



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Bruce Rauner, Governor
Wayne A. Rosenthal, Director

June 5, 2017

Woolsey Operating Company, LLC
125 North Market St. Ste. 1000
Wichita, KS 62702

Re: HVHHF Application for Woodrow #1H-310408-193 (Review #HVHHF-000001)
Sec. 31, T04S, R08E, White County, Illinois

Mr. Woolsey:

Please be advised that the Department has reviewed your High Volume Horizontal Hydraulic Fracturing (HVHHF) permit application which was officially received on May 22, 2017, and issued the review number HVHHF-000001. Section 1-35(j) of the Hydraulic Fracturing Regulatory Act (HFRA), 225 ILCS 732/1-35(j) states as follows:

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.

Based on the Department's review of your application, and for the reasons set forth in Attachment A, the application submitted to perform HVHHF operations on the above-referenced well cannot be issued as submitted as it does not meet the requirements of the HFRA and associated rules and regulations. This letter should be considered your deficiency letter under Section 1-35(j) of the HFRA and 62 Ill. Adm. Code 245.230(b). Review of your application cannot be completed until all of the items noted in Attachment A have been submitted or are otherwise resolved. Also, be advised that 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 its own initiative or in response to a request by the Department." 225 ILCS 732/1-35(i), 62 Ill. Adm. Code 240.300(a).

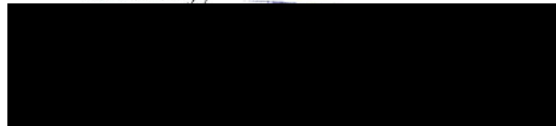
In order for the Department to complete its review within the timeline of the HFRA, please submit a response to the deficiencies listed in Attachment A within 14 calendar days from the date of this letter. Failure to respond to this deficiency letter in a timely manner may result in your application being rejected or denied at the end of the review period as set forth in 225 ILCS 732/1-35(j), 1-60(a) and 62 Ill. Adm. Code 245.300 and 245.310(a).

In order for the Department to complete review of your HVHHF permit application, you have 2 options:

- 1) Within fourteen (14) calendar days, provide a formal response to this deficiency letter, in writing, addressing all items in their entirety, or request an extension of time which will still allow the Department to complete the required review of the new information within the 60 calendar day deadline mandated by the HFRA; or
- 2) If you cannot provide a complete response which the Department can fully review within the deadlines mandated by the HFRA, formally waive, in writing, the 60-day deadline in order to provide the Department more time to complete the review of your HVHHF permit application.

Please submit all responses and questions to Doug Shutt via mail or email at the contact information below, including the review number assigned to your permit application: **HVHHF-000001**.

Sincerely,



Doug Shutt
Permit Manager
Office of Oil and Gas Resource Management
One Natural Resources Way
Springfield, Illinois 62702
217-782-7756
Doug.Shutt@illinois.gov

Attachment A - 12 pages

ATTACHMENT A TO JUNE 5, 2017 DEFICIENCY LETTER FOR HVHHF-000001

The following deficiencies were noted during the review of your application:

1. HVHHF Operations Plan

According to 62 IAC Section 245.210(a)(6), High Volume Horizontal Hydraulic Fracturing Operations Plan, shall include 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.

Application Deficiencies

- a) *Specifically, 245.210(a)(6)(E) requests the estimated or calculated fracture pressure of the producing and confining zones. The application identifies the calculated pressure of the producing zone as 2875 PSI, the calculated pressure of the confining zone as 4000 PSI and the maximum anticipated injection treating pressure as 7900 PSI. The application did not include evidence that the proposed maximum injection pressure of 7900 PSI will not initiate or propagate fractures in the confining zone or overlying strata.*

To resolve, submit a revised HVHHF Operations Plan including the following:

- A) Provide evidence that conducting the high volume horizontal hydraulic fracturing operations on the well at the proposed maximum anticipated injection treating pressure of 7900 PSI will not:
 - a) Initiate new fractures in the confining zones;
 - b) Propagate existing fractures in the confining zone;
 - c) Allow the transmission of fluids out of the producing zones; and
 - d) Allow contamination of underground sources of drinking water (USDWs);

2. Additional Required Maps

According to 62 IAC Section 245.210(a)(7), Scaled Plat Maps, Diagrams or Cross-sections, the following items shall be addressed:

- A) 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).

