Office of Oil and Gas Resource Management

REVIEW

High Volume Horizontal Hydraulic Fracturing (HVHHF)

Application Number: HVHHF-000001

Applicant Registration Number HVHHF-00003

Applicant: Woolsey Operating Company, LLC
125 North Market Street
Suite 1000
Wichita, KS 67202

Well Name: Woodrow 1H-310408-193
Well Location: 1990S 1650W NEc NE S31 T04S R08E, White County, IL
Lat: 38.1343680 Long: -88.3603830

I. This document shall serve as the record of the Department's review of HVHHF-0000001 ("Review Document"). The following abbreviations may be used for the remainder of this Review Document:

Department of Natural Resources ("Department")
Office of Oil and Gas Resource Management ("OOGRM")
Woolsey Operating Company, LLC ("Woolsey" or "Applicant")
Hydraulic Fracturing Regulatory Act, 225 ILCS 732/1 *et. al* ("HFRA")
62 Ill. Adm. Code 245.100 *et. al* ("HVHHF Rules")
Illinois Oil and Gas Act, 225 ILCS 725/1 *et. al* ("Oil and Gas Act")
62 Ill. Adm. Code 240.100 *et. al* ("Oil and Gas Rules")
High Volume Horizontal Hydraulic Fracturing ("HVHHF")

II. Department Authority to Issue a High Volume Horizontal Hydraulic Fracturing Permit

Section 1-53(a) of the HFRA, 225 ILCS 732/1-53(b) (2015) and Section 245.300(c) of the Department's HVHHF Rules, 62 Ill. Adm. Code 245.300(c), require the Department to issue a HVHHF permit only if the Department's Record of Decision demonstrates the following:

1) the well site location restrictions of 62 Ill. Adm. Code 245.400 have been satisfied;

2) the application meets the requirements of 62 Ill. Adm. Code 245.210;

3) the plans required to be submitted with the application under 62 Ill. Adm. Code 245.210 are adequate and effective to comply with the HFRA, 62 Ill Adm. Code 245 *et. al*, the Illinois Oil and Gas Act, 225 ILCS 725/1 *et.* al, and the administrative rules promulgated under that Act;

4) the high volume horizontal hydraulic fracturing operations will be conducted in a manner that will protect the public health, public safety, property, wildlife, aquatic life and environment, and will prevent pollution or diminution of any water source;

5) the water quality monitoring work plan required under 62 Ill Adm. Code 245.600 has been submitted to and approved by the Department;

6) the applicant or any parent, subsidiary, or affiliate of the applicant has not failed to abate a violation of HFRA, 62 Ill Adm. Code 245 *et. al*, the Illinois Oil and Gas Act, 225 ILCS 725/1 *et.* al, and the administrative rules promulgated under that Act specified in a final administrative decision of the Department or any court decisions related to that decision;

7) the Class II injection wells to be used for disposal of hydraulic fracturing flowback comply with all applicable requirements for internal and external mechanical integrity testing as required in 62 Ill. Adm. Code 240.760 and 240.770, including that the well has been tested within the previous 5 years. The Class II injection wells to be used for disposal of hydraulic fracturing flowback must be shown to be in compliance with 62 Ill. Adm. Code 240.360 at the time of the issuance of the high volume horizontal hydraulic fracturing permit;

8) there is no good cause to deny the permit under HFRA, 62 Ill Adm. Code 245.310; and

9) The registration and permitting procedures set forth in Subpart B of the Department's HVHHF Rules have been satisfied.

III. Department's Record of Decision

Pursuant to Section 1-53(b) of the HFRA, 225 ILCS 732/1-53(b) (2015) and Section 245.300(b) of the Department's HVHHF Rules, 62 Ill. Adm. Code 245.300(b), for the purpose of determining whether to issue a HVHHF permit, the Department shall consider, and the Department's Record of Decision shall include the following items:

1) the application for the high volume horizontal hydraulic fracturing permit, including all documentation required by 62 Ill. Adm. Code 245.210;

2) all written comments received during the public comment periods and, if applicable, the complete record from the public hearing held under 62 Ill. Adm. code 245.270 and specifically including the recommended findings;

3) all supplemental information provided by the applicant in response to:

   A) any public comments;

   B) recommended findings of the Hearing Officer if a public hearing was held;

   C) the requirements of 62 Ill Adm. Code 245 *et. al*; and

   D) Department requests for information, including any information required or requested to demonstrate preparation against the risk of earthquake, flood or other natural disaster;

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

The Department's Record of Decision for HVHHF Permit Application Number HVHHF-000001 consists of the following:

1) Woolsey Registration Form Received February 8, 2016
2) Registration Approval Letter from Department to Woolsey Issued February 23, 2016
3) Woolsey Registration Updated Insurance Certificate Received August 8, 2016
4) Woolsey Operating Company, LLC Updated Registration Form Received August 24, 2016
5) Woolsey Notice of Intent to Submit HVHHF Application received April 17, 2017
6) Woolsey HVHHF Permit Application Received May 22, 2017
7) Record of Notices Sent to Other Agencies on May 23, 2017
8) Department Public Notice issued May 26, 2017
9) Deficiency Letter Issued June 5, 2017
10) Woolsey Extension Request dated June 15, 2017
11) Department Extension Approval issued June 19, 2017
12) Woolsey June 21, 2017 email

13) Woolsey Deadline Extension dated June 26, 2017
14) Woolsey Supplemental Application dated June 26, 2017
15) Department Public Notice issued June 26, 2017
16) Record of Notices Sent to Other Agencies on June 27, 2017
17) Department July 21, 2017 and July 31, 2017 *Carmi Times* public notices
18) Woolsey Letter certifying public notices July 31, 2017
19) Department Notice of Second Public Comment Period dated August 4, 2017
20) Public Comments received during the first public comment period
21) Complete record of the public hearing held on August 2, 2017
22) Woolsey Certification of Liability Insurance received August 8, 2017
23) Hearing Officer's recommended findings dated August 11, 2017
24) Public Comments received during the second public comment period
25) Department Deficiency Letter issued August 14, 2017
26) Woolsey Supplemental Application dated August 24, 2017
27) Department Inspection Report of Well Inspector Ron Sullivan dated August 28, 2017
28) Department Deficiency Letter issued August 28, 2017
29) Woolsey Supplemental Application received via email August 30, 2017, hard copy on August 31, 2017
30) *Seismic-Hazard Maps for the Conterminous United States*, *Peak Horizontal Acceleration with 2 Percent Probability of Exceedance in 50 Years,* USGS, 2014, https://pubs.usgs.gov/sim/3325/
31) USGS Unified Hazard Tool Analysis for well location using https://earthquake.usgs.gov/hazards/interactive/
32) EcoCAT Ecological Compliance Assessment Tool Report for Township 42, Range 8E Section 30, dated August 15, 2017
33) EcoCAT Ecological Compliance Assessment Tool Report for Township 42, Range 8E Section 31, dated August 15, 2017
34) FEMA National Flood Hazard Layer Tool, http://tinyurl.com/j4xwp5e searched for LAT:38.134368 LONG: -88.360383
35) Rankin #1 OG-13/23 dated June 12, 2008
36) Rankin #1 OG-13/23 dated September 20, 2013
37) Truflo #1 OG-13/23 dated March 27, 2015
38) Truflo #1 OG-13/23 dated December 18, 2014

IV. Timeline

1) **February 8, 2016**: The Department received Woolsey HVHHF Registration Form
2) **February 23, 2016**: The Department approved Woolsey HVHHF Registration
3) **August 24, 2016**: The Department received updated Woolsey HVHHF Registration Form
4) **May 18, 2017**: Woolsey mailed HVHHF permit application
5) **April 17, 2017**: Woolsey submitted notice of intent to submit permit application
6) **May 22, 2017**: The Department deemed the application complete for purposes of accepting the application. Designates it as HVHHF-000001.
7) **May 23, 2017**: The Department sent required notices and plans to other agencies.
8) **May 26, 2017**: The Department published notice of HVHHF Permit Application HVHHF-000001 setting public comment period from May 29, 2017 until close of business on June 27, 2017. The Department also scheduled a public hearing for July 5 and 6, 2017.
9) **June 5, 2017**: The Department issued deficiency letter affording Woolsey 14 calendar days to provide additional information to complete review of HVHHF-000001.
10) **June 15, 2017**: Woolsey requested 10-day extension to respond to deficiency letter.
11) **June 19, 2017**: The Department approved the extension and set a new deadline of July 3, 2017.
12) **June 21, 2017**: Woolsey notified Department that public comment period and public hearing may need to be rescheduled due to a clerical error related to the published location of the well.
13) **June 26, 2017**: Woolsey waived 60-day decision deadline and granted The Department an extension until August 31, 2017, to make a final determination on HVHHF-000001.
14) **June 26, 2017**: The Department received amended permit application containing supplemental information, including a corrected well location.
15) **June 27, 2017**: The Department published a new public notice extending the public comment period until close of business on July 28, 2017 and rescheduling the public hearing to August 2, 2017. Department also sent required notices and plans to other agencies.
16) **July 21, 2017**: The Department published notice of public hearing in *Carmi Times*
17) **July 31, 2017**: The Department published notice of public hearing in *Carmi Times*
18) **July 28, 2017**: Initial public comment period closed. Department received approximately 5,500 comments during this time.
19) **August 2, 2017**: Public Hearing held in Enfield, IL.
20) **August 4, 2017**: The Department published notice of second public comment period running from 8:30am on August 4, 2017 until 5:00pm on August 18, 2017.
21) **August 11, 2017**: Hearing Officer issued recommended findings.
22) **August 14, 2017**: The Department issued deficiency letter requesting additional information to complete the application and respond to common themes and concerns brought up during the public comment period and public hearing. Set deadline of August 24, 2017.
23) **August 18, 2017**: Second public comment period closed.
24) **August 25, 2017**: Woolsey provided response to August 14, 2017 Deficiency Letter
25) **August 28, 2017**: The Department issued final Deficiency Letter setting deadline of August 30, 2017, for response.
26) **August 30, 2017**: Woolsey provided response to August 28, 2017 Deficiency Letter received by the Department via email.
27) **August 31, 2017**: The Department received hard copy of August 28, 2017 Deficiency Letter response.
28) **August 31, 2017**: The Department issued Permit # HVHHF-000001
29) **September 1, 2017**: The Department issued corrected Permit # HVHHF-000001

V. Department's Review of the Record of Decision

In determining whether to grant or deny the Applicant's permit # HVHHF-000001, the Department reviewed all the information comprising its Record of Decision to assess whether the Application satisfied all requirements set forth in Section 1-53(a) of the HFRA, 225 ILCS 732/1-53(b) (2015), and Section 245.300(c) of the Department's HVHHF Rules, 62 Ill. Adm. Code 245.300(c). In order to complete this review, the Department broke down the requirements of the HFRA and the Department's HVHHF Rules into individual components to determine if the information provided in the application met the individual requirements. If, at any stage of its review the Department determined the application was deficient, a deficiency letter was issued to the Applicant requesting additional information to complete or supplement its application.

Conclusion: Upon completion of its review, the Department has determined Permit Application #HVHHF-000001 satisfies the requirements set forth in Section 1-53(a) of the HFRA, 225 ILCS 732/1-53(a) (2015), and Section 245.300(c) of the Department's HVHHF Rules, 62 Ill. Adm. Code 245.300(c) and therefore, pursuant to Section 1-53(a) of the HFRA, *Id.*, the permit to conduct HVHHF activities shall be issued to Woolsey.

The remainder of this document outlines the Department's review.

A. Well Site Location Restrictions Review

62 Ill. Adm. Code 245.300(c)(1): *the well* site *location restrictions of Section* 245.400 *have been satisfied* (Section 1-53(a)(1) of the Act);

Well site location restrictions of Section 245.400 of the Department's HVHHF Rules provide as follows:

a) Except as otherwise provided in this Section, no well site may be located as follows (Section 1-25(a) of the Act):

1) within 500 feet measured horizontally from any residence or place of worship unless the landowner of the residence or the governing body of the place of worship otherwise expressly agrees in writing to a closer well site location (Section 1-25(a)(1) of the Act). This agreement shall be signed and dated by the landowner of the residence or an authorized representative of the governing body of the place of worship. A copy of the agreement shall be submitted to the Department as part of the permit application;

Review: The applicant has checked the box on the well site setback plan indicating that there are no residences or places of worship within 500 feet of the well site. Maps included with the well site setback plan identify the closest residences as 2,450 feet measured horizontally from the well site and 850 feet measured horizontally from the production facilities. No places of worship are identified on the map. Additional search of Google Earth depicted below agrees with the application. Site inspection conducted by OOGRM staff confirms conditions.

Conclusion: Requirements of 62 Ill. Adm. Code 245.400(a)(1) are **MET**

Google Earth – Imagery Date 10/22/2016
Circles depict a 500 foot radius of the well site location and production facilities based upon GPS coordinates

2) within 500 feet measured horizontally from the edge of the property line from any school, hospital, or licensed nursing home facility (Section 1-25(a)(2) of the Act);

Review: The applicant has checked the box on the well site setback plan indicating that there are no school, hospital or licensed nursing home facility property lines within 500 feet of the well site. Maps included with the well site setback plan do not identify any school, hospital or licensed nursing home facility property lines within 500feet of the well site or production facilities. Additional search of Google Earth depicted below agrees with the application. Site inspection conducted by OOGRM staff confirms conditions.

Conclusion: Requirements of 62 Ill. Adm. Code 245.400(a)(2) are **MET**.

Google Earth – Imagery Date 10/22/2016
Circles depict a 500 foot radius of the well site location and production facilities based upon GPS coordinates

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 landowner or landowners of the well or developed spring otherwise expressly agrees or agree in writing to a closer well site location (Section 1-25(a)(3) of the Act). This agreement shall be signed and dated by the landowner. A copy of the agreement shall be submitted to the Department as part of the permit application;*

Review: The applicant has checked the box on the well site setback plan indicating that there are no existing water wells or developed springs used for human or domestic animal consumption located within 500 feet measured horizontally from the surface locations to the well site. Maps included with the well site setback plan identify the closest water well as 2,700 feet measured horizontally from the well site to the surface location of the water well. The maps also identify the closest water well as 900 feet from the production facilities. Additional search of Google Earth depicted below agrees with the application. Site inspection conducted by OOGRM staff confirms conditions.

Conclusion: Requirements of 62 Ill. Adm. Code 245.400(a)(3) are **MET**.

Google Earth – Imagery Date 10/22/2016
Circles depict a 500 foot radius of the well site location and production facilities based upon GPS coordinates

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 (Section 1-25(a)(4) of the Act), unless the landowner of a water source that is wholly contained within the landowner's property expressly, in writing, waives the setback requirements and agrees to a closer well site location (Section 1-25(b) of the Act). This agreement shall be signed and dated by the landowner. A copy of the agreement shall be submitted to the Department as part of the permit application.

Review: The applicant has checked the box on the well site setback plan indicating that there are no perennial streams or rivers, natural or artificial lakes, ponds, or reservoirs located within 300 feet measured from center of a perennial stream or from the ordinary high water mark of any river, natural or artificial lake, pond, or reservoir to the well site. Maps included with the well site setback plan identify the closest of these items, a perennial stream, as 3,700 feet from the well site and 6,200 feet from the production facilities. Additional search of Google Earth depicted below agrees with the application. Site inspection conducted by OOGRM staff confirms conditions.

Conclusion: Requirements of 62 Ill. Adm. Code 245.400(a)(4) are **MET**.

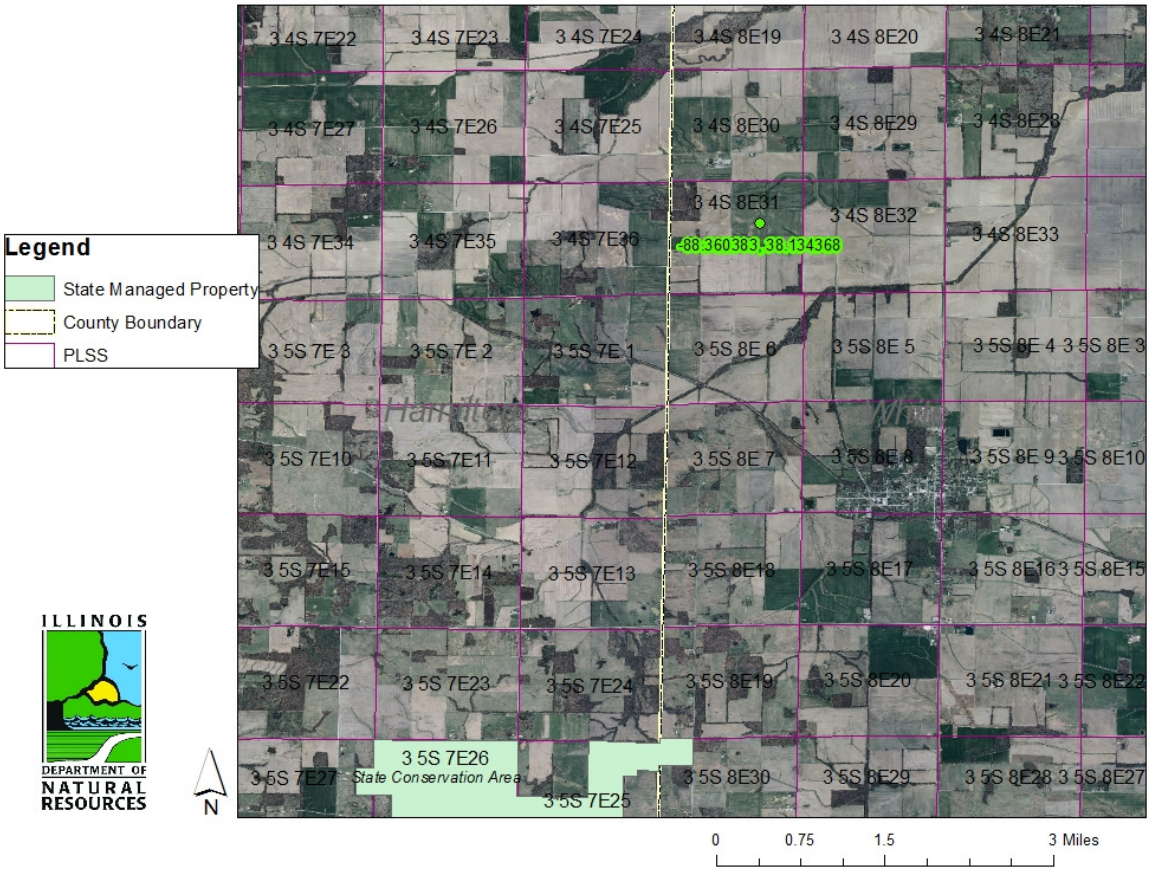
Google Earth – Imagery Date 10/22/2016
Circles depict a 300 foot radius of the well site location and production facilities based upon GPS coordinates

5) within 750 feet of a nature preserve or a site on the Register of Land and Water Reserves (Section 1-25(a)(5) of the Act); or

Review: The applicant has checked the box on the well site setback plan indicating that is no nature preserve or a site on the Register of Land and Water Reserves located within 750 feet measured from the well site. Maps included with the well site setback plan identify the closest of these items, a perennial stream, as approximately 14.7 miles from the well site and production facilitates. Department records show no state managed property within 750 feet of the proposed well site and production facility. Additional search of Google Earth depicted below agrees with the application. Site inspection conducted by OOGRM staff confirms conditions.

