyment of any citizen, resident, or visitor in the state by a hazardous discharge.**

8. "Department" means the department of environmental conservation.

[~~5.~~] **9. "Environmental damage" as used in this section means damage to:**

a. any waters of the state;

b. any land surface or subsurface strata of the state;

c. any ambient air within the state; or,

d. the wildlife or ecological systems in the land, air, or waters of the state.

10. "Fund" means the oil and gas [~~fund as established in section eighty-three-a of the state finance law~~] **account established under chapter fifty-eight of the laws of nineteen hundred eighty-two**.

[~~6.~~] **11.** "Field" means the general area underlaid by one or more pools.

[~~7.~~] **12.** "Gas" means all natural, manufactured, mixed, and byproduct gas, and all other hydrocarbons not defined as oil in this section.

[~~8.~~] **13. "Groundwater" means water in a saturated zone or stratum beneath the surface of land or water.**

14. "Groundwater well" means any well designed or used for the sole purpose of obtaining groundwater.

15. "Hazardous release" as used in this section means the release of a hazardous substance.

16. "Hazardous substance" means substances which meet the following criteria, including but not limited to those listed in N.Y.C.R.R. § 597.2:

a. because of their quantity, concentration, or physical, chemical or infectious characteristics cause physical injury or illness when improperly treated, stored, transported, disposed of, or otherwise managed;

b. pose a present or potential hazard to the environment when improperly treated, stored, transported, disposed of, or otherwise managed;

c. because of their toxicity or concentration within biological chains, present a demonstrated threat to biological life cycles when released into the environment;

d. have an oral LD (rat) toxicity of less than fifty milligrams per kilogram; or have an inhalation LC (rat) toxicity of less than two milligrams per liter; or have a dermal LD (rabbit) toxicity of less than two hundred milligrams per kilogram; or

e. cause or are capable of causing death, serious illness or serious physical injury to any person or persons as a consequence of release into the environment.

17. "Local agency" means any local agency, board, authority, school district, commission or governing body, including any county, city, town, village or other political subdivision of the state.

[~~9.~~] 18. "Metered" means the physical measurement of gas by means acceptable to the department.

[~~10.~~] 19. "Oil" means crude petroleum oil and all other hydrocarbons, regardless of gravity, that are produced at the wellhead in liquid form by ordinary production methods and that are not the result of condensation of gas.

[~~11.~~] 20. "Oil and gas facility" means equipment, improvements, or physical structures, including any oil or gas wells, used or installed at an oil and gas location for the exploration, production, withdrawal, gathering, treatment, or processing of oil or natural gas.

21. "Oil and gas location" means a definable area where an operator has disturbed or intends to disturb the land surface in order to locate an oil and gas facility.

22. "Oil and gas operations" means exploration for oil and gas, including the conduct of seismic operations and the drilling of test bores; the siting, drilling, deepening, recompletion, reworking, or abandonment of an oil and gas well, underground injection well, or gas storage well; production operations related to any such well including the installation of flowlines and gathering systems; the generation, transportation, storage, treatment, or disposal of exploration and production wastes; and any construction, site preparation, or reclamation activities associated with such operations.

23. "Operator" means any person who exercises the right to control the conduct of, or who conducts, oil and gas operations.

24. "Owner" means the person who has the right to drill into and produce from a pool or a salt deposit and to appropriate the oil, gas or salt he produces either for himself or others, or for himself and others.

[~~12.~~] 25. "Pit" means any natural or man-made depression in the ground used for the purpose of retaining or storing substances associated with oil and gas operations.

26. "Person" means and includes any natural person, corporation, association, partnership, receiver, trustee, executor, administrator, guardian, fiduciary, or other representative of any kind, and includes any department, agency or instrumentality of the state or any of its governmental subdivisions.

[~~13.~~] 27. "Plug and abandon" means the plugging, replugging if necessary, and abandonment of a well bore including the placing of all bridg-

es, plugs, and fluids therein and the restoration and reclamation of the surface in the immediate vicinity to a reasonable condition consistent with the adjacent terrain.

[~~14.~~] **28.** "Pool" means an underground reservoir containing a common accumulation of oil or gas or both; each zone of a structure which is completely separated from any other zone in the same structure is a pool.

[~~15.~~] **29. "Potential environmental justice area" means a minority or low-income community that may bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.**

30. "Producer" means the owner of a well or wells capable of producing oil, gas, or salt; or any salt or hydrocarbon mixture.

[~~16.~~] **31.** "Product" means any commodity made from oil or gas and includes refined crude oil, crude tops, topped crude, processed crude, processed crude petroleum, residue from crude petroleum, cracking stock, uncracked fuel oil, fuel oil, treated crude oil, residuum, gas oil, casinghead gasoline, natural-gas gasoline, kerosene, benzine, wash oil, waste oil, blended gasoline, lubricating oil, blends or mixtures of oil with one or more liquid products or by-products derived from oil or gas, and blends or mixtures of two or more liquid products or by-products derived from oil or gas, whether herein enumerated or not.

[~~17.~~] **32. "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, escaping, leaching, dumping or discharging into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles).**

33. "Reservoir" means any underground reservoir, natural or artificial cavern or geologic dome, sand or stratigraphic trap, whether or not previously occupied by or containing oil or gas.

