

April 19, 2018

Mr. Matthew Gordon  
Sunoco Pipeline, L.P.  
535 Fritztown Road  
Sinking Spring, Pennsylvania 19608

Re: Hydrogeological Re-Evaluation Report  
Piney Creek Crossing Horizontal Directional Drill Location (S2-0142)  
Permit No. E07-459  
Woodbury Township, Blair County

Dear Mr. Gordon:

The Department of Environmental Protection (DEP) is requesting Sunoco Pipeline, L.P. (Sunoco) to provide information to address the following comments related to the Horizontal Directional Drill (HDD) Analysis for the Piney Creek Crossing Horizontal Directional Drill Location (S2-0142), E07-459, posted on the DEP's Mariner East II pipeline portal webpage on March 8, 2018.

1. Sunoco has proposed to use Drilplex as a component of this HDD. Drilplex is not an approved horizontal directional drilling fluid additive listed on the Department's web site. If Sunoco intends to use a drilling fluid additive for this HDD, it must use an approved drilling fluid additive listed on the Department's web site. Please revise the re-evaluation to address this issue.
2. With respect to the annular pressure and formation pressure capacity curves (APC/FPC) and narrative discussion used to produce the curves that was requested in DEP's February 1, 2018 letter for this HDD Re-evaluation, DEP offers the following summary and requests the following information:
  - There are many discrepancies between the stationing and elevations on the revised plan/profile maps and the APC/FPC curves and soil profiles, and even among the various tables used to create each curve.
  - It appears that DPS underestimated the soil thickness, thereby overestimating the bedrock thickness, as shown by differences between the soil thickness used in the FPC curve calculations and what was determined from the geophysical surveys.
  - It appears that DPS calculated a drill path where annular pressure clearly exceeds the total stress of the overburden at places along the drill path.
  - DEP requests that SPLP re-examine the above, revise the re-evaluation accordingly, including new APC/FPC curves and as appropriate, new drill paths/profiles.

If you have additional questions or would like to schedule a meeting or call with DEP to discuss this re-evaluation, please contact me at 717.705.4799 or [scwilliams@pa.gov](mailto:scwilliams@pa.gov) or Mr. Ed Muzic at 717.705.4765 or [emuzic@pa.gov](mailto:emuzic@pa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Scott R. Williamson". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Scott R. Williamson  
Program Manager  
Waterways & Wetlands Program

cc: Douglass J. Hess, P.G., RETTEW  
Larry Gremminger, (via email)  
Tim Long, P.G., PADEP (via email)