
SYNOPSIS AS INTRODUCED:

New Act
30 ILCS 105/5.826 new

Creates the Illinois Hydraulic Fracturing Regulatory Act. Prohibits high volume horizontal hydraulic fracturing operations performed without a permit. Regulates where high volume horizontal hydraulic fracturing operations are proposed, planned, or occurring may be located. Provides requirements for permit applications, modification, suspension, and revocation of permits, insurance, well construction and drilling, disclosures, water quality monitoring, investigation and enforcement, violations and penalties, and administrative review. Authorizes the Department of Natural Resources to adopt rules as may be necessary to accomplish the purposes of this Act. Amends the State Finance Act. Creates the Mines and Minerals Regulatory Fund. Effective immediately.
AN ACT concerning regulation.

Be it enacted by the People of the State of Illinois, represented in the General Assembly:

Section 1. Short title. This Act may be cited as the Hydraulic Fracturing Regulatory Act.

Section 5. Definitions. For the purposes of this Act, unless the context otherwise requires:

"Agency" means the Illinois Environmental Protection Agency.

"Aquatic life" means all fish, reptiles, amphibians, crayfish, and mussels.

"Aquifer" means saturated (with groundwater) soils and geologic materials that are sufficiently permeable to readily yield economically useful quantities (at least 70 gallons per minute) of fresh water to wells, springs, or streams under ordinary hydraulic gradients.

"Base fluid" means the continuous phase fluid type, including, but not limited to, water used in a high volume horizontal hydraulic fracturing operation.

"BTEX" means benzene, toluene, ethylbenzene, and xylene.

"Chemical" means any element, chemical compound, or mixture of elements or compounds that has its own specific name or identity, such as a Chemical Abstracts Service number,
regardless of whether the chemical is subject to the requirements of paragraph (2) of subsection (g) of 29 Code of Federal Regulations §1910.1200.

"Chemical Abstracts Service" means the division of the American Chemical Society that is the globally recognized authority for information on chemical substances.

"Chemical Abstracts Service number" or "CAS number" means the unique identification number assigned to a chemical by the Chemical Abstracts Service.

"Completion combustion device" means any ignition device, installed horizontally or vertically, used in exploration and production operations to combust otherwise vented emissions.

"Delineation well" means a well drilled in order to determine the boundary of a field or producing reservoir.

"Department" means the Illinois Department of Natural Resources.

"Director" means the Director of Natural Resources.

"Flare" means a thermal oxidation system using an open, enclosed, or semi-enclosed flame. "Flare" does not include completion combustion devices as defined in this Section.

"Flowback period" means the process of allowing fluids to flow from a well following a treatment, either in preparation for a subsequent phase of treatment or in preparation for cleanup and returning the well to production. "Flowback period" begins when the material the hydraulic fracturing fluid returns to the surface following hydraulic fracturing or
re-fracturing. "Flowback period" ends with either well shut in or when the well is producing continuously to the flow line or to a storage vessel for collection, whichever occurs first.

"Fresh water" means surface and subsurface water in its natural state that is suitable for drinking water for human consumption, domestic livestock, irrigation, industrial, municipal and recreational purposes, that is capable of supporting aquatic life, and contains less than 10,000 ppm total dissolved solids.

"Gas" means all natural gas, including casinghead gas, and all other natural hydrocarbons not defined as oil.

"Groundwater" means any water below the land surface that is within the saturated zone or geologic materials where the fluid pressure in the pore space is equal to or greater than atmospheric pressure.

"Health professional" means a physician, physician assistant, nurse practitioner, a registered professional nurse, emergency medical technician, or other individual appropriately licensed or registered to provide health care services.

"High volume horizontal hydraulic fracturing operations" means all stages of a stimulation treatment of a horizontal well as defined by this Act by the pressurized application of more than 80,000 gallons per stage of hydraulic fracturing fluid and proppant to initiate or propagate fractures in a geologic formation to enhance extraction or production of oil
"High volume horizontal hydraulic fracturing permit" means the permit issued by the Department under this Act allowing high volume horizontal hydraulic fracturing operations to occur at a well site.

"High volume horizontal hydraulic fracturing treatment" shall have the same definition as "High volume horizontal hydraulic fracturing operations".

"Horizontal well" means a well with a wellbore drilled laterally at an angle of at least 80 degrees to the vertical and with a horizontal projection exceeding 100 feet measured from the initial point of penetration into the productive formation through the terminus of the lateral in the same common source of hydrocarbon supply.

"Hydraulic fracturing additive" means any chemical substance or combination of substances, including, but not limited to, any chemical and proppant that is added to a base fluid for the purposes of preparing a hydraulic fracturing fluid for a high volume horizontal hydraulic fracturing operation.

"Hydraulic fracturing flowback" means all hydraulic fracturing fluid and other fluids that return to the surface after a stage of high volume horizontal hydraulic fracturing operations has been completed and prior to the well being placed in production.

"Hydraulic fracturing fluid" means the mixture of the base
fluid and all the hydraulic fracturing additives, used to perform high volume horizontal hydraulic fracturing.

"Hydraulic fracturing string" means any pipe or casing string used for the transport of hydraulic fracturing fluids during the conduct of the high volume horizontal hydraulic fracturing operations.

"Intake" means a pipe or other means to withdraw raw water from a water source.

"Landowner" means the legal title holder or owner of real property and includes an owner of an undivided interest, a life tenant, a remainderman, a public or private corporation, a trustee under an active trust, and the holder of the beneficial interest under a land trust. "Landowner" does not include a mortgagee, a trustee under a trust deed in the nature of a mortgage, a lien holder, or a lessee.

"Low pressure well" means a well with reservoir pressure and vertical well depth such that 0.445 times the reservoir pressure (in psia) minus 0.038 times the vertical well depth (in feet) minus 67.578 psia is less than the flow line pressure at the sales meter.

"Nature preserve" shall have the same meaning as provided in Section 3.11 of the Illinois Natural Areas Preservation Act.

"Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary production methods or by the use of an oil and gas separator and which are not the result of
condensation of gas after it leaves the underground reservoir.

"Operator" means the individual or entity controlling the right to drill or produce a horizontal well in accordance with the requirements of the Illinois Oil and Gas Act.

"Owner" shall have the same meaning as provided in Section 1 of the Illinois Oil and Gas Act.

"Perennial stream" means a stream that has continuous flow in its stream bed during all of the calendar year.

"Permit" means a high volume horizontal hydraulic fracturing permit.

"Permittee" means a person holding a high volume horizontal hydraulic fracturing permit under this Act.

"Person" means any individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, trust, estate, political subdivision, state agency, or any other legal entity or their legal representative, agent, or assigns.

"Pollution or diminution" means:

(1) in groundwater, any of the following:

(A) detection of benzene or any other carcinogen in any Class I, Class II, or Class III groundwater;

(B) detection of any constituent in item (i) of subparagraph (A) of paragraph (3) of subsection (a) of 35 Ill. Adm. Code 620.310 equal to or above the listed preventive response criteria in any Class I, Class II, or Class III groundwater;
(C) detection of any constituent in 35 Ill. Adm. Code 620.410 (a), (b), (c), (d) or (e) equal to or above the listed standard in any Class I, Class II, or Class III groundwater;

(D) detection of any constituent in Class III groundwater equal to or above a standard established under 35 Ill. Adm. Code 620.260; or

(E) detection of any constituent in Class I, Class II, or Class III groundwater equal to or above a cleanup objective listed in 35 Ill. Adm. Code 742.

(2) in surface water, exceeding any applicable numeric or narrative standard in 35 Ill. Adm. Code Part 302 or Part 304.

"Produced water" means water, regardless of chloride and total dissolved solids content, that is produced in conjunction with oil or natural gas production or natural gas storage operations, but does not include hydraulic fracturing flowback.

"Proppant" means sand or any natural or man-made material that is used during high volume horizontal hydraulic fracturing operations to prop open the artificially created or enhanced fractures.

"Public water supply" means all mains, pipes, and structures through which water is obtained and distributed to the public, including wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, and

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storage tanks and appurtenances, collectively or severally, actually used or intended for use for the purpose of furnishing water for drinking or general domestic use, and which serves at least 15 service connections or which regularly serves at least 25 persons at least 60 days per year.

"Register of Land and Water Reserves" means the list of areas registered in accordance with Section 16 of the Illinois Natural Areas Preservation Act and Part 4010 of Title 17 of the Illinois Administrative Code.

"Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.


"Service connection" means the opening, including all fittings and appurtenances, at the water main through which water is supplied to the user.

"Surface water" means all water that is open to the atmosphere and subject to surface runoff.

"Total water volume" means the total quantity of water from all sources used in the high volume horizontal hydraulic fracturing operations, including surface water, groundwater, produced water, or recycled water.

"True vertical depth" or "TVD" means the vertical distance from a depth in a planned or existing wellbore or well to a point at the surface.
"Water pollution" means any alteration of the physical, thermal, chemical, biological, or radioactive properties of any waters of the State, or the discharge of any contaminant into any water of the State, as will or is likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, safety, or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate uses, or to livestock, wild animals, birds, or fish or other aquatic life.

"Water source" means (1) any existing water well or developed spring used for human or domestic animal consumption, or (2) any river, perennial stream, aquifer, natural or artificial lake, pond, wetland listed on the Register of Land and Water Reserves, or reservoir.

"Well" means any drill hole required to be permitted under the Illinois Oil and Gas Act.

"Well site" means surface areas, including the well, occupied by all equipment or facilities necessary for or incidental to high volume horizontal hydraulic fracturing operations, drilling, production, or plugging a well.

"Wildcat well" means a well outside known fields or the first well drilled in an oil or gas field where no other oil and gas production exists.

"Wildlife" means any bird or mammal that are by nature wild by way of distinction from those that are naturally tame and are ordinarily living unconfined in a state of nature without
Section 10. Intergovernmental cooperation. The Department shall have the primary authority to administer the provisions of this Act. The Illinois State Geological Survey, the Illinois State Water Survey, and the Agency shall be advised of high volume horizontal hydraulic fracturing permit applications received by the Department and lend assistance as required by the provisions of this Act.

Section 15. Powers and duties.

(a) Except as otherwise provided, the Department shall enforce this Act and all rules and orders adopted in accordance with this Act.

(b) Except as otherwise provided, the Department shall have jurisdiction and authority over all persons and property necessary to enforce the provisions of this Act effectively. In aid of this jurisdiction, the Director, or anyone designated in writing by the Director, shall have the authority to administer oaths and to issue subpoenas for the production of records or other documents and for the attendance of witnesses at any proceedings of the Department.

(c) The Department may authorize any employee of the Department, qualified by training and experience, to perform the powers and duties set forth in this Act.

(d) For the purpose of determining compliance with the
provisions of this Act and any orders or rules entered or
adopted under this Act, the Department shall have the right at
all times to go upon and inspect properties where high volume
horizontal hydraulic fracturing operations are being or have
been conducted.

(e) The Department shall make any inquiries as it may deem
proper to determine whether a violation of this Act or any
orders or rules entered or adopted under this Act exists or is
imminent. In the exercise of these powers, the Department shall
have the authority to collect data; require testing and
sampling; to make investigation and inspections; to examine
properties, including records and logs; to examine, check, and
test hydrocarbon wells; to hold hearings; to adopt
administrative rules; and to take any action as may be
reasonably necessary to enforce this Act.

(f) The Department may specify the manner in which all
information required to be submitted under this Act is
submitted.

Section 20. Applicability. This Act applies to all wells
where high volume horizontal hydraulic fracturing operations
are planned, have occurred, or are occurring in this State. The
provisions of this Act shall be in addition to the provisions
of the Illinois Oil and Gas Act. However, if there is a
conflict, the provisions of the Illinois Oil and Gas Act are
superseded by this Act.
Section 25. Setbacks and prohibitions.

