

To: Thomas Donohue, P.G. TD 5/8/24
Subsurface Permits Environmental Program Manager
District Oil and Gas Operations

From: Susan Price, P.G.
Professional Geologist Manager
Northwest District Oil and Gas Operations

Date: May 8, 2024

Re: Record of Decision
UIC Class II Disposal Well Application
PA Well Development, LLC
David A. Weaver #1, API #065-27128
Jefferson County, Young Township

I. Background

On December 19, 2023, PA Well Development, LLC (PA Well Development), submitted an application to the Pennsylvania Department of Environmental Protection (DEP, or Department) to drill a new well (David A. Weaver #1 well, API Permit Number 37-065-27128) to be used as a Class II-D commercial disposal injection well (Injection Well). In accordance with 25 Pa. Code §78.18, the Injection Well application consists of a well permit application to drill and operate a conventional well (CDOW); an Erosion and Sedimentation Control (E&S) Plan; a Control and Disposal (C&D) Plan, a Preparedness, Prevention, and Contingency (PPC Plan); a Seismic Monitoring and Mitigation (SMM) Plan; the application submitted to the U.S. Environmental Protection Agency (EPA) for a Class II-D Underground Injection Control (UIC) Permit; and the issued EPA UIC Permit Number PAS2D060BJEF.

The location of the proposed well is in Young Township, Jefferson County. Location coordinates for the Injection Well are: Latitude 40° 57' 55.38" and Longitude -78° 59' 23.12". The 911 address is: 1777 Byer Street Extension, Punxsutawney, PA 15767. David A. Weaver is the surface landowner and PA Well Development is the well operator. The Application proposes to drill a well to the Oriskany Formation to dispose of fluid associated with oil and gas production into this formation at a subsurface interval between approximately 7,236 to 7,256 feet below surface elevation.

No objections or comments pursuant to Sections 3212(a) and §3212.1 of 58 Pa.C.S. Sections 3201-3274 (relating to Development) (“2012 Oil and Gas Act”) have been received concerning this proposed well.

II. Application Review

The application for PA Well Development’s David A. Weaver #1 well was reviewed with consideration of applicable sections of the 2012 Oil & Gas Act; the Oil & Gas Conservation Law; 25 Pa. Code Chapters 78, 91, 102 and 105; “Guidelines for the Development and Implementation of Environmental Emergency Response Plans” program manual; and other relevant sources.

This document summarizes the primary portions of the Department’s review, including a CDOW review, E&S Plan review, C&D Plan review, geologic review (including the SMM Plan) and a mechanical integrity review.

- CDOW Review:
 - The CDOW application consists of operator-answered questions, notifications to interested parties, a Well Location Plat, a Pennsylvania Natural Diversity Index (PNDI) search receipt, and a non-coal justification.
 - The application was reviewed by a DEP Licensed Professional Geologist who reviewed and analyzed answers to the operator-answered questions; reviewed the notifications to interested parties, the Well Location Plat, the PNDI, and the non-coal justification; and confirmed all information with Department records.
 - The CDOW application is complete and is in accordance with all applicable statutes and regulations in the 2012 Pennsylvania Oil & Gas Act, the Oil & Gas Conservation Law, and 25 Pa. Code Chapter 78.

- Erosion and Sedimentation (E&S) Plan Review:
 - The E&S Plan conforms with applicable regulations in the 25 Pa. Code §§ 102 and 78.53; Chapter 105 is unrelated to activities at this site. The plan was reviewed by a DEP Water Quality Specialist Supervisor (WQSS), who determined the plan, when implemented, will be adequate to minimize

accelerated erosion and potential sediment impacts to surface waters of the Commonwealth. See attached “Review of E&S and C&D Plans for PA Well Development LLC” memorandum dated April 5, 2024, for additional detail.

- Control and Disposal (C&D) Plan Review:
 - The C&D Plan, also named Preparedness, Prevention, and Contingency (PPC) Plan, conforms with the Department’s “Guidelines for the Development and Implementation of Environmental Emergency Response Plans” manual, and applicable regulations in 25 Pa. Code, Chapter 78. The plan was reviewed by a DEP Water Quality Specialist Supervisor. See attached “Review of E&S and C&D Plans for PA Well Development LLC” memorandum dated April 5, 2024, for additional detail.

