March 16, 2018

By Email

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## Re: Comments on Report for HDDs PA-DE-0032.0000-RD and PA-DE-0032.0000-RD-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 numbers HDD PA-DE-0032.0000-RD and PA-DE-0032.0000-RD-16 (the "HDD Site").<sup>1</sup>

§ 6(iii) "For all other recommendations, including, but not limited to, recommendations of no change or of changes that do not require a minor permit modification, the Department will have 21 days to review the submission and render a determination with respect thereto, unless Sunoco agrees to extend the 21-day time period. Appellants and private water supply landowners who have received notice pursuant to Paragraph 7 below, shall submit comments, if any, within 14 days of the Department's posting of Sunoco's Reports on the Department's Pennsylvania Pipeline Portal website...The Department shall consider comments received and document such consideration." Emphasis added.

<sup>&</sup>lt;sup>1</sup> The Order reads, in pertinent part:

<sup>§ 6(</sup>ii) "For all recommendations for which a minor permit modification is required, including, but not limited to, certain changes from HDD to an open cut or certain changes to the Limit of Disturbance ("LOD"), the Department will have 21 days to review the submission and render a determination with respect to such minor permit modification, unless Sunoco agrees to extend the 21-day time period. *Appellants and private water supply landowners, who have received notice pursuant to Paragraph 7 below, shall submit comments, if any, within 14 days of the Department's posting of Sunoco's Reports on the Department's Pennsylvania Pipeline Portal website...The Department shall consider comments received and document such consideration.*" Emphasis added.

## The Department's Review

Pennsylvanians rely on the Department of Environmental Protection to protect them from dangerous activities that threaten their air, water, land, and health. The Department has recognized that the construction of Mariner East 2 has done damage to the public already. The purpose of Sunoco's re-evaluations of certain HDD sites is to do a better job avoiding harm to the public and the environment in its HDD construction. The Department's role is to review and assess Sunoco's Report before deciding what action to take on it.

It is the Department's duty to review and assess the Report with the goal of protecting the public and the environment placed first and foremost. Looking at the individual circumstances at the site in question is key. Critically important is accounting for input from those who live nearby, who have a deeper connection with—and greater knowledge about—the land than the foreign company building the pipelines through it.

A meaningful, objective and substantive review and assessment by the Department will ensure that new or further HDD operations at the re-evaluated sites will cause minimal, if any, harm to the public and the environment. Anything less than a full, careful, and objective review would endanger the public and the environment. Pennsylvanians place their trust in the Department to do a thorough, science-based assessment, taking into account these and other comments, and approving Sunoco's recommendation only if it would protect the public and the environment from any further harm.

## Comments on HDDs PA-DE-0032.0000-RD and PA-DE-0032.0000-RD-16

"The synthesis of regional and local geologic land development data for the HDD S3-0580 site suggests a moderate- to high-risk of drilling mud loss, drilling difficulties related to bedrock type, the potential for inadvertent returns, and potential to encounter petroleum hydrocarbon residue already existing within the drill path." This is the conclusion of Sunoco's hydrogeology consultants on the risks presented by this HDD Site. Nonetheless, amazingly, Sunoco proposes only to follow some best practices. As explained below, the risks far exceed any reward in running the pipeline in this location.

## A dangerous and unaccounted-for risk of historical petrochemical contamination to water wells exists at this site. The Hydrogeologic Report explains that:

On April 10, 2015, a release of petroleum (diesel, kerosene, and gasoline) was reported west of Valley Road near the Valley Road/Gradyville Road intersection. A pinhole leak was identified in the Sunoco Pipeline Limited Partnership (SPLP) 12-inch-diameter Point Breeze to Montello Pipelines, which was temporarily repaired on April 11, 2015, then permanently repaired in July, 2017. Interim environmental response actions completed by SPLP included installation of soil borings, groundwater piezometers, and monitoring wells to delineate the magnitude and extent of impacted soil and groundwater associated with the release. The soil and groundwater data indicated a small area located next to the release point where free-product petroleum was reported in only one monitoring well location (MW-5). As part of the interim and ongoing site characterization work four (4) recovery wells were installed to remove the residual free product petroleum and to further characterize the nature and extent of the release. It is GES' understanding that this data has been incorporated as part of the HDD construction preparation and response planning activities.