(a) Except as otherwise provided in this Section, no well site where high volume horizontal hydraulic fracturing operations are proposed, planned, or occurring may be located as follows. Unless specified otherwise, all distances shall be measured from the closest edge of the well site:

(1) within 500 feet measured horizontally from any residence or place of worship unless the owner of the residence or the governing body of the place of worship otherwise expressly agrees in writing to a closer well location;

(2) within 500 feet measured horizontally from the edge of the property line from any school, hospital, or licensed nursing home facility;

(3) within 500 feet measured horizontally from the surface location of any existing water well or developed spring used for human or domestic animal consumption, unless the owner or owners of the well or developed spring otherwise expressly agrees or agree in writing to a closer well location;

(4) within 300 feet measured horizontally from the center of a perennial stream or from the ordinary high water mark of any river, natural or artificial lake, pond, or reservoir;

(5) within 750 feet of a nature preserve or a site on
the Register of Land and Water Reserves;
(6) within 1,500 feet of a surface water or groundwater intake of a public water supply; the distance from the public water supply as identified by the Department shall be measured as follows:

(A) For a surface water intake on a lake or reservoir, the distance shall be measured from the intake point on the lake or reservoir.

(B) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake.

(C) For a groundwater source, the distance shall be measured from the surface location of the wellhead or the ordinary high water mark of the spring.

The distance restrictions under this subsection (a) shall be determined as conditions exist at the time of the submission of the permit application under this Act.

(b) Notwithstanding any other provision of this Section, the owner of a water source identified in paragraph (4) of subsection (a) of this Section that is wholly contained within the owner's property may expressly agree in writing to a closer well location.

(c) It is unlawful to inject or discharge hydraulic fracturing fluid, produced water, BTEX, diesel, or petroleum distillates into fresh water.

(d) It is unlawful to perform any high volume horizontal
hydraulic fracturing operations by knowingly or recklessly injecting diesel or any petroleum distillates.

Section 30. High volume horizontal hydraulic fracturing permit required.

(a) Notwithstanding any other provision of law, a person may not drill, deepen, or convert a horizontal well where high volume horizontal hydraulic fracturing operations are planned or occurring or convert a vertical well into a horizontal well where high volume horizontal hydraulic fracturing operations are planned in this State, unless the person has been issued a permit by the Department under this Act and has obtained all applicable authorizations required by the Illinois Oil and Gas Act.

(b) If multiple wells are to be stimulated using high volume horizontal hydraulic fracturing operations from a single well site, then a separate permit shall be obtained for each well at the site.

Section 35. High volume horizontal hydraulic fracturing permit application.

(a) Every applicant for a permit under this Act shall first register with the Department at least 30 days before applying for a permit. The Department shall provide a registration form within 90 days after the effective date of this Act. The registration form shall require the following information:
(1) the name and address of the registrant and any
parent, subsidiary, or affiliate thereof;

(2) disclosure of all findings of a serious violation
or an equivalent violation under federal or state laws or
regulations in the development or operation of an oil or
gas exploration or production site via hydraulic
fracturing by the applicant or any parent, subsidiary, or
affiliate thereof within the previous 5 years; and

(3) proof of insurance to cover injuries, damages, or
loss related to pollution or diminution in the amount of at
least $5,000,000, from an insurance carrier authorized,
licensed, or permitted to do this insurance business in
this State that holds at least an A- rating by A.M. Best &
Co. or any comparable rating service.

A registrant must notify the Department of any change in
the information identified in paragraphs (1), (2), or (3) of
this subsection (a) at least annually or upon request of the
Department.

(b) Every applicant for a permit under this Act must submit
the following information to the Department on an application
form provided by the Department:

(1) the name and address of the applicant and any
parent, subsidiary, or affiliate thereof;

(2) the proposed well name and address and legal
description of the well site and its unit area;

(3) a statement whether the proposed location of the
well site is in compliance with the requirements of Section 25 of this Act and a plat, which shows the proposed surface location of the well site, providing the distance in feet, from the surface location of the well site to the features described in subsection (a) of Section 25 of this Act;

(4) a detailed description of the proposed well to be used for the high volume horizontal hydraulic fracturing operations including, but not limited to, the following information:

(A) the approximate total depth to which the well is to be drilled or deepened;

(B) the proposed angle and direction of the well;

(C) the actual depth or the approximate depth at which the well to be drilled deviates from vertical;

(D) the angle and direction of any nonvertical portion of the wellbore until the well reaches its total target depth or its actual final depth; and

(E) the estimated length and direction of the proposed horizontal lateral or wellbore;

(5) the estimated depth and elevation, according to the most recent publication of the Illinois State Geological Survey of Groundwater for the location of the well, of the lowest potential fresh water along the entire length of the proposed wellbore;

(6) a detailed description of the proposed high volume horizontal hydraulic fracturing operations, including, but
not limited to, the following:

(A) the formation affected by the high volume horizontal hydraulic fracturing operations, including, but not limited to, geologic name and geologic description of the formation that will be stimulated by the operation;

(B) the anticipated surface treating pressure range;

(C) the maximum anticipated injection treating pressure;

(D) the estimated or calculated fracture pressure of the producing and confining zones; and

(E) the planned depth of all proposed perforations or depth to the top of the open hole section;

(7) plat showing all known previous well bores within 750 feet of any part of the horizontal well bore that penetrated within 400 vertical feet of the formation that will be stimulated as part of the high volume horizontal hydraulic fracturing operations;

(8) unless the applicant documents why the information is not available at the time the application is submitted, a chemical disclosure report identifying each chemical and proppant anticipated to be used in hydraulic fracturing fluid for each stage of the hydraulic fracturing operations including the following:

(A) the total volume of water anticipated to be
used in the hydraulic fracturing treatment of the well
or the type and total volume of the base fluid
anticipated to be used in the hydraulic fracturing
treatment, if something other than water;

(B) each hydraulic fracturing additive anticipated
to be used in the hydraulic fracturing fluid, including
the trade name, vendor, a brief descriptor of the
intended use or function of each hydraulic fracturing
additive, and the Material Safety Data Sheet (MSDS), if
applicable;

(C) each chemical anticipated to be intentionally
added to the base fluid, including for each chemical,
the Chemical Abstracts Service number, if applicable;
and

(D) the anticipated concentration, in percent by
mass, of each chemical to be intentionally added to the
base fluid;

(9) a certification of compliance with the Water Use
Act of 1983 and applicable regional water supply plans;

(10) a fresh water withdrawal and management plan that
shall include the following information:

(A) the source of the water, such as surface or
groundwater, anticipated to be used for water
withdrawals, and the anticipated withdrawal location;

(B) the anticipated volume and rate of each water
withdrawal from each withdrawal location;
(C) the anticipated months when water withdrawals shall be made from each withdrawal location;

(D) the methods to be used to minimize water withdrawals as much as feasible; and

(E) the methods to be used for surface water withdrawals to minimize adverse impact to aquatic life.

Where a surface water source is wholly contained within a single property, and the owner of the property expressly agrees in writing to its use for water withdrawals, the applicant is not required to include this surface water source in the fresh water withdrawal and management plan.

(11) a plan for the handling, storage, transportation, and disposal or reuse of hydraulic fracturing fluids and hydraulic fracturing flowback. The plan shall identify the specific Class II injection well or wells that will be used to dispose of the hydraulic fracturing flowback. The plan shall describe the capacity of the tanks to be used for the capture and storage of flowback and of the lined reserve pit to be used, if necessary, to temporarily store any flowback in excess of the capacity of the tanks. Identification of the Class II injection well or wells shall be by name, identification number, and specific location and shall include the date of the most recent mechanical integrity test for each Class II injection well;
(12) a well site safety plan to address proper safety measures to be employed during high volume horizontal hydraulic fracturing operations for the protection of persons on the site as well as the general public. Within 15 calendar days after submitting the permit application to the Department, the applicant must provide a copy of the plan to the county or counties in which hydraulic fracturing operations will occur;

(13) a containment plan describing the containment practices and equipment to be used and the area of the well site where containment systems will be employed;

(14) a casing and cementing plan that describes the casing and cementing practices to be employed, including the size of each string of pipe, the starting point, and depth to which each string is to be set and the extent to which each string is to be cemented;

(15) a traffic management plan that identifies the anticipated roads, streets, and highways that will be used for access to and egress from the well site. The traffic management plan will include a point of contact to discuss issues related to traffic management. Within 10 calendar days after submitting the permit application to the Department, the applicant must provide a copy of the traffic management plan to the county or counties in which the well site is located;

(16) the names and addresses of all owners of any real
property within 1,500 feet of the proposed well site, as
disclosed by the records in the office of the recorder of
the county or counties;

(17) drafts of the specific public notice and general
public notice as required by Section 40 of this Act;

(18) statement that the well site at which the high
volume horizontal hydraulic fracturing operation will be
conducted will be restored in compliance with Section
240.1181 of Title 62 of the Illinois Administrative Code
and Section 95 of this Act;

(19) proof of insurance to cover injuries, damages, or
loss related to pollution in the amount of at least
$5,000,000; and

(20) any other relevant information which the
Department may, by rule, require.

(c) Where an application is made to conduct high volume
horizontal fracturing operations at a well site located within
the limits of any city, village, or incorporated town, the
application shall state the name of the city village, or
incorporated town and be accompanied with a certified copy of
the official consent for the hydraulic fracturing operations to
occur of the municipal authorities where the well site is
proposed to be located. No permit shall be issued unless
consent is secured and filed with the permit application. In
the event that an amended location is selected, the original
permit shall not be valid unless a new certified consent is
(d) The hydraulic fracturing permit application shall be accompanied by a bond as required by subsection (a) of Section 65 of this Act.

(e) Each application for a permit under this Act shall include payment of a non-refundable permit fee. The applicable permit fee shall be deposited into the Mines and Minerals Regulatory Fund for the Department to use to administer and enforce this Act and otherwise support the operations and programs of the Office of Mines and Minerals. The Department shall not initiate its review of the permit application until the applicable fee under this subsection has been submitted to and received by the Department.

(f) Each application submitted under this Act shall be signed, under the penalty of perjury, by the applicant or the applicant's designee who has been vested with the authority to act on behalf of the applicant and has direct knowledge of the information contained in the application and its attachments. Any person signing an application shall also sign an affidavit with the following certification:

"I certify, under penalty of perjury as provided by law and under penalty of refusal, suspension, or revocation of a high volume horizontal hydraulic fracturing permit, that this application and all attachments are true, accurate, and complete to the best of my knowledge".

(g) The permit application shall be submitted to the
Department in both electronic and hard copy format. The electronic format shall be searchable.

(h) The application for a high volume horizontal hydraulic fracturing permit may be submitted as a combined permit application with the operator's application to drill on a form as the Department shall prescribe. The combined application must include the information required in this Section. If the operator elects to submit a combined permit application, information required by this Section that is duplicative of information required for an application to drill is only required to be provided once as part of the combined application. The submission of a combined permit application under this subsection shall not be interpreted to relieve the applicant or the Department from complying with the requirements of this Act or the Illinois Oil and Gas Act.

(i) Upon receipt of a permit application, the Department shall have no more than 60 calendar days from the date it receives the permit application to approve, with any conditions the Department may find necessary, or reject the application for the high volume horizontal hydraulic fracturing permit. The applicant may waive, in writing, the 60-day deadline upon their own initiative or in response to a request by the Department.

If at any time during the review period the Department determines that the permit application is not complete under this Act, does not meet the requirements of this Section, or requires additional information, the Department shall notify
the applicant in writing of the application's deficiencies and allow the applicant to correct the deficiencies and provide the Department any information requested to complete the application. If the applicant fails to provide adequate supplemental information within the review period, the Department may reject the application.

Section 40. Public notice.

(a) Within 5 calendar days after the Department's receipt of the high volume horizontal hydraulic fracturing application, the Department shall post notice of its receipt and a copy of the permit application on its website. The notice shall include the dates of the public comment period and directions for interested parties to submit comments.