Application Deficiencies

- a) *Specifically, 245.210(a)(7)(C) requests 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. The diagram provided does not identify 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.*

To resolve submit a revised Additional Required Maps including the following:

- A) Provide 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; or
- B) If no well bores are 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, provide a statement to that effect.

3. Hydraulic Fracturing Fluids and Flowback Plan

According to 62 IAC Section 245.210(a)(11), Hydraulic Fracturing Fluids and Flowback Plan, the following items shall be addressed:

- 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) and
- 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.

Application Deficiencies

- a) *245.210(a)(11)(A) requests 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. Specifically, 245.825(a) of Subpart H specifies the requirement of above ground storage tanks, the application does not adequately address these requirements only identifying the tanks as "purpose build lined and closed".*
- b) *245.210(a)(11)(B) requests the applicant describe the anticipated hydraulic fracturing flowback, the expected flowback rate and amount, and the frequency at which the storage tanks will be emptied. The application describes the expected flowback rate and amount, and the frequency at which the storage tanks will be emptied, however it does not contain a description of the anticipated hydraulic fracturing flowback.*

To resolve submit a revised Hydraulic Fracturing Fluids and Flowback Plan including the following:

- A) Address the specific storage tank requirements 245.825(a) and
- B) Provide a description of the anticipated hydraulic fracturing flowback.

4. Well Site Safety Plan

According to 62 IAC Section 245.210(a)(12), Well Site Safety Plan, the following items shall be addressed:

- 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.

Application Deficiencies

- a) *245.210(a)(12)(A)(i) requests a well site safety plan that complies with federal and State law, including applicable OSHA regulations for the protection of persons on the well site during high volume horizontal hydraulic fracturing operations. While the application indicates the plan will be evaluated on an annual basis to ensure compliance with local, state, and federal regulations, it does not state that it is currently compliant with federal and State law, including applicable OSHA regulations.*
- b) *245.210(a)(12)(A)(ii) requests a well site safety plan that complies with federal and State laws for the protection of the general public during high volume horizontal hydraulic fracturing operations. While the application indicates the plan will be evaluated on an annual basis to ensure compliance with local, state, and federal regulations, it does not state that it is currently compliant with federal and State law.*
- c) *245.210(a)(12)(B) requires that the well site safety plan address that the applicant's contact information is made available to emergency responders. Specifically, the applicant does not provide a statement indicating that within 15 calendar days after submitting the permit application*

to the Department, the applicant will provide a copy of the permit application's well site safety plan to the county or counties and all local fire departments with jurisdictions covering the well site in which high volume horizontal hydraulic fracturing operations will occur.

To resolve submit a revised Well Site Safety Plan including the following:

- A) A statement indicating that the plan is currently compliant with federal and State law, including applicable OSHA regulations for the protection of persons on the well site during high volume horizontal hydraulic fracturing operations.
- B) A statement indicating that the plan is currently compliant with federal and State law regulations for the protection of the general public during high volume horizontal hydraulic fracturing operations.
- C) A statement indicating that within 15 calendar days after submitting the permit application to the Department, the applicant will provide a copy of the permit application's well site safety plan to the county or counties and all local fire departments with jurisdictions covering the well site in which high volume horizontal hydraulic fracturing operations will occur.

5. Containment Plan

According to 62 IAC Section 245.210(a)(13), Containment Plan, the following items shall be addressed: 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.

245.820 requires that no more than one hour before initiating any stage of the high volume horizontal hydraulic fracturing operations, all secondary containment required pursuant to Section 245.825(b) must be visually inspected by the permittee or the contractor performing the HVHFF operations on behalf of the permittee to ensure that all structures and equipment are in place and in proper working order. The results of this inspection must be recorded and documented by the permittee or the contractor performing the HVHFF operations on behalf of the permittee on a form prescribed by the Department, maintained in the well file, and made available at the well site to the Department upon request.

