

April 23, 2019

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

Re: Hydrogeological HDD Re-Evaluation Report
Appalachian Drive 16" Horizontal Directional Drill Location (S2-0240-16)
Permit No. E21-449
Middlesex Township, Cumberland County

Dear Mr. Gordon:

The Pennsylvania Department of Environmental Protection (DEP) is requesting more information from Sunoco Pipeline, L.P. (SPLP) related to the HDD Re-Evaluation for the Appalachian Drive site, HDD# S2-0240-16 and permitted under Permit E21-449, posted on the DEP Mariner East II pipeline portal webpage on March 5, 2019.

1. Relating to the overall Geologic and Hydrogeologic Summary and Report:
 - a. Provide further explanation about how the proposed guided bore, at a shallower profile depth will minimize the potential for inadvertent returns (IRs), sinkhole formation, and impacts to water supplies.
 - b. Describe the type of HDD equipment that will be utilized to drill the pilot hole for the proposed guided bore.
 - c. Will the equipment proposed for the guided bore be mud rotary or air rotary tooling?
 - d. Please clarify the statement "The Pinesburg Station Formation is unimportant as a source of water." The report this statement was taken from makes the statement about finding large quantity, high yielding wells but there are still numerous wells drilled and completed in the Pinesburg Station Formation. Such information suggests, and the DEP reviewer agrees, that it is an important source of water for private water supply wells located in the areas underlain by the Pinesburg Station Formation.
2. Relating to the geophysical investigations:
 - a. During the installation of the 20-inch HDD, a geophysical survey with electrical resistivity, microgravity and ground penetrating radar (GPR) was completed for specific areas. However, these areas of geo-physical investigations were not shown on any plans or mapping or discussed within the re-evaluation report. Where were these areas? Was a geophysical survey completed on the area where the "guided bore" is being proposed? If not, we strongly recommend that a geophysical survey be completed for the "guided bore" (HDD pilot) portion of the 16-inch pipeline redesign or a provide adequate justification for why geophysical surveys will not be done at this portion of the Appalachian Drive site.

- b. The Geology Report states that Attachment 4 contains the geophysical survey. Attachment 4 was not included in the Geology Report submitted to the Department. Please provide Attachment 4.
3. Relating to the Analysis of Well Production Zones and use of information obtained during construction of the 20-inch pipeline;

The re-evaluation report fails to include an evaluation of the data and information collected for the private water supplies within 450 feet of the proposed guided bore or those water supplies that are in the vicinity of the proposed guided bore (such as the water supplies located along the proposed open-cut section of this site). It is also unclear whether any of the private water supplies identified within 450 feet are the same as any of the water supplies within 0.5 miles that were identified from the PaGWIS database.

In addition, Figure 3 of the Geology Report shows two wells in the vicinity of the 16-inch "guided bore" (PA Well ID 97976 and PA Well ID 98290). Attachment 3 of the Geology Report does not list or show these two wells. Please locate these two subject wells on Attachment 3 Supplemental Water Supply Information.

Any private or public water supply data obtained within 450 feet or otherwise obtained in the vicinity of the 20-inch or proposed 16-inch HDD should be used and discussed as part of this HDD re-evaluation. This data should include but not be limited to any applicable water supply sampling data and any water supply complaints that SPLP may have obtained and received for water supplies within 450 feet of the HDD or within the general vicinity during construction of the 20-inch pipeline. The results of the SPLP's water supply sampling program, investigation, disposition of the complaint, and any correlation or non-correlation to SPLP's construction activities should be evaluated and discussed in the HDD re-evaluation report. Use the report to demonstrate how the proposed 16-inch HDD activity will minimize the potential for IR's and impacts to water supplies. Please revise the re-evaluation report to include this information.

Upon receipt, DEP will post SPLP's response to this letter on the DEP pipeline portal webpage for public comment. The public will have 5 additional business days from the date of posting on the website to provide DEP any additional comment.

If you have any questions or would like to discuss this letter, please contact me at scwilliams@pa.gov or 717.705.4799.

Sincerely,



Scott R. Williamson
Program Manager
Waterways & Wetlands Program

cc: Larry Gremminger, Energy Transfer Partners/Sunoco Pipeline, L.P. (pdf copy)
Monica Styles, Sunoco Pipeline, L.P. (pdf copy)
Doug Hess, P.G., Skelly and Loy
Blair County Conservation District (pdf copy)