(b) Within 5 calendar days after the Department's receipt of the permit application and notice to the applicant that the high volume horizontal hydraulic fracturing permit application was received, the Department shall provide the Agency, Illinois State Water Survey, and Illinois State Geological Survey with notice of the application.

(c) Upon notification that the Department has received the high volume horizontal hydraulic fracturing permit application, the applicant shall provide the following public notice:

(1) Applicants shall mail specific public notice by U.S. Postal Service certified mail, return receipt
requested, within 5 calendar days after notification by the Department that the permit application was received, to all persons identified as owners of real property within 1,500 feet of the proposed well site, as disclosed by the records in the office of the recorder of the county or counties, and to each municipality and county in which the well site is proposed to be located.

(2) Applicants shall provide general public notice by publication, once each week for 2 consecutive weeks beginning no later than 3 calendar days after notification by the Department that the permit application was received, in a newspaper of general circulation published in each county where the well proposed for high volume horizontal hydraulic fracturing operations is proposed to be located.

(3) The specific and general public notices required under this subsection shall contain the following information:

(A) the name and address of the applicant;

(B) the date the application for high volume horizontal hydraulic fracturing permit was filed;

(C) the dates for the public comment period and a statement that anyone may file written comments about any portion of the applicant's submitted high volume horizontal hydraulic fracturing permit application with the Department during the public comment period;

(D) the proposed well name, reference number
assigned by the Department, and the address and legal
description of the well site and its unit area;
(E) a statement that the information filed by the
applicant in their application for a high volume
horizontal hydraulic fracturing permit is available by
the Department through its website;
(F) the Department's website and the address and
telephone number for the Department's Oil and Gas
Division;
(G) a statement that any person having an interest
that is or may be adversely affected, any government
agency that is or may be affected, or the county board
of a county to be affected under a proposed permit, may
file written objections to a permit application and may
request a public hearing.
(d) After providing the public notice as required under
paragraph (2) of subsection (c) of this Section, the applicant
shall supplement its permit application by providing the
Department with a certification and documentation that the
applicant fulfilled the public notice requirements of this
Section. The Department shall not issue a permit until the
applicant has provided the supplemental material required
under this subsection.
(e) If multiple applications are submitted at the same time
for wells located on the same well site, the applicant may use
one public notice for all applications provided the notice is
clear that it pertains to multiple applications and conforms to
the requirements of this Section. Notice shall not constitute
standing for purposes of requesting a public hearing or for
standing to appeal the decision of the Department in accordance
with the Administrative Review Law.

Section 45. Public comment periods.
(a) The public comment period shall begin 7 calendar days
after the Department's receipt of the permit application and
last for 30 calendar days.
(b) Where a public hearing is conducted under Section 50 of
this Act, the Department may provide for an additional public
comment period of 15 days as necessary to allow for comments in
response to evidence and testimony presented at the hearing.
The additional public comment period shall begin on the day
after the public hearing.
(c) During any public comment period, any person may file
written comments to the Department concerning any portion of
the permit application and any issue relating to the
applicant's compliance with the requirements of the Act and any
other applicable laws.
(d) The Department may request that the applicant respond
to any substantive public comments obtained during the public
comment period.

Section 50. High volume horizontal hydraulic fracturing
permit; hearing.

(a) When a permit application is submitted to conduct high
volume horizontal hydraulic fracturing operations for the
first time at a particular well site, any person having an
interest that is or may be adversely affected, any government
agency that is or may be affected, or the county board of a
county to be affected under a proposed permit, may file written
objections to the permit application and may request a public
hearing during the public comment period established under
subsection (a) of Section 45 of this Act. The request for
hearing shall contain a short and plain statement identifying
the person and stating facts demonstrating that the person has
an interest that is or may be adversely affected. The
Department shall hold a public hearing upon a request under
this subsection, unless the request is determined by the
Department to (i) lack an adequate factual statement that the
person is or may be adversely affected or (ii) be frivolous.

(b) Prior to the commencement of a hearing, any person who
could have requested the hearing under subsection (a) of this
Section may petition the Department to participate in the
hearing in the same manner as the party requesting the hearing.
The petition shall contain a short and plain statement
identifying the petitioner and stating facts demonstrating
that the petitioner is a person having an interest that is or
may be adversely affected. The petitioner shall serve the
petition upon the Department. Unless the Department determines
that the petition is frivolous, or that the petitioner has
failed to allege facts in support of an interest that is or may
be adversely affected, the petitioner shall be allowed to
participate in the hearing in the same manner as the party
requesting the hearing.

(c) The public hearing to be conducted under this Section
shall comply with the contested case requirements of the
Illinois Administrative Procedure Act. The Department shall
establish rules and procedures to determine whether any request
for a public hearing may be granted, and for the notice and
conduct of the public hearing. These procedural rules shall
include provisions for reasonable notice to (i) the public and
(ii) all parties to the proceeding, which include the applicant
and the persons requesting the hearing, for the qualifications,
powers, and obligations of the hearing officer, and for
reasonable opportunity for all the parties to provide evidence
and argument, to respond by oral or written testimony to
statements and objections made at the public hearing, and for
reasonable cross-examination of witnesses. County boards and
the public may present their written objections or
recommendations at the public hearing. A complete record of the
hearings and all testimony shall be made by the Department and
recorded stenographically or electronically. The complete
record shall be maintained and shall be accessible to the
public on the Department's website until final release of the
applicant's performance bond.
At least 10 calendar days before the date of the public hearing, the Department shall publish notice of the public hearing in a newspaper of general circulation published in the county where the proposed well site will be located.

Section 53. High volume horizontal hydraulic fracturing permit; determination; judicial review.

(a) The Department shall issue a high volume horizontal hydraulic fracturing permit, with any conditions the Department may find necessary, only if the record of decision demonstrates that:

(1) the well location restrictions of Section 25 of this Act have been satisfied;

(2) the application meets the requirements of Section 35 of this Act;

(3) the plans required to be submitted with the application under Section 35 of this Act are adequate and effective;

(4) the proposed hydraulic fracturing operations will be conducted in a manner that will protect the public health and safety and prevent pollution or diminution of any water source;

(5) the work plan required under Section 80 of this Act has been submitted to the Department;

(6) the applicant or any parent, subsidiary, or affiliate thereof has not failed to abate a violation of
this Act or the Illinois Oil and Gas Act;

(7) the Class II injection wells to be used for
disposal of hydraulic fracturing flowback comply with all
applicable requirements for mechanical integrity testing,
including that the well has been tested within the previous
5 years; and

(8) there is no good cause to deny the permit under
subsection (a) of Section 60 of this Act.

(b) For the purpose of determining whether to issue a
permit, the Department shall consider and the Department's
record of decision shall include:

(1) the application for the high volume horizontal
hydraulic fracturing permit, including all documentation
required by Section 35 of this Act;

(2) all written comments received during the public
comment periods and, if applicable, the complete record
from the public hearing held under Section 50 of this Act;

(3) all information provided by the applicant in
response to any public comments; and

(4) any information known to the Department as the
public entity responsible for regulating high volume
horizontal hydraulic fracturing operations, including, but
not limited to, inspections of the proposed well site as
necessary to ensure adequate review of the application.

(c) The Department shall, by U.S. Mail and electronic
transmission, provide the applicant with a copy of the high
volume horizontal hydraulic fracturing permit as issued or its final administrative decision denying the permit to the applicant and shall, by U.S. Mail or electronic transmission, provide a copy of the permit as issued or the final administrative decision to any person or unit of local government who received specific public notice under Section 40 of this Act or submitted comments or participated in any public hearing under Section 50 of this Act.

(d) The Department's decision to approve or deny a high volume horizontal hydraulic fracturing permit shall be considered a final administrative decision subject to judicial review under the Administrative Review Law and the rules adopted under that Law.

(e) Following completion of the Department's review and approval process, the Department's website shall indicate whether an individual high volume horizontal hydraulic fracturing permit was approved or denied and provide a copy of the approval or denial.

Section 55. High volume horizontal hydraulic fracturing permit; conditions; restriction; modifications.

(a) Each permit issued by the Department under this Act shall require the permittee to comply with all provisions of this Act and all other applicable local, State, and federal laws, rules, and regulations in effect at the time the permit is issued. All plans submitted with the application under
Section 35 shall be conditions of the permit.

(b) A permit issued under this Act shall continue in effect until plugging and restoration in compliance with this Act and the Illinois Oil and Gas Act are completed to the Department's satisfaction. No permit may be transferred to another person without approval of the Department.

(c) No permit issued under this Act may be modified without approval of the Department. If the Department determines that the proposed modifications constitute a significant deviation from the terms of the original application and permit approval, or presents a serious risk to public health, life, property, aquatic life, or wildlife, the Department shall provide the opportunities for comment and hearing required under Sections 45 and 50 of this Act. The Department shall provide notice of the proposed modification and opportunity for comment and hearing to the persons who received specific public notice under Section 40 of this Act and shall publish the notice and the proposed modification on its website. When applying for a modified permit, the permittee shall submit a modification fee to the Department. The fee shall be deposited into the Mines and Minerals Regulatory Fund. The Department shall adopt rules regarding procedures for a permit modification.

Section 60. High volume horizontal hydraulic fracturing permit; denial, suspension, or revocation.

(a) The Department may suspend, revoke, or refuse to issue
a high volume horizontal hydraulic fracturing permit under this Act for one or more of the following causes:

(1) providing incorrect, misleading, incomplete, or materially untrue information in a permit application or any document required to be filed with the Department;

(2) violating any condition of the permit;

(3) violating any provision of or any regulation adopted under this Act or the Illinois Oil and Gas Act;

(4) using fraudulent, coercive, or dishonest practices, or demonstrating incompetence, untrustworthiness, or financial irresponsibility in the conduct of business in this State or elsewhere;

(5) having a high volume horizontal hydraulic fracturing permit, or its equivalent, revoked in any other state, province, district, or territory for incurring a material or major violation or using fraudulent or dishonest practices; or

(6) an emergency condition exists under which conduct of the high volume horizontal hydraulic fracturing operations would pose a significant hazard to public health, aquatic life, wildlife, or the environment.

(b) In every case in which a permit is suspended or revoked, the Department shall serve notice of its action, including a statement of the reasons for the action, either personally or by certified mail, receipt return requested, to the permittee.
(c) The order of suspension or revocation of a permit shall take effect upon issuance of the order. The permittee may request, in writing, within 30 days after the date of receiving the notice, a hearing. Except as provided under subsection (d) of this Section, in the event a hearing is requested, the order shall remain in effect until a final order is entered pursuant to the hearing.

(d) The order of suspension or revocation of a permit may be stayed if requested by the permittee and evidence is submitted demonstrating that there is no significant threat to the public health, aquatic life, wildlife, or the environment if the operation is allowed to continue.

(e) The hearing shall be held at a time and place designated by the Department. The Director of the Department or any administrative law judge designated by him or her have the power to administer oaths and affirmations, subpoena witnesses and compel their attendance, take evidence, and require the production of books, papers, correspondence, and other records or information that he or she considers relevant or material.

(f) The costs of the administrative hearing shall be set by rule and shall be borne by the respondent.

(g) The Department's decision to suspend or revoke a high volume horizontal hydraulic fracturing permit is subject to judicial review under the Administrative Review Law.

Section 65. Hydraulic fracturing permit; bonds.
(a) An applicant for a high volume horizontal hydraulic fracturing permit under this Act shall provide a bond, executed by a surety authorized to transact business in this State. The bond shall be in the amount of $50,000 per permit or a blanket bond of $500,000 for all permits. If the applicant is required to submit a bond to the Department under the Illinois Oil and Gas Act, the applicant's submission of a bond under this Section shall satisfy the bonding requirements provided for in the Illinois Oil and Gas Act. In lieu of a bond, the applicant may provide other collateral securities such as cash, certificates of deposit, or irrevocable letters of credit under the terms and conditions as the Department may provide by rule.