Conclusion: Requirements of 62 Ill. Adm. Code 245.400(a)(5) are **MET**.

Map generated with internal Department GIS data:



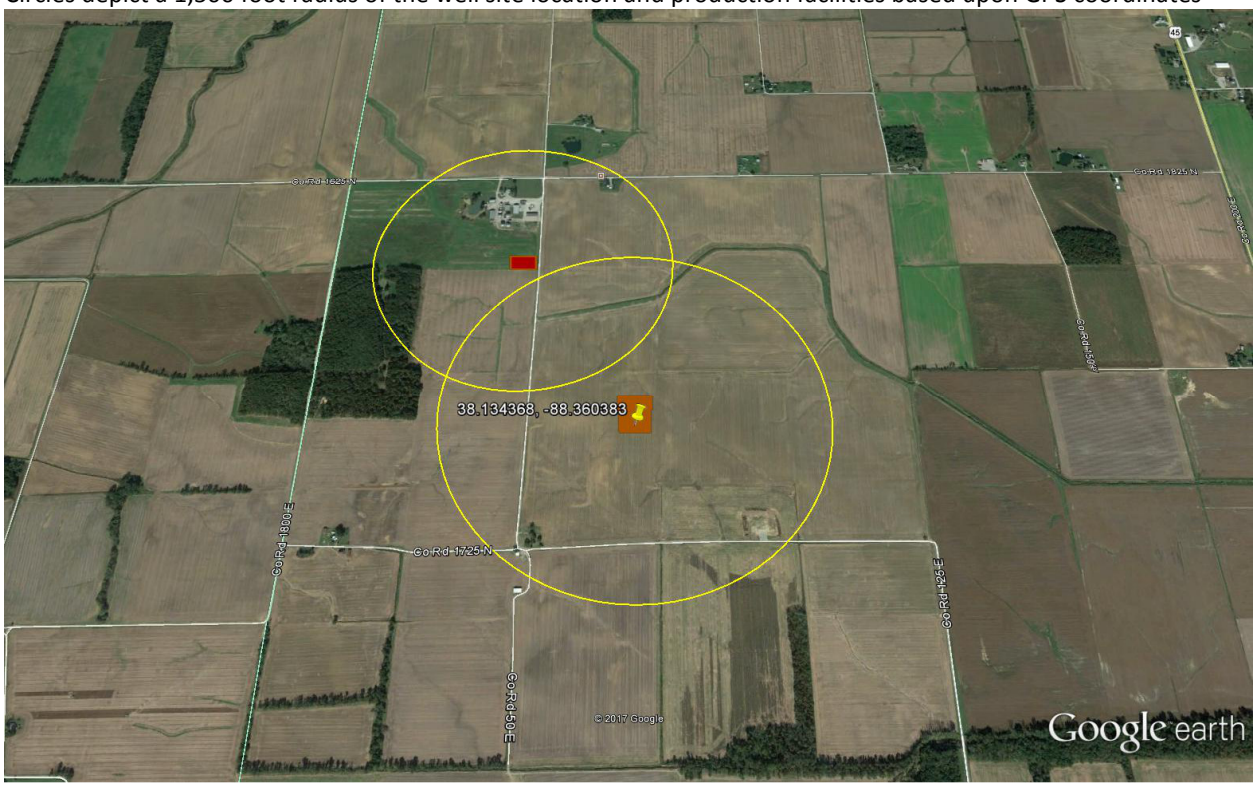
Google Earth – Imagery Date 10/22/2016
Circles depict a 750 foot radius of the well site location and production facilities based upon GPS coordinates

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* (Section 1-25(a)(6) of the Act):
   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 (Section 1-25(a)(6)(A) of the Act).*
   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 (Section 1-25(a)(6)(B) of the Act).*
   C) *For a groundwater source, the distance shall be measured from the surface location of the groundwater 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 pursuant to Section 245.210 (Section 1-25(a)(6)(C) of the Act).*

Review: The applicant has checked the box on the well site setback plan indicating that is no surface water or groundwater intake of a public water supply located within 1,500 feet measured from the well site. Additional search of Google Earth depicted below agrees with the application. Site inspection conducted by OOGRM staff confirms conditions.

Conclusion: Requirements of 62 Ill. Adm. Code 245.400(a)(6) are **MET**.

Google Earth – Imagery Date 10/22/2016
Circles depict a 1,500 foot radius of the well site location and production facilities based upon GPS coordinates



62 Ill. Adm. 245.400(b): *Unless specified otherwise, all distances shall be measured* to *the closest edge of the well site*. (Section 1-25(a) of the Act).

In addition to the above review, on August 28, 2017, OOGRM personnel conducted a field inspection of the proposed well site, including photographs, to confirm site conditions. The Department confirmed the site conditions, as submitted by the Applicant, were accurate in the below OG-22 Field Report.

Illinois Department of Natural Resources
One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov (217) 782 - 7756

OG-22 FIELD REPORT

(●) INSPECTION REPORT ( ) NOTICE OF NON-COMPLIANCE (NNC)

Type: (●) Production Well ( ) Gas Storage Well ( ) Injection Well ( ) Observation Well
Facility: ( ) TANK ( ) PIT ( ) Other

Reference #: 0
Permittee #: 4658
Permit #:
22-1
County:
08/28/2017
Permittee Name: WOOLSEY OPERATING COMPANY, LLC
Well Name:
Location:
Section: Township: Range:
GPS COORDINATES: LAT: LONG:

REPORT CODE: 1

( ) ABANDONED WELL HEARING REQUESTED
Provide details in comment section below.

(●) INSPECTION (Requested/Attention): Ernie - Permitting
( ) ROUTINE INSPECTION (NO PROBLEM)

NOTICE OF VIOLATION (NOV)
( ) REQUIRED ACTIONS COMPLETED ( ) FOLLOW-UP CASE #

NOTICE OF NON-COMPLIANCE (NNC)
( ) OBSERVED ( ) FOLLOW-UP ( ) REQUIRED ACTIONS COMPLETED

WELL SITE RESTORATION
( ) APPROVED ( ) DENIED

TANK BATTERY RESTORATION
( ) APPROVED ( ) DENIED

( ) PRF/LOG PROGRAM REPORTING

( ) STATIC FLUID LEVEL TEST OBSERVED

1. IS THE WELL OR FACILITY IN COMPLAINCE WITH DEPARTMENT RULES? (IF NO, DESCRIBE BELOW AS NNC)	(●) YES	( ) NO
2. IS THE WELL FULLY EQUIPPED FOR PRODUCTION OR INJECTION?	( ) YES	(●) NO
3. WAS THE WELL ACTIVE AT THE TIME OF INSPECTION?	( ) YES	(●) NO
4. DOES THE WELL APPEAR NON-PRODUCTIVE FOR MORE THAN 2 YEARS?	(●) YES	( ) NO
5. DOES THE LEASE APPEAR NON-PRODUCTIVE FOR MORE THAN 2 YEARS?	(●) YES	( ) NO

COMMENTS OR DESCRIPTION OF NNC

Per inspection for Permitting Unit, checked location of Woodrow#1H-310408-103 for Well Site Setback Plan. Measured into location determined by Lat/Long. Coordinates: N38.1343680. W088.3603830, sec.31-04S-08E, White County, Illinois. Location is in mature soybean field. At this time, there is no survey stake present.
Per 245.400(a) 1) wellsite is at least 500' from any resdence or place of worship. 2) site is at least 500' from property line of any school, hospital, or licensed nursing home facility. 3)wellsite is at least 500' from any existing water well or developed spring used for human or domestic animal consumption. 4) wellsite is at least 300' from center of all perennial streams and the ordinary high water mark of any river, pond, natural or artificial lake, or reservoir.5) wellsite is at least 750' from any nature preserve or site on Register of Land and Water Reserves.6) wellsite is at least 1,500' from all surface water or groundwater intakes of a public water supply.

62ILL. ADM. CODE CH. I, SEC.245 245.400(page59)

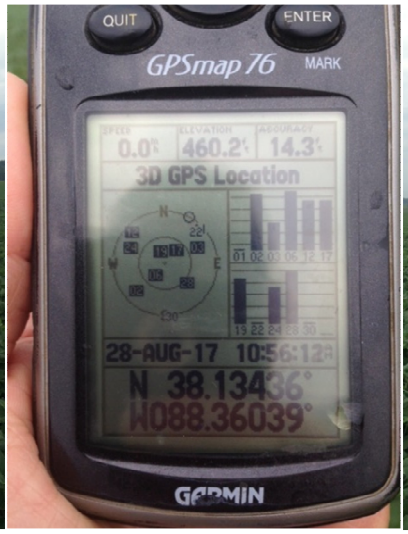
In accordance with 62 IAC 240.140, the permittee is required to correct the Non-Compliance(s) (Report Codes 5, 7 , & 10) described above within _____ days of the date of this inspection report or contact the District Office to propose an abatement plan.

Ron Sullivan
Inspector

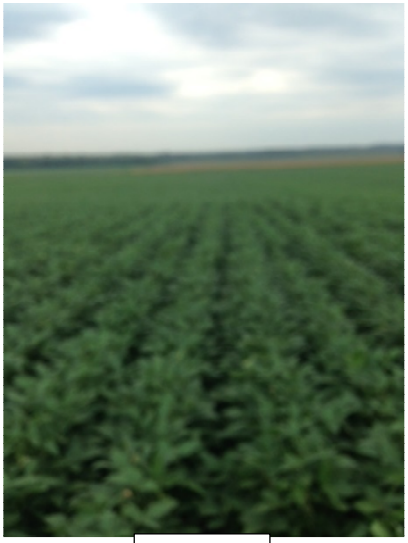
8/28/2017
Date

NORTH

WEST



EAST



SOUTH

B. Permit Application Requirements Review

62 Ill. Adm. Code 245.300(c)(2): *the application meets the requirements of Section* 245.210 (Section 1-53(a)(2) of the Act);

Permit Application Requirements (62 Ill. Adm. Code 245.210) Review

I. Application Requirements of 245.210(a):

(1) Applicant Information
(2) Well Location
(3) Well Site Setback Plan
(4) Directional Drilling Plan
(5) Underground Fresh Water Information
(6) High Volume Horizontal Hydraulic Fracturing Operations Plan
(7) Scaled Plat Maps, Diagrams or Cross-sections
(8) Chemical Disclosure Report
(9) Water Use Self-Certification
(10) Water Source Management Plan
(11) Hydraulic Fracturing Fluids and Flowback Plan
(12) Well Site Safety Plan
(13) Containment Plan
(14) Casing and Cementing Plan
(15) Traffic Management Plan
(16) Owner Information
(17) Public Notice Drafts
(18) Restoration Statement
(19) Proof of Insurance
(20) Water Quality Monitoring Work Plan
(21) Applicant Disclosure

Following is a review of each of the application requirements under Section 245.210(a) of the Department's HVHHF Rules. It is organized by subsection of 245.210(a) and the individual requirements of each subsection or of other sections of the HVHHF Rules referenced in 245.210(a). For each requirement, the review includes the exact information submitted in the application or refers to the application form that contains the required information.

Conclusion: After completing its review, the Department has determined that the application is complete and that it meets the requirements found in 62 Ill. Adm. Code 245.210(a).

245.210(a)(1)	APPLICANT WELL INFORMATION: DATA FROM APPLICANT WELL INFORMATION FORM RECEIVED 6/26/17			
	Applicant Name:	Woolsey Operating Company, LLC	Adequate	Woolsey Operating Company, LLC
	e-mail address:	woolsey@woolseyco.com	Adequate	woolsey@woolseyco.com
	Address:	125 N Market Street, Suite 1000, Wichita, KS 67202	Adequate	125 N Market Street, Suite 1000, Wichita, KS 67202
	HVHHF Registration #:	00003	Adequate	See Attachment Applicant Well Information
	Does the applicant list any parent, subsidiary or affiliate?	YES	Adequate	See Attachment Applicant Well Information
	Does the application provide the name and address of all parent, subsidiary, and/or affiliates listed?	YES	Adequate	LIST OF ALL PARENT, SUBSIDIARY OR AFFILIATE ENTITIES: Woolsey Companies, Inc. - Parent J 25 N. Market, Suite I 000 Wichita, KS 67202 Woolsey Energy II, LLC-Affiliate /Kansas Limited Liability Company and Illinois Limited Liability Company) J 25 N. Market, Suite I 000 Wichita, KS 67202 Woolsey Energy Corporation -Affiliate (Kansas Corporation) 125 N. Market, Suite 1000 Wichita, KS 67202 Woolsey Investments LLC -Affiliate (Kansas Limited Liability Company) I 25 N. Marl<et, Suite 1000 Wichita, KS 67202

245.210 (a)(2)	WELL LOCATION: DATA FROM APPLICANT WELL INFORMATION FORM RECEIVED 6/26/2017			
	Proposed Well Name:	Woodrow 1H-310408-193	Adequate	See Attachment Applicant Well Information Form
	Well Location (PLSS):	1990S 1650W NEc NE Section 31 04S 08E White County, IL	Adequate	1990S 1650W NEc NE Section 31 04S 08E White County, IL
	Well Location (GPS):	LAT 38.1343680, LONG -88.3603830	Adequate	LAT:38.134368 LONG: -88.360383
	Ground Elevation (feet):	445	Adequate	Ground Elevation: 445.5 ft
	Well site unit area:	Unit Area: SW/4 NE/4; NW/4 SE/4 and SW/4 SE/4, Section 30, T4S, R8E and NW/4 NW/4 of Section 31, T4S, R8E, White County, IL	Adequate	Unit Area: SW/4 NE/4; NW/4 SE/4 and SW/4 SE/4, Section 30, T4S, R8E and NW/4 NW/4 of Section 31, T4S, R8E, White County, IL
	Was the well location surveyed by an Illinois licensed land surveyor or Illinois registered professional engineer?	YES	Adequate	

245.210 (a)(3)	WELL SITE SETBACK PLAN: DATA FROM WELL SITE SETBACK PLAN FORM RECEIVED 5/22/2017			
	Does the application contain a statement indicating the proposed location of the well site is in compliance with the setback requirements of Section 245.400?	YES	Adequate	Statement Provided in Well Site Setback Plan
	Does the application include 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)?	YES	Adequate	Map Included in Well Site Setback Plan as required.
	1) Are there any residences or places of worship identified within 500 feet measured horizontally from the well site?	NO	Adequate	The applicant has checked the box on the well site setback plan indicating that there are no residences or places of worship within 500' of the well site. Maps included with the well site setback plan identify the closest residences as 2,450 feet measured horizontally from the well site and 850 feet measured horizontally from the production facilities. No places of worship are identified on the map. Additional search of Google Earth, Google Earth – Imagery Date 10/22/2016, agrees with the application. This meets the requirements of 245.400(a)(1).
	2) Are there any property lines from any school, hospital, or licensed nursing home facility identified within 500 feet measured horizontally from the well site?	NO	Adequate	The applicant has checked the box on the well site setback plan indicating that there are no school, hospital or licensed nursing home facility property lines within 500' of the well site. Maps included with the well site setback plan do not identify any school, hospital or licensed nursing home facility property lines within 500' of the well site or production facilities. Additional search of Google Earth, Google Earth – Imagery Date 10/22/2016, agrees with the application. This meet the requirements of 245.400(a)(2).
	3) Are there any surface locations of any existing water wells or developed springs used for human or domestic animal consumption identified within 500 feet measured horizontally from the well site?	NO	Adequate	The applicant has checked the box on the well site setback plan indicating that there are no existing water wells or developed springs used for human or domestic animal consumption located within 500' measured horizontally from the surface locations to the well site. Maps included with the well site setback plan identify the closest water well as 2,700 feet measured horizontally from the well site to the surface location of the water well. The maps also identify the closest water was as 900 feet from the production facilities. Additional search of Google Earth, Google Earth – Imagery Date 10/22/2016, agrees with the application. This meet the requirements of 245.400(a)(3).
	4) Are there any center of a perennial streams or ordinary high water mark of any rivers, natural or artificial lakes, ponds, or reservoirs identified within 300 feet measured horizontally from the well site?	NO	Adequate	The applicant has checked the box on the well site setback plan indicating that there are no perennial streams or rivers, natural or artificial lakes, ponds, or reservoirs located within 300' measured from center of a perennial stream or from the ordinary high water mark of any river, natural or artificial lake, pond, or reservoir to the well site. Maps included with the well site setback plan identify the closest of these items, a perennial stream, as 3,700 from the well site and 6,200 feet from the production facilities. Additional search of Google Earth, Google Earth – Imagery Date 10/22/2016, agrees with the application. This meet the requirements of 245.400(a)(4).
	5) Are there any nature preserves or a site on the Register of Land and Water Reserves identified within 750 feet of the well site?	NO	Adequate	The applicant has checked the box on the well site setback plan indicating that is no nature preserve or a site on the Register of Land and Water Reserves located within 750' measured from the well site. Maps included with the well site setback plan identify the closest of these items, a perennial stream, as 14.7 miles from the well site. Additional search of Google Earth, Google Earth – Imagery Date 10/22/2016, agrees with the application. This meet the requirements of 245.400(a)(5).
	6) Are there any surface water or groundwater intakes of a public water supply identified within 1,500 feet of the well site?	NO	Adequate	The applicant has checked the box on the well site setback plan indicating that is no surface water or groundwater intake of a public water supply located within 1500' measured from the well site. Additional search of Google Earth, Google Earth – Imagery Date 10/22/2016, agrees with the application. This meet the requirements of 245.400(a)(6).

