pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

January 10, 2023

Mr. Richard Watson
Project Manager
PennEnergy Resources, LLC
600 Cranberry Woods Drive, Suite 250
Cranberry Township, PA 16066

RE: PennEnergy Resources, LLC
B50 Temporary Aboveground Waterline Joint Permit Application
E0407222-001; APS # 1058722
Technical Deficiency Notice

Dear Mr. Watson,

The Department has reviewed PennEnergy Resources' November 04, 2022 response to the Department's September 15, 2022 deficiency notice and has identified the following outstanding deficiencies. The following list specifies the items which should be included in the resubmittal of your registration and/or the submission of additional information.

1) Module S1.A. states that the surface intake will be removed from the stream and floodway during inactive periods. The current condition of the stream bank of Big Sewickley Creek at the proposed withdrawal location is highly eroded. Explain how the stream bank will be protected during the installation and removal of the intake and/or outline the necessary measures that may be necessary to protect the stream bank including the identification of any necessary permits. The installation and removal of the intake should not cause an increase in sediment and or turbidity within Big Sewickley Creek. 25 Pa. Code §105.2; §105.14 (b) & (c); §105.46; §102.4

2) The narratives within Module S2.C, Module S3.D.2, and Module S3.D.3 outline that the proposed water withdrawal will be temporary in nature and will consist of a floating, screened, surface intake system, which will pull water from just below the surface, avoiding disturbance to the stream bottom. This is important, as any increase in sediment and turbidity within the watershed is a threat to aquatic life. The proposed Megator, 6 inch dolphin strainer manufacturer's specifications list the intake to be 19 inches tall. The current intake cross-section shows the normal pool depth as 36 inches, which is reflective of the max pool depth of 36 inches listed within the Stream Survey Data Collection Form ("Data Collection Form") for Big Sewickley Creek (Stream 3). Within the same Data Collection Form the wetted width is only listed as 4 to 12 inches. The data as presented is inconsistent. Please address the following comments in order to justify that the intake will remain floating and not cause disturbance to the stream bed. 25 Pa. Code §105.13 (e)(1); §105.14 (b) & (c); §102.11(a)

a. Provide the surveyed ground (stream bed bottom) elevation of Big Sewickley Creek at the proposed withdrawal location.
b. Provide a justification that the delineated max pool depth is an adequate representative of the normal pool depth of Big Sewickley Creek. The actual normal pool depth should be reflected.
c. In addition to the normal pool level, update Cross-section A-A to show the water elevations associated with the required flow rates (i.e. 8.8 and 13.1 cfs) for the full withdrawal rate to occur.
d. Show the actual dimensions of the dolphin intake(s) that will be utilized during withdrawals.
e. Document that the water elevations at various flows is of sufficient depth for a withdrawal to occur without stream bed disturbance. Specifically, the location of the intake structure, normal pool depth at that location, 30 % average daily flow pass by, 50% average daily flow pass by, and the depth of the intake structure should be evaluated so that stream bed disturbance is minimized. It is suggested that the PA Fish and Boat Commission's Recommendations Surface Water Intake Design Criteria to Reduce Aquatic Species Impacts be followed as it relates to habitat selection.
f. Provide a stream profile through each of the seven (7) intake structure locations clearly depicting that each individual intake structure is suspended at a sufficient depth for a withdrawal to occur and that no streambed impacts will occur.

The PA Fish and Boat Commission (PBFC) also noted the inconsistencies in pool levels on September 27, 2022, when water levels present at the withdrawal location were stated to only be six inches; that the cross-section of Big Sewickley is changing, and that there may be times that the proposed floating intake exceeds the depth of water of Big Sewickley Creek. Please evaluate the notations of the PBFC in your analysis and when updating the Operations Plan intake profile.

3) Module S1.B.1. and Module S3.F.1 within the JPA application states that the B50 well pad does not have a meaningful freshwater storage facility and therefore a withdrawal rate of 1.5 MGD at Big Sewickley Creek is needed to fully develop the B50 well pad. Within the November 4, 2022 JPA response, PennEnergy (PE) states that a trucking terminal with freshwater storage will be constructed a mile from the B50 well pad as a supplemental and contingency measure for well development on the B50 well pad. PennEnergy proposes to utilize existing WMP sources and proposes to truck water to the facility.

Section S3.F.3.4 of the alternative analysis fails to fully address the trucking terminal aspect now associated with the development of the B50 well pad.

As this proposed trucking terminal with freshwater storage may impact the volume of water proposed for withdrawal from Big Sewickley Creek, Penn Energy should revisit and revise its alternative analysis accordingly. In doing so, Penn Energy should consider the following 25 Pa. Code §105.13 (e)(1)(viii); §105.14 (a)

a. Penn Energy proposes to utilize existing WMP Sources. These sources should be identified.;

b. The proposed storage capacity at the trucking facility should be identified to demonstrate that the trucking facility will be able to fully support the well development of the B50 well pad (either as a supplemental source or contingency source) if an adequate volume of water is not available at Big Sewickley Creek.; and
c. Penn Energy should provide an adequate justification of the total allocation necessary from Big Sewickley Creek. Please be sure that any revisions to the alternative analysis addresses whether the allocation from Big Sewickley Creek can be reduced with the operation of the trucking facility, as supplemental sources are proposed to be used.