245.825 requires that hydraulic fracturing additives, hydraulic fracturing fluid, hydraulic fracturing flowback, and produced water shall be stored in above-ground tanks pursuant to the requirements of this Section at all times until removed for proper disposal or recycling

Application Deficiencies

- a) *245.820 requires that no more than one hour before initiating any stage of the high volume horizontal hydraulic fracturing operations, all secondary containment required pursuant to Section 245.825(b) must be visually inspected by the permittee or the contractor performing the HVHFF operations on behalf of the permittee to ensure that all structures and equipment are in place and in proper working order. The containment plan does not mention the intent to inspect the containment in accordance with 245.820.*
- b) *245.825(a)(1-5) require specific requirements for each type of tank (hydraulic fracturing additives, hydraulic fracturing fluid, hydraulic fracturing flowback, and produced water). The application did not identify each of these types of tanks as meeting the requirements of 245.825.*

To resolve submit a revised Containment Plan including the following:

- A) A statement indicating that the secondary containment will be inspected as required by 245.820; and
- B) A statement indicating that each of the types of containment tank is a tank meeting the requirements of 245.825.

6. Casing and Cementing Plan

According to 62 IAC Section 245.210(a)(13), Casing and Cementing Plan, the following items shall be addressed:

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.

Surface casing shall be used in the construction of all wells regulated by this Part and shall be set and cemented pursuant to the requirements of Section 245.530.

When intermediate casing is required, Intermediate casing shall be set and cemented pursuant to the requirements of Section 245.560.

Production casing shall be used in the construction of all wells regulated by this Part and shall be set and cemented pursuant to the requirements of Section 245.570.

Application Deficiencies

- a) *245.530(b) requires that surface casing must be made of steel and conform to the industry standards set forth in the document referenced in Section 245.115(a)(2). The casing and cementing plan does not indicate that the surface casing conforms to industry standards referenced in Section 245.115(a)(2).*
- b) *245.530(k)(2) requires that after the surface casing cement operation is completed to the surface, the permittee shall notify the Department's District Office by phone and electronic mail to enable an inspector to be present for the installation and testing of the blowout prevention equipment pursuant to Section 245.550. The casing and cementing plan does not indicate that blowout prevention equipment will be installed in the presence of an inspector or tested in the presence of an inspector.*
- c) *245.570(b) requires that production casing must conform to the industry standards set forth in the document referenced in Section 245.115(a)(2). Additionally, the use of production casing in the well construction must be in a manner consistent with the industry standards set forth in the document referenced in Section 245.115(a)(2). The casing and cementing plan does not indicate that the production casing conforms to industry standards referenced in Section 245.115(a)(2).*
- d) *245.570(c) requires that casing thread compound must conform to and meet all manufacturing and material requirements of the industry standards set forth in the document referenced in Section 245.115(a)(3) (Section 1-70(d)(2) of the Act). Additionally, the uses of casing thread compound in the well construction must be in a manner consistent with the industry standards set forth in the document referenced in Section 245.115(a)(3). The casing and cementing plan does not indicate that the casing thread compound conforms to industry standards referenced in Section 245.115(a)(3).*
- e) *245.570(e) requires that the permittee shall notify the Department's District Office by phone and electronic mail before setting and cementing production casing to enable an inspector to be present. The casing and cementing plan does not indicate that the Department's District Office will be notified by phone and electronic mail before setting and cementing production casing to enable an inspector to be present.*
- f) *245.570(f)(2) requires that in the horizontal portion of the well, rigid centralizers shall be used and placed accordingly to ensure at least 80% standoff. The casing and cementing plan does not*

indicate that rigid centralizers shall be used and placed accordingly to ensure at least 80% standoff.