[~~18.~~] **34.** "Salt" means sodium chloride, evaporite or other water soluble minerals, either in solution or as a solid or crystalline material in a pure state or as a mixture.

[~~19.~~] **35. "Site" means the location of any oil and gas operation, including but not limited to wells and well pads, storage facilities, natural gas compressor stations, and centralized impoundments.**

36. "Solution mining" means the dissolving of an underground salt by water to produce a brine for transport to another underground or surface location for sale, processing or storage.

[~~20.~~] **37. "Surface water" means any water occurring on the Earth's surface in the form of a stream, river, pond, lake, wetland, ocean, artificial channel or reservoir, or other surface water body.**

38. "Waste" means

a. Physical waste, as that term is generally understood in the oil and gas industry;

b. The inefficient, excessive or improper use of, or the unnecessary dissipation of reservoir energy;

c. The locating, spacing, drilling, equipping, operating, or producing of any oil or gas well or wells in a manner which causes or tends to cause reduction in the quantity of oil or gas ultimately recoverable from a pool under prudent and proper operations, or which causes or tends to cause unnecessary or excessive surface loss or destruction of oil or gas;

d. The inefficient storing of oil or gas; and

e. The flaring of gas produced from an oil or condensate well after the department has found that the use of the gas, on terms that are just

and reasonable, is, or will be economically feasible within a reasonable time.

§ 4. Section 23-0303 of the environmental conservation law, as amended by chapter 846 of the laws of 1981, is amended to read as follows:

§ 23-0303. Administration of article.

1. Except to the extent that the administration of this article is specifically entrusted to other agencies or officers of the state by its provisions, such administration shall be by the department. Geological services for the department in connection with the administration of this article shall be provided by or in cooperation with the state geologist. Within appropriations therefor the department is authorized to employ such personnel as may be necessary for the administration of this article and may also employ or secure the services of such engineering, technical and other consultants as it may require from time to time.

2. The provisions of this article shall supersede all local laws or ordinances relating to the regulation of the oil, gas and solution mining industries; [~~but shall not supersede local government jurisdiction over local roads or the rights of local governments under the real property tax law~~] **provided, however, that nothing in this article shall be construed to prevent any local government from:**

a. Enacting or enforcing local laws or ordinances of general applicability, except that such local laws or ordinances shall not regulate oil and gas operations regulated by state statute or regulation; or

b. Enacting or enforcing local laws or ordinances related to the regulation and management of local roads, such as ingress and egress to public thoroughfares controlled by the local government; or

c. Enacting or enforcing laws pursuant to the rights of local governments under the real property tax law; or

d. Enforcing any requirement contained in any oil or gas permit issued by the state; or

e. Enacting or enforcing local zoning ordinances or laws that determine permissible uses in zoning districts, including whether oil and gas facilities are permissible within a particular zoning district. Where an oil and gas facility is designated a permissible use in a zoning district and allowed by special use permit, conditions placed on such special use permits shall be limited to the following:

i. Requirements and conditions concerning setback from property boundaries, surface waters, groundwater wells, homes or private residences, churches, schools, and other public facilities, and public thoroughfare rights-of-way;

ii. Requirements and conditions concerning natural or man-made barriers to restrict access from oil and gas facilities, if required; and

iii. Dust, noise, vibration, or light limitations, and regulation of hours of operation.

3. Notwithstanding any provision to the contrary, local laws and ordinances regulating zoning, including conditions in special use permits that impose setbacks, the requirement of natural or manmade barriers, or limitations on dust, noise, vibration, light, or hours of operation, do not constitute the regulation of oil and gas operations regulated by state statute or regulation.

4. In order to facilitate a municipality's ability to exercise its authority under paragraph d of subdivision two of this section, the department shall provide every municipality with a copy of the permit of each well located or permitted to be located within its boundaries.

[~~3.~~] **5.** a. The commissioner shall accept from municipalities requests for funds from the oil and gas fund to reimburse the municipality for

costs incurred in repairing damages to municipal land or property. Such requests shall include such explanatory material and documentation as the commissioner may require.

b. The commissioner and director of the budget, may recommend payment to the municipality to satisfy the request for reimbursement upon finding that:

(1) The municipality has made a bona fide effort to seek relief and recover its costs from those deemed to be responsible and any other appropriate avenues, but has been unsuccessful;

(2) The damage was a direct result of activities regulated under this article and that the amount of funds requested is reasonable in view of such damages; and

(3) The costs were incurred after the effective date of this subdivision.

§ 5. Paragraph d of subdivision 8 of section 23-0305 of the environmental conservation law, as amended by chapter 846 of the laws of 1981, is amended to read as follows:

d. Require the drilling, casing, operation, plugging and replugging of wells and reclamation of surrounding land in accordance with rules and regulations of the department in such manner as to prevent or remedy [~~the following~~] **any act resulting in environmental damage**, including but not limited to: the escape of oil, gas, brine or water out of one stratum into another; the intrusion of water into oil or gas strata other than during enhanced recovery operations; the pollution of fresh water supplies by oil, gas, salt water**, drilling fluids, hydraulic fracturing fluids** or other contaminants; and blowouts, cavings, seepages and fires. **Such rules and regulations shall regulate the type, volume, and concentration of additives for the protection of human health and the environment; and such regulations shall prohibit the use of drilling fluids or hydraulic fracturing fluids containing any chemical substance that upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment, including from drinking water, or indirectly through food chains, will, on the basis of information available to the department, cause death, disease, behavioral abnormalities, cancer, genetic mutations, endocrine disruption, physiological malfunctions, including malfunctions in reproduction, or physical deformations, in such organisms or their offspring, including but not limited to: benzene and any chemical substance that has been identified pursuant to the Federal Toxic Substances Control Act as persistent, bioaccumulative and toxic.**