- Geologic Review and Seismic Monitoring and Mitigation Plan Review:
 - The Department conducted a geologic review in accordance with 25 Pa. Code, Chapter 91.51, which considered stratigraphy and geologic structures to investigate potential pathways for injected fluids to reach water supplies or basement rock. The Department’s geologic review revealed no evidence of potential pathways for injected fluid to reach water supplies or basement rock, and it is improbable injection of fluids would be prejudicial to the public interest. No gas storage areas exist within the area of review. Due to the historical Walston #2 mine, there is the potential for a mine void in the Lower Freeport Formation at this location. 25 Pa. Code, Chapter 78.83(h) requires specific coal protective casing and cementing procedures when coal has been mined. A permit note regarding the mine void is recommended (See geologic review memorandum Appendix B). For these reasons and the reasons set forth in the Department’s geologic review memorandum, the Department concludes the location of the proposed disposal well makes it a suitable candidate to handle injection fluids.

 - Well permit conditions will address seismic monitoring and mitigation (See geologic review memorandum Appendix A).

- Mechanical Integrity Review:
 - The applicant is requesting a permit to drill a new well. Once the David A. Weaver #1 well is drilled, the well will need to meet the mechanical integrity requirements within 25 Pa. Code §78 and the requirements within the EPA permit. Mechanical integrity special permit conditions (Appendix A) are also recommended for the DEP permit to monitor mechanical integrity of the well.
 - The Casing and Cementing Plan for the David A. Weaver #1 well was reviewed by a DEP Oil and Gas Inspector (OGI) and it conforms with the casing and cementing requirements of 25 Pa. Code §78 and 25 Pa. Code §79.
- USEPA Class II-D UIC Permit Application and Issued Permit Review:
 - The EPA application and issued permit were reviewed for completeness and consistency with applicable Pennsylvania laws and regulations. The issued EPA Class II-D UIC Permit Number PAS2D0060BJEF was effective as of November 13, 2023 and expires July 25, 2033.

III. Summary

The Department has determined the application and project meets all applicable statutes, regulations, and guidance manuals relating to permitting of a disposal well in Pennsylvania. The Department concludes that underground disposal into the PA Well Development, David A. Weaver #1 well would be for an abatement of pollution by providing a lawful alternative to other disposal options that have greater risk to the public. PA Well Development's proposed operation is sufficient to protect surface water and water supplies, and it is improbable that disposal into the David A. Weaver #1 well would be prejudicial to the public interest. I recommend issuance of API# 065-27128, located in Young Township, Jefferson County with special conditions attached to the permit. All documents related to this application and review will be kept in the well permit file #065-27128.

IV. Appendix A

Mechanical Integrity Special Permit Conditions

- Permittee shall submit/provide a stimulation & treatment plan to the Department for review thirty (30) days prior to implementation of stimulation or treatment.
- The permittee shall provide to the Department, on a monthly basis, an electronic and graphical record of injection pressures, annular pressures, injection rates, injection volumes and cumulative volumes in a format acceptable to the Department. All pressures and rates shall be monitored continuously with digital devices. The permittee shall maintain records of this information for review at the request of the Department on a 12-month rolling basis.
- The permittee shall provide notice to the Department prior to the initial injection of fluids into the disposal well, so the Department can conduct an inspection of the well site, seismometer and recorder.
- Documentation shall be provided to the Department demonstrating compliance with Part II(D)(2)(a) of the EPA UIC Permit, prior to commencing injection when the documentation is submitted to the EPA.
- Permittee shall notify the Department's Oil & Gas Inspector verbally within twenty- four (24) hours and the Department's Program Manager in writing within seven (7) days when conditions indicate mechanical integrity problems that call for injection to cease under Part II.C of the EPA UIC Permit.

Other Conditions

- This permit is conditioned upon the existence of the Class II-D disposal Injection Well U.S. EPA permit #PAS2D060BJEF, issued November 13, 2023 ("EPA UIC Permit") and any revision or modification to this permit, and the well's operation as a disposal well. Permittee shall submit to the Department a copy of any EPA revised or modified permit and the approved application materials submitted to EPA for the revision or modification.
- Permittee shall submit the annual monitoring report to the Department pursuant to 25 PA Code §78.125 when the reports are submitted to the EPA.

Attached: Special Conditions for PA Well Development – David A. Weaver #1 (065-27128)
Geologic Review of Proposed Disposal Well memorandum
Erosion and Sedimentation and Control and Disposal memorandum
Casing and Cementing memorandum

cc. File (# 065-27128)