

December 4, 2017

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

Re: Hydrogeological Re-Evaluation Report
East Swedesford Road, Horizontal Directional Drill Location (S3-0381)
PA DEP Permit No. E15-862
West Whiteland Township
Chester County

Dear Mr. Gordon:

The Department of Environmental Protection (DEP) has examined the above-referenced Hydrogeological Re-Evaluation Report (Report) and is requesting more information related to the HDD Analysis for the East Swedesford Road, Horizontal Directional Drill Location (S3-0381), DEP Permit No. E15-862, posted on DEP's Mariner East II pipeline portal webpage on November 3, 2017.

1. Provide additional information on the "flex bore" proposal:
 - a. Will the pilot phase involve a flex bore set-up or a regular HDD set-up? The provided analysis was not clear.
 - b. Will the pilot phase include any type of lubricants or additives? If so, please describe and explain and include, where applicable, MSDS sheets for any such substances.
 - c. Will the high-pressure air and water used in "flex bore" lead to a higher risk of discharges of any kind at the surface, when compared to regular HDD, including, specifically, during higher risk work, including the pilot drilling and in the vicinity of entry/exit points?
 - d. Has Sunoco done any studies regarding the geology and/or this proposed technology to determine the suitability of "flex bore" at this location (i.e., geophysical studies, etc.)? Please explain and detail any such studies and explain how they factored into the reevaluation and how they demonstrate that "flex bore" is suitable for this location.

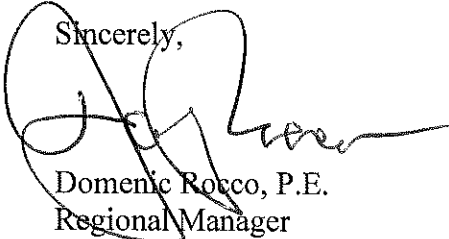
- e. Provide a specific detail on how the “flex bore” unit will be set up at the exit/entry points, including any necessary bore or “relief” pits.
 - f. Explain additional measures Sunoco is proposing to implement during “flex bore” operations to address any threats to the environment, public health, or water supplies that may arise from such operations. DEP recommends protocols at least as protective as what was done for the pullback work at HDD 290.
2. Explain what alternatives have been considered, aside from the Pipeline Infrastructure Task Force (PITF) recommendation of co-locating the route. Particularly, what alternatives (including alternative routing) have been considered to avoid or minimize impacts to residential areas, woodlands, and surface waters such as S-B79 and S-B81, and including wetlands such as B71? Additional stream or wetland impacts will need a separate permit modification request to both DEP and ACOE that specifically meet the regulatory requirements.
 3. Provide additional information on studies conducted and/or measures taken to specifically address concerns with potential impacts to private water supplies, including an explanation of how the implementation of such measures will avoid or minimize the risk of private water supply impacts.
 4. Provide proof that SPLP has complied with the “Adjacent Features Analysis” part of the Report providing that “[i]f any landowner with the 450 ft HDD radius fails to respond, agents for SPLP will initiate direct contact by phone or in person to engage the owners for a determination of potable water source,” and explain how such measures satisfy the “analysis of well production zones” provisions of paragraph 4.ii. of the August 10, 2017, Corrected Stipulated Order (“Order”), alone, or in combination with, other measures detailed in your response.
 5. Detail the measures undertaken in the reevaluation to ensure that issues SPLP has experienced with the operation of HDDs, including inadvertent returns, and impacts to private water supplies in West Whiteland Township, have been adequately considered and addressed by Sunoco, in conducting its reevaluation, and explain how these measures comply with the provisions of paragraph 4 of the Order.
 6. The Report indicates that Karst geology is present in the area. Detail the measures undertaken to ensure that the proposed alternative from the reevaluation of “flex bore” and open cut will not result in sinkholes, and how these measures comply with paragraphs 4.iii. and iv. of the Order.
 7. The Report concludes that “[a] geophysical study is required to determine the extent of karst development along the profile of HDD S3-082, especially in light of installation

challenges that are being experienced at HDD S3-400 due south of HDD S3-082, including excessive groundwater discharge; loss of fluids, with no IRs to date; and difficulties steering the pilot hole.” Explain why no geophysical study has been conducted. Further explain how SPLP can, in the absence of a geophysical study, proceed with the methods proposed in the reevaluation without adversely impacting public or private water supplies, resulting in returns or loss of returns of drilling fluids, or causing other adverse environmental impacts, including impacts to water resources such as streams, groundwater, or wetlands.

8. The Report concludes that “[t]he risk of losing drilling fluids, of IRs, of groundwater flowback discharges and of lowering the local water table could not be assessed given the available information.” Explain why such information was not obtained as part of the reevaluation. Further explain how SPLP can, in the absence of such information, proceed with the methods proposed in the reevaluation without adversely impacting public or private water supplies, resulting in returns or loss of returns of drilling fluids, or causing other adverse environmental impacts, including impacts to water resources such as streams, groundwater, or wetlands.

If you have any questions regarding this matter, please contact me by e-mail at drocco@pa.gov or by telephone at 484.250.5174.

Sincerely,



Domenic Rocco, P.E.
Regional Manager
Waterways and Wetlands

cc: Mr. Wardrop, P.G. – GES
Chester County Conservation District
Re 30 (GJS17WAW)334