§ 6. Section 23-0305 of the environmental conservation law is amended by adding a new subdivision 15 to read as follows:

15. The department shall promulgate regulations requiring disclosure of chemicals used in oil and gas well drilling and hydraulic fracturing, including but not limited to the following requirements:

a. No permit to drill, deepen, plug back, or convert a well shall be issued under this article until the department obtains from the permit applicant a complete list of the chemical constituents of each additive that may be used in drilling or fracturing the well specified in the application;

b. Whenever the department or a treating physician or nurse, determines that a medical emergency exists as a result of oil or gas exploration, stimulation, or production activities conducted by a well drilling permit holder or its subcontractors and that the disclosure of proprietary chemical information, including the identity of any chemical or the formula of any additive used in drilling or hydraulic fracturing of a

permitted oil or gas well, may be necessary for emergency or first-aid treatment, the well drilling permit holder or any subcontractor in possession or control of the proprietary information shall immediately disclose the proprietary information requested to the department or that treating physician or nurse, regardless of the existence of a written statement of need or a confidentiality agreement. The permit holder or subcontractor may request a written statement of need and a confidentiality agreement as soon thereafter as circumstances permit. In the event the permit holder or subcontractor fails to immediately disclose such proprietary information, the department shall make available to a treating physician or nurse all information within its possession relating to the ingredients of any chemical or the formula of any additive used in drilling or hydraulic fracturing utilized in a permitted oil or gas well suspected of causing such emergency;

c. Each permit holder shall notify the department of any changes to the chemical constituents used in drilling or fracturing prior to the fluid's use in the drilling or fracturing process.

d. The department shall make any disclosures filed under paragraph a or c of this subdivision available to the public and shall post such information on the department's website.

§ 7. Section 23-0313 of the environmental conservation law is amended by adding four new subdivisions 3, 4, 5 and 6 to read as follows:

3. The department shall promulgate regulations requiring:

a. Oil and gas well owners or operators to give notice to the department, local health department and responding emergency agencies, in person or by such means as the department shall specify, immediately after the release of any fuel, hazardous chemical or waste stored at or generated by an oil and gas facility or used in well drilling or hydraulic fracturing operations.

b. Notice required under paragraph a of this subdivision shall include each of the following (to the extent known at the time of the notice and so long as no delay in responding to the release results):

i. The chemical name or identity of any substance involved in the release; and

ii. An estimate of the quantity of any such substance that was released into the environment; and

iii. The time and duration of the release; and

iv. The medium or media into which the release occurred; and

v. Any known or anticipated acute or chronic health risks associated with the release and, where appropriate, advice regarding medical attention necessary for exposed individuals; and

vi. Proper precautions and remedial actions to take as a result of the release; and

vii. The name and telephone number of the person or persons to be contacted for further information.

c. As soon as practicable after a release that requires notice under paragraph a of this subdivision, such owner or operator shall provide a written follow-up emergency notice (or notices, as more information becomes available) setting forth and updating the information required under paragraph b of this subdivision, and including:

i. Actions taken to respond to and contain the release;

ii. Any known or anticipated acute or chronic health risks associated with the release; and

iii. Advice regarding medical attention necessary for exposed individuals.

d. The department shall post all chemical spill report information referenced in paragraphs a, b and c of this subdivision on the department's website.

4. The department shall promulgate rules and regulations requiring that owners or operators of wells give written notice to all persons residing within one half mile of any proposed well site two weeks before drilling or hydraulic fracturing operations begin. Owners or operators of wells shall publish a notice in a local newspaper circulating in the area of the proposed well site two weeks before drilling or hydraulic fracturing operations begin. Within two business days of giving notice under this section, a list of recipients and a copy of all notices, with proof of delivery in compliance with this section, shall be submitted to the department for inclusion in the drilling permit file. Copies of all notices shall be publicly available.

5. The department shall develop maps of all known oil and gas wells, including active and abandoned wells, in New York using a geographic information system and make those maps system publicly available on the department's website.

6. The department shall create and operate an emergency 1-800 telephone number for public use in identifying and reporting any oil or natural gas-related incidents to the department.

§ 8. The environmental conservation law is amended by adding a new section 23-0315 to read as follows:

§ 23-0315. Best management practices.

1. The commissioner shall not permit any owner or operator to commence operations to drill, deepen, plug back or convert a well for exploration, production, storage or disposal unless such operations implement best management practices.

2. The commissioner shall include all applicable best management practices as conditions of each permit to drill, deepen, plug back or convert a well.

3. Every three years, after holding a public hearing with due notice, the commissioner shall publish an inventory of best management practices that may be included as special conditions of permits for natural gas drilling, depending upon site-specific analysis of a proposed well site and available control technologies. Any best management practices that may be applied to all drilling permits shall be promulgated as regulations in compliance with the requirements of the state administrative procedure act.

