

**DEP Permit # E21-449**  
**DEP Permit HDD Reference # PA-CU-0062.0000-WX-16**  
**DEP HDD # S2-0170**  
**Township – Lower Frankford**  
**County - Cumberland**  
**HDD Site Name – Graham Creek Crossing**

**2<sup>nd</sup> Public Comment Period**

<b>Commentator ID #</b>	<b>Name and Address</b>	<b>Affiliation</b>
1	Melissa Marshall, Esq. P.O. Box 408 1414-B Indian Creek Valley Road Melcroft, PA 15462	Mountain Watershed Association
2	Aaron J. Stemplewicz, Esq. 925 Canal Street 7 <sup>th</sup> Floor, Suite 3701 Bristol, PA 19007	Delaware Riverkeeper Network
3	Joseph Otis Minott, Esq. 135 South 19 <sup>th</sup> Street, Suite 300 Philadelphia, PA 19103	Clean Air Council
4	Alexander G. Bomstein, Esq. 135 South 19 <sup>th</sup> Street, Suite 300 Philadelphia, PA 19103	Clean Air Council
5	Kathryn L. Urbanowicz, Esq. 135 South 19 <sup>th</sup> Street, Suite 300 Philadelphia, PA 19103	Clean Air Council

**1. Comment**

On May 17, 2019, Sunoco submitted a letter to the Department in response to comments supplied by Clean Air Council, Delaware Riverkeeper Network, and Mountain Watershed Association (“Appellants”) regarding horizontal directional drilling (“HDD”) Site PA-CU- 0062.0000-WX-16 (the “Site”). Pursuant to the Corrected Stipulated Order entered on EHB Docket No. 2017-009-L on August 10, 2017 (“Order”), and on behalf of Appellants, we respectfully submit these comments in reply. We address each point in Sunoco’s letter under the same item number here.

**1. Justification of the proposed bore path**

After two rounds of public comments, a request for information from DEP, and three rounds of supplemental information, it appears Sunoco has provided some clarity in response to the most basic of questions: why the modified drill path it is proposing is appropriate. Its explanation is sparse, but provides relevant information that suggests the path it proposes is indeed an improvement over the original plans. Unfortunately,

some of the critical data points Sunoco provides this time around do not appear to match numbers provided in a previous supplemental response and it is still unclear whether the proposal represents the best plan.

In its April 30, 2019 supplement, Sunoco asserted, “The depth of the redesigned profile places the horizontal run a minimum of 30 ft. of depth into bedrock having RQD values of 52 – 90, and core recoveries of 76 – 100%”. In its May 17, 2019 submission, Sunoco claims the horizontal run will be “advanced through bedrock having fair to excellent RDQ [sic] values (i.e. 62-90).” These numbers do not necessarily present a conflict, but that is unclear. What is the RQD value of the rock at the depth where Sunoco will actually be completing the horizontal run versus the RQD value of the competent bedrock that will lie above the horizontal run and serve as a buffer?

It is also not clear from either of Sunoco’s supplemental submissions the depth it has chosen represents the best plan. It could for example, use the proposed entry and exit angles it is proposing, which Sunoco has explained have been maximized, but have a deeper, shorter horizontal run.

## **2. Interception of fractures**

Appellants appreciate Sunoco’s willingness to admit to a math/typing error. Its explanation does not fully address that error, though. Sunoco’s April 30, 2019 supplemental response discussed the vertical location of the proposed horizontal run, weathered bedrock, and competent bedrock in terms of distance from the surface (feet bgs). It explained the rock is weathered and fractured to a depth of 130 feet bgs. In order for the horizontal run to have 20 feet of competent bedrock cover (which Sunoco is claiming is the case), the horizontal run would have to be located at 150 feet bgs. Sunoco has not corrected its statement that the horizontal run is located at 126 feet bgs. In its May 17, 2019 supplement, Sunoco discusses its error by explaining how many feet above sea level one of its test bores and one of the IRs were located. For clarity, Sunoco should correct the actual number that was in error and use the same unit of measure.

## **3. Overburden strength**

Sunoco asserts it has provided sufficient information regarding overburden strength. The information it refers to though (water content, Attenberg Limits, etc.) were in Sunoco’s first submission. The Department deemed that information to be insufficient and asked for additional information in its March 19, 2019 letter. Sunoco has still not responded to that request.

Sunoco writes, perhaps in explanation, that “The Order is not clear when defining overburden strength, which is not a common geotechnical engineering term.” Nonetheless, it is the term Sunoco agreed to when stipulating to the Order. If Sunoco sees ambiguity in the terminology two years later, the solution cannot be to ignore the

language of the Order. Sunoco must comply with the intent as expressed through the language Sunoco agreed to, which clearly is as the Department identified: the strength of the overburden as a structure.

#### **4. Pipe stress allowances**

Sunoco's response suggests it did not read, or perhaps did not understand, the Department's request. In its March 19, 2019 letter, the Department instructed Sunoco to: "Provide further explanation of how the following statement applies to this HDD re-evaluation: 'Pipe stress allowances are an integral part of the design calculations performed for each HDD.'" (Emphasis added.) As Appellants previously pointed, Sunoco's overview on pipeline stress allowance is not an explanation as to how the design of this HDD accounts for pipe stress allowance. The profile specifications Sunoco now suggests that Appellants critique are not what was requested. The Department, reasonably, requested an explanation that would tie together what Sunoco generally refers to as an "integral part of design of calculations" with the actual design for this Site. Sunoco has still failed to provide this site-specific explanation.

Thank you for considering these comments. Please keep Appellants apprised of any future develop regarding this Site. (1-5)

Letter – [Clean Air Council – 5-25-19 – Graham Creek Crossing](#)