February 15, 2019

By Email

ra-eppipelines@pa.gov
kyordy@pa.gov

Re: Comments on Report for HDD PA-CU-0136.0002-WX-16 (HDD# S2-0210-16)

To whom it may concern:

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"), please accept these comments on Sunoco Pipeline L.P.'s ("Sunoco") re-evaluation report ("Report") for the horizontal directional drilling ("HDD") indicated by drawing number PA-CU-0136.0002-WX-16 (the "HDD Site").

Point 6 of the executive summary of the Geology and Hydrogeological Evaluation Report ("GHER") concludes that "the LeTort Spring Run HDD is susceptible to an IR of drilling fluids during HDD operations for the planned 16-inch drill." This is a bit of an understatement. The Department should take the time to carefully review Section 7.0 of the GHER, which details the troubled history of the drilling of the 20-inch pipe borehole after restart approval in spring of 2018. This is a problematic site with a history of spills underlain by karst and covered by sensitive and valuable environmental features. Sunoco's redesign of the 16-inch drill is inadequate to prevent additional permit violations that will cause significant damage to these wetlands and waters.

In the main Report, the original HDD profile is listed as having 16-degree entry and exit angles, 1,950-foot horizontal length, and maximum depth of cover of 155 feet. The redesigned profile is supposedly "to allow for a deeper crossing beneath LeTort Spring Run than was completed for the 20-inch pipeline installation." Sunoco also claims "[t]he inclination of the entry and exit angles has been increased in order to install the 16-inch pipe through protective soils, residual soils, and bedrock in closer proximity to the entry and exit points than the original shallower profile." But the redesigned HDD profile is listed at the same length, the same entry/exit angle, and with a lesser maximum depth of cover—144 feet. *Compare* Report at unnumbered page 1 with Report at unnumbered page 5.

This is inconsistent with the profile diagrams attached as the final two pages of the Report. There, the entry and exit angles for the 16-inch profile as planned in 2017 are listed as 14 degrees and 15 degrees, and the maximum depth of cover is unlisted but appears to be close to 123 feet. Sunoco needs to clarify what it is actually proposing for this redesigned profile.

The ultimate result of the redesign appears to be an HDD profile that is remarkably similar to the one that spectacularly failed to prevent harm to the environment over the course of half a year in 2018. The new borehole would be roughly 25 feet deeper at most than that drill, and only a few feet laterally apart. The geology is substantially similar weathered dolomite and/or limestone bedrock at both depths. There is no reason to believe and the Report and GHER nowhere conclude that the additional depth would put the borehole in significantly safer geology. For such a problematic drill, this overly modest adjustment to the drilling plans is insufficient and nearly guarantees substantial new violations of permit conditions and new spills in the onsite exceptional value wetlands and High Quality-Cold Water Fishery / Wild Trout stream.

Sunoco's proposed too-minor adjustment is facilitated by an alternatives analysis that misses the mark. Sunoco legitimately concludes that open trench and conventional boring are not reasonable alternatives, although it does so using inaccurate statements. Its statement that "conventional auger bore is technically limited to less than 200 linear feet at a time varying by the underlying substrate" contradicts its other statements on the topic. Sunoco's Trenchless Construction Feasibility Analysis states at Section 4.1.2 that "the current maximum extent for a CAB installation of a 16" or 20" diameter pipeline is approximately 390 feet." *See* http://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/MarinerEastII/Cambria/11%20-%20EAF/Encl%20E%20-%20Comp%20Env%20Eval/Part%203%20-%20Alternatives%20Analysis/Appendix%20B%20-%20Trenchless%20Feasibility%20Analysis%20%202016-11-29-FINAL.pdf. And Sunoco has elsewhere in a letter to the Department dated August 24, 2018 stated "conventional auger bore is technically limited to less than 300 linear ft of relatively flat land surface at a single attempt." Which one is it?

Moreover, Sunoco claims that "The HDD will largely avoid surface impacts to biological features and as currently proposed, results in no surface impacts to wetlands (impact avoidance) compared to the open cut alternative." Repeated drilling fluid spills to exceptional value wetlands and a high-quality stream over the course of months cannot be said to be "no surface impacts to wetlands."

Regardless, HDD or re-routing are the only reasonable alternatives for the Site. Sunoco does an analysis for re-routing, but fails to do any analysis of alternative HDD profiles. Sunoco should have analyzed the possibility of a deeper profile that crosses sensitive features in more competent bedrock. Deeper profiles tend to need to be longer, otherwise the angle of entry must be steepened, and 16 degrees is already towards the steeper end of what the equipment can handle. However, the profile should easily be made to go longer. East of the planned exit pit is open farmland nearly the length of the profile again. Sunoco has not cored below 150 feet, so it cannot know whether the lower depths would provide better protection.

Better protection is required. The history of this Site, both initially and then in 2018 after close Departmental scrutiny, makes clear that this near-duplicate of the as-built 20-inch pipe will almost certainly be disastrous unless a more protective plan is put in place. Appellants urge the Department to require Sunoco to gather and use data from deeper into the bedrock and for the Department to evaluate the potential benefits of a longer and deeper profile that would likely reduce inadvertent returns.

Additionally, Sunoco performed geophysical surveys, though the geophysical survey results were only published to the Department website on February 6, 2019, and Sunoco never sent them directly to Appellants. For the results of geophysical surveys to be of value, it should also be made clear how those results informed the drilling plans and that explanation should be made public. The electrical resistivity survey identified possible fractures in the bedrock within three zones. One of those zones corresponds with the location of repeated IRs where Sunoco built a drilling fluid containment barrier, suggesting it is no mere artifact. The Department should also require Sunoco to do enhanced monitoring as the drill passes through these zones, not just the zones identified by the fracture trace analysis, which is all Sunoco currently commits to.

Thank you for considering these comments. Please keep us apprised of your next steps on the HDD Site.

Sincerely,

_s/ Melissa Marshall, Esq.__
Melissa Marshall, Esq.
PA ID No. 323241
Mountain Watershed Association
P.O. Box 408
1414-B Indian Creek Valley Road
Melcroft, PA 15462
Tel: 724.455.4200
mwa@mtwatershed.com

_s/ Aaron J. Stemplewicz___
Aaron J. Stemplewicz, Esq.
Pa. ID No. 312371
Delaware Riverkeeper Network
925 Canal Street, 7th Floor, Suite 3701
Bristol, PA 19007
Tel: 215.369.1188
aaron@delawareriverkeeper.org

_s/ Joseph Otis Minott, Esq.___
Joseph Otis Minott, Esq.
Executive Director & Chief Counsel
PA ID No. 36463
joe_minott@cleanair.org

Alexander G. Bomstein, Esq.
PA ID No. 206983
abomstein@cleanair.org

Kathryn L. Urbanowicz, Esq.
PA ID No. 310618
kurbanowicz@cleanair.org

Clean Air Council
135 South 19th Street, Suite 300
Philadelphia, PA 19103
Tel: (215) 567-4004

cc: jrinde@mankogold.com
dsilva@mankogold.com
ntaber@pa.gov