§ 9. The environmental conservation law is amended by adding a new section 23-0317 to read as follows:

§ 23-0317. Liability.

1. Liable parties. The following persons shall be liable under subdivision two of this section:

a. the owner of an oil and gas facility or pipeline;

b. the operator of an oil and gas facility or pipeline;

c. any person who by contract, agreement, or otherwise arranged for the transport of oil or gas, or for the transport, disposal, or treatment of a hazardous substance used in oil or gas operations, including hazardous hydraulic fracturing fluid or any hazardous components thereof; and,

d. any person who accepts any hazardous substance used in oil and gas operations for recycling, disposal, or treatment.

2. Liability. Any liable party mentioned in subdivision one of this section shall be liable for any environmental damage from, or the consequences of any hazardous release from, an oil and gas facility, well-

bore, pipeline, or from any storage or disposal area for oil, gas, or a hazardous substance used in oil or gas operations including:

a. all costs of removal or remedial action incurred by the state or any subdivision thereof;

b. any other necessary costs of response or mitigation incurred by any other person authorized by the state to respond to the contamination or mitigate the effects thereof;

c. damages for injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing such injury, destruction, or loss resulting from such a release; and,

d. all direct costs proximately caused by the environmental damage or the consequences of any hazardous release to private parties, including but not limited to damage to property owned by such parties or injury to personal health or welfare.

3. Limitation of liability. Nothing in this section should be construed as limiting the liability of any liable party identified in subdivision one of this section as against any private party in a civil action.

4. Natural resources liability. a. In the event of an injury to, destruction of, or loss of natural resources under paragraph c of subdivision two of this section, liability shall be to the state of New York; provided, however, that no liability to the state of New York shall be imposed under paragraph c of subdivision two of this section, where the party sought to be charged has demonstrated that the damages to natural resources complained of were specifically identified as an irreversible or irretrievable commitment of natural resources in an environmental impact statement, or other comparable environmental analysis, and the decision to grant a permit or license authorizes such commitment of natural resources, and the facility or project was otherwise operating within the terms of its permit or license.

b. The commissioner, or another representative authorized by the governor of New York, shall act on behalf of the public as trustee of such natural resources to recover for such damages. Sums recovered by the commissioner as trustee under this subsection shall be retained by the trustee, without further appropriation, for use only to restore, replace, or acquire the equivalent of such natural resources. The measure of damages in any action under paragraph c of subdivision one of this section shall not be limited by the sums which can be used to restore or replace such resources.

5. Financial responsibility. a. Any owner or operator of a well or wells must, before commencement of operations, post a liability bond or hold liability insurance coverage for each well owned or operated.

b. The liability bond or insurance required by paragraph a of this subdivision shall be in such form as the department by regulation shall require and in such amount as the department shall deem to be reasonably sufficient to correct, repair or remedy to the satisfaction of the department any environmental damage or hazardous discharge resulting from oil or gas exploration or production. However, for wells less than two thousand five hundred feet in depth or length, a minimum of five thousand five hundred dollars per well will be required to satisfy this section and for wells between two thousand five hundred feet and six thousand feet in depth or length, ten thousand five hundred dollars per well will be required. Wells greater than six thousand feet in depth or length and for which hydraulic fracturing fluid shall be used, will require that the operator provide additional financial security of two hundred fifty thousand dollars, provided however the department may

require an additional bond or financial security in an amount sufficient to cover potential remediation costs associated with contamination of the environment.

c. The liability bond or insurance required by paragraph a of this subdivision shall be held for the duration of operations.

d. After operations have ceased, any owner or operator of a well or wells shall post a liability bond or hold liability insurance for each well owned or operated.

e. The liability bond or insurance required by paragraph d of this subdivision shall be in such form as the department by regulation shall require and in such amount as the department shall deem sufficient to correct, repair, or remedy to the satisfaction of the department any environmental damage or hazardous discharge resulting from movement of any hazardous substance from the plugged or permanently abandoned well.

f. The liability bond or insurance required by paragraph d of this subdivision shall be held for one hundred years after the well has been plugged or permanently abandoned.

g. Nothing in this section shall affect the requirements of paragraph e of subdivision three of section 23-1101 of this article.

6. Definition of natural resources. "Natural resources" as used in this section means land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the state of New York.

§ 10. The environmental conservation law is amended by adding a new section 23-0505 to read as follows:

§ 23-0505. Oil and gas facility location requirements.

1. Minimum setbacks. No oil and gas facility, well-bore, pipeline, or storage or disposal area for oil, gas, or a hazardous substance used in oil or gas operations shall be located within two thousand feet of any surface waters, groundwater well, home or private residence (including a nursing home), school, church, day care facility, or health care facility.

2. Subsurface lands. For the purposes of subdivision one of this section, the setbacks applicable to any surface waters, groundwater well, home or private residence (including a nursing home), school, church, day care facility, or health care facility shall also apply to the land directly below those areas, including any subsurface strata.

3. Contamination prevention. a. Spills, well leaks, and contaminant flow from targeted formation.

(1) The well pad of any oil or gas well located within one-half mile of any surface waters must be surrounded by a protective berm with a water detention capacity of at least twenty-five thousand gallons. The department may require a protective berm to have a detention capacity greater than twenty-five thousand gallons if the department determines it is necessary to protect surface waters from contamination.

