**Section 245.210 Permit Application Requirements**

a) *Every applicant for a permit under this* Part *must submit the following information to the Department on an application form provided by the Department* (Section 1-35(b) of the Act). The plans required under subsections (a)(3), (a)(4), (a)(6), (a)(10), (a)(11), (a)(12), (a)(13), (a)(14), (a)(15) and (a)(20) are, pursuant to Section 1-55(a) of the Act, conditions of any permit issued under the Act. Pursuant to Section 1-35(b)(20) of the Act, the Department may request additional information from the applicant (see the other subsections of this subsection (a), requirements labeled as Additional Information within this subsection (a), and the information listed in subsection (b)).

1) Applicant Information

*The name,* email address, and *address of the applicant*, the name and address of *any parent, subsidiary, or affiliate* (Section 1-35(b)(1) of the Act) of the applicant, and the applicant's HVHHF registration number;

2) Well Location

*The proposed well name*, well location, *and legal description* per the Public Land Survey System *of the* well, *well site, and its unit area* (Section 1-35(b)(2) of the Act). The well location shall be surveyed by an Illinois licensed land surveyor or Illinois registered professional engineer and the description of the surveyed well location shall also include the legal description, the GPS latitude and longitude location, and ground elevation of the well. The GPS location shall be recorded as degrees and decimal degrees recorded to 6 decimal places in the North American Datum 1983 projection and shall be accurate to within 3 feet. The reported GPS location is required to be an actual GPS field measurement and not a calculated or conversion measurement;

3) Well Site Setback Plan

*A statement whether the proposed location of the well site is in compliance with the* setback *requirements of Section* 245.400 *and a plat* map, *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 Section* 245.400(a) (Section 1-35(b)(3) of the Act) and a statement explaining how the size of the well site is sufficient to conduct all aspects of HVHHF operations within its boundaries;

4) Directional Drilling Plan

*A detailed description* of the directional drilling plan *for the proposed well to be used for the high volume horizontal hydraulic fracturing operations, including, but not limited to, the following information* (Section 1-35(b)(4) of the Act):

A) *the approximate total* true vertical and measured *depth to which the well is to be drilled or deepened* (Section 1-35(b)(4)(A) of the Act);

B) *the proposed angle and direction* (heading) *of the well* (Section 1-35(b)(4)(B) of the Act);

C) *the actual depth or the approximate depth at which the well to be drilled deviates from vertical* (Section 1-35(b)(4)(C) of the Act);

D) the planned depth at which the well enters the formation that will be stimulated as part of the HVHHF operations;

E) *the angle and direction of any nonvertical portion of the well until the well reaches its total target depth or its actual final depth* (Section 1-35(b)(4)(D) of the Act);

F) *the* planned horizontal deviation *and direction* (heading) *of the proposed horizontal* portion of the *well* (Section 1-35(b)(4)(E) of the Act); and

G) the planned bottom hole location of the well;

5) Underground Fresh Water Information

*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* or any other relevant information known to the applicant*, of the lowest potential fresh water along the entire length of the proposed well* (Section 1-35(b)(5) of the Act);

6) High Volume Horizontal Hydraulic Fracturing Operations Plan

*A detailed description of the proposed high volume horizontal hydraulic fracturing operations, including, but not limited to, the following* (Section 1-35(b)(6) of the Act):

A) *the* formations *affected by the high volume horizontal hydraulic fracturing operations, including, but not limited to, geologic name and geologic description of the* formations *that will be stimulated by the operation* (Section 1-35(b)(6)(A) of the Act), and a description of the confining zone and the formations constituting or contributing to that zone, including, but not limited to, a description of the lithology, extent, thickness, permeability, porosity, transmissive faults, fractures, water or water source content, and susceptibility to vertical propagation of fractures, of the confining formations; if any of the features of the confining zone and overburden described in this subsection (a)(6)(A) are unknown, the applicant should so state;

B) *the anticipated surface treating pressure range* (Section 1-35(b)(6)(B) of the Act);

C) *the maximum anticipated injection treating pressure* (Section 1-35(b)(6)(C) of the Act);

D) *the estimated or calculated fracture pressure of the producing and confining zones* (Section 1-35(b)(6)(D) of the Act);

E) *the planned depth of all proposed perforations or depth to the top of the open hole section* (Section 1-35(b)(6)(E) of the Act); and