(b) The bond or other collateral securities shall remain in force until the well is plugged and abandoned. Upon abandoning a well to the satisfaction of the Department and in accordance with the Illinois Oil and Gas Act, the bond or other collateral securities shall be promptly released by the Department. Upon the release by the Department of the bond or other collateral securities, any cash or collateral securities deposited shall be returned by the Department to the applicant who deposited it.

(c) If, after notice and hearing, the Department determines that any of the requirements of this Act or rules adopted under this Act or the orders of the Department have not been complied with within the time limit set by any notice of violation issued under this Act, the permittee's bond or other collateral
securities shall be forfeited. Forfeiture under this subsection shall not limit any duty of the permittee to mitigate or remediate harms or foreclose enforcement by the Department or the Agency. In no way will payment under this bond exceed the aggregate penalty as specified. 

(d) When any bond or other collateral security is forfeited under the provisions of this Act or rules adopted under this Act, the Department shall collect the forfeiture without delay. The surety shall have 30 days to submit payment for the bond after receipt of notice by the permittee of the forfeiture. 

(e) All forfeitures shall be deposited in the Mines and Minerals Regulatory Fund to be used, as necessary, to mitigate or remediate violations of this Act or rules adopted under this Act.

Section 70. Well preparation, construction, and drilling.

(a) This Section shall apply to all horizontal wells that are to be completed using high volume horizontal hydraulic fracturing operations under a high volume horizontal hydraulic fracturing permit. The requirements of this Section shall be in addition to any other laws or rules regarding wells and well sites.

(b) Site preparation standards shall be as follows:

(1) The access road to the well site must be located in accordance with access rights identified in the Illinois Oil and Gas Act and located as far as practical from
occupied structures, places of assembly, and property
lines of leased property.

(2) Unless otherwise approved or directed by the
Department, all topsoil stripped to facilitate the
construction of the well pad and access roads must be
stockpiled, stabilized, and remain on site for use in
either partial or final reclamation. In the event it is
anticipated that the final reclamation shall take place in
excess of one year from drilling the well the topsoil may
be disposed of in any lawful manner provided the operator
reclaims the site with topsoil of similar characteristics
of the topsoil removed.

(3) Piping, conveyances, valves, and tanks in contact
with hydraulic fracturing fluid, hydraulic fracturing
flowback, or produced water must be constructed of
materials compatible with the composition of the hydraulic
fracturing fluid, hydraulic fracturing flowback, and
produced water.

(c) Site maintenance standards shall be as follows:

(1) Secondary containment is required for all fueling
tanks.

(2) Fueling tanks shall be subject to Section 25 of
this Act.

(3) Fueling tank filling operations shall be
supervised at the fueling truck and at the tank if the tank
is not visible to the fueling operator from the truck.
(4) Troughs, drip pads, or drip pans are required beneath the fill port of a fueling tank during filling operations if the fill port is not within the secondary containment required by paragraph (1) of this subsection.

(d) All wells shall be constructed, and casing and cementing activities shall be conducted, in a manner that shall provide for control of the well at all times, prevent the migration of oil, gas, and other fluids into the fresh groundwater and coal seams, and prevent pollution or diminution of fresh groundwater. In addition to any of the Department's casing and cementing requirements, the following shall apply:

(1) All casings must conform to the current industry standards published by the American Petroleum Institute.

(2) Casing thread compound and its use must conform to the current industry standards published by the American Petroleum Institute.

(3) Surface casing shall be centralized at the shoe, above and below a stage collar or diverting tool, if run, and through usable-quality water zones. In non-deviated holes, pipe centralization as follows is required: a centralizer shall be placed every fourth joint from the cement shoe to the ground surface or to the bottom of the cellar. All centralizers shall meet specifications in, or equivalent to, API spec 10D, Specification for Bow-Spring Casing Centralizers; API Spec 10 TR4, Technical Report on Considerations Regarding Selection of Centralizers for
Primary Cementing Operations; and API RP 10D-2, Recommended Practice for Centralizer Placement and Stop Collar Testing; The Department may require additional centralization as necessary to ensure the integrity of the well design is adequate. All centralizers must conform to the current industry standards published by the American Petroleum Institute.

(4) Cement must conform to current industry standards published by the American Petroleum Institute and the cement slurry must be prepared to minimize its free water content in accordance with the current industry standards published by the American Petroleum Institute; the cement must also:

(A) secure the casing in the wellbore;

(B) isolate and protect fresh groundwater;

(C) isolate abnormally pressured zones, lost circulation zones, and any potential flow zones including hydrocarbon and fluid-bearing zones;

(D) properly control formation pressure and any pressure from drilling, completion and production;

(E) protect the casing from corrosion and degradation; and

(F) prevent gas flow in the annulus.

(5) Prior to cementing any casing string, the borehole must be circulated and conditioned to ensure an adequate cement bond.
(6) A pre-flush or spacer must be pumped ahead of the cement.

(7) The cement must be pumped at a rate and in a flow regime that inhibits channeling of the cement in the annulus.

(8) Cement compressive strength tests must be performed on all surface, intermediate, and production casing strings; after the cement is placed behind the casing, the operator shall wait on cement to set until the cement achieves a calculated compressive strength of at least 500 pounds per square inch, and a minimum of 8 hours before the casing is disturbed in any way, including installation of a blowout preventer. The cement shall have a 72-hour compressive strength of at least 1,200 psi, and the free water separation shall be no more than 6 milliliters per 250 milliliters of cement, tested in accordance with current American petroleum Institute standards.

(9) A copy of the cement job log for any cemented casing string in the well shall be maintained in the well file and available to the Department upon request.

(10) Surface casing shall be used and set to a depth of at least 200 feet, or 100 feet below the base of the deepest fresh water, whichever is deeper, but no more than 200 feet below the base of the deepest fresh water and prior to encountering any hydrocarbon-bearing zones. The
surface casing must be run and cemented as soon as practicable after the hole has been adequately circulated and conditioned.

(11) The Department must be notified at least 24 hours prior to surface casing cementing operations. Surface casing must be fully cemented to the surface with excess cements. Cementing must be by the pump and plug method with a minimum of 25% excess cement with appropriate lost circulation material, unless another amount of excess cement is approved by the Department. If cement returns are not observed at the surface, the operator must perform remedial actions as appropriate.

(12) Intermediate casing must be installed when necessary to isolate fresh water not isolated by surface casing and to seal off potential flow zones, anomalous pressure zones, lost circulation zones and other drilling hazards.

Intermediate casing must be set to protect fresh water if surface casing was set above the base of the deepest fresh water, if additional fresh water was found below the surface casing shoe, or both. Intermediate casing used to isolate fresh water must not be used as the production string in the well in which it is installed, and may not be perforated for purposes of conducting a hydraulic fracture treatment through it.

When intermediate casing is installed to protect fresh
water, the operator shall set a full string of new
intermediate casing at least 100 feet below the base of the
deepest fresh water and bring cement to the surface. In
instances where intermediate casing was set solely to
protect fresh water encountered below the surface casing
shoe, and cementing to the surface is technically
infeasible, would result in lost circulation, or both,
cement must be brought to a minimum of 600 feet above the
shallowest fresh water zone encountered below the surface
casing shoe or to the surface if the fresh water zone is
less than 600 feet from the surface. The location and
depths of any hydrocarbon-bearing zones or fresh water
zones that are open to the wellbore above the casing shoe
must be confirmed by coring, electric logs, or testing and
must be reported to the Department.

In the case that intermediate casing was set for a
reason other than to protect strata that contains fresh
water, the intermediate casing string shall be cemented
from the shoe to a point at least 600 true vertical feet
above the shoe. If there is a hydrocarbon bearing zone
capable of producing exposed above the intermediate casing
shoe, the casing shall be cemented from the shoe to a point
at least 600 true vertical feet above the shallowest
hydrocarbon bearing zone or to a point at least 200 feet
above the shoe of the next shallower casing string that was
set and cemented in the well (or to the surface if less
(13) The Department must be notified prior to intermediate casing cementing operations. Cementing must be by the pump and plug method with a minimum of 25% excess cement. A radial cement bond evaluation log, or other evaluation approved by the Department, must be run to verify the cement bond on the intermediate casing. Remedial cementing is required if the cement bond is not adequate for drilling ahead.

(14) Production casing must be run and fully cemented to 500 feet above the top perforated zone, if possible. The Department must be notified at least 24 hours prior to production casing cementing operations. Cementing must be by the pump and plug method with a minimum of 25% excess cement.

(15) At any time, the Department, as it deems necessary, may require installation of an additional cemented casing string or strings in the well.

(16) After the setting and cementing of a casing string, except the conductor casing, and prior to further drilling, the casing string shall be tested with fresh water, mud, or brine to at least the maximum anticipated treatment pressure but no less than 0.22 psi per foot of casing string length or 1,500 psi, whichever is greater, for at least 30 minutes with less than a 5% pressure loss. The pressure test shall not exceed 70% of the minimum
internal yield. If the pressure declines more than 5% or if there are other indications of a leak, corrective action shall be taken before conducting further drilling and high volume horizontal hydraulic fracturing operations. The operator shall contact the Department's District Office for any county in which the well is located at least 24 hours prior to conducting a pressure test to enable an inspector to be present when the test is done. A record of the pressure test must be maintained by the operator and must be submitted to the Department on a form prescribed by the Department prior to conducting high volume horizontal hydraulic fracturing operations. The actual pressure must not exceed the test pressure at any time during high volume horizontal hydraulic fracturing operations.

(17) Any hydraulic fracturing string used in the high volume horizontal hydraulic fracturing operations must be either strung into a production liner or run with a packer set at least 100 feet below the deepest cement top and must be tested to not less than the maximum anticipated treating pressure minus the annulus pressure applied between the fracturing string and the production or immediate casing. The pressure test shall be considered successful if the pressure applied has been held for 30 minutes with no more than 5% pressure loss. A function-tested relief valve and diversion line must be installed and used to divert flow from the hydraulic fracturing string-casing annulus to a
covered watertight steel tank in case of hydraulic fracturing string failure. The relief valve must be set to limit the annular pressure to no more than 95% of the working pressure rating of the casings forming the annulus. The annulus between the hydraulic fracturing string and casing must be pressurized to at least 250 psi and monitored.

(18) After a successful pressure test under paragraph (16) of this subsection, a formation pressure integrity test must be conducted below the surface casing and below all intermediate casing. The operator shall notify the Department's District Office for any county in which the well is located at least 24 hours prior to conducting a formation pressure integrity test to enable an inspector to be present when the test is done. A record of the pressure test must be maintained by the operator and must be submitted to the Department on a form prescribed by the Department prior to conducting high volume horizontal hydraulic fracturing operations. The actual hydraulic fracturing treatment pressure must not exceed the test pressure at any time during high volume horizontal hydraulic fracturing operations.

(e) Blowout prevention standards shall be set as follows:

(1) The operator shall use blowout prevention equipment after setting casing with a competent casing seat. Blowout prevention equipment shall be in good
working condition at all times.

(2) The operator shall use pipe fittings, valves, and unions placed on or connected to the blow-out prevention systems that have a working pressure capability that exceeds the anticipated pressures.

(3) During all drilling and completion operations when a blowout preventer is installed, tested, or in use, the operator or operator's designated representative shall be present at the well site and that person or personnel shall have a current well control certification from an accredited training program that is acceptable to the Department. The certification shall be available at the well site and provided to the Department upon request.

(4) Appropriate pressure control procedures and equipment in proper working order must be properly installed and employed while conducting drilling and completion operations including tripping, logging, running casing into the well, and drilling out solid-core stage plugs.

(5) Pressure testing of the blowout preventer and related equipment for any drilling or completion operation must be performed. Testing must be conducted in accordance with industry standards. Testing of the blowout preventer shall include testing after the blowout preventer is installed on the well but prior to
drilling below the last cemented casing seat. Pressure control equipment, including the blowout preventer, that fails any pressure test shall not be used until it is repaired and passes the pressure test.

(6) A remote blowout preventer actuator, that is powered by a source other than rig hydraulics, shall be located at least 50 feet from the wellhead and have an appropriate rated working pressure.