245.210 (a)(4)	DIRECTIONAL DRILLING PLAN: DATA FROM DIRECTIONAL DRILLING PLAN FORM RECEIVED 5/22/2017			
	Did the applicant provide the approximate total true vertical and measured depth to which the well is to be drilled or deepened?	YES	Adequate	TTVD 5,280' TMD 10,580'
	Did the applicant provide the proposed angle and direction (heading) of the well?	YES	Adequate	9 degrees / 100 feet 355 degree heading
	Did the applicant provide the actual depth or the approximate depth at which the well to be drilled deviates from vertical?	YES	Adequate	4,600'
	Did the applicant provide the planned depth at which the well enters the formation that will be stimulated as part of the HVHHF operations?	YES	Adequate	5,190'
	Did the applicant provide the angle and direction of any nonvertical portion of the well until the well reaches its total target depth or its actual final depth?	YES	Adequate	0 to 90 degrees with an Azimuth of 355 degrees
	Did the applicant provide the planned horizontal deviation and direction (heading) of the proposed horizontal portion of the well?	YES	Adequate	length 4780' 90.45 degrees 355 degrees heading
	Did the applicant provide the planned bottom hole location of the well?	YES	Adequate	LAT 38.1497403 LONG -88.3621095 Center E/2 NW SW SW From NE Corner Section 30-4S-8E, White County, Illinois

245.210 (a)(5)	UNDERGROUND FRESH WATER INFORMATION: DATA FROM UNDERGROUND FRESH WATER FORM RECEIVED 8/25/2017			
	Did the applicant provide 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?	YES	Adequate	Depth 510' to 530' Elevation -24' to -90' Conservative USDW 600' to 620' calculated based on applicant information USDW approximation 495' based upon USDW Atlas and Ground Elevation of well - 445-(-50) = 495' => 495' Applicant's data is based upon information from area wells listed in the Illinois State Geological Survey. For further details see log cross section in Underground Fresh Water Information provided in the application.

245.210 (a)(6)	HIGH VOLUME HORIZONTAL HYDRAULIC FRACTURING OPERATIONS PLAN: DATA FROM HVHHF OPERATIONS PLAN FORM RECEIVED 8/25/2017			
	Did the applicant provide 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, 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 are unknown, the applicant should so state.	YES	Adequate	The drilling objective is the New Albany Shale; this shale is of Group status and actually is composed of 3 Formations, in ascending order from the base to the top, is the Blocher Shale Formation, the Selmier Shale Formation and the Grassy Creek Shale Formation. They are described below. Grassy Creek Shale (horizontal target Formation): dark gray to black, pyritic, organic-rich, faintly laminated and locally burrowed and bioturbated, slightly silty shale / mudrock that possesses thin light gray beds composed of quartz grains; algal cysts (tasmanites) express laminations. Average core measured porosity is 5 to 7% and, although the most permeably of the three NAS formations is also in the nanodarcy range, and is extremely tight. Natural fractures do exist in this section, especially in the lower 50', and are up to a foot or two long, vertically; most are mineralized but some open fractures do exist. Horizontal, healed, fractures associated with prior oil generation also exist. With the exception of saturation measurements, no information was collected or tested in regard to water from this formation. In regard to transmissive faults and large through-going fractures, it can be stated that according to a 3-D seismic survey collected over the proposed location / prospect area, there are none that exist anywhere near the proposed wellbore, and specifically that part of the well bore that will be in the reservoir zone, the New Albany Shale. The applicant lists the Grassy Creek Shale as the target formation. The HVHHF operations plan indicates that the confining zones for purposes of HVHHF operations to be the Lingle Limestone and the Compton Limestone. Both have a fracture pressure above the maximum downhole fracture pressure. These confining zones will limit the effects of the HVHHF operations, including fracture fluid to the Grassy Creek Shale, Selmier Shale, and the Blocher Shale formations. For purposes of 62 Ill. Adm. Code 245.840, Grassy Creek, Selmier and Blocher Shales will be considered the "targeted formation" because all 3 are located between the confining zones and could receive hydraulic fracturing fluids. See HVHHF Operations Plan for additional details.
	Did the applicant provide the anticipated surface treating pressure range?	YES	Adequate	1,000-7,900 PSI
	Did the applicant provide the maximum anticipated injection treating pressure?	YES	Adequate	7,900 PSI @ Well Head 3,480 PSI NET PRESSURE IN FORMATION See HVHHF OPERATIONS PLAN FORM RECEIVED 8/25/2017 for further explanation
	Did the applicant provide the estimated or calculated fracture pressure of the producing and confining zones?	YES	Adequate	2,875PSI and 4,000 PSI, respectively
	Did the applicant provide the planned depth of all proposed perforations or depth to the top of the open hole section?	YES	Adequate	5,245' - 5,275' TVD

Did the applicant provide the anticipated type, source and volume of the base fluid anticipated to be used in the high volume horizontal hydraulic fracturing treatment?	YES	Adequate	Slickwater 3% KCl, local wells, approximately 7,000,000 gallons

245.210 (a)(7)	**SCALED PLAT MAPS, DIAGRAMS OR CROSS-SECTIONS: DATA FROM ADDITIONAL REQUIRED MAPS FORM RECEIVED 8/25/2017,** WELL SITE SETBACK PLAN FORM RECEIVED 5/22/2017, AND DIRECTIONAL DRILLING PLAN FORM RECEIVED 5/22/2017			
	Does the application include 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. If so, is each well bore: well name, location and permit number included for each present well bore?	YES	Adequate	"There are no wells within 750' laterally that are within 400' vertical feet of the proposed Woodrow 1H-310408-193 Horizontal Drain Hole." REVISED FORM
	Does the application include 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?	YES	Adequate	See ADDITIONAL REQUIRED MAPS FORM RECEIVED 8/25/2017 and WELL SITE SETBACK PLAN FORM – RECEIVED 5/22/2017
	Does the application include 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?	YES	Adequate	See ADDITIONAL REQUIRED MAPS FORM - RECEIVED 8/25/2017
	Does the application include a scaled cross-section of the well bore from the surface through the horizontal leg's total length, provide the information required in (4) and (5) above as well as show the formations to be stimulated as described in subsection (6)(formation stimulated) above?	YES	Adequate	See DIRECTIONAL DRILLING PLAN FORM RECEIVED 5/22/2017

245.210 (a)(8)	CHEMICAL DISCLOSURE REPORT: DATA FROM CHEMICAL DISCLOSURE REPORT FORM RECEIVED 8/25/2017			
	Does the application include 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?*	YES	Adequate	List provided in Chemical Disclosure Report Form received 8/25/2017
	If this information is not available pursuant to a trade secret claim under Sections 245.700 and 245.720, did the permittee 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?	N/A	N/A	There is no claim of trade secret under Sections 245.700 or 245.720, therefore no redacted version is required. All ingredients are listed with all CAS#s.
	Was a redacted copy submitted to the certified local health department?	N/A	N/A	There is no claim of trade secret under Sections 245.700 or 245.720, therefore no redacted version is required.
	Does the chemical closure report contain the following items:			
	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?*	YES	Adequate	175,000 gallons per stage
	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?*	YES	Adequate	SEE - CHEMICAL DISCLOSURE REPORT FORM RECEIVED 8/25/2017 7 items with MSDS
	Each chemical anticipated to be intentionally added to the base fluid, including, for each chemical, the CAS *number, if applicable?*	YES	Adequate	SEE - CHEMICAL DISCLOSURE REPORT FORM RECEIVED 8/25/2017 7 items with MSDS
	The anticipated concentration in the base fluid, in percent by mass, of each chemical to be intentionally added to the base fluid as calculated by the equation Mass Percent = g solute/g solution X 100?	YES	Adequate	SEE - CHEMICAL DISCLOSURE REPORT FORM RECEIVED 8/25/2017 7 items with MSDS
	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?	YES	Adequate	SEE - CHEMICAL DISCLOSURE REPORT FORM RECEIVED 8/25/20177 items with MSDS

245.210 (a)(9)	**WATER USE SELF CERTIFICATION: DATA FROM WATER USE SELF CERTIFICATION FORM RECEIVED 5/22/2017**			
	Does the application include 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)?	YES	Adequate	Yes. Stated compliance with 525 ILCS 45/1 et seq. as well as White County Soil and Water Conservation District (as well as any other locatable community water systems).
	Does the application 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?	YES	Adequate	Over inclusive list of recipients of the WUSC included with certified mail receipt. A random sample was taken and certified mail # gave tracking data.

<table>
<tr><td>245.210 (a)(10)</td><td colspan="4">WATER SOURCE MANAGEMENT PLAN: DATA FROM WATER SOURCE MANAGEMENT PLAN FORM RECEIVED 8/25/2017</td></tr>
<tr><td></td><td>Is fresh water is anticipated to be used in the high volume horizontal hydraulic fracturing treatment?</td><td>YES</td><td>Adequate</td><td>Groundwater will be used for HVHHF treatment. Three new water supply wells will be drilled in close proximity to the HVHHF well and will supply the full volume of water needed for hydraulic fracturing.</td></tr>
<tr><td></td><td>Does the application include a water source management plan?</td><td>YES</td><td>Adequate</td><td>See WATER SOURCE MANAGEMENT PLAN FORM RECEIVED 8/25/2017</td></tr>
<tr><td></td><td><u>Does the water source management plan include the following:</u></td><td>YES</td><td>N/A</td><td>See WATER SOURCE MANAGEMENT PLAN FORM RECEIVED 8/25/2017</td></tr>
<tr><td></td><td>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?</td><td>YES</td><td>Adequate</td><td>
<table>
<tr><th>Well No.</th><th>County</th><th>Latitude</th><th>Longitude</th></tr>
<tr><td>WSW 1</td><td>White</td><td>38.135287</td><td>-88.361048</td></tr>
<tr><td>WSW 2</td><td>White</td><td>38.135171</td><td>-88.360673</td></tr>
<tr><td>WSW 3</td><td>White</td><td>38.134849</td><td>-88.360967</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td></td><td>The anticipated volume and rate of each fresh water withdrawal from each withdrawal location?</td><td>YES</td><td>Adequate</td><td>
<table>
<tr><th>Well No.</th><th>Rate Gallons/day</th><th>Volume Total Gallons</th></tr>
<tr><td>WSW 1</td><td>34,000</td><td>2.5×10^6</td></tr>
<tr><td>WSW 2</td><td>34,000</td><td>2.5×10^6</td></tr>
<tr><td>WSW 3</td><td>34,000</td><td>2.5×10^6</td></tr>
</table>
</td></tr>
<tr><td></td><td>The anticipated months when fresh water withdrawals shall be made from each withdrawal location?</td><td>YES</td><td>Adequate</td><td>
<table>
<tr><th>Month</th><th>Well No.</th><th>Quantity (Gallons)</th></tr>
<tr><td>Sept, 2017</td><td>WSW 1</td><td>500,000</td></tr>
<tr><td>Nov, 2017</td><td>WSW 1,2, & 3</td><td>3,000,000</td></tr>
<tr><td>Dec, 2017</td><td>WSW 1,2, & 3</td><td>3,000,000</td></tr>
<tr><td>Jan, 2017</td><td>WSW 1,2,& 3</td><td>1,000,000</td></tr>
</table>
</td></tr>
<tr><td></td><td>The methods to be used to minimize fresh water withdrawals as much as feasible?</td><td>YES</td><td>Adequate</td><td>It is not in the interest of the applicant to overuse water in the HVHHF process. Excessive use of water results in the need for additional storage capacity for both the raw water and the produced water that results from the process. In addition, treatment, transport, and disposal of produced water results in increased well costs. While using, recycled water may be feasible and desirable in the future should this exploratory well prove the potential of the target for commercial production, however, there is no compatible source nearby that would be logistically realistic. Wasting water is in no one's best interest.
The design of hydraulic fracturing stages and the chemistry of the fluids used will dictate the quantity of water required. Modern horizontal completion technology has shown that increasing the number of stages and thus overall treatment results in better well performance which in turn drains a larger area and reduces the overall number of wells and resource impact. To put the volumes in perspective, it takes 27,000 gallons of water to irrigate one acre of land with one inch of water. The anticipated usage of 7,500,000 gallons is equivalent to irrigating 278 acres with one inch of water which is a very small percentage as compared to the amount of water used annually for agricultural irrigation in White County, Illinois.
The highest potential for wasting water would be from leakage of water in the pumping, storage, and delivery systems to be used at the site. This potential will be minimized by locating the water wells in close proximity to the HVHHF well, and using piping rather than trucking of the water to and from the impoundment reservoir. Piping the water eliminates the loading and off-loading of water trucks, which would be the process with the highest potential for loss due to overfilling of the transport vehicles.</td></tr>
<tr><td></td><td>The methods to be used for surface water withdrawals to minimize adverse impact to aquatic life?</td><td>YES</td><td>Adequate</td><td>Since no surface water supply will be used other than the fresh water reservoir pit to be constructed prior to HVHHF operations, there will be no impact to aquatic life in surface waters.</td></tr>
<tr><td></td><td><u>Did the applicant also provide the following:</u></td><td></td><td></td><td></td></tr>
<tr><td></td><td>Does the applicant 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?</td><td>YES</td><td>Adequate</td><td>The three wells will be equipped with individual totalizing meters on their output lines. The total output from each well will be recorded daily by the operator in the well log during the operation of the water wells. As required by the Water Use Act of 1983, (525 ILCS 45/5.3) the water withdrawal shall be reported to the Illinois State Water Survey's (ISWS) Illinois Water Inventory Program, In addition, the water use shall be reported to the White County Soil and Water Conservation District, as required by the District.</td></tr>
</table>

Does the applicant specify the methods of transportation and/or delivery of withdrawn surface water to the well site?	YES	Adequate	As described above, the water will be produced from on-site wells, and transported by pipeline from the water wells to the storage reservoir. No off-site traffic will result from water transport to the site, other than the one-time movement of equipment to and from the well site.
If recycled water is anticipated to be used in the HVHHF treatment, does the applicant describe the source of the recycled water and the anticipated water to be used?	None	Adequate	Backflow will not commence until injection in all frac stages have been completed, thus there will be no opportunity for use of recycled water in the hydraulic fracture completion.
Is water other than fresh water or recycled water anticipated to be used in the HVHHF treatment provide the following items:	N/A	Adequate	Groundwater will be used for HVHHF treatment. Three new water supply wells will be drilled in close proximity to the HVHHF well and will supply the full volume of water needed for hydraulic fracturing. Temporary above-ground storage of the extracted groundwater will be provided in an excavated water supply impoundment pit to be constructed at the well site to allow the limited number of wells to make the total required volume of water available prior to the start of hydraulic fracturing operations.
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	N/A	Adequate	The applicant indicates no surface water source will be used.

245.210(a)(11)	**HYDRAULIC FRACTURING FLUIDS AND FLOWBACK PLAN: DATA FROM HYDRAULIC FRACTRUING FLUIDS & FLOWBACK PLAN FORM RECEIVED VIA EMAIL 8/30/2017**			
	Does the applicant provide a plan addressing the following activities related to hydraulic fracturing fluids and hydraulic fracturing flowback:	YES	Adequate	See – Hydraulic Fracturing Fluids and Flowback Plan Form
	Handling of hydraulic fracturing fluids and hydraulic fracturing flowback?	YES	Adequate	All chemicals associated with the makeup of the Hydraulic Fracturing Fluid will be delivered by authorized carrier and stored on site in manufacturer's approved containers. The primary constituent of the Hydraulic Fracturing Fluid is fresh water and will not require any special handling. At the conclusion of HVHHF operations any remaining unused chemicals will be returned to the manufacturer in the same container. As the chemicals are mixed and injected directly into the fracturing fluid from the manufacturer's containers, only fresh water will be stored in the makeup tanks. There will be one lined acid tank where bulk acid will be diluted and pumped ahead of the proppant fluid. When HVHHF Operations are complete any remaining dilute acid will be removed and hauled to an approved facility. All such Hydraulic Fracturing Chemicals will be removed from the well site within 60 days of the completion of HVHHF operations. The fracturing treatment fluids will be flowed into a flow back tank having a capacity of approximately 500 barrels.
	Storage of hydraulic fracturing fluids and hydraulic fracturing flowback?	YES	Adequate	All chemicals associated with the makeup of the Hydraulic Fracturing Fluid will be delivered by authorized carrier and stored on site in manufacturer's approved containers. The primary constituent of the Hydraulic Fracturing Fluid is fresh water and will not require any special handling. At the conclusion of HVHHF operations any remaining unused chemicals will be returned to the manufacturer in the same container. As the chemicals are mixed and injected directly into the fracturing fluid from the manufacturer's containers, only fresh water will be stored in the makeup tanks. There will be one lined acid tank where bulk acid will be diluted and pumped ahead of the proppant fluid. When HVHHF Operations are complete any remaining dilute acid will be removed and hauled to an approved facility. All such Hydraulic Fracturing Chemicals will be removed from the well site within 60 days of the completion of HVHHF operations. The fracturing treatment fluids will be flowed into a flow back tank having a capacity of approximately 500 barrels. This "flow back tank" is a closed tank constructed of steel with a sufficient pressure rating and maintained in a leak-free condition for the express purpose of recovering flow back fluids. It is lined with a material resistant to; corrosion, erosion, swelling, deterioration or other damage as a result of exposure to the flow back fluids, see attached diagram. The tank is inspected routinely for corrosion. This tank will be used to separate any gas or proppant in the flow back fluid and measure the flow back fluid volume. Up to five (5) additional closed storage tanks that meet the requirements set out in 245.825(a) will be connected to the primary flow back tank for temporary storage of the flow back fluid (approx. 3,000 barrels of maximum onsite storage). Flow back fluid is comprised of treatment fluid used in the HVHHF operations

			being primarily 2-5% KCL (Potassium Chloride) with minor amounts of other treating chemicals listed in the Chemical Disclosure Report. Flow back operations will occur at the wellsite on the drilling pad. The temporary storage tanks will be enclosed by earthen containment berms which will be of sufficient size to contain all of the possible flow back fluid temporary storage volume. The flow from the well will be regulated by an adjustable choke.
Transportation of hydraulic fracturing fluids and hydraulic fracturing flowback?	YES	Adequate	All chemicals associated with the makeup of the Hydraulic Fracturing Fluid will be delivered by authorized carrier and stored on site in manufacturer's approved containers. The primary constituent of the Hydraulic Fracturing Fluid is fresh water and will not require any special handling. At the conclusion of HVHHF operations any remaining unused chemicals will be returned to the manufacturer in the same container. The flow back fluid will be hauled on a 24 hour basis as needed. Multiple water transports will be available and will be undertaken by liquid oilfield waste haulers permitted by the Illinois Department of Natural Resources. Expected haul frequency will depend on the flow rate and the size of the truck available. Bobtail trucks commonly can haul 80 barrels at a time and transports 120 barrels. If, for any reason the fluid cannot be hauled timely or safely, the well will be closed in until the fluid can be hauled. There are no plans to use open pits for capture and store of flow back fluids.
Disposal, recycling, or reuse of hydraulic fracturing fluids and hydraulic fracturing flowback?	YES	Adequate	The primary site where the flow back fluid will be disposed of is the Haggard Well Service Rankin #1 Class II disposal facility located in White County, Illinois. A secondary site is the TrueFlo Solutions LLC Class II disposal facility located in White County, Illinois. Flow back fluids will not be disposed into the above referenced disposal wells until an electronic flowmeter is installed and approved by IDNR as stated in Section 245.850(g). As this would be the first well to undergo HVHHF operations there would be no recycled fluid to use. At the time of this review, 8/31/2017, the Rankin #1 well did not meet the necessary requirements to receive hydraulic fracturing fluids or hydraulic fracturing flowback. See Review of 62 Ill. Adm. Code 245.300(c)(7) for more detail.
Does the applicant provide a description of the anticipated hydraulic fracturing flowback?	YES	Adequate	Flow back fluid is comprised of treatment fluid used in the HVHHF operations being primarily 2-5% KCL (Potassium Chloride) with minor amounts of other treating chemicals listed in the Chemical Disclosure Report.
Does the applicant provide an estimation of the flowback rate and amount?	YES	Adequate	Anticipated flow rates will be between 10 and 25 barrels per hour. The flow back fluid will be hauled on a 24 hour basis as needed. Multiple water transports will be available and will be undertaken by liquid oilfield waste haulers permitted by the Illinois Department of Natural Resources. Expected haul frequency will depend on the flow rate and the size of the truck available. Bobtail trucks commonly can haul 80 barrels at a time and transports 120 barrels. If, for any reason the fluid cannot be hauled timely or safely, the

				well will be closed in until the fluid can be hauled. There are no plans to use open pits for capture and store of flow back fluids. The well will be flowed until there is little or no proppant being produced. At that time flowback operations will cease and the well turned to production facilities. It is anticipated that between 4,000 and 5,000 barrels of flow back will be recovered prior to terminating flow back and beginning to produce the well through the production facilities. As defined per 245.110 of the Illinois Administrative Code: "Flowback period" ends with either the well shut in or when the well is producing continuously to the flow line. For this reason, the bulk of the fluid recovered will be treated as produced fluid as it would be from any conventional well. Flow back fluids will be tested for the presence of volatile organic chemicals, semi-volatile organic chemicals, inorganic chemicals, heavy metals and naturally occurring radioactive material before being removed from the well site.
	Does the applicant provide a frequency at which the storage tanks will be emptied?	YES	Adequate	The flow back fluid will be hauled on a 24 hour basis as needed. Multiple water transports will be available and will be undertaken by liquid oilfield waste haulers permitted by the Illinois Department of Natural Resources. Expected haul frequency will depend on the flow rate and the size of the truck available. Bobtail trucks commonly can haul 80 barrels at a time and transports 120 barrels. If, for any reason the fluid cannot be hauled timely or safely, the well will be closed in until the fluid can be hauled. There are no plans to use open pits for capture and store of flow back fluids.