(2) The department shall require a site-specific analysis of the topography, geology, and hydrogeology of all proposed oil and gas facilities or pipelines. This analysis should include identification of all potential pathways and receiving waters for spills from the site to reach surface waters.

(3) The department shall require the development of groundwater contour and vertical gradient maps of the geological formation from the target formation to the ground surface prior to approval of any gas drilling permit.

(4) The department shall promulgate regulations identifying topographical and geologic and hydrogeologic conditions, including but not limited to steep slopes between the well pad and surface waters; proximity to impaired waterways identified by the state of New York pursuant to section 303(d) of the federal Clean Water Act; conditions that would permit sudden spills to reach surface waters before containment is possible; or any other conditions that would increase the risk of surface or groundwater contamination or further degradation that require setbacks larger than those specified in subdivision one of this section or denial of a well drilling permit.

(5) As a condition of any permit granted pursuant to section 23-0501 of this title for any well subject to setback requirements, the department shall establish setbacks sufficient to protect human health and the waters of the state.

b. Monitoring requirements. (1) All oil or gas wells must be equipped with a monitoring device or devices installed to detect any contaminant movement from the oil or gas well in the direction of any groundwater or groundwater well.

(2) The department shall promulgate regulations establishing a monitoring program to detect any contaminant movement from an oil or gas facility. The regulations shall provide, at a minimum, that:

(i) monitoring shall occur no less often than quarterly;

(ii) groundwater monitoring shall commence at or near the proposed well site at least three hundred sixty-five days before drilling begins to provide a water quality baseline that accounts for seasonal changes in water quality;

(iii) monitoring shall continue for the duration of operations until fifty years after operations have ceased or the oil and gas well has been plugged or permanently abandoned;

(iv) the monitoring device or devices used to detect contaminant movement shall reflect the best technology available for such monitoring;

(v) monitoring shall be conducted for one or more actual constituents of drilling and fracturing fluids used at each proximate site; and

(vi) screen lengths, monitoring well density and monitored aquifers shall be based upon a conceptual flow model, developed on the basis of all available or new data, as appropriate, to detect a leak or migration of any contamination so as to maximize the possibility of detection prior to contamination of any drinking water source.

§ 11. The environmental conservation law is amended by adding a new section 23-0507 to read as follows:

§ 23-0507. Exclusion areas.

1. The department shall identify specific areas with determinable boundaries in which any oil and gas facilities, well-bores, pipelines, or storage or disposal areas for oil, gas, or a hazardous substance used in oil or gas operations will be prohibited. These areas shall include:

a. the area around and including the New York city watershed;

b. the area around and including any water system that has received, at any point in time, a filtration avoidance determination from the United States Environmental Protection Agency;

c. any area overlying a sole source aquifer;

d. any other area identified by the department as necessary for the protection of drinking water resources;

e. any area identified as a critical habitat for a threatened or endangered species under section four of the federal Endangered Species Act (42 U.S.C. § 1533) or any area identified as a "natural heritage area" under section 11-0539 of this chapter;

f. any area identified by the department as a bird conservation area or any other critical bird habitat for the protection of migratory or non-migratory birds;

g. all floodplains; and,

h. all areas within any New York state park, forest preserve, state forest, wildlife refuge, wildlife management area, or wilderness area.

2. For any areas identified in paragraph a or b of subdivision one of this section the department shall identify an additional area around the primary drinking water resource in which oil and gas operations shall be prohibited in order to ensure adequate protection of such resource.

3. For any areas identified in paragraphs a, b, c, or e of subdivision one of this section the department shall add an additional exclusion buffer of no less than one-half mile in which any oil and gas facilities, well-bores, pipelines, or storage or disposal areas for oil, gas, or a hazardous substance used in oil or gas operations will be prohibited.

4. All areas identified in subdivision one of this section and the exclusion buffer areas identified in subdivision two of this section shall include all the land located directly below those areas, including all levels of subsurface strata.

5. The department may also identify any other exclusion area for the protection of any natural resource as defined in subdivision six of section 23-0317 of this article or for the health, safety, or general welfare of any citizen, resident, or visitor in the state of New York.

§ 12. The environmental conservation law is amended by adding a new section 23-0509 to read as follows:

§ 23-0509. Prohibition on waste storage pits or impoundments.

Pits and other impoundments, whether or not lined, shall not be used for on-site or off-site collection or storage of any oil or gas exploration, stimulation, or production wastes, including but not limited to drilling fluids and cuttings, hydraulic fracturing flowback, produced water, and residual sludges or brines remaining after on-site treatment of oil or gas wastes for reuse or recycling. All oil or gas exploration, stimulation, or production wastes shall be collected and stored and retrievable at all times in closed-loop systems. The department shall promulgate minimum standards for closed-loop systems for oil and gas waste collection, storage, and retrieval.

§ 13. Section 23-1903 of the environmental conservation law, as amended by section 1 of part R1 of chapter 62 of the laws of 2003, is amended to read as follows:

§ 23-1903. Imposition of oil, gas and solution mining regulation and reclamation fees.