- g) 245.570(f)(4) requires that all centralizers used in the vertical portion of the well must conform to and shall meet specifications in, or equivalent to, the industry standards set forth in the documents referenced in Section 245.115(a)(4) through (a)(6). (Section 1-70(d)(3) of the Act). The casing and cementing plan does not indicate that all centralizers used in the vertical portion of the well conform to the industry standards referenced in Section 245.115(a)(4) through (a)(6).*
- h) 245.570(j) requires that after the production casing cement operation is completed, the permittee shall notify the Department's District Office by phone or electronic mail to enable an inspector to be present for testing the internal mechanical integrity of the production casing pursuant to Section 245.540. The application suggests that the 4-1/2" casing will be tested independently of the 7". The requirements of 245.540(c) indicate that the production casing string, in this case comprised of both the 7" and 4-1/2" casing, shall be tested as one unit after the 4-1/2" casing has been installed. Note: This requirement in no way effects the requirement to test the 7" casing prior to installing the 4-1/2" casing.*

To resolve submit a revised Casing and Cementing Plan including the following:

- A) A statement indicating that the surface casing conforms to industry standards referenced in Section 245.115(a)(2);
- B) A statement indicating that blowout prevention equipment will be installed and tested in accordance with 245.550;
- C) A statement indicating that the production casing conforms to industry standards referenced in Section 245.115(a)(2);
- D) A statement indicating that the casing thread compound conforms to industry standards referenced in Section 245.115(a)(3);
- E) A statement indicating that the Department's District Office will be notified by phone and electronic mail before setting and cementing production casing to enable an inspector to be present;
- F) A statement indicating that the rigid centralizers shall be used and placed accordingly to ensure at least 80% standoff;
- G) A statement indicating that all centralizers used in the vertical portion of the well conforms to industry standards referenced in Section 245.115(a)(4) through (a)(6); and
- H) Describing the procedure for testing of the production sting, comprised of both the 4-1/2" casing and 7" casing, once the production casing cement operation is completed.

7. Traffic Management Plan

According to 62 IAC Section 245.210(a)(15), Traffic Management Plan, the following items shall be addressed:

- 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, HVHFF 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 HVVHF 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, HVVHF 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;

245.410(a) The access road to the well site must be located in accordance with access rights either obtained by agreement with the surface landowner or pursuant to the Drilling Operations Act [765 ILCS 530] and located as far as practical from occupied structures, places of assembly, and property lines of unleased property (Section 1-70(b)(1) of the Act).

245.410(b) The improvement, construction, or repair of a publicly owned highway or roadway, if undertaken by the owner, operator, permittee, or any other private entity, shall be performed using bidding procedures outlined in the Illinois Department of Transportation rules governing local roads and streets or applicable bidding requirements outlined in the Illinois Procurement Code [30 ILCS 500] as though the project were publicly funded (Section 1-70(b)(4) of the Act).

245.410(c) 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, in consultation with the Agency as the Department deems appropriate, if technologically feasible and economically reasonable to minimize fugitive dust emissions. (Section 1-75(e)(10) of the Act).

245.410(d) Unless otherwise approved or directed by the Department, all topsoil and subsoil stripped to facilitate the construction of the well pad, well site, and access roads must be stockpiled, stabilized to prevent erosion, and remain on site. Topsoil is the uppermost layer of soil with the darkest color or the highest content of organic matter. The topsoil shall be segregated from the subsoil. All soils shall remain on site for use in either partial or final restoration and reclamation pursuant to Subpart J. 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 permittee reclaims the site with topsoil of similar characteristics of the topsoil removed. (Section 1-70(b)(2) of the Act).

Application Deficiencies

- a) *245.210(a)(15)(A) requires 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. The application did not indicate that the applicant submitted copies of the traffic management plan to the impacted highway authority.*

To resolve submit a revised Traffic Management Plan including the following:

- A) A statement indicating that the applicant has submitted copies of the traffic management plan to the impacted highway authority as required under 245.210(a)(15).

8. Restoration Statement

According to 62 IAC Section 245.210(a)(18), Restoration Statement, shall include the following;

- 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;

Application Deficiencies

- a) *Specifically, 245.210(a)(18)(A) requires 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). The application did not include this statement.*
- b) *Specifically, 245.210(a)(18)(B)(ii) requires a strategy for restoration of lands used by the permittee other than the well site and production facility pursuant to Section 245.1020. The application did not provide a strategy for restoration fully addressing the requirements of 245.1020.*
- c) *Specifically, 245.210(a)(18)(B)(iii) requires 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. The application did not provide a strategy for restoration fully addressing the requirements of 62 Ill. Adm. Code 240.Subpart K and Sections 245.1000 and 245.1030.*

To resolve submit a revised Restoration Statement including the following:

- A) A statement indicating 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) Provide a strategy for restoration of lands used by the permittee other than the well site and production facility that addresses all the requirements of 245.1020; and
- C) Provide a strategy for restoration of lands used by the permittee other than the well site and production facility that addresses all the requirements of 245.1020.