245.210(a)(12)	WELL SITE SAFETY PLAN: DATA FROM WELL SITE SAFETY PLAN FORM RECEIVED 8/25/2017			
	Does the applicant address proper safety measures to be employed during the HVHHF operation for the protection of persons on the well site?	YES	Adequate	See WELL SITE SAFETY PLAN FORM RECEIVED 8/25/2017
	Does the applicant provide a statement indicating these measures are complaint with Federal and State law, including OSHA regulations?	YES	Adequate	This Site Safety and Health Plan is compliant with all applicable State and federal regulations for the protection of all persons on the well site and the general public during high volume horizontal hydraulic fracturing operations.
	Does the applicant address proper safety measures to be employed during the HVHHF operation for the protection of the general public?	YES	Adequate	Section 13 of WELL SITE SAFETY PLAN FORM RECEIVED 8/25/2017
	Does the applicant provide a statement indicating these measures are complaint with Federal and State law?	YES	Adequate	This Site Safety and Health Plan is compliant with all applicable State and federal regulations for the protection of all persons on the well site and the general public during high volume horizontal hydraulic fracturing operations.
	Does the applicant address proper safety measures to be employed during an emergency including:			
	Do local responders have appropriate equipment and training to respond to an emergency at the wells site?	YES	Adequate	Section 13.7 of WELL SITE SAFETY PLAN FORM RECEIVED 8/25/2017
	Was a list of any hazardous materials to be stored at the well site included?	YES	Adequate	Section 13.3 of WELL SITE SAFETY PLAN FORM RECEIVED 8/25/2017
	Was a list of contact information for all appropriate emergency responders provided?	YES	Adequate	Table 13-1 in Section 13 of WELL SITE SAFETY PLAN FORM RECEIVED 8/25/2017
	Does the applicant state that their contact information was made available to the emergency responders?	YES	Adequate	Copies of the Well Site Safety Plan have been submitted to counties and all local fire departments with jurisdictions covering the well site in which high volume horizontal hydraulic fracturing operations will occur.

245.210(a)(13)	**CONTAINMENT PLAN: DATA FROM CONTAINMENT PLAN FORM RECEIVED 8/30/2017**			
	Does the applicant provide a plan describing the containment practices and equipment to be used and the area of the well site system to be deployed?	YES	Adequate	See **CONTAINMENT PLAN FORM RECEIVED 8/30/2017**
	Does the containment plan include the following:	YES	Adequate	See **CONTAINMENT PLAN FORM RECEIVED 8/30/2017**
	Visual inspection of any Secondary Containment to ensure all structures and equipment are in place and in proper working order?	YES	Adequate	No more than one (1) hour prior to initiating fracturing operations the secondary containment facilities and structures will be visually inspected for integrity as required by 245.820.
	Do all above-ground storage tanks have secondary containment?	YES	Adequate	The operator plans to have a minimum amount of "fracturing fluid" within the common containment area. The fracturing fluid will be mixed on-the-fly just ahead of the well head. The constituent chemicals, hydraulic fracturing additives, used in the makeup of the "fracturing fluid" will be stored in above ground tanks that meet the requirements set out in 245.825, 245.910, 245.210(a)(13) and Section 1-75(c)(4) of the Act, see attached chemical tote tank specifications. Tanks containing these chemicals will be stored within a diked containment area capable of holding 150% of the total volume of the single largest container or tank within a common containment area.
	Do all additive staging areas have secondary containment?	YES	Adequate	The operator plans to have a minimum amount of "fracturing fluid" within the common containment area. The fracturing fluid will be mixed on-the-fly just ahead of the well head. The constituent chemicals, hydraulic fracturing additives, used in the makeup of the "fracturing fluid" will be stored in above ground tanks that meet the requirements set out in 245.825, 245.910, 245.210(a)(13) and Section 1-75(c)(4) of the Act, see attached chemical tote tank specifications. Tanks containing these chemicals will be stored within a diked containment area capable of holding 150% of the total volume of the single largest container or tank within a common containment area.
	Except as provided in 245.830, hydraulic fracturing additives will be stored in above-ground tanks meeting the requirements of 245.825(a)?	YES	Adequate	The constituent chemicals, hydraulic fracturing additives, used in the makeup of the "fracturing fluid" will be stored in above ground tanks that meet the requirements set out in 245.825, 245.910, 245.210(a)(13) and Section 1-75(c)(4) of the Act, see attached chemical tote tank specifications. Tanks containing constituent chemicals used in the hydraulic fracturing fluid are provided by the chemical manufacturer. Tanks to be utilized for the storing of hydraulic fracturing fluid will comply with Sections 245.825 and 245.210(a)(13). he tanks used for hydraulic fracturing flowback and produced water will be in compliance with the requirements of Sections 245.825 and 245.210(a)(13).

Except as provided in 245.830, hydraulic fracturing fluids will be stored in above-ground tanks meeting the requirements of 245.825(a)?	YES	Adequate	The constituent chemicals, hydraulic fracturing additives, used in the makeup of the "fracturing fluid" will be stored in above ground tanks that meet the requirements set out in 245.825, 245.910, 245.210(a)(13) and Section 1-75(c)(4) of the Act, see attached chemical tote tank specifications.
Except as provided in 245.830, hydraulic fracturing flowback will be stored in above-ground tanks meeting the requirements of 245.825(a)?	YES	Adequate	The constituent chemicals, hydraulic fracturing additives, used in the makeup of the "fracturing fluid" will be stored in above ground tanks that meet the requirements set out in 245.825, 245.910, 245.210(a)(13) and Section 1-75(c)(4) of the Act, see attached chemical tote tank specifications. Tanks containing constituent chemicals used in the hydraulic fracturing fluid are provided by the chemical manufacturer. Tanks to be utilized for the storing of hydraulic fracturing fluid will comply with Sections 245.825 and 245.210(a)(13). The tanks used for hydraulic fracturing flowback and produced water will be in compliance with the requirements of Sections 245.825 and 245.210(a)(13).
Except as provided in 245.830, produced water will be stored in above-ground tanks meeting the requirements of 245.825(a)?	YES	Adequate	The tanks used for hydraulic fracturing flowback and produced water will be in compliance with the requirements of Sections 245.825 and 245.210(a)(13).
Is the secondary containment sufficient to contain 150% of the total capacity of the single largest container or tank within the containment? *(Show calculations in comments, may be multiple containments to review.)*	YES	Adequate	The operator plans to have a minimum amount of "fracturing fluid" within the common containment area. The fracturing fluid will be mixed on-the-fly just ahead of the well head. The constituent chemicals, hydraulic fracturing additives, used in the makeup of the "fracturing fluid" will be stored in above ground tanks that meet the requirements set out in 245.825, 245.910, 245.210(a)(13) and Section 1-75(c)(4) of the Act, see attached chemical tote tank specifications. Tanks containing these chemicals will be stored within a diked containment area capable of holding 150% of the total volume of the single largest container or tank within a common containment area. Tanks containing these chemicals will be stored within a diked containment capable of holding 150% of the total volume of the single largest container or tank within a common containment area. No stationary fueling tanks will be used. During flowback operations the tanks located within the area of the wellsite will also be surrounded by a dike capable of holding 150% of the total volume of the single largest container or tank within a common containment area.

245.210(a)(14)	**CASING AND CEMENTING PLAN: DATA FROM CASING AND CEMENTING PLAN FORM RECEIVED 6/26/2017**			
	Does the applicant provide 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?			
245.530	Surface casing requirements:			
	Identify the base of the deepest fresh water, USDW, (feet).	620’		Depth 510' to 530' Elevation -24' to -90' Conservative USDW 600' to 620' calculated based on applicant information USDW approximation 495' based upon USDW Atlas and Ground Elevation of well - 445-(-50) = 495' Applicant’s data is based upon information from area wells listed in the Illinois State Geological Survey. For further details see log cross section in Underground Fresh Water Information provided in the application. SEE UNDERGROUND FRESH WATER FORM RECEIVED 8/25/2017
	Identify the depth at which the surface casing is set (feet).	800	Surface casing setting depth is Adequate.	A 17 ½” hole will be drilled to +/-800’ or such depth to be 100’ below the base of the deepest fresh water
	Will centralizers be used when setting the surface casing?	YES	Adequate	casing will be set to bottom using approved centralizers at the bottom of the string and through the fresh water zone(s) and every 4th joint to the last joint.
	Will the borehole be circulated and conditioned before setting and cementing the surface casing?	YES	Adequate	The hole will be conditioned prior to running casing. The hole will then be circulated and a pre-flush pumped ahead of the cement slurry consisting of 775 sacks of Class A Cement, 500# of Calcium Chloride, 3 sacks of Flake.
	Cement Type	Class A	Adequate	775 sacks of Class A Cement, 500# of Calcium Chloride, 3 sacks of Flake
	Top of cement	Surface	Adequate	Cement will be circulated to surface with an estimated 65% excess.
	Cement Testing	YES	Adequate	Cementing activities will conform to Section 245.520 including a compressive strength test.
	Is the surface casing made of steel and does it conform to industry standards (see 245.115(a)(2))?	YES	Adequate	13 3/8”, 54.5#/ft. API*J-55 grade steel casing will be set to bottom
	Does the applicant plan to perform a Mechanical Integrity Test in accordance with 245.540 (b)	YES	Adequate	A mechanical integrity test will be run in accordance with 245.540(b) prior to drilling ahead.

	Does the applicant plan to install and test a blowout preventer? 245.530(k)	YES	Adequate	Pursuant to 245.550, prior to drilling out the casing shoe a Blow Out Preventer (BOP) shall be installed on the well by certified personal. Prior to testing the BOP, IDNR's District Office will be contacted by phone and electronic mail of the planned operation to enable an inspector to be present when the tests are performed. The BOP will remain on the well in good working condition throughout all drilling and completion operations.

245.210(a)(14)	**CASING AND CEMENTING PLAN: DATA FROM CASING AND CEMENTING PLAN FORM RECEIVED 6/26/2017**			
	Does the applicant provide 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?			
245.560	Intermediate Casing Requirements			
Will the applicant be using an intermediate string?		NO	Adequate	Applicant not using intermediate casing only surface and production.

245.210(a)(14)	**CASING AND CEMENTING PLAN: DATA FROM CASING AND CEMENTING PLAN FORM RECEIVED 6/26/2017**			
245.570	Production Casing Requirements			
	Will the production casing be fully cemented from the production casing shoe to 500 feet above the top perforated formation?	YES	Adequate	Production casing to be cemented to surface in two phases 7" and 4.5" segments.
	Does the applicant plan to use a production casing of a type and in a manner conforming to the industry standards set forth in Section 245.115(a)(2)?	YES	Adequate	7", 32#/ft. API P-110 grade casing will be run to TD 4 ½" Liner (also to be used as production casing): A 6 1/8" hole will be drilled from the 7" casing shoe to RTD (10,580' MD). At RTD the hole will be conditioned in preparation for running casing. 4 ½", 13.5 #/ft. API P-110 grade casing will be run to TD
	Does the applicant plan to use casing thread compound of a type and in a manner conforming to the industry standards set forth in Section 245.115(a)(3)?	YES	Adequate	Casing make-up thread compound will be API compliant.
	Will the borehole be circulated and conditioned before setting and cementing the intermediate casing?	YES	Adequate	At RTD the hole will be conditioned in preparation for running casing.
	Will the permittee notify the Department's District Office prior to setting and cementing the production casing to enable an inspector to be present?	YES	Adequate	Prior to setting and cementing of the casing the IDNR's District Office will be contacted by phone and electronic mail of the planned operation to enable an inspector to be present. This casing will be cemented to the surface and thus, fulfills the requirement of intermediate casing. During different phases of the drilling, completion and production process, this casing will be used as intermediate casing, frac string and production casing and fulfills the requirements of each. phone and electronic mail of the planned operation to enable an inspector to be present.
	Will centralizers be used meeting the following requirements?			
	In the vertical portion of the well, a centralizer shall be placed on every fourth joint from the kickoff point *to the ground surface or to the bottom of the cellar;*	YES	Adequate	7", 26#/ft. P-110 grade casing will be run to TD using approved centralizers from the base of the vertical portion of the hole (KOP) to base of surface casing on every 4th joint.
	In the horizontal portion of the well, rigid centralizers shall be used and placed accordingly to ensure at least 80% standoff	YES	Adequate	API P-110 grade casing will be run to TD with rigid solid turbulizing centralizers spaced along the lateral portion of the hole allowing for 80% standoff.

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)	YES	Adequate	7", 32#/ft. API P-110 grade casing will be run to TD using API approved centralizers from the base of the vertical portion of the hole (KOP) to base of surface casing on every 4th joint.
Will a pre-flush or spacer be pumped ahead of the cement?	YES	Adequate	The 7" hole will again be conditioned and a pre-flush spacer pumped ahead of the cement slurry. The 4 1/2"hole will once again be circulated and conditioned and followed by a flush and cement slurry consisting of 550 sacks of Class H 3% KCL L.F.L with Gilsonite and 2.5 sacks of Flake.
Will the production casing cement meet the cement requirements of 245.520(a)&(b)?	YES	Adequate	Cementing activities will conform to Section 245.520 including a compressive strength test.
Will the production casing cement be applied behind the casing according to 245.520(c)&(d)?	YES	Adequate	Cementing activities will conform to Section 245.520 including a compressive strength test.
Cement Testing	YES	Adequate	Cementing activities will conform to Section 245.520 including a compressive strength test.
Does the applicant plan to perform a Mechanical Integrity Test in accordance with 245.540 (c)	YES	Adequate	Cementing activities will conform to Section 245.520 including a compressive strength test. Following this, the casing will be tested as a production casing string. Prior to testing the casing the IDNR's District Office will be contacted by phone and electronic mail of the planned operation to enable an inspector to be present. The casing will be tested using brine to fill the casing and pressure tested to 70% of its minimum internal yield for 30 minutes.

245.210(a)(15)	TRAFFIC MANAGEMENT PLAN: DATA FROM TRAFFIC MANAGEMENT PLAN FORM RECEIVED 8/25/2017			
	Does the applicant provide a traffic management plan meeting the following:			
	Are the impacted highway authorities (county, township, road district system, and municipal street systems) identified?	YES	Adequate	Road Jurisdictions identified in TRAFFIC MANAGEMENT PLAN FORM RECEIVED 8/25/2017
	Did the applicant include the 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?	YES	Adequate	Contacts identified in TRAFFIC MANAGEMENT PLAN FORM RECEIVED 8/25/2017
	Are the anticipated roads, streets, and highways that will be used to facilitate the well site construction, drilling operations, HVHHF operations, production, and continued operations of the well site identified?	YES	Adequate	Roads identified in TRAFFIC MANAGEMENT PLAN FORM RECEIVED 8/25/2017 (map)
	Does the applicant indicate that copies of the traffic management plan will be sent to the impacted highway authorities upon submission of the application?	YES	Adequate	Copies of the traffic management plan have been submitted to the impacted highway and road authorities as required under 245.210(a)(15) per TRAFFIC MANAGEMENT PLAN FORM RECEIVED 8/25/2017
	Did the plan include 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?	YES	Adequate	TRAFFIC MANAGEMENT PLAN FORM RECEIVED 8/25/2017 includes scaled maps of the proposed routes.
	Did the plan include anticipated start and end dates for well site construction and drilling operations, HVHHF operations, and other high traffic operations?	YES	Adequate	See TRAFFIC MANAGEMENT PLAN FORM RECEIVED 8/25/2017 for dates.
	Did the plan include any management measures that will be used to minimize stress to local roads and/or impact on regular traffic flow?	YES	Adequate	See TRAFFIC MANAGEMENT PLAN FORM RECEIVED 8/25/2017 for details

245.210(a)(16)	OWNER INFORMATION: DATA FROM OWNER PERMITTTEE INFORMATION FORM RECEIVED 5/22/2017		
Does the applicant provide 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)?	YES	Adequate	ATTACHMENT: OWNER PERMITTEE INFORMATION Alice Woodrow 1819 Co. Rd. 50 E Enfield, IL 62835 Scott L. & Bobby Woodrow 1842 Co. Rd. 50 E Enfield, IL 62835 Kent Woodrow 63 Co. Rd. 1825 N Enfield, Il 62835 Raymond A. York 1002 Co. Rd. 1800 N Carmi, IL 62821 Inez Taylor 412 East Hosiek Fairfield, Il 62837 John C. Carter 237 County Road 1350 N Enfield, IL 62835 Horn Joint Primary Trust 1432 US Hwy 45 Enfield, IL 62835

245.210 (a)(17)	**PUBLIC NOTICE DRAFTS: DATA FROM PUBLIC NOTICE DRAFTS FORMS RECEIVED 5/22/2017 AND 6/26/2017**			
	Did the applicant provide 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);	YES	Adequate	Yes. Draft Notices were provided for both the initial notice and an extension of the initial notice period, which included an extension of the comment period. The additional Time/Location information was added to the Drafts and then returned to Applicant for Signature.
	Is the HVHHF-27 General Public Notice considered complete?	YES	Adequate	The form contained all the necessary information required.
	Is the HVHHF-28 Specific Public Notice considered complete?	YES	Adequate	The form contained all the necessary information required.