Section 75. High volume horizontal hydraulic fracturing operations.

(a) General.

(1) During all phases of high volume horizontal hydraulic fracturing operations, the permittee shall comply with all terms of the permit.

(2) All phases of high volume horizontal hydraulic fracturing operations shall be conducted in a manner that shall not pose a significant risk to public health, life, property, aquatic life, or wildlife.

(3) The permittee shall notify the Department by phone, electronic communication, or letter, at least 48 hours prior to the commencement of high volume horizontal hydraulic fracturing operations.

(b) Integrity tests and monitoring.

(1) Before the commencement of high volume horizontal hydraulic fracturing operations, all mechanical integrity
tests required under subsection (d) of Section 70 and this subsection must be successfully completed.

(2) Prior to commencing high volume horizontal hydraulic fracturing operations and pumping of hydraulic fracturing fluid, the injection lines and manifold, associated valves, fracture head or tree and any other wellhead component or connection not previously tested must be tested with fresh water, mud, or brine to at least the maximum anticipated treatment pressure for at least 30 minutes with less than a 5% pressure loss. A record of the pressure test must be maintained by the operator and made available to the Department upon request. The actual high volume horizontal hydraulic fracturing treatment pressure must not exceed the test pressure at any time during high volume horizontal hydraulic fracturing operations.

(3) The pressure exerted on treating equipment including valves, lines, manifolds, hydraulic fracturing head or tree, casing and hydraulic fracturing string, if used, must not exceed 95% of the working pressure rating of the weakest component. The high volume horizontal hydraulic fracturing treatment pressure must not exceed the test pressure of any given component at any time during high volume horizontal hydraulic fracturing operations.

(4) During high volume horizontal hydraulic fracturing operations, all annulus pressures, the injection pressure, and the rate of injection shall be continuously monitored...
and recorded. The records of the monitoring shall be maintained by the operator and shall be provided to the Department upon request at any time during the period up to and including 5 years after the well is permanently plugged or abandoned.

(5) High volume horizontal hydraulic fracturing operations must be immediately suspended if any anomalous pressure or flow condition or any other anticipated pressure or flow condition is occurring in a way that indicates the mechanical integrity of the well has been compromised and continued operations pose a risk to the environment. Remedial action shall be undertaken immediately prior to recommencing high volume horizontal hydraulic fracturing operations. The permittee shall notify the Department within 1 hour of suspending operations for any matters relating to the mechanical integrity of the well or risk to the environment.

(c) Fluid and waste management.

(1) For the purposes of storage at the well site and except as provided in paragraph (2) of this subsection, hydraulic fracturing additives, hydraulic fracturing fluid, hydraulic fracturing flowback, and produced water shall be stored in above-ground tanks during all phases of drilling, high volume horizontal hydraulic fracturing, and production operations until removed for proper disposal. For the purposes of centralized storage off site for
potential reuse prior to disposal, hydraulic fracturing additives, hydraulic fracturing fluid, hydraulic fracturing flowback, and produced water shall be stored in above-ground tanks.

(2) In accordance with the plan required by paragraph (11) of subsection (b) of Section 35 of this Act and as approved by the Department, the use of a reserve pit is allowed for the temporary storage of hydraulic fracturing flowback. The reserve pit shall be used only in the event of a lack of capacity for tank storage due to higher than expected volume or rate of hydraulic fracturing flowback, or other unanticipated flowback occurrence. Any reserve pit must comply with the following construction standards and liner specifications:

(A) the synthetic liner material shall have a minimum thickness of 24 mils with high puncture and tear strength and be impervious and resistant to deterioration;

(B) the pit lining system shall be designed to have a capacity at least equivalent to 110% of the maximum volume of hydraulic fracturing flowback anticipated to be recovered;

(C) the lined pit shall be constructed, installed, and maintained in accordance with the manufacturers' specifications and good engineering practices to prevent overflow during any use;
(D) the liner shall have sufficient elongation to cover the bottom and interior sides of the pit with the edges secured with at least a 12 inch deep anchor trench around the pit perimeter to prevent any slippage or destruction of the liner materials; and

(E) the foundation for the liner shall be free of rock and constructed with soil having a minimum thickness of 12 inches after compaction covering the entire bottom and interior sides of the pit.

(3) Fresh water may be stored in tanks or pits at the election of the operator.

(4) Tanks required under this subsection must be above-ground tanks that are closed, watertight, and will resist corrosion. The permittee shall routinely inspect the tanks for corrosion.

(5) Hydraulic fracturing fluids and hydraulic fracturing flowback must be removed from the well site within 60 days after completion of high volume horizontal fracturing operations, except that any excess hydraulic fracturing flowback captured for temporary storage in a reserve pit as provided in paragraph (2) of this subsection must be removed from the well site within 7 days.

(6) Tanks, piping, and conveyances, including valves, must be constructed of suitable materials, be of sufficient pressure rating, be able to resist corrosion, and be maintained in a leak-free condition. Fluid transfer
operations from tanks to tanker trucks must be supervised
at the truck and at the tank if the tank is not visible to
the truck operator from the truck. During transfer
operations, all interconnecting piping must be supervised
if not visible to transfer personnel at the truck and tank.

(7) Hydraulic fracturing flowback must be tested for
volatile organic chemicals, semi-volatile organic
chemicals, inorganic chemicals, heavy metals, and
naturally occurring radioactive material prior to removal
from the site. Testing shall occur once per well site and
the analytical results shall be filed with the Department
and the Agency, and provided to the liquid oilfield waste
transportation and disposal operators. Prior to plugging
and site restoration, the ground adjacent to the storage
tanks and any hydraulic fracturing flowback reserve pit
must be measured for radioactivity.

(8) Hydraulic fracturing flowback may only be disposed
of by injection into a Class II injection well that is
below interface between fresh water and naturally
occurring Class IV groundwater. Produced water may be
disposed of by injection in a permitted water flood
operation. Hydraulic fracturing flowback and produced
water may be treated and recycled for use in hydraulic
fracturing fluid for high volume horizontal hydraulic
fracturing operations.

(9) Discharge of hydraulic fracturing fluids,
hydraulic fracturing flowback, and produced water into any
surface water or water drainage way is prohibited.

(10) Transport of all hydraulic fracturing fluids, hydraulic
fracturing flowback, and produced water by vehicle for
disposal must be undertaken by a liquid oilfield waste
 hauler permitted by the Department under Section 8c of the
Illinois Oil and Gas Act. The liquid oilfield waste hauler
transporting hydraulic fracturing fluids, hydraulic
fracturing flowback, or produced water under this Act shall
comply with all laws, rules, and regulations concerning
liquid oilfield waste.

(11) Drill cuttings, drilling fluids, and drilling wastes
not containing oil-based mud or polymer-based mud may
be stored in tanks or pits. Pits used to store cuttings,
fluids, and drilling wastes from wells not using fresh
water mud shall be subject to the construction standards
identified in (2) of this Section. Drill cuttings not
contaminated with oil-based mud or polymer-based mud
may be disposed of onsite subject to the approval of the
Department. Drill cuttings contaminated with oil-based
mud or polymer-based mud shall not be disposed of on
site. Annular disposal of drill cuttings or fluid is prohibited.

(12) Any release of hydraulic fracturing fluid, hydraulic
fracturing additive, or hydraulic fracturing flowback, used
or generated during or after high volume horizontal
hydraulic fracturing operations shall be
immediately cleaned up and remediated pursuant to Department requirements. Any release of hydraulic fracturing fluid or hydraulic fracturing flowback in excess of 1 barrel, shall be reported to the Department. Any release of a hydraulic fracturing additive shall be reported to the Department in accordance with the appropriate reportable quantity thresholds established under the federal Emergency Planning and Community Right-to-Know Act as published in the Code of Federal Regulations (CFR), 40 CFR Parts 355, 370, and 372, the federal Comprehensive Environmental Response, Compensation, and Liability Act as published in 40 CFR Part 302, and subsection (r) of Section 112 of the Federal Clean Air Act as published in 40 CFR Part 68. Any release of produced water in excess of 5 barrels shall be cleaned up, remediated, and reported pursuant to Department requirements.

(13) Secondary containment for tanks required under this subsection and additive staging areas is required. Secondary containment measures may include, as deemed appropriate by the Department, one or a combination of the following: dikes, liners, pads, impoundments, curbs, sumps, or other structures or equipment capable of containing the substance. Any secondary containment must be sufficient to contain 110% of the total capacity of the single largest container or tank within a common
containment area. No more than one hour before initiating any stage of the high volume horizontal hydraulic fracturing operations, all secondary containment must be visually inspected to ensure all structures and equipment are in place and in proper working order. The results of this inspection must be recorded and documented by the operator, and available to the Department upon request.

(14) A report on the transportation and disposal of the hydraulic fracturing fluids and hydraulic fracturing flowback shall be prepared and included in the well file. The report must include the amount of fluids transported, identification of the company that transported the fluids, the destination of the fluids, and the method of disposal.

(15) Operators operating wells permitted under this Act must submit an annual report to the Department detailing the management of any produced water associated with the permitted well. The report shall be due to the Department no later than April 30th of each year and shall provide information on the operator's management of any produced water for the prior calendar year. The report shall contain information relative to the amount of produced water the well permitted under this Act produced, the method which the produced water was disposed, and the destination where the produced water was disposed in addition to any other information the Department determines is necessary by rule.
(d) Hydraulic fracturing fluid shall be confined to the targeted formation designated in the permit. If the hydraulic fracturing fluid or hydraulic fracturing flowback are migrating into the freshwater zone or to the surface from the well in question or from other wells, the permittee shall immediately notify the Department and shut in the well until remedial action that prevents the fluid migration is completed. The permittee shall obtain the approval of the Department prior to resuming operations.

(e) Emissions controls.

(1) This subsection applies to all horizontal wells that are completed with high volume horizontal hydraulic fracturing.

(2) Except as otherwise provided in paragraph (8) of this subsection (e), permittees shall be responsible for managing gas and hydrocarbon fluids produced during the flowback period by routing recovered hydrocarbon fluids to one or more storage vessels or re-injected into the well or another well, and routing recovered natural gas into a flow line or collection system, re-injecting the gas into the well or another well, using the gas as an on-site fuel source, or using the gas for another useful purpose that a purchased fuel or raw material would serve, with no direct release to the atmosphere.

(3) If it is technically infeasible or economically unreasonable to minimize emissions associated with the
venting of hydrocarbon fluids and natural gas during the flowback period using the methods specified in paragraph (2) of this subsection (e), the permittee shall capture and direct the emissions to a completion combustion device, except in conditions that may result in a fire hazard or explosion, or where high heat emissions from a completion combustion device may negatively impact waterways. Completion combustion devices must be equipped with a reliable continuous ignition source over the duration of the flowback period.

(4) Except as otherwise provided in paragraph (8) of this subsection (e), permittees shall be responsible for minimizing the emissions associated with venting of hydrocarbon fluids and natural gas during the production phase by:

(A) routing the recovered fluids into storage vessels and (i) routing the recovered gas into a gas gathering line, collection system, or to a generator for onsite energy generation, providing that gas to the surface owner of the well site for use for heat or energy generation, or (ii) using another method other than venting; and

(B) employing sand traps, surge vessels, separators, and tanks as soon as practicable during cleanout operations to safely maximize resource recovery and minimize releases to the environment.
(5) If the permittee establishes that it is technically infeasible or economically unreasonable to minimize emissions associated with the venting of hydrocarbon fluids and natural gas during production using the methods specified in paragraph (4) of this subsection (e), the Department shall require the permittee to capture and direct any natural gas produced during the production phase to a flare. Any flare used pursuant to this paragraph shall be equipped with a reliable continuous ignition source over the duration of production. In order to establish technical infeasibility or economic unreasonableness under this paragraph (5), the permittee must demonstrate, for each well site on an annual basis, that taking the actions listed in paragraph (4) of this subsection (e) are not cost effective based on a site-specific analysis. Permittees that use a flare during the production phase for operations other than emergency conditions shall file an updated site-specific analysis annually with the Department. The analysis shall be due one year from the date of the previous submission and shall detail whether any changes have occurred that alter the technical infeasibility or economic unreasonableness of the permittee to reduce their emissions in accordance with paragraph (4) of this subsection (e).

