February 6, 2018

By Email

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



Re: Comments on Report for Strasburg Road/Bow Tree Drive Crossing (PA-CH-0413.0000-RD & PA-CH-0413.0000-RD-16, HDD# S3-0520)

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-CH-0413.0000-RD & PA-CH-0413.0000-RD-16 (the "Site").¹

¹ The Order reads, in pertinent part:

§ 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 21day 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.

^{§ 6(}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 HDD 0413.0000-RD & PA-CH-0413.0000-RD-16

1. The risk to water supplies has not been adequately addressed.

As a threshold matter, Sunoco has not finished collecting data on well locations and features and should not be permitted to proceed with its plans until all this data is collected and analyzed. Sunoco explains that through contact with nearby landowners, it identified 10 wells within 450 feet of the proposed alignment. While the majority of wells in this area are served by public water, Sunoco has identified 13 parcels for which it lacks water supply data. These landowners must be reached, especially given the known risks to water supplies Sunoco describes in the Report. Even for the wells Sunoco has begun to document, it has not identified well production zones, as required by the Order, and thus cannot ensure their protection.

In its discussion of risks to water wells, Sunoco explains that drilling may "result in transport of diluted drilling fluids towards the withdrawn zone for individual wells." Sunoco also incredibly claims that, "while this does not present a health hazard, it can be unsightly to users and could affect taste." This sweeping claim is false. Bacterial contamination is known to result from drilling fluids or other sediment in drinking water. Water contamination from Sunoco's HDD has already caused bacterial contamination in wells of residents in Exton, PA and in Berks County near the Joanna Road HDD Site.

Also concerning is that Sunoco seems to have arbitrarily decided that "active HDD activities could affect individual well use ... for wells located within 150 linear ft, on either side of the profile, and wells out to 175 ft ... along potential identified fracture zones...." Not only are

these distance limitations (150 and 175 feet) unsupported by data, but, in respect to wells along the fracture lines, they contradict Sunoco's own Hydrogeological Evaluation Report. Sunoco's hydrogeologists recognize the potential for increased migration along fractures and recommend that

[p]roperties that lie beyond the 450-foot buffer and are in alignment with the mapped geologic structural features (fracture traces/zone, faults), intersecting water bodies, or other identified high-risk indicator for the incidence of IRs should be identified. The locations of these properties should be surveyed for information on water supply type.

Sunoco has ignored this recommendation and should be required to conduct surveying and well identification beyond the 450 foot radius in these areas of known vulnerability.

Despite the admitted risks to water supplies, Sunoco does not intend to change its plans so well contamination can be avoided, but rather "to encourage landowners to make advance arrangements for the supply of alternative water sources as necessary during the HDDs." Residents nearby Sunoco's operations should not bear the burden of dealing with the consequences resulting from illegal conduct such as Sunoco's pollution of their wells. They are innocent bystanders. The Department has a legal obligation to not permit illegal pollution such as water well contamination, and may not approve construction techniques that are likely to result in such contamination.

2. Sunoco has not developed adequate plans to manage flooding.

The Hydrogeological Evaluation Report recommends that "drainage control and storm runoff management infrastructure in the areas of HDD entry/exit should be evaluated." And specifically notes that "[p]rior operation experienced significant surface water flooding at the drill entry point following large rain events and snow melts." It appears Sunoco has chosen not to follow the recommendation of its scientists. Sunoco should be required to provide a detailed plan for preventing and controlling flooding at the Site.

3. The Report has not fully addressed the risk of Inadvertent Returns.

This HDD alignment, as the Hydrogeological Evaluation Report makes clear, is crossed by several probable fracture lines and zones. These are features where groundwater may travel freely (leading to possible well contamination) and where IRs may find a path to the surface. Sunoco has not adequately addressed the increased risks presented by these fractures in its plans. In particular, the Hydrogeological Evaluation Report notes that some residences in this area are on septic systems and where these are near the HDD alignment, or "where fracture traces/zones connect the borehole to septic system locations, the risk of IRs is increased." It does not appear Sunoco has also not provided a plan for dealing with this specific increased risk or discussed the potentially serious consequences of connecting with a septic system. This is all critical information that Sunoco should be required to provide.

The spills Sunoco reports in relation to the Site also seem to be incomplete. Sunoco mentions only "minor fluid losses and IRs occurred during the pilot hole of phase [sic] of the 20-inch pipeline. Two IRs of approximately 100 and 70 gallons were observed near the corner of Glenmont Lane and State Route 352…" But this ignores a significant IR in a residential yard on Gateswood Drive, just beyond the northern end of that drill, and on the other side of Rte 352. This spill resulted in the coating of the side yard of a home in a layer of drilling mud (which Sunoco then covered with straw). The connectivity between the Gateswood Drive spill location and this site should be explored to ensure there is not a repeat spill.

4. More geotechnical study and analysis is needed.

Sunoco's revised plan has its HDD path running deeper than its previous plan, presumably to drill through more solid bedrock in order to avoid groundwater and IR issues. But in fact, the reported borehole information show that the quality of rock actually declines below 90 feet. Especially given the highly variable integrity of the bedrock at the Site, it is important for the geologists who analyzed the HDD Site to weigh in also on whether and how the revisions to the design will adequately address the risks present from the original design. At this stage, that is not clear.

Sunoco claims that existing geophysical studies and one test boring at each end of the alignment are sufficient and that no further geophysical studies are needed. But the IRs that have already occurred during pilot-hole boring suggest that a better understanding of the local geology is required, especially in the areas of past IRs and probable fractures. The boring conducted so far shows potential problems. The nature and magnitude of the fracture lines and zones that appear to cross the alignment, identified from aerial photographs, has not been confirmed by boring or other means on the ground. The DEP should insist that new studies be completed before HDD resumes.

5. Sunoco's Alternatives Analysis is inadequate.

The Order requires Sunoco to consider alternative routes to the one initially proposed. In this case as in previous cases, they have failed to do so. Their verbiage asserting that "no practicable re-route options" exist apart from the current proposal is simply a reiteration of previous inadequate responses. For example, even a cursory examination of Google Earth satellite imagery shows that a far less populated route exists to the northeast. Sunoco recognizes that an alternative a mile to the northeast exists, but dismisses it because it would require "deviating from the current route...until an intersect is achieved" and then "deviate and return to the continued direction of the existing Mariner II route." The DEP must insist that Sunoco do an actual evaluation of routes to either side of this area, with enough details to provide a basis for quantitative and qualitative comparison of the alternatives.

6. Sunoco should provide a traffic control plan.

The Hydrogeological Evaluation Report points out that Rte. 352 (which the alignment follows) has no off-shoulder walkways in this area, making it hard to conduct inspections safely along the right-of-way during drilling, and to respond to IR. Sunoco's hydrogeologist has thus

recommended "an effective traffic control plan should be maintained." Sunoco has not provided such a plan and must be required to do so.

Conclusion

For these reasons, Appellants request that the Department not approve the HDD re-evaluation recommendation without first (1) requiring that Sunoco gather the needed missing information, as outlined above, and (2) determining that, in light of the newly gathered information, HDD as suggested is appropriate at the HDD Site.

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

<u>s/ Aaron J. Stemplewicz</u> 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

cc: jrinde@mankogold.com ntaber@pa.gov <u>s/ Joseph Otis Minott, Esq.</u> 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