9. Topsoil Preservation

According to 62 IAC Section 245.210(b)(2), topsoil preservation, shall include the following;

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

245.410(a) The access road to the well site must be located in accordance with access rights either obtained by agreement with the surface landowner or pursuant to the Drilling Operations Act [765 ILCS 530] and located as far as practical from occupied structures, places of assembly, and property lines of unleased property (Section 1-70(b)(1) of the Act).

245.410(b) The improvement, construction, or repair of a publicly owned highway or roadway, if undertaken by the owner, operator, permittee, or any other private entity, shall be performed using bidding procedures outlined in the Illinois Department of Transportation rules governing local roads

and streets or applicable bidding requirements outlined in the Illinois Procurement Code [30 ILCS 500] as though the project were publicly funded (Section 1-70(b)(4) of the Act).

245.410(c) 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, in consultation with the Agency as the Department deems appropriate, if technologically feasible and economically reasonable to minimize fugitive dust emissions. (Section 1-75(e)(10) of the Act).

245.410(d) Unless otherwise approved or directed by the Department, all topsoil and subsoil stripped to facilitate the construction of the well pad, well site, and access roads must be stockpiled, stabilized to prevent erosion, and remain on site. Topsoil is the uppermost layer of soil with the darkest color or the highest content of organic matter. The topsoil shall be segregated from the subsoil. All soils shall remain on site for use in either partial or final restoration and reclamation pursuant to Subpart J. 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 permittee reclaims the site with topsoil of similar characteristics of the topsoil removed. (Section 1-70(b)(2) of the Act).

Application Deficiencies

a) Specifically, 245.410(d) requires that unless otherwise approved or directed by the Department, all topsoil and subsoil stripped to facilitate the construction of the well pad, well site, and access roads must be stockpiled, stabilized to prevent erosion, and remain on site. Topsoil is the uppermost layer of soil with the darkest color or the highest content of organic matter. The topsoil shall be segregated from the subsoil. All soils shall remain on site for use in either partial or final restoration and reclamation pursuant to Subpart J. 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 permittee reclaims the site with topsoil of similar characteristics of the topsoil removed. (Section 1-70(b)(2) of the Act). The application did not include a statement indicating that all soil will remain on site for use in either partial or final restoration and reclamation pursuant to Subpart J.

To resolve submit a revised Topsoil Preservation form including the following:

A) A statement indicating that the well site at which the HVVHF 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).

10. Bonds or Other Collateral Securities

According to 62 IAC Section 245.210(f), application shall be accompanied by a bond or equivalent financial instrument as required by Section 245.220(a).

62 IAC Section 245.220:

- a) No person shall be allowed to construct, drill, operate, perform HVVHF operations, or produce from a well for which a permit is necessary under this Part if that well is not covered and protected by a bond or other collateral securities as required by this Section.
- b) All applicants for a permit under this Part, and persons requesting permit transfers, shall provide a bond at the time of filing an application for permit pursuant to Section 245.210 or at the time of filing a request for transfer of permit pursuant to Section 245.340. The bond shall be in the amount of \$50,000 per permit or a blanket bond of \$500,000 for all permits. (Section 1-65(a) of the Act) All bonds must

meet the following requirements during the permit application process and through the entire term of an issued permit until the bond is released as provided by subsection (d):