245.210(a)(18)	**RESTORATION STATEMENT: DATA FROM PLUGGING AND RESTORATION FORM RECEIVED 6/26/2017**			
	Did the applicant provide 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)?	YES	Adequate	Within six (6) months of abandonment the operator will remove off 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 high volume horizontal hydraulic fracturing operations at the well site or on lands used other than the well site and the surface restored back to as close to pre-drilling condition as reasonably possible or to the satisfaction of the surface owner. This will include putting the stored topsoil back to its original location and repairing any terraces and drain tile. On April 22, 2016, 62 Ill. Adm. Code 240.1181 was repealed and the requirements found in that Section were incorporated into 62 Ill. Adm. Code 240.1180. As it is now impossible to comply with 62 Ill. Adm. Code 240.1181, the well site will be restored with the restoration requirements found in 62 Ill. Adm. Code 240.1180 and Section 1-95 of the Hydraulic Fracturing Regulatory Act, 225 ILCS 732/1-95. On lands used other than the well site and production facility the restoration process will also comply with Sections 245.1020 and 245.1030 of the Hydraulic Fracturing Regulatory Act, 225 ILCS 732/1-95.
	Did the applicant provide the following additional information, pursuant to Section 1-35(b)(20) of the Act:			
	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?	YES	Adequate	A statement provided by the applicant indicates no wells meet this requirement. A review of the Office of Oil and Gas Resource Management records indicated that there are no wells meeting the requirement to be plugged.
	A strategy for restoration of lands used by the permittee other than the well site and production facility pursuant to Section 245.1020?	YES	Adequate	On lands used other than the well site and production facility the restoration process will also comply with Sections 245.1020 and 245.1030 of the Hydraulic Fracturing Regulatory Act, 225 ILCS 732/1-95.
	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?	YES	Adequate	On April 22, 2016, 62 Ill. Adm. Code 240.1181 was repealed and the requirements found in that Section were incorporated into 62 Ill. Adm. Code 240.1180. As it is now impossible to comply with 62 Ill. Adm. Code 240.1181, the well site will be restored with the restoration requirements found in 62 Ill. Adm. Code 240.1180 and Section 1-95 of the Hydraulic Fracturing Regulatory Act, 225 ILCS 732/1-95.

245.210 (a)(19)	**PROOF OF INSURANCE: DATA FROM PROOF OF INSURANCE FORM RECEIVED 8/25/2017**			
	Did the applicant provide 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)?	YES	Adequate	Yes. Proof of Insurance was included. Policy had an aggregate of $5,000,000 across the multiple sub-sections. Policy also included a $5,000,000 excess umbrella.

245.210(a)(20)	**WATER QUALITY MONITORING WORK PLAN: DATA FROM WATER QUALITY MONITORING WORK PLAN FORM RECEIVED 5/22/2017**			
	Did the applicant provide a 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?	YES	Adequate	See WATER QUALITY MONITORING WORK PLAN FORM RECEIVED 5/22/2017
	Did the applicant provide information identifying all water sources within the range of testing under this Section (Section 1-80(a)(1) of the Act)?	YES	Adequate	Existing water sources within the range of testing include one surface impoundment used for stock watering, and one water well, reportedly used to supply the stock watering surface impoundment. Community water systems in the vicinity of the proposed HVHHF well supply water through interconnections with regional water suppliers, with those supplied from surface water storage in Rend Lake, some 30 miles west of the oil well location, or water wells along the Wabash River, more than 10 miles east of the proposed oil well. None of the community water supply sources are within the range of testing under §1-80(a) of the Act. Three water supply wells are planned for installation as part of the oil well drilling and hydraulic fracturing program, and these wells will be within the range of testing required by the Act. A single residence is located within the range of testing, but the house does not have a private well, and is served with piped-in water by the local water district.
	Did the applicant provide a sampling plan and protocol consistent with the requirements of subsections (b)Baseline Testing , (c)Follow-up Monitoring and (d)Laboratory Analysis Procedures , *including notification to the Department at least 7 calendar days prior to sample collection* (Section 1-80(a)(2) of the Act)?	YES	Adequate	Water Sample bottles shall be provided by the analytical laboratory with preservatives included in the bottles. Prior to sampling, all necessary water sample bottles will be clearly labeled in indelible ink, with identification of the project, sample location, date, time, analytical method(s), and initials of the individual collecting the samples. Water shall be retrieved from the water source in a clean, unused bailer or similar device such that the water is representative of the water quality with as little disturbance or aeration as possible. The water will then be distributed to the sample bottles in a manner that minimizes the potential for aeration or contamination. Sample bottles, with the exception of volatile organic samples, shall be filled to approximately 90 percent of full, to allow for expansion of the contents. Samples collected for volatile organics analysis (including dissolved gasses) shall be collected in VOA bottles and filled completely, with no headspace. Immediately after collection, the individual samples bottles shall be placed in individual zipper-lock plastic bags which shall be labeled with their contents. The bagged sample bottles shall then immediately be placed in a cooler or ice chest containing either bagged ice or 'blue ice' type coolants. The chain of custody documents shall be filled out in the field as the samples are collected, and accompany the samples Prior to HVHHF operations each source shall be sampled a minimum of three times to establish baseline conditions. After HVHHF operations have been completed, all sources shall be sampled repeatedly, at 6 months, 18 months & 30 months after HFHHF Operations

Did the applicant provide 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) (Section 1-80(a)(3) of the Act)?	YES	Adequate	Shawnee Professional Services 104 South 4th St P.O. Box 125 Vienna, Illinois 62995-0125 618.658.6065
Did the applicant provide 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) (Section 1-80(a)(4) of the Act)?	YES	Adequate	Shawnee Professional Services 104 South 4th St P.O. Box 125 Vienna, Illinois 62995-0125 618.658.6065
Did the applicant provide the name and contact information of an independent testing laboratory accredited or certified by the Agency *to perform the required laboratory method* and *to conduct the analysis required under subsections (b) and* (c) (Section 1-80(a)(5) of the Act). When no laboratory has been accredited or certified by the Agency to analyze a particular substance requested in subsection (d), results will be considered only if they have been analyzed by a laboratory accredited or certified by another State agency or an agency of the federal government, if the standards used for the accreditation or certification of that laboratory are substantially equivalent to the accreditation standard under Section 4(o) of the Illinois Environmental Protection Act [415 ILCS 5]?	YES	Adequate	ARDL, Inc Primary Laboratory in Mt. Vernon, IL ESC Lab Sciences Alternate Primary Laboratory Mt. Juliet, Tennessee
Did the applicant provide proof that the applicant provided each landowner referenced in subsections (a)(7) through (a)(10) with a notice of water sampling rights under the Act pursuant to a form prescribed by the Department and prior to the landowner's execution	YES	Adequate	January 25, 2017 letter attached to WATER QUALITY MONITORNG WORK PLAN RECEIVED 5/22/2017

of any document regarding water sampling?			
Did the applicant provide proof of access and the right to test within the area for testing prescribed within subsections (b) and (c) (Section 1-80(a)(6) of the Act)?	N/A	Adequate	Landowner declines to provide permission for sampling. January 25, 2017 letter attached to WATER QUALITY MONITORNG WORK PLAN RECEIVED 5/22/2017
Did the applicant provide copies of any non-disclosure agreements made with landowners, if applicable (Section 1-80(a)(6) of the Act). *Landowners of private property may condition access or permission for sampling of private water wells or ponds wholly within* their *property or a portion of any perennial stream or river that flows through* their *property under a non-disclosure agreement* that includes *the following terms and conditions* (Section 1-80(d) of the Act)?	N/A	Adequate	Not applicable
Did the applicant provide documentation that the landowner of the private property declines, expressly and in writing, to provide access or permission for sampling, if applicable. Under these conditions, s*ampling of* private *water wells or ponds wholly contained within private property shall not be required* (Section 1-80(d) of the Act)?	YES	Adequate	January 25, 2017 letter attached to WATER QUALITY MONITORNG WORK PLAN RECEIVED 5/22/2017
Did the applicant provide evidence as to the good faith efforts (for example, logs of oral communications and copies of written communication) *that were made to secure documentation* that *the* landowner *of the private property declines to provide proof of his or her refusal to allow access* for the purposes of conducting sampling *in writing*, if applicable. *Permits issued under* this Part *cannot be denied if the* landowner *of the private property declines to provide proof of his or her refusal to allow access in writing and the permittee provides evidence that good*	YES	Adequate	January 25, 2017 letter attached to WATER QUALITY MONITORNG WORK PLAN RECEIVED 5/22/2017

	faith efforts were made to gain access for the purposes of conducting sampling (Section 1-80(d) of the Act)?			
	Did the applicant provide 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 245.610 (Section 1-80(a)(7) of the Act)?	YES	Adequate	The area is served by a public water supply agency and water distribution system. There is no drinking water supply that uses the local surface or groundwater, thus no need to provide any alternate human drinking water supplies. In the unlikely event that the surface impoundment stock pond, or the water well supplying that stock pond, were to be polluted or otherwise diminished, a stock watering tank could be provided, using the public water system as the supply.

245.210(a)(21)	APPLICANT DISCLOSURE: DATA FROM VIOLATIONS REPORT FORM RECEIVED 5-22-2017		
Does the permittee have 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)?	NO	Adequate	Department review found no convictions, adjudications or findings pursuant to 62 Ill. Adm. Code 245.210(a)(21)(A) and 225 ILCS 732/I-60(a)(4)
Does the permittee have 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)?	NO	Adequate	Applicant responded "None" to (b) of the Violations Report. Reviewed WOC, LLC. website. Sent request to the State of Kentucky - responded no record of WOC, LLC in database. Sent request to the state of Indiana - responded no permits have been revoked. Sent request to the state of Oklahoma - responded no record of WOC, LLC. Sent request to the Bureau of Indian Affairs, Eastern Oklahoma Region - no record of WOC, LLC per telephone conversation with Sheila Yandella of the Bureau on 5/31/17. Sent request to the state of Texas - record of WOC, LLC but no permits. Sent request to the state of Kansas - record of WOC, LLC but Kansas does not issue HVHHF permits - sent 2nd request on 5/31/17. Spoke with John Meyers of Kansas Oil & Gas OLC on 5/31/2017 - WOC, LLC has never had a well permit revoked.

B. Application Requirements Review (continued)

62 Ill. Adm. Code 245.300(c)(2): *the application meets the requirements of Section* 245.210 (Section 1-53(a)(2) of the Act);

Permit Application Requirements (62 Ill. Adm. Code 245.210) Review

II. Application Requirements of 245.210(b):

(1) Registration Certification
(2) Topsoil Preservation
(3) Fugitive Dust Control
(4) Contractor Information
(5) Violations Report
(6) Emissions Management
(7) Radioactive Materials Management Strategy

Following is a review of each of the application requirements under Section 245.210(b) of the Department's HVHHF Rules. It is organized by subsection of 245.210(b) and the individual requirements of each subsection or of other sections of the HVHHF Rules referenced in 245.210(b). For each requirement, the review includes the exact information submitted in the application or refers to the application form that contains the required information.

Conclusion: After completing its review, the Department has determined the application is complete and it satisfies requirements set forth in 62 Ill. Adm. Code 245.210(b).

62 Ill. Adm. Code 245.210(b)(1) Registration Certification

62 Ill. Adm. Code 245.210(b)(1) requires the Applicant to submit:

> Certification that the applicant's registration information provided pursuant to 62 Ill. Adm. Code 245.200 is accurate and up to date;

On February 8, 2016, the OOGRM received the Applicant's initial registration form and signed certification statement. On August 24, 2016, pursuant to Section 245.200(g) of the HFRA Rules, the OOGRM received the Applicant's Annual Submission registration form and signed certification statement.

Conclusion: Per the above analysis, the applicant's registration is accurate and up to date.

245.210(b)(2)	TOPSOIL PRESERVATION: DATA FROM TOPSOIL PRESERVATION FORM RECEIVED 8-25-2017			
	Did the applicant provide a Topsoil Preservation strategy to preserve topsoil?	YES	Adequate	see TOPSOIL PRESERVATION FORM RECEIVED 8-25-2017
	Does the strategy, unless otherwise approved or directed by the Department, include 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?	YES	Adequate	At the time of construction of the well pad and well site, topsoil will be stripped following vegetation removal, be stored separately from subsoil or other excavated material to avoid mixing during construction, storage and restoration. Topsoil will include all suitable growth medium present at site, as indicated by color or texture or supporting any sprigs of vegetation. Topsoil will be wind-rowed to shallowest practical depth around the entire perimeter of well pad to create a berm that infiltrates/redirects/manages storm water while extending the viability of the topsoil. Erosion control will be installed if necessary to ensure soil stays within the stockpile footprint. Stockpiles will be stabilized to avoid erosional losses using re-established native grasses and/or erosion mats. If topsoil stockpiles will remain longer than a growing season, the pile will be seeded with a cover crop. Topsoil, subsoil, and underlying materials will be stored in separate piles. The portion of the site used for drilling and completion will be disturbed from between 6 months and one year and topsoil will be reclaimed on that portion upon remediation. The portion of the site that will be used for operations and production will be disturbed during the production phase of the well. Upon plugging and abandoning the well all topsoil will be reclaimed with either the topsoil removed or with topsoil of similar characteristics. Access roads to the well site will not include the removal of topsoil or subsoil. A layer of rock will be added on the topsoil. The access road will remain in place through the production phase of the well. To restore the access road the rock added will be removed from the road and any topsoil removed during that process will be reclaimed with topsoil of similar characteristics of the topsoil removed. On April 22, 2016, 62 Ill. Adm. Code 240.1181 was repealed and the requirements found in that Section were incorporated into 62 Ill. Adm. Code 240. I 180. As it is now impossible to comply with 62 Ill. Adm. Code 240.1181, the well site will be restored with the restoration requirements found in 62 Ill. Adm. Code 240.1180 and Section 1-95 of the Hydraulic Fracturing Regulatory Act, 225 ILCS 732/1-95.

245.210(b)(3)	FUGITIVE DUST CONTROL STRATEGY: DATA FROM FUGITIVE DUST CONTROL STRATEGY FORM RECEIVED 5-22-2017			
	Did the applicant provide a Fugitive Dust Control strategy for compliance with the requirement to implement practices to control fugitive dust as required by Section 245.410?	YES	Adequate	See FUGITIVE DUST CONTROL PLAN RECEIVED 5-22-2017 for details.
	Does the fugitive dust control strategy 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)?	YES	Adequate	This Fugitive Dust Prevention and Control Plan (FDPCP) was prepared in accordance with the Hydraulic Fracturing Regulatory Act (225 ILCS 732/ 1-75) for controlling fugitive dust particles by request of Woolsey Operating Company (WOC). The purpose of the plan is to reduce short-term impacts to air quality during the mobilization, construction, and demolition activities needed to support the final design, construction, and operation of the Woodrow #1H-310408-193 Hydraulic Fracturing Well Site (Woodrow #1H). The Woodrow #1H Project includes work activities at two locations: the Woodrow #1H Well Site and the #1 Class 2 well operated by TrueFlo Solutions LLC (TrueFlo) at 987 IL Highway One. An alternate disposal site is located at the Rankin #1 well operated by Haggard Well Services near Calvin, IL. This FDPCP is submitted to the Illinois Environmental Protection Agency as Appendix X of the Hydraulic Fracturing Permit Application

245.210(b)(4)	CONTRACTOR INFORMATION: DATA FROM CONTRACTOR STATEMENT FORM RECEIVED 5-22-2017			
	Did the applicant identify whether who will be performing the HVHHF operations?	YES	Adequate	Basic Energy Services LP will be the HVHHF contractor.
	If a contractor will be performing the HVHHF operations, did the applicant 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?	YES	Adequate	Corporate Office: Basic Energy Services LP 500 W. Illinois, Ste. 100 Midland, TX 79701 Division Office: Basic Energy Services LP 10244 NE Hwy 61 Pratt, KS 67124 Primary Contact: Kevin Gordley, Area Manager (620) 672-1201

245.210(b)(5)	VIOLATIONS REPORT: DATE FROM VIOLATIONS REPORT FORM RECEIVED 5-22-2017		
Does the permittee provide 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?	YES	Adequate	Applicant responded "None" to (c) of the Violations Report. Reviewed applicant (permittee #4658) and variations of "..Woolsey.." in MailList and OG-1 ctrl. tables of database. Found none of the disclosed parent, subsidiaries or affiliates of the applicant in Department database. Permittee #4658 has no pending Notices of Violations or Director's Decisions.

245.210(b)(6)	EMISSIONS MANAGEMENT: DATA FROM EMISSIONS MANAGEMENT STATEMENT FORM RECEIVED 5-22-2017			
	Did the applicant provide a statement of which of the methods for managing natural gas or hydrocarbon fluids produced during the flowback period and production period the applicant will use?	YES	Adequate	All liquid hydrocarbons separated and collected during flow back operations and production shall be stored in approved tanks. The Woodrow #1H-310408-193 is a wildcat well and natural gas, if produced in significant volumes during flow back operations and production, will be separated from the flow back fluid and flared in a completion combustion device that conforms with Sections 245.845 and 245.900.
	Does the applicant intend to request an exemption or waiver under Section 245.845(c) or (f), 245.900(d) or (i), or 245.920, if so, 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?	YES	Adequate	The applicant will operate a flare per 245.845(f), the Woodrow #1H-310408-193 is a wildcat well. The applicant is not requesting an exemption or waiver, that waives the flaring requirements of 245.900 and 245.910..