F) the anticipated type, source and volume of the base fluid anticipated to be used in the high volume horizontal hydraulic fracturing treatment;

7) Scaled Plat Maps, Diagrams or Cross-sections

1. A scaled *plat* map *showing* the well location and *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* (Section 1-35(b)(7) of the Act). If the well bores are present, then also include the following information for each well bore: well name, location and permit number;

B) a scaled map showing the proposed unit, including the unit boundaries and the location of the proposed well, well pad, well site, access road and any other operating facilities;

C) a scaled top-view diagram showing the well location, direction of drilling below the surface entry point to the intersection with the formation to be stimulated, and the horizontal leg to its total length. Also indicate the location at the surface of 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 HVHHF operations; and

D) a scaled cross-section of the well bore from the surface through the horizontal leg's total length, providing the information required in subsections (a)(4) and (a)(5), and showing the formations to be stimulated as described in subsection (a)(6)(A);

8) Chemical Disclosure Report

*Unless the applicant documents* to the Department's satisfaction *why the information is not available at the time the application is submitted* (in which case the applicant shall comply with Sections 245.700 and 245.720), *a chemical disclosure report identifying each chemical and proppant anticipated to be used in hydraulic fracturing fluid for each stage of the* high volume horizontal *hydraulic fracturing operations* (Section 1-35(b)(8) of the Act).If this information is not available pursuant to a trade secret claim under Sections 245.700 and 245.720, the permittee shall submit redacted and un-redacted copies of the documents identifying the specific information on the master list of chemicals claimed to be protected as trade secrets. The Department shall use the redacted copies when posting the master list of chemicals on its website. The redacted copy must also be submitted to the certified local public health department. The report must contain the following:

A) for each stage, *the total volume of water anticipated to be used in the* high volume horizontal *hydraulic fracturing treatment of the well or the type and total volume of the base fluid anticipated to be used in the* high volume horizontal *hydraulic fracturing treatment, if something other than water* (Section 1-35(b)(8)(A) of the Act). If the total volume has not been determined at the time of the application, the permittee shall submit an estimate for the maximum volume of water or base fluid anticipated to be used;

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* MSDS *if applicable* (Section 1-35(b)(8)(B) of the Act). If this information is not available under Sections 245.700 and 245.720, the chemical family and chemical effects of each additive must be disclosed. If the additives have not been determined at the time of the application, the permittee must submit all possible additives that could be used;

C) *each chemical anticipated to be intentionally added to the base fluid, including, for each chemical, the* CAS *number, if applicable* (Section 1-35(b)(8)(C) of the Act). If this information is not available under Sections 245.700 and 245.720, the chemical family and chemical effects of each chemical must be disclosed. If the chemicals have not been determined at the time of the application, the permittee must submit all possible chemicals that could be used;

D) *the anticipated concentration in the base fluid, in percent by mass, of each chemical to be intentionally added to the base fluid* (Section 1-35(b)(8)(D) of the Act) as calculated by the equation Mass Percent = g solute/g solution X 100. If the concentration has not been determined at the time of the application, the permittee shall submit an estimate and identify such as an estimate; and

E) at or before the time of the applicant's filing of its first application under the Act, the applicant must have on file with the Department a master list of chemicals, as required in Section 1-77 of the Act;

9) Water Use Self-Certification

*A* self-*certification* explaining the applicant's *compliance with the Water Use Act of 1983* [525 ILCS 45] *and applicable regional water supply plans* (Section 1-35(b)(9) of the Act), and including receipt or other proof of the applicant's delivery of the plan to the applicable Soil and Water Conservation District and any community water supply, as defined in Section 5 of the Public Water Supply Operations Act [415 ILCS 45/5], within 20 miles of the proposed water source;