4) The ESCGP-3 Permit drawings depict the waterline as a 12-inch above-ground waterline. Update all drawings to show where the high-density polyethylene (HDPE) and plastic lay flat sections of waterline will be installed. 25 Pa. Code §105.13 (e)(1) (i)

5) Because project plans have changed for the B50 Temporary Aboveground Waterline since the August 23, 2021, and August 05, 2022, letter from the PA Fish & Boat Commission (PFBC), please reinitiate consultation with PFBC and provide an updated PNDI clearance letter. Please ensure that correspondence from the PFBC addresses the recent PNDI Search ID #748039 (Date of Review: 10/10/2022), which was included in the ESCGP-3 application package. §105.14(b), 102.6(a)(2)

6) Please revise the figures (i.e. Site Location Map, Resource Identification Map, Rapid Assessment Protocol Map, Site Plan, etc.) as necessary to reflect the changes in the Project Area. 105.13(e)(1), 105.13(g), 102.11(a)

7) Because the B50 Temporary Aboveground Waterline was amended to include additional ground-disturbing activity, please reinitiate consultation with PHMC as indicated in the letter dated February 3, 2022. §105.14(b)(5)

8) In the Channel Flow Calculations and the Riprap Channel Design Data worksheet of the E&S Plan narrative, please reevaluate the flow depth above stone and the calculated shear stress for both sections of Channel 1. Please note that the method referenced on page 133 of the E&S Manual only considers void space in the bottom of riprap channels, and ignores side slopes of the channel. Please verify that the appropriate design method is used and ensure that the proposed protective channel linings will be adequate, and revise the application as necessary. 105.13(g), §102.4(b)(5)(viii), §102.11(a)

9) It appears that the area of "Existing Unpaved Roadway" in the vicinity of Big Sewickley Creek has different boundaries than previous sets of plan drawings. Please verify that the boundaries of "Existing Unpaved Roadway" provided on the current plan drawings are accurate, and provide an explanation for any changes to the "Existing Unpaved Roadway" boundaries compared to previously submitted plan drawings. 105.13(e)(1), 105.13(g), §102.11(a), §102.4(b)(5)(ix), §102.8(f)(9)

10) On Sheet 3 of the plan drawings, please evaluate the need for a rock filter before the outlet of Channel 1. 105.13(g), 102.11(a), §102.4(b)(5)(ix)

11) Please clearly identify any areas of tree removal within 100 feet of perennial or intermittent streams. Please clearly identify any measures for minimizing impacts to wooded areas within 100 feet of perennial or intermittent streams. If it is demonstrated that there are impacts to riparian forest buffers that are not practical to avoid for the proposed project, please evaluate the feasibility of restoration plantings of native tree species and/or shrubs in the impacted riparian forest buffers and revise the plan drawings to reflect restoration plantings to the extent practical. §105.1, §102.8(b)(1), (5), and (8); §102.8(f)(9)

12) Please reevaluate the match line between Sheet 3 and Sheet 4 of the E&S Plan drawings and ensure that all BMPs (i.e. compost filter sock) are shown and labeled on the plan drawings. 105.13(e)(1), 105.13(g), 102.11(a)

13) Sheet 7 of the plan drawings shows a "Gravel Access to Remain" area off of Cooney Hollow Road that is larger than the footprint of the pre-development access road. If an increase in gravel/impervious area is proposed for the B50 Temporary Above-Ground Waterline Project, then please provide stormwater management BMPs and supporting calculations as necessary to demonstrate that post-construction stormwater runoff (rate, volume, and water quality) will be managed consistently with the requirements of 25 PA Code § 102.8 and ESCGP-3, and revise the application package as necessary. 105.13(e)(1), 105.13(g), §102.6(a)(1), §102.8

14) Item 2.e of the Response to Technical Deficiency Comments letter dated November 4, 2022 states "A note has been added to Drawing RC-01 indicating that any sediment deposited on Cooney Hollow Road as a result of the open cut road crossing should be cleaned immediately following completion of the open cut or at the end of each work day if work is not completed in one day.", but the referenced note was not found on Sheet RC01. Please ensure that the plan drawings clearly indicate all measures to limit the deposition of sediment on Cooney Hollow Road, as well as provide for sediment removal from Cooney Hollow Road as necessary. 105.13(g), §102.11(a)

Please note that this information must be received within sixty (60) calendar days from the date of this letter, on or before March 11, 2023, or DEP will consider the registration withdrawn.

If you have questions about your registration, please contact me at 412-442-4043 and refer to Application No. E0407222-001; APS No. 1058722.

Thank you.

Sincerely,

Samantha Lutz
Aquatic Biologist