245.210(b)(7)	RADIOACTIVE MATERIALS MANAGEMENT STRATEGY: DATA FROM RADIOACTIVE MATERIALS MANAGEMENT STRATEGY FORM RECEIVED 5-22-2017			
	Did the applicant provide Radioactive Materials Management Strategy?	YES	Adequate	This Radioactive Materials Management Program provides the procedures that will be followed to test for, identify, manage, transport, and dispose of any radioactive materials utilized or generated during the course of High Volume Horizontal Hydraulic Fracturing (HVHHF) operations. This document should be employed in conjunction with the Well Site Safety Plan also provided for the Site. Radioactive material management is also regulated by the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Department of Transportation (DOT).
	Does the applicant include 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?	YES	Adequate	Initial site conditions will be assessed through the collection and analysis of five soil samples from the drill pad location. The sample locations latitudes and longitudes shall be recorded so that the baseline samples can be compared to subsequent site restoration samples described below. Since there are no existing private wells in the vicinity of the proposed oil well, nor any surface water bodies, there are, as yet, no water sources to sample under this permit requirement. (Water bodies and sources are covered in the Water Source Management Plan and the Water Quality Management Plan for non-radioactive constituents.) The water supply wells constructed for purposes of oil well drilling and hydraulic fracturing are to be located in the vicinity of the proposed oil well, and shall be sampled and analyzed after completion of their construction, but before hydraulic fracturing takes place. The analysis for radioactive particles and isotopes will be conducted by an Illinois EPA approved laboratory in accordance with the analytical methods described in the attached table. Sample collection methods are described in the Well Site Safety Plan in Section 3.2.10.3.
	Does the applicant include 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?	YES	Adequate	In addition to baseline sampling at the Site prior to drilling, samples of the target black shale drill cuttings will be collected and submitted for analysis for Naturally Occurring Radioactive Materials (NORM) as Identified in the table below. The number of samples to be collected for analysis will be consistent with one sample per 1,000 feet of horizontal drilling in the black shale. The analysis for radioactive particles and isotopes will be conducted by an Illinois EPA approved laboratory in accordance with the analytical methods described in the attached table. Sampling methods and equipment are described in the Well Site Safety Plan in Section 3.2.10.3.

B. Application Requirements Review (continued)

62 Ill. Adm. Code 245.300(c)(2): *the application meets the requirements of Section* 245.210 (Section 1-53(a)(2) of the Act);

Permit Application Requirements (62 Ill. Adm. Code 245.210) Review

III. Applications Requirements of 245.210(c), (d), (e), (f), (g), (h), and (i):

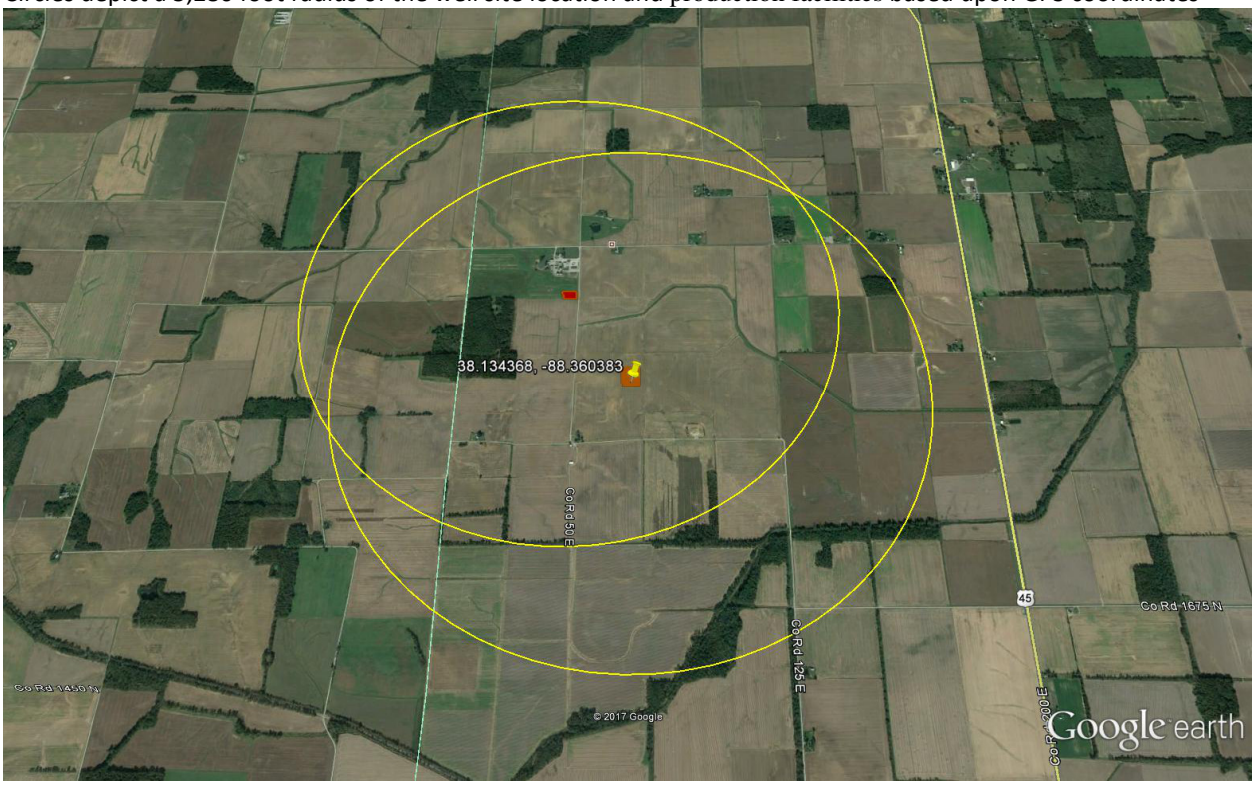
Following is a review of each of the application requirements under Section 245.210(c), (d), (e), (f), (g), (h), and (i) of the Department's HVHHF Rules. It is organized by each subsection from Section 245.210(c) through 245.210(i) and the individual requirements of each subsection. For each requirement, the review includes the exact information submitted in the application or refers to the application form that contains the required information.

Conclusion: After completing its review, the Department has determined the application is complete and satisfies the requirements set forth in 62 Ill. Adm. Code 245.210(c), (d), (e), (f), (g), (h), and (i).

62 Ill. Adm. Code 245.210(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)

As indicated on the Bond Municipal Consent Registration Form Received 5-18-2017, the applicant has checked the box NO to answer the question "Will the well site be located within the limits of any city, village, or incorporated town." Thus, no certified copy of the official consent for the high volume horizontal hydraulic fracturing operation is required. This is further confirmed through a Google Map search which depicts no city, village or incorporated town near the well site or production facilities.

Google Earth – Imagery Date 10/22/2016
Circles depict a 5,280 foot radius of the well site location and production facilities based upon GPS coordinates



245.210(d)	**2% OR MORE PROBABILITY OF EXCEEDANCE (IN 50 YEARS) OF PEAK GROUND ACCELERATION OF 0.4 STANDARD GRAVITY (G): DATA FROM HYDRAULIC FRACTURING FLUIDS AND FLOWBACK PLAN FORM RECEIVED 8-25-2017**			
	Is any part of the well or well site identified in subsection (a)(2) 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?	NO	Adequate	See HYDRAULIC FRACTURING FLUIDS AND FLOWBACK PLAN FORM RECEIVED 8-25-2017, USGS 2014 2% Probability Map and USGS Unified Hazard Analysis

245.210(e)	FLOODPLAIN: DATA FROM PROOF OF INSURANCE FORM RECEIVED 8-25-2017			
	Is any part of the well or well site identified in subsection (a)(2) in an area identified as a floodplain under 17 Ill. Adm. Code 3700 or 3706?	NO	Adequate	See PROOF OF INSURANCE FORM RECEIVED 8-25-2017 and FEMA National Flood Hazard Map

245.210(f)	BOND OR EQUIVALENT FINANCIAL INSTRUMENT DATA FROM BOND MUNICIPAL CONSENT REGISTRATION FORM RECEIVED 6-26-2017		
Question	**Response**	**Evaluation**	**Comments**
Was a "Surety" Bond received?	NO	Adequate	See Below
In lieu of a bond, were other collateral securities such as cash, certificates of deposit, or irrevocable letters of credit under provided?	YES	Adequate	SEE BOND MUNICIPAL CONSENT REGISTRATION FORM RECEIVED 6-26-2017
In lieu of a bond is the applicant using Cash, Certificates of Deposit, or Letters of Credit?	Certificates of Deposit	Adequate	SEE BOND MUNICIPAL CONSENT REGISTRATION FORM RECEIVED 6-26-2017
Are the certificates of deposit 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, has the bank(s) issuing these certificates waived all rights of setoff or liens against the certificates.	YES	Adequate	SEE BOND MUNICIPAL CONSENT REGISTRATION FORM RECEIVED 6-26-2017
Are any of the individual certificate of deposit in an amount in excess of the maximum insurable amount determined by the FDIC?	NO	Adequate	SEE BOND MUNICIPAL CONSENT REGISTRATION FORM RECEIVED 6-26-2017
If the certificate of deposit is a negotiable instrument, is it in the Department's possession? If not a negotiable instrument, is a withdrawal receipt endorsed by the permittee in the Departments possession?	YES, the Assignment of Certificate of Deposit is a negotiable instrument	Adequate	WOC, LLC, completed and submitted with what appears to be original signatures on the bonding forms provided by the Department and submitted copies of a Certificate of Deposit Receipt and deposit slip. The Assignment of Certificate of Deposit form signed by WOC, LLC, states WOC, LLC "hereby irrevocably authorizes and empowers the Illinois Department of Natural Resources, Office of Oil and Gas Resource Management at any time, whether or not at such time the obligations or any part thereof are due and payable, in its own name or in Woolsey Operating Company, LLC (Permittee) name to demand, apply for withdrawal, receipt and give acquittance for any and all sums."

245.210(g)	FEE: RECEIVED 5-22-2017			
	Did the application include a payment of $13,500, application fee?	YES	Adequate	A check in the amount of $13,500 was provided with application for the application fee.

245.210(h)	CERTIFICATION: DATA FROM PUBIC NOTICE DRAFTS FORM RECEIVED 6-26-2017			
	Was the application signed including "penalty or perjury" statement?	YES	Adequate	See PUBIC NOTICE DRAFTS FORM RECEIVED 6-26-2017

245.210(i)	ELECTRONIC AND HARD COPY OF APPLICATION			
	Did the applicant provide both an electronic and hard copy of the application?	YES	Adequate	The OOGRM received both an electronic and hard copy of the application. Including electronic and hard copies of all supplemental information provided.

C. Plans Required Review

62 Ill. Adm. Code 245.300(c)(3): *the plans required to be submitted with the application under Section* 245.210 *are adequate and effective* (Section 1-53(a)(3) of the Act) to comply with the Act, this Part, the Illinois Oil and Gas Act, and the administrative rules promulgated under that Act;

The plans required under Section 245.210 of the Department's HVHHF Rules are:

(3) Well Site Setback Plan
(4) Directional Drilling Plan
(6) High Volume Horizontal Hydraulic Fracturing Operations Plan
(10) Water Source Management Plan
(11) Hydraulic Fracturing Fluids and Flowback Plan
(12) Well Site Safety Plan
(13) Containment Plan
(14) Casing and Cementing Plan
(15) Traffic Management Plan
(20) Water Quality Monitoring Work Plan

See Section V(B)(i) (above) of the Permit Application Requirements Review for specific plan reviews as submitted by the Applicant. The Legislature set the standards that must be met by an Applicant to be issued a HVHHF permit. The Department further clarified the statutory language and requirements for an applicant in the HVHHF Rules and the Oil and Gas Rules. As evidenced in Section V(B)(i) of this Review Document, the Department reviewed each of the plans as submitted by the applicant to determine if they meet the requirements of the HFRA, HVHHF Rules, the Oil and Gas Act, and the Oil and Gas Rules. Per this review, the Department has determined that the plans included in HVHHF-000001 meet the requirements prescribed in the HFRA, Oil and Gas Act and the Rules promulgated under those acts. The Department has discovered no aspects of the application that are contrary to the requirements of the aforementioned statutes and regulations.

Conclusion: The Department deems that the Record of Decision demonstrates that each plan listed above is adequate and effective to comply with the HFRA, HVHHF Rules, the Oil and Gas Act, and the Oil and Gas Rules.

D. Hydraulic Fracturing Operations Conduct Review

62 Ill. Adm. Code 245.300(c)(4): the high volume horizontal *hydraulic fracturing operations will be conducted in a manner that will protect the public health*, public *safety*, property, wildlife, aquatic life and environment, *and* will *prevent pollution or diminution of any water source* (Section 1-53(a)(4) of the Act);

The Illinois Hydraulic Fracturing Act and associated Rules are regarded as one of the country's most stringent and protective programs for the regulation of HVHHF operations. The HFRA was the result of extensive negotiations between a large group of stakeholders representing a diverse cross-section of interest groups, including but not limited to the Sierra Club, Illinois Oil and Gas Association, Natural Resources Defense Council, Illinois Petroleum Council, Environmental Law & Policy Center, and Illinois Manufacturers' Association. The Legislature intentionally drafted, and ratified, the HFRA to ensure HVHHF operations in Illinois are conducted in a manner to protect public health and safety and the environment. The resulting statute is broad and encompasses all aspects of the HVHHF process beginning with the siting and construction of the well site and continuing through to the plugging and restoration at the end of the well's productive life, as well as all stages in between, including drilling, traffic management, and fluid handling. The HFRA further provides for potential applicants to meet minimum bonding and insurance requirements.

The Legislature then tasked the Department with the responsibility of promulgating rules on the already extensive statutory framework to ensure any HVHHF permit applicant was capable of conducting operations in a manner that upholds the spirit of, and protections mandated in, the HFRA. The Department's HVHHF Rules build on this framework and clarify the requirements that must be fulfilled to conduct HVHHF activities. While conducting its review, the Department had to assume that, unless confronted with contradictory information or circumstances, the Applicant's compliance with the HFRA and the Department's Rules would, in and of itself, be protective of public health and safety, property, wildlife, aquatic life and the environment; and further will prevent pollution or diminution of any water source.

The Record of Decision, and this Review, demonstrate the Applicant's HVHHF operations, if conducted in a manner consistent with the application and plans as submitted - which the Department has determined to be adequate - as well as all permit conditions, the HFRA, the Illinois Oil and Gas Act, and the rules promulgated under the respective acts then the Applicant's HVHHF activities, by virtue of meeting the threshold requirements under the permit application, will be deemed to be protective of public health and public safety, property, wildlife, aquatic life and the environment; and to prevent pollution or diminution of any water source.

Conclusion: The contents of the application provide no indication that issuance of a permit to perform HVHHF operations would result in the same HVHHF operations being conducted in a manner inconsistent with the protection of the public health, public safety, property, wildlife, aquatic life and environment, and will prevent pollution or diminution of any water source.

See Application Requirements Review, specifically Applications Requirements of 245.210(a) and 245.210(b), for individual review of the application. Each of these items was reviewed and appeared adequate and effective to comply with the Hydraulic Fracturing Regulatory Act, 62 Illinois Administrative Code Part 245, the Illinois Oil and Gas Act, and 62 Illinois Administrative Code Part 240.

E. Water Quality Monitoring Work Plan Review

62 Ill. Adm. Code 245.300(c)(5): *the* water quality monitoring *work plan required under Section* 245.600 *has been submitted to* and approved by *the Department* (Section 1-53(a)(5) of the Act);

62 Ill. Adm. Code 245.210(a)(20) requires that all applicants for a HVHHF permit shall submit a Water Quality Monitoring Work Plan to ensure accurate and complete water quality sampling and testing as set forth in Section 245.600(a), reviewed and certified by a professional engineer or professional geologist. The applicant submitted its Water Quality Work Plan with its initial permit application which was deemed received on May 22, 2017. The Water Quality Work Plan was reviewed as described in Section V(B)(i) of this Review Document and was deemed adequate by the Department.

Conclusion: As set forth in Section V(B)(i), the Water Quality Work Plan complies with 62 Ill. Adm. Code 245.600 and is approved by the Department.

F. Violations Report Review

62 Ill. Adm. Code 245.300(c)(6): *the applicant or any parent, subsidiary, or affiliate* of the applicant *has not failed to abate a violation of* the *Act*, this Part, *the Illinois Oil and Gas Act* (Section 1-53(a)(6) of the Act), or the administrative rules promulgated under that Act specified in a final administrative decision of the Department or any court decisions related to that decision;

62 Ill. Adm. Code 245.210(b)(5) requires all applicants for a HVHHF permit to submit 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 HFRA, HVHHF Rules, the Oil and Gas Act, and the Oil and Gas Rules. The applicant submitted the required Violations Report with its initial permit application which was deemed received on May 22, 2017. The Violations Report was reviewed as described in Section V(B)(ii) of this Review Document.

Conclusion: As set forth in Section V(B)(ii), after a search of its records, the Department has determined that neither the applicant nor any parent, subsidiary, nor affiliate of the applicant has failed to abate a violation of the HFRA, HVHHF Rules, the Oil and Gas Act, and/or the Oil and Gas Rules specified in a final administrative decision of the Department or any court decisions related to such decision.

G. Review of Class II Injection Well to be Used for Disposal

62 Ill. Adm. Code 245.300(c)(7): **[***T]he* Class *II injection wells to be used for disposal of hydraulic fracturing flowback comply with all applicable requirements for* internal and external *mechanical integrity testing* as required in 62 Ill. Adm. Code 240.760 and 240.770, *including that the well has been tested within the previous 5 years*. (Section 1-53(a)(7) of the Act) The Class II injection wells to be used for disposal of hydraulic fracturing flowback must be shown to be in compliance with 62 Ill. Adm. Code 240.360 at the time of the issuance of the high volume horizontal hydraulic fracturing permit;

62 Ill. Adm. Code 245.210(a)(11) requires all applicants for a HVHHF permit to submit a Hydraulic Fracturing Fluids and Flowback Plan which, among other things, shall identify the specific Class II injection well or wells intended to be used to dispose of hydraulic fracturing flowback. The Applicant submitted multiple versions of the required Hydraulic Fracturing Fluids and Flowback Plan. For purposes of its review, the Department relied upon the final version received on August 30, 2017. In its Hydraulic Fracturing Fluids and Flowback Plan, the Applicant identified two wells it has considered for disposal of flowback. The Department performed a review of both wells to determine if either meet the requirements of 62 Ill. Adm. Code 245.300(c)(7) as follows:

Rankin #1 SWD, Reference #11947, SE N/2 NE, Sec. 31-3S-11E, White County, IL

internal integrity testing

Pressure Test	*Part I passed 9/20/2013 (within 5 years of 8/31/2017)*
Tubing and Packer Placement	*Part II passed 6/12/2008*

external mechanical integrity testing

Protection of fresh water from upward migration
Ground Elevation 429’ Map Elevation 250’ (USDW Atlas) USDW 179’
Surface Casing
Cemented from 202’ to surface (OG-20 Inspectors Casing & Cementing Report 1-7-15)
Production Casing
Cemented from 2950’ to 1292 (OG-20 Inspectors Casing & Cementing Report 1-7-15)
Additional Cementing Squeeze Job from 2000 to surface
Conclusion: Fresh water is protected from upward migration of injection fluids

Compliance with 62 Ill. Adm. Code 240.360

Six well are located within the ¼ mile AOR, Reference # 11946, 201037, 201076, 883656, 883657, & 883658
11946 Status is A (Active), The production casing cemented from 1812’ to 119’ with a total depth of 1838’ - OK
883657 Status is WSR (Well Site Restored). OG-6 Total Depth 1848, Production Casing depth 1817’, cement plug from 1798’-1848’ - OK
201037 Status is WSR (Well Site Restored). Total Depth 4048’, Production Casing cemented from 4000’-2757’, Cement Plug from 2030’-2350’, 700’-940’. 4’-210’ Data in file insufficient to demonstrate compliance with AOR.
201076 Status is WSR (Well Site Restored). Total Depth 3990’, Production Casing cemented from 3919’-2480’, Cement Plug from 2040’-2200’, 720’-960’ Data in file insufficient to demonstrate compliance with AOR.
883656 Status is WSR (Well Site Restored). Total Depth 3862’, Production Casing cemented from 3864’-3242’, Cement Plug from 3760’-3820’, 720’-960’ Data in file insufficient to demonstrate compliance with AOR.