1. When a permit is granted to a person by the department pursuant to section 23-0305 of this article to drill a well or when a person converts a well to one subject to the oil, gas and solution mining law, such person shall pay to the department:

a. A one hundred dollar fee to be credited to the oil and gas account established under chapter fifty-eight of the laws of nineteen hundred eighty-two; and

b. A fee in accordance with the depth and length drilled or expected to be drilled as set forth below:

0- 500ft. - [~~$ 190~~] $ 250
501- 1000ft. - [~~$ 380~~] $ 500
1001- 1500ft. - [~~$ 570~~] $ 750
1501- 2000ft. - [~~$ 760~~] $1000
2001- 2500ft. - [~~$ 950~~] $1250

2501- 3000ft. - [~~$1,140~~] $1500
3001- 3500ft. - [~~$1,330~~] $1750
3501- 4000ft. - [~~$1,520~~] $2000
4001- 4500ft. - [~~$1,710~~] $2250
4501- 5000ft. - [~~$1,900~~] $2500
5001- 5500ft. - [~~$2,090~~] $2750
5501- 6000ft. - [~~$2,280~~] $3000
6001- 6500ft. - [~~$2,470~~] $3250
6501- 7000ft. - [~~$2,660~~] $3500
7001- 7500ft. - [~~$2,850~~] $3750
7501- 8000ft. - [~~$3,040~~] $4000
8001- 8500ft. - [~~$3,230~~] $4250
8501- 9000ft. - [~~$3,420~~] $4500
9001- 9500ft. - [~~$3,610~~] $4750
9501-10,000ft.- [~~$3,800~~] $5000
over 10,000ft.- [~~$3,800~~] $5000 plus [~~$190~~] $250 for each incremental 500 feet of depth or length over 10,000 feet.

A person who has paid the fees described shall not be required to pay any additional fee for a well conversion. The fee for well deepening permits pertaining to wells for which a well drilling permit was issued after August twenty-fifth, nineteen hundred eighty-one, shall be calculated on the basis of the additional depth or length drilled.

In the event the actual depth drilled exceeds the depth expected to be drilled, an additional amount shall be paid such that the total fee paid shall be in accordance with the schedule set forth in this paragraph.

2. The department shall review the fee schedules set forth in this section prior to September first of each year. The figures will be adjusted up or down annually by the previous twelve month inflation factor. The inflation factor is based upon the United States Department of Labor, Bureau of Labor Statistics data published in the monthly CPI Detailed Report. The data will be taken from the most recent report available on July first of each year and the actual percentage used will be the past year percent change for the U.S. city average, all items, all urban consumers.

3. Upon requesting from the department any determination under the Natural Gas Policy Act, such person shall pay a [~~fifty~~] one hundred dollar fee per well for each such determination.

§ 14. Article 23 of the environmental conservation law is amended by adding a new title 29 to read as follows:

TITLE 29
CITIZEN SUITS

Section 23-2901. Actions to enforce laws on pollution, impairment or destruction of environment, or to protect environment; dismissal of frivolous actions.

§ 23-2901. Actions to enforce laws on pollution, impairment or destruction of environment, or to protect environment; dismissal of frivolous actions.

1. Any person may commence a civil action in a court of competent jurisdiction against any other person alleged to be in violation of any statute, regulation or ordinance which is designed to prevent, minimize or control pollution, impairment or destruction of the environment. The action may be for injunctive or other equitable relief to compel compliance with a statute, regulation or ordinance, or to assess civil penalties for the violation as provided by law. The action may be commenced upon an allegation that a person is in violation, either continuously or

intermittently, of a statute, regulation or ordinance, and that there is a likelihood that the violation will recur in the future.

2. Except in those instances where the conduct complained of constitutes a violation of a statute, regulation or ordinance which establishes a more specific standard for the control of pollution, impairment or destruction of the environment, any person may commence a civil action in any court of competent jurisdiction for declaratory and equitable relief against any other person for the protection of the environment, or the interest of the public therein, from pollution, impairment or destruction occurring in violation, either continuously or intermittently, of this article.

3. The court may, on the motion of any party, or on its own motion, dismiss any action brought pursuant to this act which on its face appears to be patently frivolous, harassing or wholly lacking in merit.

§ 15. Article 23 of the environmental conservation law is amended by adding a new title 31 to read as follows:

TITLE 31

HEALTH IMPACT ASSESSMENT

Section 23-3101. Preparation of health impact assessment.

§ 23-3101. Preparation of health impact assessment.

1. No permit shall be issued under section 23-0501 of this article until the department of health has completed the health impact assessment described in subdivision two of this section and the department has adopted regulations and implemented any mitigation measures recommended in the health impact assessment. The purpose of a health impact assessment is to provide detailed information about the effect oil and gas operations are likely to have on public health, to identify measures that could be implemented to minimize any adverse effects of such operations, and to suggest alternatives to such an action so as to form the basis for a decision whether or not to undertake or approve such activities.