- 1) Bonds shall be signed by the permittee as principal and by a good and sufficient corporate surety legally authorized to transact business as a surety in Illinois.
 - 2) Each bond shall provide that the bond shall not be cancelled by the surety without at least 90 days' notice to the Department. Notice shall be served upon the Department in writing by registered or certified mail to the Illinois Department of Natural Resources, Attention: Office of Oil and Gas Resource Management, One Natural Resources Way, Springfield IL 62702.
 - 3) Within the 90-day notice period and before the bond is cancelled the permittee shall deliver to the Department a replacement bond. If the replacement bond is not delivered, all activities covered by the bond shall cease at the expiration of the 90-day notice period.
 - 4) If the authority to transact business in Illinois of any surety upon which a bond is filed with the Department is suspended or revoked, the permittee, within 30 days after receiving notice of the suspension/revocation, shall notify the Department and shall make substitution by providing a bond or other security as required by this Section. Upon the failure of the permittee to make the substitution of bond or other security, all activities covered by the bond shall cease until substitution has been made.
- c) In lieu of a bond, other collateral securities such as cash, certificates of deposit, or irrevocable letters of credit under the following terms and conditions may be provided by a permittee (Section 1-65(a) of the Act):
- 1) Cash: Cash shall be placed in the Department's possession.
 - 2) Certificates of Deposit
 - A) Certificates of deposit shall be payable to the permittee and assigned to the Department, both in writing submitted to the Department and upon the records of the bank issuing the certificates. If assigned, the Department will require the banks issuing these certificates to waive all rights of setoff or liens against the certificates.
 - B) The Department will not accept an individual certificate of deposit in an amount in excess of the maximum insurable amount determined by the Federal Deposit Insurance Corporation.
 - C) Any interest accruing on a certificate of deposit shall be for the benefit of the permittee except that accrued interest shall first be applied to any prepayment penalty when a certificate of deposit is forfeited by the Department.
 - D) The certificate of deposit, if a negotiable instrument, shall be placed in the Department's possession. If the certificate of deposit is not a negotiable instrument, a withdrawal receipt, endorsed by the permittee, shall be placed in the Department's possession.
 - 3) Letters of Credit
 - A) The letter may only be issued by a bank organized or authorized to do business in the United States (issuing bank). If the issuing bank does not have an office for collection in Illinois, there shall be a confirming bank designated that is authorized to accept, negotiate and pay the letter upon presentment in Illinois.
 - B) Letters of credit shall be irrevocable during their terms. A letter of credit shall be forfeited and shall be collected by the Department if not replaced by other suitable bond or other collateral securities at least 30 days before its expiration date.
 - C) The letter of credit shall be payable to the Department upon demand, in part or in full, upon receipt from the Department of a notice of forfeiture issued in accordance with subsection (e).
 - D) The Department will not accept a letter of credit in excess of 10% of the issuing bank's total capital and surplus accounts, as certified by the President of the bank providing the letter of credit and as evidenced by the most recent quarterly Call Report provided to the Federal Deposit Insurance Corporation.