883658 Status is WSR (Well Site Restored). Total Depth 3937', Production Casing cemented from 3845'-3016', Cement Plug from 3785'-3845', 720'-900' Data in file insufficient to demonstrate compliance with AOR.

State of Illinois
Department of Natural Resources

OG-13/23

☐ 13 Tubing and Packer Report ☒ 23 Mechanical Integrity-Pressure Test

Permittee: HAGGARD WELL SERVICE Permittee #: 2685

Well Name: RANKIN #1 SWD Well Permit #: 025819

County: WHITE Reference #: 11947

Section: 31 Township: 03S Range: 11E

GEOLOGIC NAME AND DEPTHS OF INJECTION ZONES

1.		from	to
2.		from	to
3.		from	to
4.		from	to

WELLHEAD CONFIGURED TO CHECK	Annulus Pressure	YES	NO	Injection Tubing Pressure	YES	N

PACKER		
	1 Brand and Type	Setting
	2 Brand and Type	Setting

MIT 1050#

IF INJECTION DURING TEST, RECORD WELLHEAD INJECTION PRESSURE AT TIME OF TEST	– PSIG	PRESENT WELLHEAD INJECTION PRESSURE	600 PS

ANNULUS PRESSURE TEST				(PASS X)	FAIL
TIME BEGAN	8:15 AM.	TIME ENDED	8:45 AM.	LENGTH OF TEST	30min.
START PRESSURE	330 PSIG.	FINAL PRESSURE	330 PSIG.	CHANGE IN PRESSURE	– 0 –

INSPECTOR COMMENTS: 5 YR. ANNIVERSARY
(USED 300 PSI TO REPAIR)

[redacted]
Inspector Signature

OG-13 Inspection Date
OG-23 Inspection Date 9-20-13

Manager Signature authorizing test/setting if inspector not Present: Date

This state agency is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined in the Ill. Compiled Stat. Ch. 225, para. 725 et seq. Failure to disclose this information will result in this form not being processed. This form has been approved by the Forms Management Center.

Office of Mines and Minerals — Division of Oil and Gas
One Natural Resources Way • Springfield, IL 62702-1271
217 782 7756

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Division of Oil and Gas
One Natural Resources Way
Springfield, IL 62702-1271
(217) 557-6379

OG-13 / 23

TUBING AND PACKER REPORT
MECHANICAL INTEGRITY-PRESSURE TEST

X 13
23

Type of Well ☐ New well ☐ Conversion ☐ Workover

10

PERMITTEE: WEST DRILLING CO. PERMITTEE #: 877

WELL PERMIT #: 025819

WELL NAME: BARKLEY #1 SWD REFERENCE #: 11947 11947

COUNTY: WHITE SECTION: 31 TOWNSHIP: 03N RANGE: 14E

	GEOLOGIC NAME		DEPTHS OF INJECTION ZONES		
1	BAR SPRINGS	FROM	2340	TO	2370
2		FROM		TO	
3		FROM		TO	
4		FROM		TO	

WELLHEAD CONFIGURED TO CHECK:

ANNULUS PRESSURE ☐ YES ☐ NO INJECTION TUBING PRESSURE ☐ YES ☐ NO

PACKER
1 Brand and Type BAKER AD-1 Setting 2253
2 Brand and Type _____ Setting _____

If injection during test, record wellhead injection pressure at time of test _____ psig

Present wellhead injection pressure _____ psig

ANNULUS PRESSURE TEST ☐ PASS ☐ FAIL

Time Began: _____ Time Ended: _____ Length of test _____

Start Pressure: _____ Final Pressure: _____ Change in Pressure: _____

INSPECTOR COMMENTS _____

[redacted] _____ OG-13 Inspection Date 06/12/2008

OG-23 Inspection Date _____

_____ _____

Manager Signature authorizing test/setting if inspector not present Date

IL 472-0287 (Rev. 07/04)
This state agency is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined in Sec 10, Compiled Stat. Ch. 225, para. 725 et. seq. Failure to disclose this information will result in this form not being processed. This form has been approved by the Forms Management Center.

1

Conclusion: The Rankin #1 SWD, Reference #11947, meets the internal and external integrity requirements of Section 240.760 & 240.770, however, this well does not meet the requirements of Section 240.360 of the Department's Oil and Gas Rules. **Therefore, the Department DOES NOT approve the Rankin #1 SWD for disposal of hydraulic fracturing fluids and flowback from the applicant's HVHHF operations.**

Trueflo #1, Reference #216072, SE SW SW, Sec. 6-6S-9E, White County, IL

internal integrity testing

Pressure Test *Part I passed 3/27/2015 (within 5 years of 8/31/2017)*
Tubing and Packer Placement *Part II passed 12/18/2014*

external mechanical integrity testing

Protection of fresh water from upward migration
Ground Elevation 418' Map Elevation 150' (USDW Atlas) USDW 320'
Surface Casing
Cemented from 357' to surface (OG-20 Inspectors Casing & Cementing Report 1-7-15)
Production Casing
Cemented from 2560' to surface (OG-20 Inspectors Casing & Cementing Report 1-7-15)
Conclusion: Fresh water is protected from upward migration of injection fluids

Compliance with 62 Ill. Adm. Code 240.360 Area of Review (AOR)

Two well are located within the ¼ mile AOR, Reference # 500139 & 886873
500139 Status is ND (not drilled) therefore no issue
886873 Status is WSR (Well Site Restored). The OG-6 well plugging report explains that the well has 67' of surface casing, no production casing and is plugged from is plugged from 930'-650' and 332'-4' with cement. **No AOR issue exists**.

State of Illinois
Department of Natural Resources

OG-13/23

☐ 13 Tubing and Packer Report ☒ 23 Mechanical Integrity-Pressure Test

Permittee: TRUEFLO SOLUTIONS, LLC Permittee #: 4717

Well Name: TRUEFLO #1 Well Permit #: 204250

County: WHITE Reference #: 216072

Section: 06 Township: 06S Range: 09E

GEOLOGIC NAME AND DEPTHS OF INJECTION ZONES							
1.				from		to	
2.				from		to	
3.				from		to	
4.				from		to	

WELLHEAD CONFIGURED TO CHECK	Annulus Pressure	YES	NO	Injection Tubing Pressure	YES	NO
PACKER	1 Brand and Type			Setting		
	2 Brand and Type			Setting		

IF INJECTION DURING TEST, RECORD WELL HEAD INJECTION PRESSURE AT TIME OF TEST	— PSIG	PRESENT WELLHEAD INJECTION PRESSURE	0 PSIG

ANNULUS PRESSURE TEST			PASS (X)	FAIL
TIME BEGAN 1130 hr.	TIME ENDED 2:00 PM.	LENGTH OF TEST 30MIN.		
START PRESSURE 350 PSIG.	FINAL PRESSURE 350 PSIG.	CHANGE IN PRESSURE -0-		

INSPECTOR COMMENTS:

[redacted]

Inspector Signature

OG-13 Inspection Date

OG-23 Inspection Date 3-27-15

Manager Signature authorizing test/setting if Inspector not Present Date

This agency is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined in the Ill. Comp. Ind Stat. Ch 225, para. 725 et seq. Failure to disclose this information will result in this form not being processed. This form has been approved by the Forms Management Center.

Office of Mines and Minerals — Division of Oil and Gas
One Natural Resources Way • Springfield, IL 62702-1271
217-782-7756

IL 472-0257 (Rev 6-08)

State of Illinois
Department of Natural Resources

OG-13/23

☒ 13 Tubing and Packer Report ☐ 23 Mechanical Integrity-Pressure Test

Permittee: TRUEFLO SOLUTIONS, LLC Permittee #: 4717

Well Name: TRUEFLO #1 Well Permit #: 204250

County: WHITE Reference #: 216072

Section: 06 Township: 06S Range: 09E

GEOLOGIC NAME AND DEPTHS OF INJECTION ZONES				
1. TAR SPRINGS SS.	from	2394'	to	2400'
2. " "	from	2406'	to	2418'
3. " "	from	2418'	to	2430'
4.	from		to	

WELLHEAD CONFIGURED TO CHECK	Annulus Pressure	YES	NO	Injection Tubing Pressure	YES	NO
PACKER	1 Brand and Type BAKER AD-1 TENSION			Setting 2268'		
	2 Brand and Type			Setting		

IF INJECTION DURING TEST, RECORD WELLHEAD INJECTION PRESSURE AT TIME OF TEST ____ PSIG	PRESENT WELLHEAD INJECTION PRESSURE ____ PSIG

ANNULUS PRESSURE TEST			PASS	FAIL
TIME BEGAN	TIME ENDED	LENGTH OF TEST		
START PRESSURE	FINAL PRESSURE	CHANGE IN PRESSURE		

INSPECTOR COMMENTS: 2-88" PC TUBING.

[redacted]

Inspector Signature

OG-13 Inspection Date 12-18-14
OG-23 Inspection Date

Manager Signature authorizing test/setting if Inspector not Present Date

This state agency is req. ... disclosure of information that is necessary to accomplish the statutory purpose as outlined in the ... Act. ... Failure to ... this information will result in this form not being processed. This form has been approved by the Forms Management Center.

Office of Mines and Minerals — Division of Oil and Gas
One Natural Resources Way • Springfield, IL 62702-1271
217-782-7756

IL 472-0267 (Rev. 8-03) IOCI 0127-39

Conclusion: The Trueflo #1, Reference #216072, meets internal and external integrity requirements of Sections 240.760 & 240.770 as well as the AOR requirements of Section 240.360 of the Department's Oil and Gas Rules.

On August 21, 2017, the Department received a complaint alleging a spill of produced fluids, including possible crude oil and brine water in an intermittent blue line stream located adjacent to, and directly south of, the TrueFlo Solutions, LLC ("TrueFlo") facility, the site of the Trueflo #1disposal well. As of the time of this review, The Department has issued Notices of Violation ("NOV(s)") to TrueFlo for alleged violations observed by OOGRM field staff during the week of August 21, 2017. At this time, however, none of the NOVs have reached a final administrative decision of the Department, and in fact TrueFlo, if determined to be in violation of the the Illinois Oil and Gas Act and associated regualtions, will be afforded the opportunity to abate any violations. The HFRA, and the Department's HVHHF Rules do not address a situation in which an operator of the Class II well listed by a HVHHF applicant as a possible disposal site has pending Notices of Violation concurrent with the Department's review of the HVHHF application. Consequently, the Department does not have authority to deny HVHHF-000001 solely on the premise that TrueFlo has Notices of Violation pending.

Notwithstanding the above, the HFRA requires the Department to determine if an applicant will conduct its HVHHF operations in a manner that will protect the public health and safety, property, wildlife, aquatic life and the environment, as well as prevent pollution or diminution of any water source. In light of the fact that proper disposal of hydraulic fracturing flowback and produced water are intergal to the Applicant's HVHHF operations, and that TrueFlo has pending NOVs, the Department has elected under 62 Ill. Adm. Code 245.320to add conditions to the Applicant's permit to ensure the disposal of the Applicant's hydraulic fracturing flowback and produced water will be conducted in a manner consistent with 62 Ill. Adm. Code 245.300(c)(4). Permit condition number 17 prohibits the Applicant from disposing of hydraulic fracturing flowback or produced water at the Trueflo #1, if, at the time of the disposal, the operator of the TrueFlo #1 is subject to any unabated Notices of Violation which have reached a final administrative decision of the Department or Illinois Environmental Protection Agency or any court decisions related to such a decision. The Permit conditions 18 and 19 will further require the Applicant to provide notice to the Department prior to disposing of any hydraulic fracturing flowback or produced water at the Trueflo #1 in order to afford The Department time to determine if Trueflo has any unabated violations and if condition 17 applies at the time of disposal.

If permit conditon number 17 precludes Applicant from disposing of hydraulic fracturing flow back or produced water into the Trueflo #1, the Applicant will be required to apply for a permit modification adding an additional means of disposing or recycling the hydraulic fracturing flowback and/or produced water prior to performing HVHHF operations on the Woodrow 1H-310408-193.

H. Good Cause Review

62 Ill. Adm. Code 245.300(c)(8): *there is no good cause to deny the permit under Section* 245.310 (Section 1-53(a)(8) of the Act);

62 Ill. Adm. Code 245.310 provides as follow:

In addition to failing to meet the requirements of Section 245.300(c)(1) through (c)(7), *the Department may* also *refuse to issue a high volume horizontal hydraulic fracturing permit for one or more of the following causes* (Section 1-60(a) of the Act):

a) *providing incorrect, misleading, incomplete, or materially untrue information in a permit application or any document required to be filed with the Department* during the permit application process (Section 1-60(a)(1) of the Act);

b) *using 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);

c) *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* (Section 1-60(a)(5) of the Act)*;* or

d) *an emergency condition exists under which conduct of the high volume horizontal hydraulic fracturing operations would pose a significant hazard to public health,* public safety, property, *aquatic life, wildlife, or the environment* (Section 1-60(a)(6) of the Act).

62 Ill. Adm. Code 245.310(a):

The Applicant has supplied the necessary information required to process the application, including supplemental information to clarify or complete the documentation as requested. The Department to date has no evidence that the Applicant has at any time intentionally, negligently, or otherwise provided incorrect, misleading, incomplete, or materially untrue information in the permit application or any document required to be filed with the Department during the permit application process.

62 Ill. Adm. Code 245.310(b):

The Applicant has supplied the necessary information required to process the application, including supplemental information to clarify or complete the documentation as requested. The Department has no evidence that the Applicant has or is, throughout the permit application process, using fraudulent, coercive, or dishonest practices, or demonstrating incompetence, untrustworthiness, or financial irresponsibility in the conduct of business in this State or elsewhere. See the Violations Report review as described in Section V(B)(ii) of this Review Document, as well as Section V(F) above for additional information.

62 Ill. Adm. Code 245.310(c):

See the Violations Report review as described in Section V(B)(ii) of this Review Document as well as Section V(F) above for additional information. The Department contacted other states where the Applicant is known to conduct oil and gas operations. None of the States contacted reported revoking the Applicant's high volume horizontal

hydraulic fracturing permit, or its equivalent, for incurring a material or major violation or using fraudulent or dishonest practices.

62 Ill. Adm. Code 245.310(d):

The Department is not aware of any emergency condition existing under which the conduct of HVHHF operations would pose a significant hazard to public health, public safety, property, aquatic life, wildlife, or the environment. To ensure no State-listed threatened or endangered ("T&E") species or locations would be adversely affected by the Applicant's HVHHF operations, the Department consulted with the Department's Office of Realty and Environmental Planning to determine if any T&E's, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves are the vicinity of the well site and production facilities. A search of the Illinois Natural Heritage Database did not return any reports of T&E's found at the well site or within the applied buffer zone. See EcoCAT Reports for Township 4S, range 8E and Sections 30 and 31. Also, as evidenced by the review conducted under Section V(A), (B) and (C) of this Review Document, the well site and production facility are in compliance with all required setbacks. Neither the well site nor the production facilitates are located in a flood plain or in an area of seismic concern. Further, the Department received no public comments or testimony at the public hearing addressing verifiable emergency conditions existing in the area that would pose a significant hazard if the applicant's HVHHF operations are conducted in accordance with the HFRA, HVHHF Rules, the Oil and Gas Act, and the Oil and Gas Rules.

Conclusion: In light of the above analysis, the Department has determined there is no good cause to deny the permit under Section 245.310 of the Department's HVHHF Rules.

I. Registration and Permitting Procedures Review

62 Ill. Adm. Code 245.300(c)(9): The registration and permitting procedures set forth in Subpart B have been satisfied.

Subpart B of the Department's HVHHF Rules includes the following Sections:

- 62 Ill. Adm. Code 245.200 – Registration Procedures
- 62 Ill. Adm. Code 245.210 – Permit Application Requirements
- 62 Ill. Adm. Code 245.220 – Permit Bonds or Other Collateral Securities
- 62 Ill. Adm. Code 245.230 – Permit Application Receipt and Department Review
- 62 Ill. Adm. Code 245.240 – Public and Governmental Notice by the Department
- 62 Ill. Adm. Code 245.250 – Public and Governmental Notice by the Permit Applicant
- 62 Ill. Adm. Code 245.260 – Public Comment Periods
- 62 Ill. Adm. Code 245.270 – Public Hearings

i. 62 Ill. Adm. Code 245.200 – Registration Procedures

62 Ill. Adm. Code 245.200(a) requires every applicant for a HVHHF permit to register with the Department at least 30 days before applying for a permit, using a registration form provided by the Department.

The Department received Woolsey's registration form on February 8, 2016. The registration was on a form provided by the Department. The Department determined the registration application met all the requirements of 62 Ill. Adm. Code 245.200 and on February 23, 2016, approved Woolsey's registration, and issued them registration number HVHHF-00003. On August 8, 2016, the Department received an updated insurance certificate from Woolsey. On August 24, 2016, the Department received Woolsey's updated registration which was submitted to comply with the requirements of 62 Ill. Adm. Code 245.200(g) which requires all registrants to update their registration information beginning September 1, 2016 and by September 1, of every even numbered year thereafter. Woolsey's registration is currently up to date.

Woolsey's HVHHF application was officially received by the Department on May 22,2017. Therefore, Woolsey's registration was received and approved at least 30 days prior to submitting an HVHHF permit application.