There are several problems with this statement. The first is that this is the extent of the analysis Sunoco does on the threat of mobilization of contamination from petroleum underground in the area. GES says that it "understand[s] that this data has been incorporated as part of the HDD construction preparation and response planning activities." But it is not at all clear that that is the case. There is no evidence of it. Where are the four recovery wells? What is the extent of the plume? Sunoco did several borings in this area, knowing of the contamination which it caused, and does not appear to have examined the borings for evidence that the plume is or is not present along the planned HDD alignment. If it has such evidence, it must be provided to the Department and the public. If it does not, Sunoco must do the work to determine the extent of the plume.

The Department should demand that Sunoco make this data available and explain how it "has been incorporated as part of the HDD construction preparation and response planning activities."

The only thing Sunoco plans to do to mitigate this risk, according to the Report, is the following:

Drilling fluid returns, drill cuttings, and produced groundwater should be carefully monitored for presence of volatile organics during this project. If olfactory evidence, elevated photoionization detector (PID) readings, or a sheen suggest petroleum contamination drilling should be suspended until cuttings and water samples can be analyzed. Affected materials should be screened prior to disposal and a proper disposal plan prepared for such materials.

The greatest danger is not that the drill cuttings get contaminated; it is that the plume is mobilized underground and spreads to any of the dozens of water wells in the immediate vicinity of the drill. Sunoco has no plans to deal with that.

The second thing wrong with the statement on the 2015 spill is that it is fails to mention that MTBE was detected in water wells hundreds of feet from the pipeline breach location after the spill. MTBE is a notable groundwater contaminant that can render water unpotable in very small quantities.<sup>2</sup> The Commonwealth has spent nearly three-quarters of a billion dollars to clean up leaks of MTBE.

The third thing wrong with the statement is that it characterizes the location of the spill as "west of Valley Road near the Valley Road/Gradyville Road intersection." It is only "west" by a few feet at most. This is within the same right-of-way as the proposed HDD alignment. As explained in the attached contemporaneous email exchange, it is "right at the PECO utility

<sup>&</sup>lt;sup>2</sup> See <u>https://en.wikipedia.org/wiki/MTBE\_controversy</u>.

pole," which is right on the Valley Road roadside.<sup>3</sup>

The fourth thing wrong with the statement is that it mischaracterizes the extent of soil contamination as restricted to a "small area located next to the release point." As just noted, underground contamination from the gasoline additive MTBE was found hundreds of feet from the release site. Where exactly the plume is located is vital information for protection of water supplies which is wholly absent from this Report.

Just as important, this may not be the only petrochemical plume near the site. In 1992, Sunoco's pipeline spilled thousands of gallons of jet fuel on nearby Meadow Lane. Other spills in the immediate vicinity may have gone undetected underground, but could be mobilized by the drilling. The Department should require Sunoco to investigate and locate the bounds of all underground contamination along the HDD alignment in this densely populated neighborhood reliant on dozens of wells for its drinking water. Otherwise, this is a disaster in the making.

**Sunoco's well production zone analysis is inadequate**. Sunoco pads the "Hydrogeology, Ground Water, and Well Production Zones" section of its Report with a host of information intended to impress upon the reader that it is impossible to determine where wells near the Site draw their water from and Sunoco therefore can do nothing to protect these wells. But in fact, this is bogus. The Department manages Pennsylvania's implementation of the Wellhead Protection Program, which relies on "the delineation of wellhead protection areas ... developed based on hydrogeologic investigations conducted by the U.S. Geological Survey for DEP."<sup>4</sup> The Department did not throw up its hands trying to figure out what the wellhead protection areas are and say, "beats me, it's too hard." But that is what Sunoco has done here. This is in violation of the Order's requirement of a well production zone analysis.