2. The department of health shall prepare, or cause to be prepared by contract or otherwise, a comprehensive health impact assessment of oil and gas operations involving any shale formation, including all operations related and incident thereto, which may have an adverse impact on public health.

a. Such an assessment shall include a detailed statement setting forth the following:

i. a description of the operations;

ii. the public health impact of the operations, including short-term and long-term effects;

iii. whether an operation occurs in, or disproportionately will impose negative health impacts upon a potential environmental justice area, and if so, the identity of such area;

iv. any adverse public health effects that cannot be avoided;

v. alternatives to the oil and gas operations generally or alternatives to any aspect related or incident thereto which may have an adverse impact on public health;

vi. mitigation measures proposed to minimize the public health impact;

vii. any such other information consistent with the purposes of this article as may be prescribed in guidelines issued by the commissioner.

b. The department of health shall first issue a draft health impact assessment that satisfies the requirements of paragraph a of this subdivision. The draft should resemble in form and content the health impact assessment to be prepared after comments have been received and considered.

3. The draft assessment shall be filed with the department.

a. The department and the department of health shall solicit comments from the public and federal, state, regional and local agencies having an interest in the assessment. The comment period shall last no shorter than ninety days.

b. The draft assessment shall be posted on the department of health's and the department's websites.

4. After the filing of a draft health impact assessment either the department of health or the department shall determine whether or not to conduct a public hearing on the public health impact of the oil and gas operations. If either agency determines to hold such hearing, it shall commence the hearing within sixty days of the filing unless the proposed action is withdrawn from consideration.

5. If no hearing is held, the agency shall prepare and make available the final health impact assessment. The final assessment shall include copies or a summary of the substantive comments received by the agency pursuant to subdivision four of this section, and the agency response to such comments.

6. The health impact assessment together with all comments, shall be filed with the commissioner, made available to the public, and posted on a publicly-available internet website upon issuance.

7. When an agency decides to carry out or approve an action which has been the subject of this health impact assessment, it shall make an explicit finding that the requirements of this section have been met and that to the maximum extent practicable, adverse public health impacts revealed in the health impact assessment process will be minimized or avoided.

8. Where the department of health concludes or the health impact assessment indicates that the oil and gas operations, or operations related or incident thereto, occur in, or disproportionately will impose negative health impacts upon a potential environmental justice area, the department of health shall require a site specific health impact assessment. That assessment shall conform to the requirements set forth in subdivision two of this section, and the department of health shall make regulations specifying additional requirements which shall apply to site specific assessments. No permit shall be issued under section 23-0501 of this article in any area subject to a site specific health impact assessment until the site specific health impact assessment has been completed and the mitigation measures suggested therein have been adopted. The department of health may require a site specific health impact assessments in any other circumstances it deems advisable.

§ 16. Article 23 of the environmental conservation law is amended by adding a new title 33 to read as follows:

TITLE 33

AIR QUALITY MONITORING

Section 23-3301. Air quality monitoring.

§ 23-3301. Air quality monitoring.

Within six months of the enactment of this section the department shall:

1. Prepare a draft air quality testing and monitoring plan for all areas of current or potential oil and gas operations in New York state. The draft plan shall be subject to public review, including but not limited to notice and a comment period of at least thirty days. The draft and final plan shall incorporate the following minimum provisions:

a. Mandatory baseline testing of air quality and air pollutant emissions throughout the oil and gas development region of New York state,

including emissions from both mobile and stationary air contamination sources involved in oil and gas operations, as defined in subdivision five of section 19-0107 of this chapter;

b. Deployment of a sufficient number of air quality monitoring devices within the oil and gas development region to ensure prompt detection of any violations of air quality standards;

c. Delineation of oil and gas development subregions within New York state, based on the airsheds for each regulated pollutant emitted by oil and gas facilities; preparation of cumulative impact analyses of air emissions in each subregion, including emissions from all natural gas compressor stations; and development of standards and regulatory procedures for control of compressor station emissions;

d. Development of procedures and a schedule for the regular monitoring and reporting of air quality and air pollutant density within each of the subregions;

e. Mandatory posting of such reports on the department's website;

f. Establishment of procedures for appropriate responses, including emergency responses, to violations of air quality standards.

2. In the final air quality testing and monitoring plan, the department shall respond to all substantive comments timely submitted on the draft plan.

3. No permit shall be issued under section 23-0501 of this article until thirty days after notice of the final plan is published in the Environmental Notice Bulletin.

4. No permit shall be issued under section 23-0501 of this article, if air emissions from the permitted operation would cause or contribute to a violation of any air quality standard.

§ 17. Section 27-0903 of the environmental conservation law is amended by adding a new subdivision 4 to read as follows:

4. Uniform treatment of waste. Notwithstanding any other law or regulation to the contrary, all waste resulting from the exploration, development, extraction or production of crude oil or natural gas, including but not limited to drilling fluids and produced waters, shall be considered hazardous waste under the law of this state and subject to all pertinent generation, transportation, treatment, storage, and disposal laws and regulations, if such waste meets the definition of hazardous waste set forth in subdivision three of section 27-0901 of this chapter. Within six months from the effective date of this subdivision, the department shall make all necessary changes to bring its regulations into compliance with this section.

§ 18. The opening paragraph of paragraph f of subdivision 1 and subdivision 6 of section 15-1503 of the environmental conservation law, the opening paragraph of paragraph f of subdivision 1 as amended and subdivision 6 as added by chapter 401 of the laws of 2011, are amended to read as follows:

a description of the applicant's proposed near term and long range water conservation program that [~~incorporates~~] must comply with environmentally sound and economically feasible water conservation measures, including implementation and enforcement procedures, effectiveness to date and any planned modifications for the future. For a public water supply system, the water conservation program may include but need not be limited to:

6. A new permit for a water withdrawal system and any subsequent renewal thereof shall be valid for a period of time not to exceed [~~ten~~] five years from the date of issuance. A new permit or permit modifica-

tion must be obtained from the department prior to any transfer or change of ownership of a water withdrawal system.

