

DEP Permit # E07-459
DEP Permit HDD Reference # PA-BL-0126.0000-RD
DEP HDD # S2-0142
Township – Woodbury
County – Blair
HDD Site Name – Piney Creek Crossing

2nd Public Comment Period

| Commentator ID # | Name and Address | Affiliation |
|-------------------------|--|--------------------------------|
| 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 th Floor, Suite 3701 Bristol, PA 19007 | Delaware Riverkeeper Network |
| 3 | Joseph Otis Minott, Esq. 135 South 19 th Street, Suite 300 Philadelphia, PA 19103 | Clean Air Council |
| 4 | Alexander G. Bomstein, Esq. 135 South 19 th Street, Suite 300 Philadelphia, PA 19103 | Clean Air Council |
| 5 | Kathryn L. Urbanowicz, Esq. 135 South 19 th Street, Suite 300 Philadelphia, PA 19103 | Clean Air Council |

1. Comment:

On March 8, 2018, Sunoco submitted a letter to the Department in response to the Department’s request for additional information regarding horizontal directional drilling (“HDD”) sites HDD PA-BL-0126.0000-RD & PA-BL-0126.0000-RD-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 Clean Air Council, Mountain Watershed Association, Inc., and the Delaware Riverkeeper Network (“Appellants”), we respectfully submit these comments in reply.

Sunoco’s reevaluation of the Site and its subsequent submission to the Department have suffered from two significant, overarching flaws: a lack of information, and a break-it-now- attempt-to-fix-it-later approach to planning that ignores the importance of preventing and avoiding harm. The Department has been pointed in its requests for additional information, focusing in on key health and safety concerns that are shared by the public. Appellants continue to support those requests and ask that the

Department recognize Sunoco's March 8, 2018 letter for the gallingly dismissive, incomplete response that it is.

For ease of organization, Appellant's comments are numbered to correspond to the numbering in the March 8, 2018 letter.

1. The Department required that Sunoco "enter into written agreements with all private water supply owners whose water supplies may be impacted by this drill" to supply replacement water "to the satisfaction of all potentially affected water supply owners." The Department further directed that Sunoco "shall provide proof of these agreements to DEP." Later, concerned about being "too restrictive," the Department gave Sunoco an alternative to pursuing such agreements with landowners: to "avoid" impacts to water supplies. Sunoco has failed to comply with either option.

Sunoco does not even claim to have avoided impacts to private water supplies. Its goal is merely to "minimize" such impacts by using an additive, DriPlex, in the drilling slurry. This is problematic for two reasons.

First, it is not clear from the scant few sentences Sunoco has provided regarding this mitigation measure whether the use of this particular additive – which the MSDS notes can cause "nausea and vomiting" if ingested – is actually appropriate for this Site. There are a variety of options for modifying drilling mud properties, and which option is best suited for a particular job necessarily turns on an analysis of site-specific conditions. No such analysis was provided here in support of Sunoco's chosen mitigation technique, and the efficacy of this plan remains unclear.

Second, even if the use of DriPlex were to provide some degree of protection, the Department must not authorize plans that cannot avoid impacts to water supplies. Damage to a resident's private water supply is illegal and actionable trespass to property and nuisance, as well as a violation of environmental protection laws. Providing replacement water is not an acceptable alternative to avoiding impacts. The provision of a temporary water supply after contaminating someone's well is like offering someone aspirin after beating them up—it's the least you can do, but by no means makes the offense acceptable. The Department must prevent harm, not merely try to dampen it.

Nevertheless, even given the option to proceed with damaging water supplies where landowners have agreed to accept temporary water, Sunoco has not satisfied the Department's requirements with regard to those agreements. Of the 14 parcels Sunoco has identified within 450 feet of the HDD alignment, Sunoco claims one landowner has accepted temporary water, and six have stated they will take action later if there is a problem. Sunoco has not "provided proof" of any agreement to DEP as directed. The Department is well aware from the history of this project that it would be foolish to simply take Sunoco's word with regard to compliance.

2.

- The Department was right to require an analysis of well production zones; that analysis was explicitly required in the Order, and is critical to protecting water supplies. Sunoco appears to understand what such an analysis entails:

Any technically defensible analysis of this subject in this unique geology is dependent upon information on the orientation of the fissures and bedding plane partings; their width; do they dip or incline; and to what extent hydrostatic forces or the effects of gravity influence the movement of water in these bedrock features.

Sunoco also seems to think that providing such an analysis for the Site is too difficult and it admits it has not done so. Neither the Order nor the Department's letter said that Sunoco only has to provide analysis of well production zones if it chooses to. Sunoco agreed to be bound by the Order. If the geology at the Site makes it too difficult for Sunoco to comply with this fundamental portion of the Order, the answer is not that Sunoco can just go forward anyway without having met the requirement; Sunoco cannot proceed with construction at this location.