10) Water Source Management Plan

A) If fresh water is anticipated to be used in the high volume horizontal hydraulic fracturing treatment, *a water* source *management plan that shall include the following information* (Section 1-35(b)(10) of the Act):

i) *the* name and location (county, latitude, longitude) of the *source of the* fresh *water, such as surface or groundwater, anticipated to be used for water withdrawals, and the anticipated withdrawal location* (Section 1-35(b)(10)(A) of the Act);

ii) *the anticipated volume and rate of each* fresh *water withdrawal from each withdrawal location* (Section 1-35(b)(10)(B) of the Act);

iii) *the anticipated months when* fresh *water withdrawals shall be made from each withdrawal location* (Section 1-35(b)(10)(C) of the Act);

iv) *the methods to be used to minimize* fresh *water withdrawals as much as feasible* (Section 1-35(b)(10)(D) of the Act); and

v) *the methods to be used for surface water withdrawals to minimize adverse impact to aquatic life* (Section 1-35(b)(10)(E) of the Act);

B) Additional Information. Pursuant to Section 1-35(b)(20) of the Act, with its Water Source Management Plan, the applicant shall:

i) specify the methods to be utilized for accurately monitoring the amount of water from each source and how that data will be recorded and maintained;

ii) specify the methods of transportation and/or delivery of withdrawn surface water to the well site;

iii) if recycled water is anticipated to be used in the HVHHF treatment, describe the source of the recycled water and the anticipated water to be used; and

iv) if water other than fresh water or recycled water is anticipated to be used in the HVHHF treatment:

• describe the source of that other water and the anticipated volume to be used; and

• if the water derives from a river, lake, stream, other surface water or groundwater and, but for the total dissolved solids (TDS) levels, would be considered fresh water, provide the information required by subsection (a)(10)(A);

C) *Where a surface water source is wholly contained within a single property, and the* landowner *of the property expressly agrees in writing to its use for* fresh *water withdrawals, the applicant is not required to include this surface water source in the fresh water withdrawal and management plan* (Section 1-35(b)(10) of the Act). For this exception to apply, the water use agreement with the landowner of the property must be provided with the permit application. Any confidential provisions of a water use agreement may be redacted by the applicant;

11) Hydraulic Fracturing Fluids and Flowback Plan

A) *A* hydraulic fracturing fluids and flowback *plan for the handling, storage, transportation, and disposal*, recycling, *or reuse of hydraulic fracturing fluids and hydraulic fracturing flowback* consistent with the requirements of Subpart H. *The plan shall identify the specific Class II injection well or wells that will be used to dispose of the hydraulic fracturing flowback* or the facilities where the hydraulic fracturing flowback will be reused or recycled. *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* (Section 1-35(b)(11) of the Act);

B) Additional Information. Pursuant to Section 1-35(b)(20) of the Act, the applicant shall also describe the anticipated hydraulic fracturing flowback, the expected flowback rate and amount, and the frequency at which the storage tanks will be emptied;

12) Well Site Safety Plan

A) *A well site safety plan to:*

i) *address proper safety measures to be employed during high volume horizontal hydraulic fracturing operations for the protection of persons on the* well *site* (Section 1-35(b)(12) of the Act) that complies with federal and State law, including applicable OSHA regulations; and

ii) *address proper safety measures to be employed during high volume horizontal hydraulic fracturing operations for the protection of the general public* (Section 1-35(b)(12) of the Act) that complies with federal and State law;

B) Additional Information. Pursuant to Section 1-35(b)(20) of the Act, the applicant shall also address proper safety measures to be employed during an emergency, such as whether local responders have appropriate equipment and training to respond to an emergency at a well site, identify the presence of any hazardous materials used or stored at the well site, and ensure the applicant has contact information for all appropriate emergency responders and that the applicant's contact information is made available to emergency responders;

13) Containment Plan

*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* (Section 1-35(b)(13) of the Act) to be compliant with Sections 245.820, 245.825 and 245.830;

14) Casing and Cementing Plan

*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* (Section 1-35(b)(14) of the Act) to be compliant with Sections 245.530, 245.560 and 245.570;

15) Traffic Management Plan

A) *A traffic management plan that* is developed by the applicant, identifying the impacted highway authorities (county, township, road district system, and municipal street system, as applicable), to *identify the anticipated roads, streets, and highways that will be used* (Section 1-35(b)(15) of the Act) to facilitate the well site construction, drilling operations, HVHHF operations, production, and continued operations of the well site. The applicant shall include contact information for the applicant's representative with knowledge of the traffic management plan and contact information for a representative of each impacted highway authority. The applicant shall submit copies of the traffic management plan to the impacted highway authority, when the applicant submits the application to the Department, to provide the highway authority time to submit comments to the Department, if desired.

