DEP Permit # E15-862 & E23-524 DEP Permit HDD Reference # PA-CH-0421.0000-RD DEP HDD # S3-0541

Township – Westtown & Edgmont County – Chester & Delaware HDD Site Name – Arch Bishop / South Chester Road Crossing

4th Public Comment Period

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1. Comment

First and foremost, please reject Sunoco's HDD re-evaluation permits outright on the basis that the more work they perform in the commonwealth, the more violations they accumulate, the more they endanger Pennsylvanians and the more laws they break. Their work practices are unsafe, their contractors tend to smoke while operating machinery or within designated non-smoking areas that endanger themselves, their

co-workers and all residents in their vicinity and they document and film residents while they are on private property thereby invading citizens privacy.

With regards to the above HDD segment that runs parallel to route 352 from West Chester Pike to Route 926; how much more deficient can Sunoco Pipeline be in that they identify this HDD segment as from Westtown Twp to Edgmont Twp? This HDD segment runs from Westtown Twp to Thorbury Twp., Delaware County and does not run into Edgmont Twp at all. It's only been 4-5 years, you'd think the pipeline operator would: 1. Know where their HDDs start and end. 2. Know what townships they are operating in. Clearly, they don't and they do not care to be accurate. Please shut them down.

In regards to (1) Geophyics Analysis - I demand this be made public. Thank you.

(2) Sunoco's Proactive Measures to Prevent IRRs are nothing new. These aren't groundbreaking steps they are now just starting to do. They are the same steps and work procedures that they used in West Whiteland Twp when they plowed through an aquifer and ruined private residents summers in 2017. They are the same SOPs that resulted in the below notice of Violation:

Mr. Patrick McDonnell, When is enough, enough? How many laws does sunoco pipeline need to break, how many water ways do they need to pollute, how much erosion control do they need to lack and how many times do they need to break the law to be permanently shut down? Ethically, the PA DEP has lost it's soul if you continue allow the worst pipeline operator in the industry to continue to destroy our state.

Your mission statement: "To protect Pennsylvania's air, land and water from pollution and to provide for the health and safety of its citizens through a cleaner environment." Read that again, and start abiding by it. Thank you. (1)

2. Comment

Once again I am dismayed by the inadequacy of Sunoco's response. It does not at all address significant issues that were identified in multiple prior comment periods. For example, based on Sunoco's actual performance in Thornbury Township in the fall of 2017 the Township Engineer documented on-going failures of the intercept drilling over the course of several weeks. Amazingly, Sunoco's own report states "steering within the Baltimore Gneiss has been problematic....These minerals and rocks can divert the drill bit from the intended alignment." But they want approval to proceed anyway? Further failed intercept drills are likely to cause more inadvertent returns (IRs). There were 6 IRs for the 1350 ft HDD in Thornbury in 2017. How many more can we anticipate with the proposed 6346 HDD with the same geology and going downhill?

Sunoco acknowledges the near certainty that they will adversely affect private wells and is preemptively recommending that well-owners make arrangements for alternate

water supplies. Yet they admit they have been unable to contact and/of finalize arrangements with all identified well-owners. Have they even identified all well-owners? Given the adverse consequences we have seen in other areas, I am gravely concerned about the potential impact to the drinking water of my neighbors.

Sunoco is also doing a poor job controlling dust and runoff at the drill site at the intersection of Routes 352 and 926. This is especially serious because that site is a former apple orchard and the soil is contaminated. I have made several calls to the Delaware County Conservation District and DEP to report problems.

Specific to this latest report, I request that the results of the geophysical testing be made public. Sunoco has a history of ignoring scientific reports and the public should have an opportunity to review the analysis and ensure that the surveys cover the entire area, and that the results are being accounted for in the subsequent drilling plans.

Finally, I would like to point out that the "proactive" measures Sunoco describes in point 2 are nothing new. This is their standard operating procedure, and not "supplemental" to previous, inadequate submissions. It's just a recitation of their SOP! And of course, their SOP has previously proven to be wholly inadequate.

There are many problems with this HDD plan and with the latest re-evaluation report. It is also highly problematic that Sunoco can take as much time as they need and the Public has only 5 days including the weekend to review and respond.

I urge the DEP to continue to protect our community and deny approval of this plan. (2)

3. Comment

Sunoco has left unresolved many of the issues that have been brought up in previous public comments—and the DEP has not pressed them for resolution. Now is the time to make sure all the remaining questions get answered. The DEP is ignoring its responsibility if it does not insist on comprehensive, and public, responses from Sunoco before allowing HDD to proceed.