§ 19. The environmental conservation law is amended by adding a new section 15-1531 to read as follows:

§ 15-1531. Reporting.

The commissioner shall, within two years of the effective date of this section, and thereafter as often as the commissioner deems appropriate, report to the governor and the legislature on the implementation of this title. The report may include but need not be limited to recommendations for modifications to this title, including but not limited to modifications to the threshold volume provided in this title for particular water sources, watersheds, water bodies or regions, where the department has determined that such water sources, watersheds, water bodies or regions are in need of special protection because of the nature or volume of demands made upon them and a modification is necessary to protect the public health, safety and welfare.

§ 20. Article 15 of the environmental conservation law is amended by adding a new title 35 to read as follows:

TITLE 35

WATER USE STANDARDS

Section 15-3501. Water use standards.

§ 15-3501. Water use standards.

The department shall adopt rules establishing water use standards for maintaining in-stream flows that are protective of aquatic life and other uses and that establish criteria for designating watersheds most at risk from cumulative water use. Standards adopted under this section must be based on the natural variation of flows and water levels, allowing for variances if use will still be protective of water quality within that classification.

§ 21. Article 72 of the environmental conservation law is amended by adding a new title 8 to read as follows:

TITLE 8

WATER SUPPLY PERMIT PROGRAM FEES

Section 72-0801. Definitions.

72-0802. Water supply permit program fees.

§ 72-0801. Definitions.

When used in this title:

1. "Agricultural purpose" shall mean the practice of farming for crops, plants, vines and trees; and the keeping, grazing, or feeding of livestock for sale of livestock or livestock products.

2. "Public water supply purpose" shall mean water use by a public water supply system.

3. "Water supply permit program" means those activities of the department as specified in title fifteen of article fifteen of this chapter related to the withdrawal of waters of the state and any related enforcement activities.

§ 72-0802. Water supply permit program fees.

1. Except as otherwise provided in this title, all persons, except a political subdivision of the state, or an agency, department, bureau, public authority of the state, or persons making withdrawals for an agricultural purpose who are to obtain a permit pursuant to the water supply permit program shall submit annually to the department a fee, for each water withdrawal system, in an amount to be determined as follows:

a. fifty dollars for a water withdrawal system with a capacity of less than one million gallons per day, used primarily for public water supply purposes;

b. one hundred twenty-five dollars for a water withdrawal system with a capacity of between one million and nine million nine hundred ninety-nine thousand nine hundred ninety-nine gallons per day, used primarily for public water supply purposes;

c. two hundred fifty dollars for a water withdrawal system with a capacity of ten million gallons per day or more, used primarily for public water supply purposes;

d. two hundred fifty dollars for a water withdrawal system with a capacity of between fifty thousand and ninety-nine thousand nine hundred ninety-nine gallons per day, for any and all uses which are not primarily for agricultural or public water supply purposes;

e. five hundred fifty dollars for a water withdrawal system with a capacity of between one hundred thousand and one hundred thousand nine hundred ninety-nine gallons per day, for any and all uses which are not primarily for agricultural or public water supply purposes;

f. one thousand dollars for a water withdrawal system with a capacity of between two hundred fifty thousand gallons and four hundred ninety-nine thousand nine hundred ninety-nine gallons per day, for any and all uses which are not primarily for agricultural or public water supply purposes;

g. two thousand five hundred dollars for a water withdrawal system with a capacity of between five hundred thousand gallons and nine hundred ninety-nine thousand nine hundred ninety-nine gallons per day, for any and all uses which are not primarily for agricultural or public water supply purposes;

h. five thousand dollars for a water withdrawal system with a capacity of between one million and nine million nine hundred ninety-nine thousand nine hundred ninety-nine gallons per day, for any and all uses which are not primarily for agricultural or public water supply purposes;

i. seven thousand five hundred dollars for a water withdrawal system with a capacity of between ten million and forty-nine million nine hundred ninety-nine thousand nine hundred ninety-nine gallons per day, for any and all uses which are not primarily for agricultural or public water supply purposes;

j. ten thousand dollars for a water withdrawal system with a capacity of fifty million gallons per day or more, for any and all uses which are not primarily for agricultural or public water supply purposes.

2. For the purpose of determining the appropriate fee required by subdivision one of this section, the amount of reclaimed wastewater, which a person withdraws for reuse, shall not be included in the total capacity of the water withdrawal.

3. All fees collected pursuant to this article shall be paid into the environmental conservation special revenue fund to the credit of the environmental regulatory account.

§ 22. This act shall take effect immediately; provided that section twenty of this act shall take effect upon the completion of rule-making required in subdivision 2 of section 15-1501 of the environmental conservation law and provided that the commissioner of the department of environmental conservation shall notify the legislative bill drafting commission upon the occurrence of the enactment of the rules required under subdivision 2 of section 15-1501 of the environmental conservation law in order that the commission may maintain an accurate and timely effective data base of the official text of the laws of the state of New York in furtherance of effectuating the provisions of section 44 of the legislative law and section 70-b of the public officers law.