Sunoco instead suggests that offering water testing, which Sunoco is already required to do, should quell any concerns with water contamination. This is not acceptable. This is exceptionally problematic because Sunoco identified 26 water wells within 450 feet of the HDD alignment. This is a dense area with a large number of potentially impacted residents.

The Hydrogeologic Report explains: "It has been verified that 26 properties are located within 450 feet of the HDD S3-0580 ROW with all but 3 properties served by residential wells. These wells are open cased at the same depth as the boring, which increases the risk of impact by drilling fluids." The Report further explains, "The location of the HDD along a groundwater recharge zone, a complex structural geology including a high degree of fracturing, 30 to 32 foot difference between the water table and southeast entry/exit point and close proximity of residential wells represent potential adverse risks for this HDD site."

Yet Sunoco proposes to do more or less nothing to investigate and defend against the dangers.

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. The provision of a temporary

<sup>&</sup>lt;sup>3</sup> We have redacted personal contact information for residents included within this Right-to-Know response. <sup>4</sup> See PADEP, "The Wellhead Protection Program in Pennsylvania: An Overview (January 2002)," available at <u>https://www.dep.state.pa.us/dep/deputate/watermgt/wc/subjects/srceprot/source/whppover.htm</u>.

water supply before contaminating someone's well is like putting on boxing gloves before beating them up—it's the least you can do, but by no means acceptable conduct. The Department must *prevent* harm, not merely try to *dampen* it. The Department should not authorize HDD operations which are at high risk of causing an illegal trespass and contamination of water wells. Rather, the Department should demand an actual evaluation of risk, and if the risk is too high, a change in plans.

**The Department should require details about how and where Sunoco will handle produced groundwater due to the 55-foot change in elevation from entry to exit.** In other instances, the Department has required more protective measures to be put in place where there is the potential for significant volumes of groundwater to be produced due to changes in elevation between the entry and exit holes of the HDD. *See*, e.g., December 19, 2017 letter from DEP to Sunoco re Yellow Breeches Creek HDD location.<sup>5</sup> A similar change in elevation is present here, and the Department should require similar protective measures here as well.

The alternatives analysis ignores alternatives to HDD, conventional augur boring, and open trenching. Sunoco only considers those three possibilities at the Site, and claims it cannot use conventional augur boring because of "the curvature requirements to follow the exi[s]ting utility easement and the inability to steer an augur bore into curves." But Sunoco has acknowledged it also uses "FlexBor" technology, guided bores, and guided augur bores, all of which can steer.<sup>6</sup> In fact, it specifically notes that guided boring "is commonly used when working adjacent to or when crossing other utilities." Due to the particularly hazardous nature of using HDD at the Site, the Department should require a detailed and convincing analysis by Sunoco of why other methods of boring would not be possible to use instead.

**Sunoco claims adjustments have been made to the HDD profile, but none are evident from the Report.** Sunoco makes the following statement in its Report: "HDD specialists and geologists employed by SPLP have investigated the HDD design and subsurface geologic conditions for HDD S3-0580, and made minor adjustments to the profile design, which included a minor extension in length of the 20-inch as detailed in the introduction section above." The introduction section provides no such explanation. It is unclear what exactly was changed and why, as there is only one set of HDD profiles provided in the Report. There is a little more explanation in the Hydrogeologic Report but again, no explanation of why the changes were made. The Department should require an explanation.

<sup>&</sup>lt;sup>5</sup> Available at

http://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/MarinerEastII/HDD Reevaluation Report s/DEP\_Response/Yellow%20Breeches%20-%20E21-449%20-%20S2-0250%20-%2012-19-17,%201st%20DEP%20Response.pdf.

<sup>&</sup>lt;sup>6</sup> See Sunoco response to Paragraph 2 of the January 3, 2018 Administrative Order, available at <u>http://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/MarinerEastII/Summary\_of\_Order/Para%</u>202%20-%20Exhibit%20A%20-%20Trenchless%20Construction%20Methodologies.pdf.

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

Sincerely,

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