(6) Uncontrolled emissions exceeding 6 tons per year from storage tanks shall be recovered and routed to a flare
that is designed in accordance with 40 CFR 60.18 and is
certified by the manufacturer of the device. The permittee
shall maintain and operate the flare in accordance with
manufacturer specifications. Any flare used under this
paragraph must be equipped with a reliable continuous
ignition source over the duration of production.

(7) The Department may approve an exemption that waives
the requirements of paragraphs (5) and (6) of this
subsection (e) only if the permittee demonstrates that the
use of the flare will pose a significant risk of injury or
property damage and that alternative methods of collection
will not threaten harm to the environment. In determining
whether to approve a waiver, the Department shall consider
the quantity of casinghead gas produced, the topographical
and climatological features at the well site, and the
proximity of agricultural structures, crops, inhabited
structures, public buildings, and public roads and
railways.

(8) For each wildcat well, delineation well, or low
pressure well, permittees shall be responsible for
minimizing the emissions associated with venting of
hydrocarbon fluids and natural gas during the flowback
period and production phase by capturing and directing the
emissions to a completion combustion device during the
flowback period and to a flare during the production phase,
except in conditions that may result in a fire hazard or
explosion, or where high heat emissions from a completion combustion device or flare may negatively impact waterways. Completion combustion devices and flares shall be equipped with a reliable continuous ignition source over the duration of the flowback period and the production phase, as applicable.

(9) On or after July 1, 2015, all flares used under paragraphs (5) and (8) of this subsection (e) shall (i) operate with a combustion efficiency of at least 98%, in accordance with 40 CFR 60.18; and (ii) be certified by the manufacturer of the device. The permittee shall maintain and operate the flare in accordance with manufacturer specifications.

(10) Permittees shall employ practices for control of fugitive dust related to their operations. These practices shall include, but are not limited to, the use of speed restrictions, regular road maintenance, and restriction of construction activity during high-wind days. Additional management practices such as road surfacing, wind breaks and barriers, or automation of wells to reduce truck traffic may also be required by the Department if technologically feasible and economically reasonable to minimize fugitive dust emissions.

(11) Permittees shall record and report to the Department on an annual basis the amount of gas flared or vented from each high volume horizontal hydraulic
fracturing well. Three years after the effective date of
the first high-volume horizontal hydraulic fracturing well
permit issued by the Department, and every 3 years
thereafter, the Department shall prepare a report that
analyzes the amount of gas that has been flared or vented
and make recommendations to the General Assembly on whether
steps should be taken to reduce the amount of gas that is
being flared or vented in this State.

(f) High volume horizontal hydraulic fracturing operations
completion report. Within 60 calendar days after the conclusion
of high volume horizontal hydraulic fracturing operations, the
operator shall file a high volume horizontal hydraulic
fracturing operations completion report with the Department. A
copy of each completion report submitted to the Department
shall be provided by the Department to the Illinois State
Geological Survey. The completion reports required by this
Section shall be considered public information and shall be
made available on the Department's website. The high volume
horizontal hydraulic fracturing operations completion report
shall contain the following information:

(1) the permittee name as listed in the permit
application;

(2) the dates of the high volume horizontal hydraulic
fracturing operations;

(3) the county where the well is located;

(4) the well name and Department reference number;
(5) the total water volume used in the high volume horizontal hydraulic fracturing operations of the well, and the type and total volume of the base fluid used if something other than water;

(6) each source from which the water used in the high volume horizontal hydraulic fracturing operations was drawn, and the specific location of each source, including, but not limited to, the name of the county and latitude and longitude coordinates;

(7) the quantity of hydraulic fracturing flowback recovered from the well;

(8) a description of how hydraulic fracturing flowback recovered from the well was disposed and, if applicable, reused;

(9) a chemical disclosure report identifying each chemical and proppant used in hydraulic fracturing fluid for each stage of the hydraulic fracturing operations including the following:

(A) the total volume of water used in the hydraulic fracturing treatment of the well or the type and total volume of the base fluid used in the hydraulic fracturing treatment, if something other than water;

(B) each hydraulic fracturing additive used in the hydraulic fracturing fluid, including the trade name, vendor, a brief descriptor of the intended use or function of each hydraulic fracturing additive, and
the Material Safety Data Sheet (MSDS), if applicable;
(C) each chemical intentionally added to the base fluid, including for each chemical, the Chemical Abstracts Service number, if applicable; and
(D) the actual concentration, in percent by mass, of each chemical intentionally added to the base fluid;
(10) all pressures recorded during the high volume horizontal hydraulic fracturing operations; and
(11) any other reasonable or pertinent information related to the conduct of the high volume horizontal hydraulic fracturing operations the Department may request or require by administrative rule.

Section 77. Chemical disclosure; trade secret protection.
(a) If the chemical disclosure information required by paragraph (8) of subsection (b) of Section 35 of this Act is not submitted at the time of permit application, then the permittee, applicant, or person who will perform high volume horizontal hydraulic fracturing operations at the well shall submit this information to the Department in electronic format no less than 21 calendar days prior to performing the high volume horizontal hydraulic fracturing operations. The permittee shall not cause or allow any stimulation of the well if it is not in compliance with this Section. Nothing in this Section shall prohibit the person performing high volume horizontal hydraulic fracturing operations from adjusting or
altering the contents of the fluid during the treatment process to respond to unexpected conditions, as long as the permittee or the person performing the high volume horizontal hydraulic fracturing operations notifies the Department by electronic mail within 24 hours of the departure from the initial treatment design and includes a brief explanation of the reason for the departure.

(b) No permittee shall use the services of another person to perform high volume horizontal hydraulic fracturing operations unless the person is in compliance with this Section.

(c) Any person performing high volume horizontal hydraulic fracturing operations within this State shall:

   (1) be authorized to do business in this State; and

   (2) maintain and disclose to the Department separate and up-to-date master lists of:

        (A) the base fluid to be used during any high volume horizontal hydraulic fracturing operations within this State;

        (B) all hydraulic fracturing additives to be used during any high volume horizontal hydraulic fracturing operations within this State; and

        (C) all chemicals and associated Chemical Abstract Service numbers to be used in any high volume horizontal hydraulic fracturing operations within this State.
(d) Persons performing high volume horizontal hydraulic fracturing operations are prohibited from using any base fluid, hydraulic fracturing additive, or chemical not listed on their master lists disclosed under paragraph (2) of subsection (c) of this Section.

(e) The Department shall assemble and post up-to-date copies of the master lists it receives under paragraph (2) of subsection (c) of this Section on its website in accordance with Section 110 of this Act.

(f) Where an applicant, permittee, or the person performing high volume horizontal hydraulic fracturing operations furnishes chemical disclosure information to the Department under this Section, Section 35, or Section 75 of this Act under a claim of trade secret, the applicant, permittee, or person performing high volume horizontal hydraulic fracturing operations shall submit redacted and un-redacted copies of the documents containing the information to the Department and the Department shall use the redacted copies when posting materials on its website.

(g) Upon submission or within 5 calendar days of submission of chemical disclosure information to the Department under this Section, Section 35, or Section 75 of this Act under a claim of trade secret, the person that claimed trade secret protection shall provide a justification of the claim containing the following: a detailed description of the procedures used by the person to safeguard the information from becoming available to
persons other than those selected by the person to have access to the information for limited purposes; a detailed statement identifying the persons or class of persons to whom the information has been disclosed; a certification that the person has no knowledge that the information has ever been published or disseminated or has otherwise become a matter of general public knowledge; a detailed discussion of why the person believes the information to be of competitive value; and any other information that shall support the claim.

(h) Chemical disclosure information furnished under this Section, Section 35, or Section 75 of this Act under a claim of trade secret shall be protected from disclosure as a trade secret if the Department determines that the statement of justification demonstrates that:

(1) the information has not been published, disseminated, or otherwise become a matter of general public knowledge; and

(2) the information has competitive value.

There is a rebuttable presumption that the information has not been published, disseminated, or otherwise become a matter of general public knowledge if the person has taken reasonable measures to prevent the information from becoming available to persons other than those selected by the person to have access to the information for limited purposes and the statement of justification contains a certification that the person has no knowledge that the information has ever been published,
disseminated, or otherwise become a matter of general public
knowledge.

(i) Denial of a trade secret request under this Section
shall be appealable under the Administrative Review Law.

(j) A person whose request to inspect or copy a public
record is denied, in whole or in part, because of a grant of
trade secret protection may file a request for review with the
Public Access Counselor under Section 9.5 of the Freedom of
Information Act or for injunctive or declaratory relief under
Section 11 of the Freedom of Information Act for the purpose of
reviewing whether the Department properly determined that the
trade secret protection should be granted.

(k) Except as otherwise provided in subsections (l) and (m)
of this Section, the Department must maintain the
confidentiality of chemical disclosure information furnished
under this Section, Section 35, or Section 75 of this Act under
a claim of trade secret, until the Department receives official
notification of a final order by a reviewing body with proper
jurisdiction that is not subject to further appeal rejecting a
grant of trade secret protection for that information.

(l) The Department shall adopt rules for the provision of
information furnished under a claim of trade secret to a health
professional who states a need for the information and
articulates why the information is needed. The health
professional may share that information with other persons as
may be professionally necessary, including, but not limited to,
the affected patient, other health professionals involved in
the treatment of the affected patient, the affected patient's
family members if the affected patient is unconscious, unable
to make medical decisions, or is a minor, the Centers for
Disease Control, and other government public health agencies.
Except as otherwise provided in this Section, any recipient of
the information shall not use the information for purposes
other than the health needs asserted in the request and shall
otherwise maintain the information as confidential.
Information so disclosed to a health professional shall in no
way be construed as publicly available. The holder of the trade
secret may request a confidentiality agreement consistent with
the requirements of this Section from all health professionals
to whom the information is disclosed as soon as circumstances
permit. The rules adopted by the Department shall also
establish procedures for providing the information in both
emergency and non-emergency situations.

(m) In the event of a release of hydraulic fracturing
fluid, a hydraulic fracturing additive, or hydraulic
fracturing flowback, and when necessary to protect public
health or the environment, the Department may disclose
information furnished under a claim of trade secret to the
relevant county public health director or emergency manager,
the Director of the Illinois Department of Public Health, the
Director of the Illinois Department of Agriculture, and the
Director of the Illinois Environmental Protection Agency upon
request by that individual. The Director of the Illinois Department of Public Health, and the Director of the Illinois Environmental Protection Agency, and the Director of the Illinois Department of Agriculture may disclose this information to staff members under the same terms and conditions as apply to the Director of Natural Resources. Except as otherwise provided in this Section, any recipient of the information shall not use the information for purposes other than to protect public health or the environment and shall otherwise maintain the information as confidential. Information disclosed to staff shall in no way be construed as publicly available. The holder of the trade secret information may request a confidentiality agreement consistent with the requirements of this Section from all persons to whom the information is disclosed as soon as circumstances permit.

Section 80. Water quality monitoring.

(a) Each application for a high volume horizontal hydraulic fracturing permit shall provide the Department with a work plan to ensure accurate and complete sampling and testing as required under this Section. The work plan shall ensure compliance with the requirements of this Section and include, at a minimum, the following:

(1) information identifying all water sources within the range of testing under this Section;

(2) a sampling plan and protocol, including
notification to the Department at least 7 calendar days
prior to sample collection;

(3) the name and contact information of an independent
third party under the supervision of a professional
engineer or professional geologist that shall be
designated to conduct sampling to establish a baseline as
provided for under subsection (b) of this Section;

(4) the name and contact information of an independent
third party under the supervision of a professional
engineer or professional geologist that shall be
designated to conduct sampling to establish compliance
with monitoring as provided within subsection (c) of this
Section;

(5) the name and contact information of an independent
testing laboratory, certified to perform the required
laboratory method, to conduct the analysis required under
subsections (b) and (c) of this Section;

(6) proof of access and the right to test within the
area for testing prescribed within subsection (b) of this
Section during the duration of high volume horizontal
hydraulic fracturing operations covered under the permit
application, and copies of any non-disclosure agreements
made under subsection (d) of this Section; and

(7) identification of practicable contingency
measures, including provision for alternative drinking
water supplies, which could be implemented in the event of
pollution or diminution of a water source as provided for in Section 83.