B) Additional Information. Pursuant to Section 1-35(b)(20) of the Act, the applicant shall also include:

i) a scaled map of the proposed routes, including but not limited to any access roads, that the applicant intends to use to construct the well site or to perform HVHHF operations, production and continued operations, for at least a 10 mile radius around the well site, identifying all the different highway jurisdictions, as well as any structures or property lines relevant to demonstrating compliance with Section 245.410 and 765 ILCS 530;

ii) anticipated start and end dates for well site construction and drilling operations, HVHHF operations, and other high traffic operations; and

iii) any management measures that will be used to minimize stress to local roads and/or impact on regular traffic flow;

16) Owner Information

*The names and addresses of all* *owners* *of any real property* surface interest *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* (Section 1-35(b)(16) of the Act);

17) Public Notice Drafts

*Drafts of the specific public notice and general public notice as required by Section* 245.250 using the forms provided by the Department (Section 1-35(b)(17) of the Act);

18) Restoration Statement

A) *A statement that the well site at which the HVHHF operation will be conducted will be restored in compliance with 62 Ill. Adm. Code 240.1181 and Section 1-95 of* the *Act* (Section 1-35(b)(18) of the Act).

B) Additional Information. Pursuant to Section 1-35(b)(20) of the Act, the applicant shall provide:

i) Its proposed strategy for the pre-HVHHF operations plugging of previously abandoned unplugged or insufficiently plugged wells identified in subsection (a)(7)(A). For any well bores identified in subsection (a)(7)(A), this strategy shall demonstrate that the well bores are sufficiently plugged as described in Section 245.815(b) or that the well bores will be plugged pursuant to Section 245.1010;

ii) A strategy for restoration of lands used by the permittee other than the well site and production facility pursuant to Section 245.1020; and

iii) A strategy for the plugging of the well and the restoration of the well site to be in compliance with 62 Ill. Adm. Code 240.Subpart K and Sections 245.1000 and 245.1030 of this Part;

19) Proof of Insurance

*Proof of insurance* indicating that the applicant/operator performing, itself or through a contractor, HVHHF operations at the proposed well is insured *to cover injuries, damages, or loss related to pollution in the amount of at least $5,000,000* per occurrence (Section 1-35(b)(19) of the Act);

20) Water Quality Monitoring Work Plan

*The work plan to ensure accurate and complete water quality sampling and testing* (Section 1-80(a) of the Act) as set forth in Section 245.600(a), reviewed and certified by a professional engineer or professional geologist;

21) Applicant Disclosure

Disclosure of and a written explanation for the following, which must be supplemented if any changes occur after the application is submitted:

A) Any conviction, adjudication or finding of *fraudulent, coercive, or dishonest practices, or demonstrating incompetence, untrustworthiness, or financial irresponsibility in the conduct of business in this State or elsewhere* (Section 1-60(a)(4) of the Act);

B) Any revocation of a *high volume horizontal hydraulic fracturing permit, or its equivalent, in any other state, province, district, or territory for incurring a material or major violation or using fraudulent or dishonest practices* (Section 1-60(a)(5) of the Act).

b) Additional Information. Pursuant to Section 1-35(b)(20) of the Act, the Department may request additional information from the applicant. This information is not automatically incorporated in the permit as a permit condition (see Section 1-55(a) of the Act), as are the plans described in the subsections specified in subsection (a). The applicant shall submit the following information:

1) Registration Certification

Certification that the applicant's registration information provided pursuant to Section 245.200 is accurate and up to date;

2) Topsoil Preservation

A strategy for compliance with the requirement to preserve topsoil as required by Section 245.410;

3) Fugitive Dust Control

A strategy for compliance with the requirement to implement practices to control fugitive dust as required by Section 245.410;

4) Contractor Information

A statement indicating whether the applicant or a contractor will be performing the HVHHF operations. If a contractor will be performing the HVHHF operations, provide the contractor's name, address and telephone number, and the direct telephone number of the person responsible for HVHHF operations at the well site for the contractor. If any information is not known about the contractor at this time, the application shall be supplemented as soon as possible and in all events before the HVHHF operations begin;

5) Violations Report

A violations report indicating whether the applicant or any parent, subsidiary or affiliate of the applicant has pending Notices of Violations or Director's Decisions under the Act, this Part, the Illinois Oil and Gas Act, or the administrative rules promulgated under that Act;