How do we know wells outside the 450-foot zone that Sunoco is looking at will not be damaged? We need assurances from a professional geologist that this will not happen—and the permit should not be issued until that is done.

What long-term solutions does Sunoco offer to those whose wells are damaged or destroyed by HDD? Offering a plastic "water buffalo" is not a long-term solution.

Sunoco is proposing to drill from both ends and meet in the middle. But will they be able to make them meet? In their previous attempts to drill in Thornbury Township (the next HDD to the south), they were unable to track and steer the drill properly even without the requirement for a precise meeting underground. See the comments from Thornbury Township at

https://dragonpipediary.files.wordpress.com/2018/05/2018-05-25-thornbury-comments-re-sunoco-hdd-resubmission.pdf. This document also contains several other important requests from the Township.

What, exactly, is Sunoco's plan for monitoring wells along the HDD route? Sunoco promises "regular monitoring." Is that once a month? Once a year? Once a decade? What tests will be performed?

What will Sunoco do about the possibility of groundwater flow-back at the drill site? In a previous response, Sunoco said this has not happened in the past, but that is wrong. It has happened at Shoen Road in Chester County and at Tunbridge Apartments in Delaware County, with serious consequences in both cases. It is very likely to happen at the southern end of this HDD, which is lower than the water table in the central part of the HDD. At Shoen Road, Sunoco attempted to stop the water flow using grouting, but water continues to emerge from the nearby ground to this day.

Will the DEP be informed during critical drilling phases? Sunoco has refused to do this in the past, saying only that it will provide "advance notice of commencing all HDDs, project wide". That is inadequate, and the DEP must insist on specific notification during critical phases.

Will Sunoco be required to provide well depths, casing depths, and water-level depths for all the wells along the HDD route? Suncoo claims to have done this, but of 45 wells listed in the appendix to their plan, 36 have the water level listed as "unknown" or "unavailable". The DEP must insist on this measurement. It will be important in determining whether, and to what extent, wells have been damaged.

The DEP has not been doing its job in protecting water supplies and holding Sunoco to account. Now is the time to change that. The DEP must insist on real answers from Sunoco, and on real actions based on those answers. (3)

4. Comment

Thank you for considering these comments.

GROUTING

In point 3, Sunoco describes two grouting measures it may generally use at HDDs, under the heading "Proactive Treatment by Annulus Grouting." These grouting plans appear to conflict with earlier grouting plans Sunoco described to the Department, which involve the injection of bentonite chips rather than cement or sand/cement. It is unclear if both protocols will co-exist or this is intended to replace the previous protocol. If both protocols will co-exist, it is unclear when one will be used versus the other. They conflict, and so cannot both be operative. Sunoco should clarify what it intends to follow.

WATER SUPPLY

Many people in this area rely on private wells for their drinking water. Sunoco has still not committed to follow all the recommendations its scientists made in the hydrogeological report, including that door-to-door surveying be performed, and the survey area be extended beyond 450 feet based on geological features. Even at this late date, it remains unclear whether all water supplies have been correctly identified and Sunoco continues to be unwilling to notify all residents whose water may be at risk. Identification of at-risk waters supplies must be completed prior to any plans for this site being approved.

The summary of water supply testing results submitted by Sunoco still does not comply with the Order. A number of wells were not analyzed for E. coli, total coliform, and fecal coliform. Testing for such pathogens is explicitly required by the Water Supply Plan. Sunoco cannot rely on the incomplete tests it has summarized and landowners should be made aware that they are entitled to not only whatever testing Sunoco may have completed, but specifically testing for these bacteria.

ADDITIONAL CONCERNS

The results of the geophysical testing should be made public. As indicated above Sunoco has a tendency to ignore even its own scientific reports and the public should have an opportunity to review the analysis and ensure that the surveys cover the entire area, and that the results are being accounted for in the subsequent drilling plans.

Finally, the "proactive" measures Sunoco describes in point 2 are nothing new. This is their standard operating procedure, and not "supplemental" to previous, inadequate submissions. And of course, their SOP has previously proven to be wholly inadequate.

It is very concerning that this company is on it's fourth try at meeting the DEP requirements for this HDD site. It is also extremely frustrating that this process is so opaque and requires so much effort for the public to know what is going on and provide input.

I do appreciate that you have persisted in holding Sunoco to the requirements for this site and trust that you will continue to fulfill your mission "to protect Pennsylvania's air, land and water from pollution and to provide for the health and safety of it's citizens through a cleaner environment." (4)

5. Comment

On October 31, 2018, Sunoco submitted a letter to the Department in response to the Department's February 22, 2018 request for additional information regarding horizontal directional drilling ("HDD") Site PA-CH-0421.0000-RD ("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. These comments first address Sunoco's response point by point, and also raise additional outstanding concerns.