(b) Prior to conducting high volume horizontal hydraulic fracturing operations on a well, a permittee shall retain an independent third party, as required within paragraph (3) of subsection (a) of this Section, and shall conduct baseline water quality sampling of all water sources within 1,500 feet of the well site prior to any fracturing activities. The samples collected by the independent third party, under the supervision of a professional engineer or professional geologist, shall be analyzed by an independent testing laboratory in accordance with paragraph (4) of subsection (a) of this Section. Testing shall be done by collection of a minimum of 3 samples for each water source required to be tested under this Section. The permittee shall, within 7 calendar days after receipt of results of tests conducted under this subsection, submit the results to the Department or to the owner of the water source under a non-disclosure agreement under subsection (d) of this Section. The Department shall post the results on its website within 7 calendar days after receipt. The results shall, at a minimum, include a detailed description of the sampling and testing conducted under this subsection, the chain of custody of the samples, and quality control of the testing.

(c) After baseline tests are conducted under subsection (b) of this Section and following issuance of a permit by the
Department, the permittee shall have all water sources subjected to sampling under subsection (b) of this Section. All water sources shall be sampled and tested in the same manner 6 months, 18 months, and 30 months after the high volume horizontal hydraulic fracturing operations have been completed. Sampling of a water source under this subsection is not required if the water source was sampled under this subsection or subsection (b) within the previous month. The permittee shall notify the Department at least 7 calendar days prior to taking the sample. The permittee shall, within 7 calendar days after receipt of results of tests conducted under this subsection (c), submit the results to the Department or to the owner of the water source pursuant to a non-disclosure agreement under subsection (d) of this Section. The results shall include, at a minimum, a detailed description of the sampling and testing conducted under this subsection, the chain of custody of the samples, and quality control of the testing.

(d) Sampling of private water wells or ponds wholly contained within private property shall not be required where the owner of the private property declines, expressly and in writing, to provide access or permission for sampling. The owners of private property may condition access or permission for sampling of a private water well or pond wholly within the property or a portion of any perennial stream or river that flows through the property under a non-disclosure agreement, which must include the following terms and conditions:
(1) the permittee shall provide the results of the water quality testing to the property owners;

(2) the permittee shall retain the results of the water quality testing until at least one year after completion of all monitoring under this Section for review by the Department upon request;

(3) the permittee shall not file with the Department the results of the water quality testing, except under paragraph (4) of subsection (d) of this Section; and

(4) the permittee shall notify the Department within 7 calendar days of its receipt of the water quality data where any testing under subsection (c) of this Section indicates that concentrations exceed the standards or criteria referenced in the definition of pollution or diminution under Section 5 of this Act.

(e) Each set of samples collected under subsections (b) and (c) of this Section shall include analyses for:

(1) pH;

(2) total dissolved solids, dissolved methane, dissolved propane, dissolved ethane, alkalinity, and specific conductance;

(3) chloride, sulfate, arsenic, barium, calcium, chromium, iron, magnesium, selenium, cadmium, lead, manganese, mercury, and silver;

(4) BTEX; and

(5) gross alpha and beta particles to determine the
presence of any naturally occurring radioactive materials. Sampling shall, at a minimum, be consistent with the work plan and allow for a determination of whether any hydraulic fracturing additive or other contaminant has caused pollution or diminution for purposes of Sections 83 and 85 of this Act.

Section 83. Order authority.

(a) Any person who has reason to believe they have incurred pollution or diminution of a water source as a result of a high volume horizontal hydraulic fracturing treatment of a well shall immediately notify the Department and request that an investigation be conducted.

(b) Within 30 calendar days after notification, the Department shall initiate the investigation of the claim and make a reasonable effort to reach a determination within 180 calendar days after notification. The Department may contact the Agency to seek the Agency's assistance in water quality sampling. The Agency may seek cost recovery under subsection (e) of Section 87 of this Act and recover all costs for samples taken for the investigation under this Section.

(c) Any person conducting or who has conducted high volume horizontal hydraulic fracturing operations shall supply any information requested by the Department to assist the Department. The Department shall give due consideration to any information submitted during the course of the investigation.

(d) If sampling results or other information obtained as
part of the investigation or the results of tests conducted
under subsection (c) of Section 80 of this Act indicate that
concentrations exceed the standards or criteria referenced by
pollution or diminution under Section 5 of this Act, the
Department shall issue an order to the permittee as necessary
to require permanent or temporary replacement of a water
source. In addition to any other penalty available under the
law and consistent with the Department's order, the permittee
shall restore or replace the affected supply with an
alternative source of water adequate in quantity and quality
for the purposes served by the water source. The quality of a
restored or replaced water source shall meet or exceed the
quality of the original water source based upon the results of
the baseline test results under subsection (b) of Section 80
for that water source, or other available information. The
Department may require the permittee to take immediate action,
including but not limited to, repair, replacement, alteration,
or prohibition of operation of equipment permitted by the
Department. The Department may issue conditions within any
order to protect the public health or welfare or the
environment.

(e) Within 15 calendar days after a determination has been
made regarding the pollution or diminution, the Department
shall provide notice of its findings and the orders, if any, to
all persons that use the water source for domestic, agricultural, industrial, or any other legitimate beneficial
(f) Upon issuance of an Order or a finding of pollution or diminution under subsection (d) of this Section, the Department shall contact the Agency and forward all information from the investigation to the Agency. The Agency shall investigate the potential for violations as designated within Section 87 of this Act.

(g) Reports of potential cases of water pollution that may be associated with high volume horizontal hydraulic fracturing operations may be submitted electronically. The Department shall establish a format for these reports to be submitted through the website developed under Section 110 of this Act. The Department shall electronically provide these reports to the Agency.

(h) The Department shall publish, on its website, lists of confirmed cases of pollution or diminution that result from high volume horizontal hydraulic fracturing operations. This information shall be searchable by county.

(i) Nothing in this Section shall prevent the Department from issuing a cessation order under Section 8a of the Illinois Oil and Gas Act.

Section 85. Presumption of pollution or diminution.

(a) This Section establishes a rebuttable presumption for the purposes of evidence and liability under State law regarding claims of pollution or diminution of a water source
and for use regarding the investigation and order authority under Section 83.

(b) Unless rebutted by a defense established in subsection (c) of this Section, it shall be presumed that any person conducting or who has conducted high volume horizontal hydraulic fracturing operations shall be liable for pollution or diminution of a water supply if:

(1) the water source is within 1,500 feet of the well site;

(2) water quality data showed no pollution or diminution prior to the start of high volume horizontal hydraulic fracturing operations; and

(3) the pollution or diminution occurred during high volume horizontal hydraulic fracturing operations or no more than 30 months after the completion of the high volume horizontal hydraulic fracturing operations.

(c) To rebut the presumption established under this Section, a person presumed responsible must affirmatively prove by clear and convincing evidence any of the following:

(1) the water source is not within 1,500 feet of the well site;

(2) the pollution or diminution occurred prior to high volume horizontal hydraulic fracturing operations or more than 30 months after the completion of the high volume horizontal hydraulic fracturing operations; or

(3) the pollution or diminution occurred as the result
of an identifiable cause other than the high volume horizontal hydraulic fracturing operations.

Section 87. Water quality investigation and enforcement.

(a) No person shall cause or allow high volume horizontal hydraulic fracturing operations permitted under this Act to violate Section 12 of the Illinois Environmental Protection Act or surface water or groundwater regulations adopted under the Illinois Environmental Protection Act.

(b) The Agency shall have the duty to investigate complaints that activities under this Act have caused a violation of Section 12 of the Illinois Environmental Protection Act or surface or groundwater rules adopted under the Illinois Environmental Protection Act. Any action taken by the Agency in enforcing these violations shall be taken under and consistent with the Illinois Environmental Protection Act, including but not limited to, the Agency's authority to seek a civil or criminal cause of action under that Act. The test results under subsections (b) and (c) of Section 80 of this Act may be considered by the Agency during an investigation under this Section.

(c) A person who has reason to believe they have incurred contamination of a water source as a result of high volume horizontal hydraulic fracturing may notify the Agency and request an investigation be conducted. The Agency shall forward this request to the Department for consideration of an
investigation under Section 83 of this Act. If the Agency is provided with notice under subsection (f) of Section 83, the Agency shall conduct an investigation to determine whether pollution or diminution is continuing to occur at the location subject to the order, as well as locations identified by the Department or at any other water source within 1,500 feet of the well site. Any person conducting or who has conducted high volume horizontal hydraulic fracturing operations shall supply any information requested to assist the Agency in its investigation. The Agency shall give due consideration to any information submitted during the course of the investigation.

(d) Pollution or diminution is a violation of this Act and may be pursued by the Department subject to the procedures and remedies under Sections 100 and 105 of this Act.

Section 95. Plugging; restoration.

(a) The permittee shall perform and complete plugging of the well and restoration of the well site in accordance with the Illinois Oil and Gas Act and any and all rules adopted thereunder. The permittee shall bear all costs related to plugging of the well and reclamation of the well site. If the permittee fails to plug the well in accordance with this Section, the owner of the well shall be responsible for complying with this Section.

(b) Prior to conducting high volume horizontal hydraulic fracturing operations at a well site, the permittee shall cause
to be plugged all previously unplugged well bores within 750 feet of any part of the horizontal well bore that penetrated within 400 vertical feet of the formation that will be stimulated as part of the high volume horizontal hydraulic fracturing operations.

(c) For well sites where high volume horizontal hydraulic fracturing operations were permitted to occur, the operator shall restore any lands used by the operator other than the well site and production facility to a condition as closely approximating the pre-drilling conditions that existed before the land was disturbed for any stage of site preparation activities, drilling, and high volume horizontal hydraulic fracturing operations. Restoration shall be commenced within 6 months of completion of the well site and completed within 12 months. Restoration shall include, but is not limited to, repair of tile lines, repair of fences and barriers, mitigation of soil compaction and rutting, application of fertilizer or lime to restore the fertility of disturbed soil, and repair of soil conservation practices such as terraces and grassed waterways.

(d) Unless contractually agreed to the contrary by the permittee and surface owner, the permittee shall restore the well site and production facility in accordance with the applicable restoration requirements in subsection (c) of this Section and shall remove all equipment and materials involved in site preparation, drilling, and high volume horizontal
hydraulic fracturing operations, including tank batteries, rock and concrete pads, oil field debris, injection and flow lines at or above the surface, electric power lines and poles extending on or above the surface, tanks, fluids, pipes at or above the surface, secondary containment measures, rock or concrete bases, drilling equipment and supplies, and any and all other equipment, facilities, or materials used during any stage of site preparation work, drilling, or hydraulic fracturing operations at the well site. Work on the removal of equipment and materials at the well site shall begin within 6 months after plugging the final well on the well site and be completed no later than 12 months after the last producing well on the well site has been plugged. Roads installed as part of the oil and gas operation may be left in place if provided in the lease or pursuant to agreement with the surface owner, as applicable.

Section 97. Seismicity.
(a) For purposes of this Section, "induced seismicity" means an earthquake event that is felt, recorded by the national seismic network, and attributable to a Class II injection well used for disposal of flow-back and produced fluid from hydraulic fracturing operations.
(b) The Department shall adopt rules, in consultation with the Illinois State Geological Survey, establishing a protocol for controlling operational activity of Class II injection
wells in an instance of induced seismicity.

