

January 4, 2021

Mr. Matthew Gordon Sunoco Pipeline, L.P. 535 Fritztown Road Sinking Springs, PA 19608

Re: Pennsylvania Pipeline Project (PPP)/Mariner East II
Restart Request and Permit Amendment Requirements for HDD S3-0290
Minor Amendment - Chapter 102 Permit No. ESG 01 000 15 001
Major Amendment - Chapter 105 Permit No. E15-862
Supporting Geotechnical Analysis and Data
Upper Uwchlan Township, Chester County

Dear Mr. Gordon:

This letter is in reference to the request to restart horizontal drilling (HDD) operations at the S3-0290 drilling site. The request submitted by your consultant and received by the Pennsylvania Department of Environmental Protection (DEP) on November 23, 2020 included minor permit modifications for Chapter 102 Permit No. ESG 01 000 15 001 and Chapter 105 Permit No. E15-862. These modifications were based on the request to use an unconventional pressure relief point (UPRP) within wetland WL-H17 during the proposed drilling.

It was conveyed in a meeting held on December 21, 2020, that the drilling restart and permit amendment requests that need to be re-submitted are: (1) a minor 102 amendment; (2) a major 105 amendment; and (3) geotechnical studies supporting the resumption of the proposed HDD activities at the site. Per your request at the meeting, the following are the minimum requirements for the submission of this request.

102 – Minor Permit Amendment Request

- This must be a stand-alone submission.
- The minor amendment for the ESCGP-3 should follow the checklist in the Chapter 102 Permit Amendment FAQ available on the Department's website:
 <a href="https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater-W
- The application should be made to DEP SERO, including applicable DEP fees, for completeness review and when determined to be complete, the submission and applicable fees should be sent to the Chester County Conservation District.

105 – Major Permit Amendment Request

- This must be a stand-alone submission.
- Submit an Alternatives Analysis (AA) that considers all measures to prevent another IR and avoids using the wetland as the unconventional pressure relief point. Such measures should include the discussion of alternative locations and methods to achieve the purpose of pressure relief. Additional geotechnical testing and analysis may be required.
- Submit an estimate of drilling fluid still in ground and the likelihood that this fluid may be the source of another IR once drilling should occur.
- Submit an analysis of the stability of the adjacent pond's dam.
- Submit a description of the flow of the spring that originates in the formation where the IR occurred including a determination that flow can be maintained to support the wetlands during and after construction.
- Other items to include in the Major Amendment:
 - o Fees
 - o Act 14 notifications
 - o Project description & project purpose
 - o Complete and cleared PNDI including PAFBC consultation
 - o Items listed in 105.13(e), (g), (h) and (i)

Supporting Geotechnical Data

Supporting geophysical data and analysis is required to delineate zones of structural weakness in the rock that have contributed to HDD-induced subsidence features. This should include an interpretation by a licensed professional geologist of subsurface anomalies near the southeastern section of the HDD alignment.

The analysis should be accompanied with a detailed, site-specific description of the structural nature of the underlying bedrock and analysis of fracture zones. At a minimum, resistivity, seismic, and gravity methods should be utilized to fully delineate the location, orientation and extent of fractures and any other subsurface anomalies down to the depth of the bore.

If you have any questions, please contact me at the telephone number located in the first page footer.

Sincerely,

John Hohenstein, P.E.

Environmental Program Manager

Waterways and Wetlands

cc: Chester County Conservation District

Upper Uwchlan Township

Army Corps of Engineers - Philadelphia

Mr. Bryan, Energy Transfer

Mr. Embry, Energy Transfer

Ms. Styles, Energy Transfer

Mr. Simcik, TetraTech

Mr. Prosceno, TetraTech

Mr. Schaeffer, TetraTech