6) Emissions Management

A statement of which of the methods for managing natural gas and hydrocarbon fluids produced during the flowback period and production period the applicant will use, as required by Sections 245.845(a) and (b) and 245.900(a) through (c). If the applicant indicates in this statement that it intends to request an exemption or waiver under Section 245.845(c) or (f), 245.900(d) or (i), or 245.920, it must include that fact in the statement and attach the substantiation for the request that is required by Section 245.845, 245.900 or 245.920, as applicable;

7) The applicant shall submit a radioactive materials management strategy to test for and identify, manage, transport and dispose of any radioactive materials utilized or generated during the course of HVHHF operations. The proposed strategy shall ensure that any wastes generated that are low-level radioactive waste comply with the waste management requirements specified in the strategy. The radioactive materials management strategy shall include:

A) An initial site sampling plan that will determine the concentrations of total dissolved solids, gross alpha, gross beta, radium-226, radium-228 and potassium-40 of the soil, private wells and surface water within 1500 feet of the well site;

B) A strategy for radiation testing of the drill cuttings from the black shale, the hydraulic fracturing flowback, and the well site as part of the site restoration, including reserve pits and any surface waters within 1500 feet of the well site. The strategy shall include surveys, of a specified frequency, of equipment and waste streams prior to disposal, maintenance or recycling.

c) When *an application is made to conduct high volume horizontal* hydraulic *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* high volume horizontal *hydraulic fracturing operations to occur from 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* a modification to the permit is subsequently sought for *an amended location* or any other significant permit deviation*, a new certified consent is* required *for the amended location*. (Section 1-35(c) of the Act)

d) If any part of the well or well site identified in subsection (a)(2) is in an area identified by the U.S. Geological Service as having a 2% or more probability of exceedance (in 50 years) of peak ground acceleration of 0.4 standard gravity (g) or more, then the plans submitted per subsections (a)(11) (Hydraulic Fracturing Fluids and Flowback Plan), (a)(12) (Well Site Safety Plan), (a)(13) (Containment Plan) and (a)(14) (Casing and Cementing Plan) shall identify measures the applicant will take to protect the components in those plans against an earthquake of M 4.5 or more, and the insurance policy identified in subsection (a)(19) shall have a rider providing coverage against loss or claims resulting from impacts from any aspect of the permitted operations following earthquakes of M 4.5 or more.

e) If any part of the well or well site identified in subsection (a)(2) is in an area identified as a floodplain under 17 Ill. Adm. Code 3700 or 3706, it shall be considered a construction under either or both of those Parts and the applicant shall be responsible for obtaining all permits under Part 3700 or 3706, whichever is applicable, and the insurance policy identified in subsection (a)(19) shall have a rider providing coverage against loss or claims resulting from impacts from any aspect of the permitted operations following floods.

f) *The permit application shall be accompanied by a bond* or equivalent financial instrument *as required by Section* 245.220(a) (Section 1-35(d) of the Act).

g) *Each application for a permit under this* Part *shall include payment of a non-refundable fee of $13,500* (Section 1-35(e) of the Act)*.* Checks shall be made payable to the Illinois Department of Natural Resources.

h) *Each application submitted under this* Part *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."* (Section 1-35(f) of the Act)

i) *The permit application shall be submitted to the Department in both electronic and hard copy format* at the same time. One hard copy of the permit application and all documents attached to the application shall be provided. *The electronic format shall be searchable* (Section 1-35(g) of the Act) and provided to the Department on compact disc, DVD or Universal Serial Bus (USB) compatible storage devices. Permittee shall also provide the Department, in electronic and hard copy format, a duplicate set of any pages containing names or addresses of individuals in which the names and addresses, except those provided pursuant to subsections (a)(1) and (b)(4), are redacted for purposes of confidentiality. Review of the permit application shall not be considered for the purposes of Section 245.230 if the Department is unable to access the submitted electronic format.

j) *The application for a high volume horizontal hydraulic fracturing permit may be submitted as a combined permit application with the permittee's application to drill on a form as the Department shall prescribe. The combined application must include the information required in this Section. 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* Part, the *Act, the Illinois Oil and Gas Act* and the rules adopted under that Act. (Section 1-35(h) of the Act)