(c) The rules adopted by the Department under this Section shall employ a "traffic light" control system allowing for low levels of seismicity while including additional monitoring and mitigation requirements when seismic events are of sufficient intensity to result in a concern for public health and safety.

(d) The additional mitigation requirements referenced in subsection (c) of this Section shall provide for either the scaling back of injection operations with monitoring for establishment of a potentially safe operation level or the immediate cessation of injection operations.

Section 99. Department report. Two years after the effective date of the first high volume horizontal hydraulic fracturing permit issued by the Department, and every 3 years thereafter, the Department shall prepare a report that examines the following:

(1) the number of high volume horizontal hydraulic fracturing permits issued by the Department, on an annual basis;

(2) a map showing the locations in this State where high volume horizontal hydraulic fracturing operations have been permitted by the Department;

(3) identification of the latest scientific research, best practices, and technological improvements related to high volume horizontal hydraulic fracturing operations and
methods to protect the environment and public health;

(4) confirmed environmental impacts in this State due
to high volume horizontal hydraulic fracturing operations,
including, but not limited to, any reportable release of
hydraulic fracturing flowback, hydraulic fracturing fluid,
and hydraulic fracturing additive;

(5) confirmed public health impacts in this State due
to high volume horizontal hydraulic fracturing operations;

(6) a comparison of the revenues generated under
subsection (e) of Section 35 of this Act to the
Department's costs associated with implementing and
administering provisions of this Act;

(7) a comparison of the revenues generated under
subsection (e) of Section 87 of this Act to the Agency's
costs associated with implementing and administering
provisions of this Act;

(8) a description of any modifications to existing
programs, practices, or rules related to high volume
horizontal hydraulic fracturing operations made by the
Department;

(9) any problems or issues the Department identifies as
it implements and administers the provisions of this Act;

(10) any recommendations for legislative action by the
General Assembly to address the findings in the report; and

(11) any other information the Department deems
relevant regarding its specific experiences implementing
and administering the provisions of this Act and, generally, high volume horizontal hydraulic fracturing operations.

The first report shall also examine any studies issued by the United States Environmental Protection Agency regarding high volume horizontal hydraulic fracturing operations. The report required by this Section shall be provided to the General Assembly and Governor.

Section 100. Criminal offenses; penalties.

(a) Except as otherwise provided in this Section, it shall be a Class A misdemeanor to knowingly violate this Act, its rules, or any permit or term or condition thereof, or knowingly to submit any false information under this Act or regulations adopted thereunder, or under any permit or term or condition thereof. A person convicted or sentenced under this subsection (a) shall be subject to a fine of not to exceed $10,000 for each day of violation.

(b) It is unlawful for a person knowingly to violate:

(1) subsection (c) of Section 25 of this Act;
(2) subsection (d) of Section 25 of this Act;
(3) subsection (a) of Section 30 of this Act;
(4) paragraph (9) of subsection (c) of Section 75 of this Act; or
(5) subsection (a) of Section 87 of this Act.

A person convicted or sentenced for any knowing violation
of the requirements or prohibitions listed in this subsection (b) commits a Class 4 felony, and in addition to any other penalty prescribed by law is subject to a fine not to exceed $25,000 for each day of violation. A person who commits a second or subsequent knowing violation of the requirements or prohibitions listed in this subsection (b) commits a Class 3 felony and, in addition to any other penalties provided by law, is subject to a fine not to exceed $50,000 for each day of violation.

(c) Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Department or Agency as required by this Act, its rules, or any permit, term, or condition of a permit, commits a Class 4 felony, and each false, fictitious, or fraudulent statement or writing shall be considered a separate violation. In addition to any other penalty prescribed by law, persons in violation of this subsection (c) is subject to a fine of not to exceed $25,000 for each day of violation. A person who commits a second or subsequent knowing violation of this subsection (c) commits a Class 3 felony and, in addition to any other penalties provided by law, is subject to a fine not to exceed $50,000 for each day of violation.

(d) Any criminal action provided for under this Section shall be brought by the State's Attorney of the county in which the violation occurred or by the Attorney General and shall be conducted in accordance with the applicable provision of the
Code of Criminal Procedure of 1963. For criminal conduct in this Section, the period for commencing prosecution shall not begin to run until the offense is discovered by or reported to a State or local agency having authority to investigate violations of this Act.

Section 101. Violations; civil penalties and injunctions.

(a) Except as otherwise provided in this Section, any person who violates any provision of this Act or any rule or order adopted under this Act or any permit issued under this Act shall be liable for a civil penalty not to exceed $50,000 for the violation and an additional civil penalty not to exceed $10,000 for each day during which the violation continues.

(b) Any person who violates any requirements or prohibitions of provisions listed in this subsection (b) is subject to a civil penalty not to exceed $100,000 for the violation and an additional civil penalty not to exceed $20,000 for each day during which the violation continues. The following are violations subject to the penalties of this subsection (b):

1. subsection (c) of Section 25 of this Act;
2. subsection (d) of Section 25 of this Act;
3. subsection (a) of Section 30 of this Act;
4. paragraph (9) of subsection (c) of Section 75 of this Act; or
5. subsection (a) of Section 87 of this Act.
(c) The penalty shall be recovered by a civil action before
the circuit court of the county in which the well site is
located or in the circuit court of Sangamon County. Venue shall
be considered proper in either court. These penalties may, upon
the order of a court of competent jurisdiction, be made payable
to the Environmental Protection Trust Fund, to be used in
accordance with the provisions of the Environmental Protection
Trust Fund Act.

(d) The State's Attorney of the county in which the
violation occurred, or the Attorney General, may, at the
request of the Department or on his or her own motion,
 institute a civil action for an injunction, prohibitory or
mandatory, to restrain violations of this Act, any rule adopted
under this Act, the permit or term or condition of the permit,
or to require other actions as may be necessary to address
violations of this Act, any rule adopted under this Act, the
permit or term or condition of the permit.

(e) The State's Attorney of the county in which the
violation occurred, or the Attorney General, shall bring
actions under this Section in the name of the People of the
State of Illinois. Without limiting any other authority that
may exist for the awarding of attorney's fees and costs, a
court of competent jurisdiction may award costs and reasonable
attorney's fees, including the reasonable costs of expert
witnesses and consultants, to the State's Attorney or the
Attorney General in a case where he or she has prevailed.
against a person who has committed a knowing or repeated
violation of this Act, any rule adopted under this Act, or the
permit or term or condition of the permit.

(f) All final orders imposing civil penalties under this
Section shall prescribe the time for payment of those
penalties. If any penalty is not paid within the time
prescribed, interest on penalty at the rate set forth in
subsection (a) of Section 1003 of the Illinois Income Tax Act,
shall be paid for the period from the date payment is due until
the date payment is received. However, if the time for payment
is stayed during the pendency of an appeal, interest shall not
accrue during stay.

Section 102. Other relief.

(a) Any person having an interest that is or may be
adversely affected may commence a civil action on his or her
own behalf to compel compliance with this Act against any
governmental instrumentality or agency which is alleged to be
in violation of the provisions of this Act or of any rule,
order, or permit issued under this Act, or against any other
person who is alleged to be in violation of this Act or of any
rule, order, or permit issued under this Act. No action may be
commenced under this subsection (a): (i) prior to 60 days after
the plaintiff has given notice in writing of the alleged
violation to the Department and to any alleged violator or (ii)
if the State has commenced and is diligently prosecuting a
civil action to require compliance with the provisions of this
Act, or any rule, order, or permit issued under this Act.

(b) Any person having an interest that is or may be
adversely affected may commence a civil action against the
Department on his or her own behalf to compel compliance with
this Act where there is alleged a failure of the Department to
perform any act or duty under this Act that is not
discretionary with the Department. No action may be commenced
under this subsection (b) prior to 60 days after the plaintiff
has given notice in writing of the action to the Department,
except that such action may be brought immediately after the
notification in the case where the violation or order
complained of constitutes an imminent threat to the health or
safety of the plaintiff or would immediately affect a legal
interest of the plaintiff.

(c) The court, in issuing any final order in any action
brought under this Section, may award costs of litigation
(including attorney and expert witness fees) to any party, on
the basis of the importance of the proceeding and the
participation of the parties to the efficient and effective
enforcement of this Act. The court may, if a temporary
restraining order or preliminary injunction is sought, require
the filing of a bond or equivalent security in accordance with

(d) Any person who is injured in his or her person or
property through the violation by any operator of any rule,
order, or permit issued under this Act may bring an action for
damages (including reasonable attorney and expert witness
fees). Nothing in this subsection (d) shall affect any of the
rights established by or limits imposed under the Workers'
Compensation Act.

(e) Any action brought under this Section may be brought
only in the county in which the high volume horizontal
hydraulic fracturing operation complained of is located.

(f) In any action under this Section, the Department shall
have an unconditional right to intervene.

(g) No existing civil or criminal remedy for any wrongful
action shall be excluded or impaired by this Act.

(h) Nothing in this Section shall restrict any right that
any person (or class of persons) may have under any statute or
common law to seek enforcement of any of the provisions of this
Act and the rules adopted under this Act, or to seek any other
relief (and including relief against the United States or the
Department).

Section 105. Violations, complaints, and notice; website.

The Department shall maintain a detailed database that is
readily accessible to the public on the Department's website.
The database shall show each violation found by the Department
regarding high volume horizontal hydraulic fracturing
operations and the associated well owners, operators, and
subcontractors. When the Department determines that any person
has violated this Act, the Department shall provide notice by
U.S. Postal Service certified mail, return receipt requested,
of the Department's determination to all persons required to
receive specific public notice under Section 40 of this Act
within 7 calendar days after the determination. The Department
shall also post the notice on the Department's website. The
notice shall include a detailed, plain language description of
the violation and a detailed, plain language description of all
known risks to public health, life, property, aquatic life, and
wildlife resulting from the violation.

Section 110. Public information; website.

(a) All information submitted to the Department under this
Act is deemed public information, except information deemed to
constitute a trade secret under Section 77 of this Act and
private information and personal information as defined in the
Freedom of Information Act.

(b) To provide the public and concerned citizens with a
centralized repository of information, the Department shall
create and maintain a comprehensive website dedicated to
providing information concerning high volume horizontal
hydraulic fracturing operations. The website shall contain,
assemble, and link the documents and information required by
this Act to be posted on the Department's or other agencies'
websites. The Department shall also create and maintain an
online searchable database that provides information related
to high volume horizontal hydraulic fracturing operations on
wells that, at a minimum, include, for each well it permits,
the identity of its operators, its waste disposal, its chemical
disclosure information, and any complaints or violations under
this Act. The website created under this Section shall allow
users to search for completion reports by well name and
location, dates of fracturing and drilling operations,
operator, and by chemical additives.

Section 120. Applicable federal, State, and local laws.
Compliance with this Act does not relieve responsibility for
compliance with the Illinois Oil and Gas Act, the Illinois
Environmental Protection Act, and other applicable federal,
State, and local laws.

Section 125. Administrative review. All final
administrative decisions, including issuance or denial of a
permit, made by the Department under this Act are subject to
judicial review under the Administrative Review Law and its
rules.

Section 130. Rules. The Department shall have the
authority to adopt rules as may be necessary to accomplish the
purposes of this Act. Any and all rules adopted under this Act
by the Department are not subject to the review, consultation,
or advisement of the Oil and Gas Board.
Section 135. The Mines and Minerals Regulatory Fund. The Mines and Minerals Regulatory Fund is created as a special fund in the State treasury. All moneys required by this Act to be deposited into the Fund shall be used by the Department to administer and enforce this Act and otherwise support the operations and programs of the Office of Mines and Minerals.

Section 140. Severability. The provisions of this Act are severable under Section 1.31 of the Statute on Statutes.

Section 150. The State Finance Act is amended by adding Section 5.826 as follows:

(30 ILCS 105/5.826 new)

Sec. 5.826. The Mines and Minerals Regulatory Fund.

Section 999. Effective date. This Act takes effect upon becoming law.