Conclusion: For the abovementioned reasons, the requirements of 62 Ill. Adm. Code 245.200 have been satisfied. See Woolsey Registration Form Received February 8, 2016; Registration Approval Letter from Department to Woolsey Issued February 23, 2016; Woolsey Registration Updated Insurance Certificate Received August 8, 2016; Woolsey Updated Registration Form Received August 24, 2016; Woolsey HVHHF Permit Application Received May 22, 2017.

ii. 62 Ill. Adm. Code 245.210 – Permit Application Requirements

62 Ill. Adm. Code 245.210(a) requires all HVHHF applicants to apply on a form provided by the Department. On May 22, 2017, the Department received Woolsey's HVHHF Permit Application. The application was on forms provided by the Department. The Department initiated review of the application and issued a deficiency letter to Woolsey on June 5, 2017, requesting additional information. On June 15, 2017, Woolsey requested 10-day extension to respond to deficiency letter. On June 19, 2017, the Department approved the extension and set a new deadline of July 3,

2017. On June 21, 2017, Woolsey notified the Department that the public comment period and public hearing would need to be extended due to a clerical error related to the published location of the well. On June 26, 2017, Woolsey waived the 60-day decision deadline found in 62 Ill. Adm. Code 245.300(a) and granted the Department an extension until August 31, 2017, to make a final determination on HVHHF-000001. On June 26, 2017, the Department, in response to the June 5, 2017 Deficiency Letter, received an amended permit application containing supplemental information, including a corrected well location. On August 14, 2017, the Department issued a second deficiency letter requesting additional information from Woolsey to complete the application and respond to common themes and concerns brought up during the public comment period and public hearing. The deficiency letter set a response deadline of August 24, 2017. On August 24, 2017, Woolsey provided response to August 14, 2017 Deficiency Letter. On August 28, 2017, the Department issued an additional Deficiency Letter setting deadline of August 30, 2017, for response. On August 30, 2017, Woolsey provided a response to August 28, 2017 Deficiency Letter via email with a hard copy arriving at the Department on August 31, 2017.

See Section IV(B) of this Review document for a detailed account of the Department's analysis of the requirements found in 62 Ill. Adm. Code 245.210. See also Woolsey HVHHF Permit Application Received May 22, 2017; the Department's June 5, 2017 Deficiency Letter; Woolsey Operating Company, LLC Extension Request Received June 15, 2017; June 19, 2017, the Department's Extension Approval; Woolsey Operating Company, LLC Waiver Received on June 26, 2017; Woolsey Operating company, LLC Supplemental Permit Application Received on June 26, 2017; Woolsey Operating Company, LLC Response to August 14, 2017 Deficiency Letter Received on August 24, 2017; August 28, 2017 Third Deficiency Letter; Woolsey Operating Company, LLC provided response to August 28, 2017 Deficiency Letter received on August 30, 2017.

Conclusion: Per the above analysis, the requirements of 62 Ill. Adm. Code 245.210 have been satisfied.

iii. 62 Ill. Adm. Code 245.220 – Permit Bonds or Other Collateral Securities

Section 62 Ill. Adm. Code 245.220 sets forth the bonding requirements for HVHHF permit applicants. The Department performed an analysis of Woolsey Operating Company, LLC's bond submissions as part of its review of the application's compliance with 62 Ill. Adm. Code 245.210(f). See Section IV(B)(iii) of this Review document for more detailed information on that review.

Conclusion: Per the Department's analysis the Applicant's bonding requirements have been satisfied.

iv. 62 Ill. Adm. Code 245.230 – Permit Application Receipt and Department Review

Section 62 Ill. Adm. Code 245.220 sets forth the requirements for the Department's receipt and review of HVHHF applications.

Woolsey contacted the Department on April 17, 2017, to notify the Department they intended to submit a HVHHF Permit application. On May 18, 2017, the Woolsey HVHHF application arrived at the Department at 2:14 pm. On May 19, 2017, the Department performed a review of the application to determine whether the application was complete. On May 22, 2017, the Department officially received the Woolsey HVHHF application and provided notice to the Applicant that the application was considered received. The notice included: the review number (HVHHF-000001), the date of receipt (May 22, 2017), the dates of the public comment period (May 29, 2017 until close of business on June 27, 2017), and the required public hearing information (July 5, 2017, 11:00 am and continue until 5:00 pm on July 5, 2017, 9:00 am until complete on July 6th, 2017; Enfield United Methodist Church Family Life

Center, Corner of West Main and South Jennette St., Enfield, IL 62835; Daniel P. Schuering). The Department issued a deficiency letter to Woolsey on June 5, 2017, requesting additional information. On June 15, 2017, Woolsey requested a 10-day extension to respond to the Deficiency Letter. June 19, 2017, the Department approved the extension and set a new deadline of July 3, 2017. On June 21, 2017, Woolsey notified the Department the public comment period and public hearing would need to be extended due to a clerical error related to the published location of the well. On June 26, 2017, Woolsey waived the 60-day decision deadline found in 62 Ill. Adm. Code 245.300(a) and granted the Department an extension until August 31, 2017 to make a final determination on HVHHF-000001. On June 26, 2017, the Department, in response to the June 5, 2017 Deficiency Letter, received an amended permit application containing supplemental information, including a corrected well location. On August 14, 2017, the Department issued a second deficiency letter requesting additional information from Woolsey to complete the application and respond to common themes and concerns brought up during the public comment period and public hearing. The Deficiency Letter set a response deadline of August 24, 2017. On August 24, 2017, Woolsey provided response to the August 14, 2017 Deficiency Letter. On August 28, 2017, the Department issued a final Deficiency Letter setting deadline of August 30, 2017, for response. August 30, 2017, Woolsey provided a response to the August 28, 2017 Deficiency Letter via email with a hard copy arriving at the Department on August 31, 2017. On August 31, 2017, the Department issued HVHHF-000001 to Woolsey prior to expiration of the applicable deadline.

See Woolsey 5-Day Notice Received on April 17, 2017; See the Department's notice to Woolsey issued on May 22, 2017; Woolsey HVHHF Permit Application Received May 22, 2017; the Department's June 5, 2017 Deficiency Letter; Woolsey Extension Request Received June 15, 2017; June 19, 2017, the Department's Extension Approval; Woolsey Waiver Received on June 26, 2017; Woolsey Supplemental Permit Application received on June 26, 2017; Woolsey Response to August 14, 2017 Deficiency Letter Received on August 24, 2017; August 28, 2017 Third Deficiency Letter; Woolsey response to August 28, 2017 Deficiency Letter received via email on August 30, 2017 and hardcopy on August 31, 2017; HVHHF Permit Number HVHHF-000001.

Conclusion: Per the above analysis, the requirements of 62 Ill. Adm. Code 245.230 have been satisfied.

v. 62 Ill. Adm. Code 245.240 – Public and Governmental Notice by the Department

Section 62 Ill. Adm. Code 245.240 sets forth the public and governmental notice requirements for the Department. On May 26, 2017, the Department posted notice of its receipt and a copy of the permit application on its website. The notice listed all of the requirements of Section 62 Ill. Adm. Code 245.240(a)(1) through (6). See May 26, 2017 Public Notice.

On May 23, 2017, the Department provided the notices of application to conduct HVHHF operations to: the Illinois Environmental Protection Agency, Illinois Office of the State Fire Marshal, Illinois State Water Survey, Illinois State Geological Survey and, the Egyptian Health Department in Carmi, Illinois, as required by Section 62 Ill. Adm. Code 245.240(b) On May 23, 2017, the Department also served the Office of the State Fire Marshal with the Well Site Safety Plan, Containment Plan and Traffic Management Plan.

Due to the extended public comment period and the rescheduled public hearing, the Department re-noticed the above agencies on June 27, 2017.

On July 21, 2017 and July 31, 2017, the Department published notice of the public hearing in the *Carmi Times* pursuant to 62 Ill Adm. Code 245.240(f).

Conclusion: Per the above analysis, the requirements of 62 Ill. Adm. Code 245.240 have been satisfied.

vi. 62 Ill. Adm. Code 245.250 – Public and Governmental Notice by the Permit Applicant

62 Ill. Adm. Code 245.250 sets forth the public and governmental notice requirements for the permit applicant. Section 245.250(b) requires the applicant to supplement its permit application with a certification and documentation of complying with the Section 245.250(a) requirements no later than 35 days after the Department's receipt of the permit application.

The Department received Woolsey's initial permit application on May 22, 2017. The Department issued a Deficiency Letter to Woolsey on June 5, 2017, requesting additional information. On June 15, 2017, Woolsey requested a 10-day extension to respond to deficiency letter. June 19, 2017, the Department approved the extension and set a new deadline of July 3, 2017. On June 21, 2017, Woolsey notified the Department the public comment period and public hearing would need to be extended due to a clerical error related to the published location of the well. On June 26, 2017, Woolsey waived the 60-day decision deadline found in 62 Ill. Adm. Code 245.300(a) and granted the Department an extension until August 31, 2017, to make a final determination on HVHHF-000001. On June 26, 2017, the Department, in response to the June 5, 2017 Deficiency Letter, received an amended permit application from Woolsey containing supplemental information, including a corrected well location. In response to the corrected well location, the Department extended the public comment period, rescheduled the public hearing, and published a corrected public notice incorporating the material changes. In light of the material changes and amended application, for the purposes of complying with 62 Ill. Adm. Code *et seq.*, the Department considers June 26, 2017 as the permit application received date. On July 31, 2017, the Department received Woolsey's certification of compliance with the Section 245.250(a) public notice requirements within 35 days of the Department's receipt of the June 26, 2017, amended permit application. The certification included documentation of publication of public notice in the *Carmi Times* on June 29, 2017 and July 3, 2017. See July 31, 2017 Woolsey Letter to the Department.

Conclusion: Per the above analysis, the Department had determined the requirements of 62 Ill. Adm. Code 245.250 have been satisfied.

vii. 62 Ill. Adm. Code 245.260 – Public Comment Periods

62 Ill. Adm. Code 245.260 sets forth the rules and procedures for the public comment period upon the Department's receipt of a HVHHF permit application. On May 22, 2017, the Department officially received the Woolsey HVHHF application. On May 26, 2017, the Department posted notice of the Woolsey HVHHF-000001 permit application on its website. The notice included: the dates of the public comment period (May 29, 2017 until close of business on June 27, 2017); the permit review number (HVHHF-000001); and instructions on how the public may submit comments to the Department. The Department issued a Deficiency Letter to Woolsey on June 5, 2017, requesting additional information. On June 15, 2017, Woolsey requested a 10-day extension to respond to the Deficiency Letter. On June 19, 2017, the Department approved the extension and set a new deadline of July 3, 2017. On June 21, 2017, Woolsey notified the Department the public comment period and public hearing would have to be extended due to a clerical error related to the published location of the well. On June 26, 2017, Woolsey waived the 60-day decision deadline found in 62 Ill. Adm. Code 245.300(a) and granted the Department an extension until August 31, 2017 to make a final determination on HVHHF-000001. On June 26, 2017, the Department, in response to the June 5, 2017 Deficiency Letter, received an amended permit application containing supplemental information, including a corrected well location. On June 26, 2017, the Department published a supplemental notice extending the public comment period until July 28, 2017. On August 2, 2017, the Department held a public hearing. On August

4, 2017, the Department posted a public notice on its website announcing a follow-up public comment period would run from 8:30 a.m. on August 4, 2017 until 5:00 p.m. on August 18, 2017.

During the initial public comment period from May 29, 2017 through July 28, 2017, the Department received over 5,500 public comments. A large percentage of these incorporated or were copies of various prewritten public comments generated by various environmental/public interest groups. Department staff reviewed each individual public comment to determine what issues, if any, were discussed. The public comments were then grouped into batches based on common issues. The Department considered all issues, although not all of the issues presented in the public comments were relevant to the review of HVHHF-000001.

Numerous comments related to HVHHF generally. The essence of most of these comments was that Illinois should not allow or promote HVHHF under any circumstances. Many of comments called for the Department, pursuant to its protective and conservationist roles, to "ban" or at least call for a ban on HVHHF, or to declare that there is no safe way to conduct HVHHF.

The Department's principal task related to HVHHF operations is to implement the HFRA via its rules (225 ILCS 732/1-15(e) and 1-130) in accordance with its multiple statutory duties. Pursuant to 225 ILCS 732/1-53(a) and 62 Ill. Adm. Code 245.300(c), the Department **SHALL** issue a HVHHF permit if the application meets all of the requirements of 62 Ill. Adm. Code 245.300(c). It is well-established that a properly promulgated administrative rule or regulation is an expression of legislative policy, and an administrative body cannot, through rulemaking, negate the statute. Therefore, the Department cannot, on its own, create a moratorium or ban on HVHHF activities if a complete and adequate application is submitted. Doing so would be a violation of the HFRA. The Legislature tasked the Department with implementing the HFRA and the Legislature is the only body that can change the HFRA or pass a ban on HVHHF activities within Illinois. Therefore, the Department did not rely upon such comments when making its final permitting decision. In the same vein, comments that merely indicated support of the HVHHF process did not affect the Department's final decision because, similarly, these comments were not relevant to the substantive review of the application itself.

After review of all the public comments, thirteen (13) common, relevant themes were identified:

1) Concerns with the methods identified by the applicant in its Water Source Management Plan to minimize its water withdrawals and the adequacy of the local ground water reserve;
2) Lack of citation to source of ground water measurements included in the Underground Fresh Water Information;
3) Lack of proper information regarding the possible reuse, recycling or disposal of HVHHF fluids and flowback;
4) Concerns with the flowback rate identified by the applicant in its Hydraulic Fracturing Fluids and Flowback Plan;
5) Concerns with the containment described in the Containment Plan and Hydraulic Fracturing Fluids and Flowback Plan;
6) Adequacy of the Applicant's Topsoil Preservation strategy;
7) Seismicity Concerns – induced seismicity and possible damage to the well and related facilities due to seismic activity;
8) Adequacy of the Applicant's bond;
9) The exclusion of "proprietary" chemicals and CAS numbers in the Applicant's Chemical Disclosure Report;
10) Adequacy of the Casing and Cementing Plan;
11) NORM exposure/Radioactive Materials Management Strategy;
12) Adequacy of the Applicant's insurance policy; and
13) An incident which occurred at a vertical well drilled by Woolsey Operating Company, LLC in 2014.

After reviewing all of the properly submitted comments, the Department was able to break them down further into three categories. One, as addressed above, were comments or concerns that were addressed in the original and amended applications. Due to the extended public comment period, some issues that were identified in early public comments were addressed by the Applicant's response to the Department's deficiency letter, prior to the expiration of the public comment period. Second, some comments required DNR to inquire from the Applicant for more information. Finally, there were comments in support and opposition that did not present a reasoned argument past the idea that granting this permit was a "good" or "bad" thing. In its August 14, 2017 Deficiency Letter, the Department requested additional information from the Applicant regarding four areas of public concern namely: Underground Fresh Water Information, the HVHHF Operations Plan, Water Source Management Plan, and Topsoil Preservation. At the public hearing, the Applicant stated it would address concerns that were brought up during the public hearing. It did so in its response to the August 14, 2017 Deficiency letter, by including new chemical disclosure information and MSDS sheets eliminating the "proprietary" designation from certain CAS numbers.

In addition to the first round of comments, the Department received 21 public comments during the follow-up public comment period. The limited purpose of the follow-up public comment period was to allow for public comment on issues raised during the public hearing. The Department reviewed approximately 17 distinct public comments during this period, 16 of which were at least loosely related to the topics discussed at the Public Hearing. One comment was simply a statement in support of DNR issuing the permit. Although additional information was added through these follow-up comments, none presented novel issues with the Applicant's permit application necessitating the Department to deny the permit or request additional information not already in the Department's possession. On consideration of all the public comments and the Applicant's response to them, the Department has determined the application compete and requiring no further information or response by the Applicant.

Conclusion: Per the above analysis, all requirements related to 62 Ill. Adm. Code 245.270 have been satisfied.

viii. 62 Ill. Adm. Code 245.270 – Public Hearings

62 Ill. Adm. Code 245.270 sets forth the rules and procedures for the public hearing to be held upon the Department's receipt of a HVHHF permit application. On May 22, 2017, the Department officially received the Woolsey HVHHF application. On May 26, 2017, the Department posted notice of the Woolsey Operating Company, LLC HVHHF permit application on its website. The notice included: the dates and times of the scheduled public hearing (July 5, 2017, 11:00 am and continue until 5:00 pm on July 5, 2017, 9:00 am until complete on July 6th, 2017; Enfield United Methodist Church Family Life Center, Corner of West Main and South Jennette St., Enfield, IL 62835); the permit review number (HVHHF-000001); and instructions on how the public may submit a public hearing request to the Department. The Department selected Daniel P. Schuering, an Administrative Law Judge employed by the Department of Central Management Services, to serve as the Hearing Officer for the public hearing. The Department issued a deficiency letter to Woolsey on June 5, 2017, requesting additional information. On June 15, 2017, Woolsey requested a 10-day extension to respond to the deficiency letter. On June 19, 2017, the Department approved the extension and set a new deadline of July 3, 2017. On June 21, 2017, Woolsey notified the Department the public comment period and public hearing would have to be extended due to a clerical error related to the published location of the well. On June 26, 2017, Woolsey waived the 60-day decision deadline found in 62 Ill. Adm. Code 245.300(a) and granted the Department an extension until August 31, 2017, to make a final determination on HVHHF-000001. On June 26, 2017, the Department, in response to the June 5, 2017 Deficiency Letter, received an amended permit application containing supplemental information, including a corrected well location. On June 26, 2017, the Department published a supplemental public notice extending the public comment period until July 28, 2017. Due to the modified public comment period, the Department's public notice also included the rescheduled public hearing dates of August 2 and 3, 2017 in the same location. By the end of the public comment period, the Department referred a total of nine possible hearing requests to Hearing Officer Schuering (one appeared to be a duplicate leaving 8 distinct requests). Hearing Officer Schuering issued two written determinations on the adequacy

of the public hearing requests. Hearing Officer Schuering determined three of the eight distinct requests met the standards set forth in 62 Ill. Adm. Code 245.270. The Public Hearing was held on August 2, 2017 at the previously listed location.

Prior to the start of the public hearing on August 2, 2017, attorneys representing the Department, the requestors and the Applicant convened a pre-hearing conference. During the conference, it was decided a fourth requestor would be allowed to provide testimony. One of the three original requestors failed to appear at the hearing, so only three requestors offered oral testimony. After the public hearing, on August 4, 2017, the Department posted a public notice on its website announcing the follow-up public comment period scheduled to run from 8:30 a.m. on August 4, 2017 until 5:00 p.m. on August 18, 2017. On August 11, 2017, Hearing Officer Schuering issued his Recommended Findings.

As part of its review of HVHHF-000001, the Department considered the testimony provided at the public hearing as well as the Hearing Officer Schuering' s Recommended Findings. Much of the testimony was related to information previously provided to the Department in the application or during the public comment period. Please see Section IV(H)(vii) above for analysis of the common themes that were discussed during the public comment period. See also August 11, 2017 Hearing Officer's Recommended Findings.

Conclusion: Per the above analysis, the Department has satisfied the requirements of 62 Ill. Adm. Code 245.270.