- E) The letter of credit shall provide on its face that the Department, its lawful assigns, or the attorneys for the Department or its assigns may sue, waive notice and process, appear on behalf of, and confess judgment against the issuing bank (and any confirming bank) in the event that the letter of credit is dishonored. The letter of credit shall be deemed to be made in Sangamon County, Illinois, for the purpose of enforcement and any actions thereon shall be enforceable in the Courts of Illinois, and shall be construed under Illinois law.
- d) The bond or other collateral securities shall remain in force until the well is plugged, abandoned and restored, or transferred. Upon plugging, abandoning and restoring, or transferring 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 or permittee who deposited it. (Section 1-65(b) of the Act)
- e) If, after notice and the opportunity for hearing, the Department determines that any of the requirements of the Act or this Part or the orders of the Department have not been complied with within the time limit set by any notice of violation issued thereunder, the permittee's bond or other collateral securities shall be subject to forfeiture pursuant to the following procedure (Section 1-65(c) of the Act):
- 1) A permittee's failure to comply with the Department's order finding a violation of the Act or this Part constitutes grounds for bond forfeiture.
 - 2) The Department will send written notification by certified mail, return receipt requested, to the permittee and the surety on the bond, if any, informing them of the determination to forfeit the bond pursuant to subsection (e)(1).
 - 3) The Department may allow a surety to correct the violation if the surety can demonstrate an ability to complete the corrective work in accordance with the requirements of the Act and this Part. No surety liability shall be released until the successful correction of the violation ordered by the Department.
 - 4) In the event forfeiture of the bond or other collateral securities is warranted by subsection (e)(1), the Department will afford the permittee the right to a hearing, if the hearing is requested in writing by the permittee within 30 days after the bond forfeiture notification is received in accordance with subsection (e)(2). If the permittee does not request a hearing within the 30-day period, the determination to forfeit the bond shall be a final administrative decision. If a hearing is requested by the permittee, the hearing shall be scheduled within 30 days after the receipt of the request for hearing, and shall be conducted by a Hearing Officer.
 - 5) At the bond forfeiture hearing, the Department will present evidence and has the burden of proof to support its determination to forfeit the bond under subsection (e)(1). The permittee may present evidence contesting the Department's determination. The Hearing Officer may administer oaths and affirmations, subpoena witnesses and written or printed materials, compel attendance of witnesses or production of those materials, compel discovery, and take evidence.
 - 6) Within 30 days after the close of the record for the bond forfeiture hearing, the Hearing Officer shall issue recommended findings of fact, recommended conclusions of law and recommendations as to the disposition of the case.
 - 7) The Director or his or her designee shall review the administrative record in a contested case, in conjunction with the Hearing Officer's recommended findings of fact, recommended conclusions of law and recommendations as to the disposition of the case. The Director or designee, shall then issue the Department's final administrative decision affirming, vacating or modifying the Hearing Officer's decision.
 - 8) In no way will payment under this bond exceed the aggregate administrative penalty as specified in the Notice of Violation or Director's Decision. (Section 1-65(c) of the Act)
 - 9) Forfeiture under this subsection (e) shall not limit any duty of the permittee to mitigate or remediate harms or foreclose enforcement by the Department or the Agency. (Section 1-65(c) of the Act)

- f) When any bond or other collateral security is forfeited under the provisions of the Act or this Part, 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 or the Department of the forfeiture. (Section 1-65(d) of the Act)
- g) If the permittee's bond is subject to forfeiture and used for anything other than plugging and restoration of the well and well site, the permittee shall have 30 days from the date of the Department's determination to forfeit the bond to replace the bond. Failure to replace the bond within this time shall result in the immediate cessation of activities covered by the bond and permit.
- h) All forfeitures shall be deposited in the Mines and Minerals Regulatory Fund to be used, as necessary, to mitigate or remediate violations of the Act or this Part. (Section 1-65(e) of the Act)

Application Deficiencies

- a) *Specifically, 245.220(c)(2)(a) requires that certificates of deposit shall be payable to the permittee and assigned to the Department, both in writing submitted to the Department and upon the records of the bank issuing the certificates. If assigned, the Department will require the banks issuing these certificates to waive all rights of setoff or liens against the certificates.*
- b) *Specifically, 245.220(c)(2)(d) requires that the certificate of deposit, if a negotiable instrument, shall be placed in the Department's possession. If the certificate of deposit is not a negotiable instrument, a withdrawal receipt, endorsed by the permittee, shall be placed in the Department's possession. The original certificate of deposit or withdrawal receipt was not submitted to the Department.*

To resolve submit a revised Bond Municipal Consent Registration form including the following:

- A) Provide in writing and upon the records of the bank issuing the certificate(s) of deposit, a certificate(s) of deposit payable to Woolsey Operating Company, LLC and an assignment(s) to the Illinois Department of Natural Resources, Office of Oil and Gas Resource Management. This/these assignment(s) must also include in writing that the issuing bank waives all rights of setoff or liens against the certificate(s) of deposit. Note: Do not utilize the Financial Security Instrument (Bond) Certificate of Deposit or Assignment of Certificate of Deposit forms provided by the Department for conventional permitting purposes.
- B) Provide the Original certificate(s) of deposit or withdrawal receipt(s) to the Department.

Please submit all responses and inquiries to Doug Shutt vial mail or email at the following address:

Doug Shutt
RE: 6/5/2017 Deficiency Letter for HVHHF-000001
Office of Oil and Gas Resource Management
One Natural Resources Way
Springfield, Illinois 62702
217-782-7756
Doug.Shutt@illinois.gov