1. Geophysical Surveys

Though very late in the game, Sunoco's commitment to conduct surface geophysics at the Site is an important step in the right direction. It is critical, however, that the Department ensure the geophysical surveys are adequate in scope and the results are fully incorporated into the construction plans for the Site. Sunoco has a history of ignoring and obscuring the findings and recommendations of its own scientists in the context of these HDD reevaluations. Commenters and the Department have identified this practice on multiple occasions. Sunoco also cannot be trusted to fully utilize the results of geophysical studies when it has vehemently rejected the usefulness of precisely such studies: in its previous supplemental filing for this Site, Sunoco claimed, "geophysics will provide no functional information" at this HDD location. To avoid Sunoco undermining the value of the geophysical surveying, both the raw data and the expert analysis of the results (including recommendations regarding construction) must be made available to the public with an opportunity to comment. There is also no reason such studies should not be shared, according to the sworn testimony of Sunoco's Geologist, David Demko. May 12, 2018 Hearing Transcript, Pennsylvania State Senator Andrew E. Dinnman v. Sunoco Pipeline L.P., Pennsylvania Public Utility Commission Docket No. P-2018-3001453, 700: 2-4. (Attached as Exhibit A)

2. Proactive Measures

The proactive measures Sunoco describes in point 2 are not "supplemental" to Sunoco's previous, inadequate submissions, but merely a recitation of practices that Sunoco is already required to use, has committed to using, or both. For example, in this October 29, 2018 letter, Sunoco describes using Annular Pressure Monitoring (APM) as a method of data collection; this was already addressed an earlier letter, submitted May 22, 2018, where Sunoco stated: "the HDD operator uses tooling, the Annular Pressure Monitor (APM), to actively observe conditions in the profile while drilling." Moreover, the HDD IR Plan plainly requires the use of APM: "The following requirements shall be placed upon each HDD contractor with respect to drilling fluid control: Instrumentation – The HDD contractor shall monitor the annulus pressure of returns during the HDD pilot hole phase of HDD using an annular pressure monitor." Similarly, the explanations of "tool face pressure" and "tracking of cuttings removal," are not new or additional preventative measures; they are standard operating procedures that, while necessary, have proven inadequate.

3. Grouting

In point 3, Sunoco describes two grouting measures it may generally use at HDDs, under the heading "Proactive Treatment by Annulus Grouting." These grouting plans appear to conflict with earlier grouting plans Sunoco described to the Department,

which involve the injection of bentonite chips rather than cement or sand/cement. It is unclear if both protocols will co-exist or this is intended to supplant the old protocol. If both protocols will co-exist, it is unclear when one will be used versus the other. They conflict, and so cannot both be operative. For example, Sunoco previously indicated that minor loss of circulation events can be effectively treated with loss control materials. Here, Sunoco says that they "are less effective below 70 ft of the ground surface," which is where "[m]any of SPLP's HDD profiles are." Sunoco should clarify what it intends to follow.

Additional Deficiencies

Other critical deficiencies in Sunoco's reevaluation of the Site remain. Over five months have passed since Sunoco's last submission of supplemental information for the Site. At that time, Sunoco had not made arrangements for replacement water for all residents whose water supplies might be impacted by construction. It appears that is still the case. No additional information has been provided to confirm needed outreach has been completed and necessary contingency plans are in place. The Department should continue to require such documentation.

Sunoco continues to ignore the recommendations made by its scientists in the hydrogeological report, including using a diamond bit to make steering easier through the gneiss formation where Sunoco has been warned staying on alignment will be difficult. It is also unclear from Sunoco's most recent, boilerplate supplemental response, that it will appropriately monitor drilling mud pressure and utilize lower drilling pressure to mitigate steering problems. Veering off the drill path can damage surrounding utilities and water supplies and is especially dangerous in the densely populated area of this Site. Finally, the summary of water supply testing results submitted by Sunoco still does not comply with the Order. A number of wells were not analyzed for E. coli, total coliform, and fecal coliform. Testing for such pathogens is explicitly required by the Water Supply Plan. Sunoco cannot rely on the incomplete tests it has summarized and landowners should be made aware that they are entitled to not only whatever testing Sunoco may have completed, but specifically testing for these bacteria.

Thank you for considering these comments. Please keep us apprised of your next steps on this HDD Site. (5-9)

Letter – <u>Clean Air Council – 11-5-18 – Arch Bishop/South Chester Road Crossing</u> Attachment – <u>Clean Air Council – Exhibit A</u>