- The Department requested a "map showing all private water supplies in the correct, surveyed locations." Sunoco claims that the map in the revised Hydrogeologic Report was updated. It is unclear what Sunoco is referring to. The Hydrogeologic Report attached to the March 8, 2018 response does include a map of water supplies, but that map only depicts 5 water supplies, not the 10 that have been identified on parcels within 450 feet of the alignment, or the 7 water supplies that are within 450 feet of the alignment. Either way, the map provided is clearly incomplete. If the Department has a more recent version of the map, Appellants ask that it be made available to the public so it can be verified.
- Sunoco has attached fourteen water quality test results to its March 8, 2018 response. It is not clear which parcel each water quality test applies to and which, if any, might be duplicative. The number of reports is surprising because even though Sunoco identified 14 parcels within 450 feet of the alignment, Sunoco also claims "eight of the 14 landowners have identified the locations for 10 water wells; of these, 7 landowners have water wells within 450 ft of the HDD profile." The Department should seek verification that each of the reports provided actually relates to this Site. Furthermore, five of the fourteen lab reports provided were not conducted as part of this reevaluation and plainly do not satisfy the requirements of the Order. Specifically, the five tests performed prior to August 8, 2017 did not test for Total Coliform or E.Coli, and do not include an explanation of the results, as required by the Water Supply Plan. This is especially concerning because if Sunoco is relying on non-compliant water tests here, it may be in other locations as well. The Department must verify that each parcel has received testing in accordance with the Water Supply Plan as revised August 8, 2017. If that has not occurred, Sunoco is violation of the Order.

- Sunoco asserts that “water supply well owners have not asked SPLP to perform any water quantity tests at any well location.” It is not clear when or if any offer to specifically test water quantity was made. At other locations, landowners were sent letters indicating their private “water supply/well” could be tested; presumably this was referring to water quality tests, as that is what most landowners have received. It would be unreasonable to expect landowners to specifically “ask” for water quantity testing. If Sunoco sent an additional, more specific offer to landowners, the Department should be provided a copy for verification. If Sunoco is simply relying on its usual notice/offer of water testing, that is insufficient, and the Department’s request has not been satisfied.

4. In its response to Sunoco’s reevaluation report for the Site, the Department stated “[m]ore information is needed to provide an adequate site-specific re-examination of the bedrock geology in addition to the information provided from county geologic reports and from a core boring at either end of a drill path that arcs through highly dissolution-prone dipping bedrock.” Sunoco has not provided this information and should be required to do so. Sunoco’s failure to gather adequate geological data and to incorporate that data into its plans has resulted in hosts of problems across the state.

5. The Department requested additional information on overburden strength and grain size and a discussion of all data related to overburden. Sunoco refused to provide this information, dismissing it as being of “little or no value” to HDD analysis or design. The Department should continue pressing for this information. Significant portions of the drill profiles pass above the bedrock before the profiles reach their final depth. It is at these shallower depths that drilling is often most likely to lead to inadvertent returns and understanding overburden characteristics can help inform mitigation

6. The Department required Sunoco to “[p]rovide an evaluation of the geologic strength at profile depth (beyond the boring descriptions, rock quality descriptions (RQDs), and unconfined compressive strength test results) and how the data collected was used to arrive at the revised drill paths.” Sunoco has not provided any additional information or analysis in response.

8. The Department required Sunoco to “[p]rovide an analysis of the pipe stress angle and how that information was used to arrive at the revised drill paths.” Sunoco has provided no such analysis.

9. The Department pointed out that Sunoco has made interpretations which are not included in any of the professional geologist reports and required these interpretations be signed and sealed by a PA-licensed professional geologist. The Department’s request flows directly from the Order. Nevertheless, Sunoco has dismissed this requirement, arguing it has relied on generally available information, or that it has indeed referred back to its hydrogeologist report- though Sunoco provides no citations. This is unacceptable. Sunoco has the burden of demonstrating the

appropriateness of its plans and supporting its conclusions. By presenting and relying on conclusions that are not included in the report sealed by a PA-licensed professional geologist, Sunoco is undermining the re-evaluation process, which is intended to be scientifically driven.

In particular, the Department pointed out that Sunoco's determination regarding how far from the alignment wells could be affected was not supported by a PA-licensed professional geologist. In its re-evaluation report, Sunoco stated:

SPLP believes that HDD activities could affect individual well use during active drilling for wells located within 150 linear ft, on either side of the profile, and wells out to 175 ft on either side of the profile set along potential identified fracture zones where water flow in the geology is less restrained.

This statement was in the unsealed, narrative portion of the re-evaluation report, not the hydrogeology report. After the Department made clear that this conclusion needs to be supported by a professional geologist, Sunoco simply deleted the conclusion instead of getting a geologist to weigh in on the extent of well impacts. This is strong evidence that Sunoco had no scientific basis for its conclusion to begin with. The fact that Sunoco has not gotten a professional geologist to weigh in on the scope of potential impacts to water supplies, as required by the Department, also strongly suggests those impacts are in fact expected to be greater than Sunoco reported. Because Sunoco has not complied, the public does not know whose water supplies are at risk. It is entirely possible that wells even outside of Sunoco's 450-foot area of focus will be damaged. Sunoco should still be required to produce a report, sealed by a PA-licensed, professional geologist, that discusses the extent of risks to water supplies, especially if those risks extend beyond 150 feet from the profile.

14. The Department made the following request: "The table labeled 'Rock Core Description Summary' mentions dip angles of fractures. Provide the direction in which these dip angles are oriented." Sunoco responded "These geotechnical cores are not oriented, therefore the dip direction cannot be accurately determined from the core data." Sunoco has missed the point. The Department did not necessarily ask for further information to be extracted from the core data itself. The angles of fractures can and should be determined by other means, and might help inform how drilling fluids are going to travel.

Thank you for considering these comments. Please keep us apprised of your next steps on this HDD Site. (1-5)

[Letter – Clean Air Council – 3-13-18 – Piney Creek Crossing](#)