DEP Permit # E06-701 DEP Permit HDD Reference # PA-BR-0071.0000-RD-16 DEP HDD # S3-0200 Township – Cumru & Spring County - Berks HDD Site Name – Highway 222 Crossing

1st Public Comment Period

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1. Comment

Berks Gas Truth submits these comments on behalf of its members and in support of the affected communities with whom it works.

Procedural Comments:

The DEP suspended review of all construction permits for ETP and its subsidiaries earlier this month. This reevaluation would not be occurring if ETP projects were not such spectacular failures, due in large part to the company's consistent pattern of indifference to regulators, elected officials, and the public. In addition to the DEP's suspension, the company is currently the subject of a criminal investigation by a District Attorney, various legal proceedings brought by, among others, a state senator, and a formal complaint by the Inspections and Enforcement division of the PUC. Why is this company allowed to do anything in this state? And why wouldn't the reevaluation of permits be included in the current review suspension? DEP should indefinitely suspend this review, as it pertains to construction permits. Should DEP disregard our first point, we further object to the short length of the comment period and the insufficient notice provided to the public. The Mariner East project has been a very controversial one, as noted above. DEP would not be conducting this reevaluation otherwise. Therefore, the public should be given proper notice in each county's paper of record -- in this case the Reading Eagle -- and sufficient time, at least 30 days, to read, process, and comment on, in this case, a 96-page report. DEP should extend the comment period after properly advertising it.

Three consulting firms provide a lot of the technical data in the report. Tetra Tech is a longtime Associate Member of the Marcellus Shale Coalition. The others, Rettew and Skelly & Loy, list among their professional affiliations the Marcellus Shale Coalition, as well. Their involvement in MSC calls all three firms' credibility into question and threatens the integrity of the DEP's reevaluation process. DEP should reject the report with its current contributors and vet all future contributors as part of the evaluation process should it continue.

General Comments:

We oppose continued shale gas development in Pennsylvania. Communities have been harmed for more than a decade and our environment has been irreparably damaged. Climate changed. In addition to the on-the-ground impacts of fracking and fracking-related infrastructure, Pennsylvanians are already experiencing the impacts of climate change shale gas development is exacerbating. Methane is well-known to be a dangerous greenhouse gas, but, as Pennsylvania foolishly pursues plans to become a petrochemical hub, the dangers of the greenhouse gas ethane must be recognized as well. The state should ban all fracking immediately.

Sunoco/ETP has been the subject of a show trial in recent months for the cynical purpose of suggesting that it is a bad actor among good actors. Sunoco/ETP is an outrageously bad actor among bad actors. All pipeline companies bully residents, bend every imaginable rule, buy politicians, lobby their way out of regulations and laws, and disregard the ones they can't defeat or manipulate. Sunoco/ETP simply makes it an art form. The day Governor Wolf announced his emissions reduction plans last month, he told KDKA radio that if PA wants a strong natural gas industry, we need more pipelines. We don't want a strong natural gas industry. We want a transition to renewable energy. Governor Wolf has also included further pipeline development in his criminally wrong-headed Restore Pennsylvania plan as just one of the ways the industry would get its severance tax dollars back in spades. DEP has an obligation to live up to its name and protect the environment by advocating against further shale gas development, not spending its time and taxpayer dollars enabling it.

This series of reevaluations was mandated because of Sunoco/ETP's recidivism. Surely the DEP is familiar with the saying that the definition of insanity is doing things the same way and expecting a different outcome. This week, Kelcy Warren told investors that his company would do better. Interesting that he has never felt compelled to say that to the many here he has harmed, many of whom who have turned to protesting the pipeline because their attempts to stop the pipeline by participating in formal processes like this one have been ignored. They are the ones Warren has said should be "removed from the gene pool." As for Warren's promise to do better, we are reminded of the pattern of the abusive partner who swears it'll never happen again every time it does. How would you advise loved ones in that kind of relationship? Would you urge them to hang in there? Surely you wouldn't. Protest is intervention. We urge DEP to recognize that it is time to break free of this bad relationship.

This specific reevaluation pertains to Berks County, a county that has been the site of some of the incidents that led the state to suspend permits on Mariner East 2 construction in the past and caused the PUC's Bureau of Investigation and Enforcement to file a formal complaint. HDD is been a colossal failure along the entire route. The section of highway that is the subject of this reevaluation is one of the busier stretches of Berks County's busiest highway. Berks County's communities and natural resources have suffered enough. Allowing for a process almost certain to fail at a site that would cripple transportation in the area when it does is unacceptable.

We have no more specific comments to offer because we cannot in good faith participate in the process of determining how best to construct the noose the shale gas industry is using on us. (1) Letter – Berks Gas Truth – 2-27-19 - Highway 222 Crossing

2. Comment

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-BR-0071.0000-RD-16 (the "HDD Site").

1. The Report is wildly contradictory and sloppy, leading it to be unclear what Sunoco wants the Department to approve, and impossible for either the Department or the public to evaluate.

Of utmost concern with the Report is the uncertainty over what Sunoco is actually proposing. The Report is rife with internal and external contradictions. The actual specifications of the proposed redesign are unclear, and even the identity of the crossing in question is uncertain. As a result, much of the comments Appellants have besides this one are based on speculation about which of the several types of plans discussed are what Sunoco "really" means. This Report does not comply with the Order, which spells out the requirement for proposed design modifications. See Order \P 5.

To begin with, the cover page of the Report lists the crossing in question as "Highway 222 Crossing" and also "PA-BR-0071.0000-RD-16." It then says, "This HDD is number 16 on the list of HDDs included on Exhibit 3 of the Order." Number 16 on Exhibit 3 of the Order, however, is listed as "PA-BR-0075-0000-RD" not "0071." "0075" is consistent with both the HDD plan in the permit applications for crossing Highway 222 and the overall aerial site plan for Berks County. This could be an isolated error in numbering and not in identification otherwise.

But then the plot thickens. The Report states in multiple places that the HDD crosses Peach Tree Lane. To wit: "This HDD location is located 0.2 miles north of the Town of Gouglersville in Berks County, Pennsylvania, and crosses under Stream B-41, Highway 222, and Peach Tree Lane." Also: "This alignment bypasses or avoids directly impacting Highway 222 and Peach Tree Lane." Does it cross under Peach Tree Lane? Not according to the Report's own maps. The only road besides Highway 222 in the Report's maps is Old Lancaster Pike. There is a separate, and adjacent, Peach Tree Lane HDD: PA-BR-0079-0000-RD. If that is, indeed what the Report is referring to it would mark the third possible site in discussion: Peach Tree Lane being, "0079.0000-RD," the title page reference to "0071.0000-RD-16," and the location described as exhibit 3 being "0075.0000-RD." The site drawing that is identified in the Report as Figure 1 is described as "Permitted 16-Inch HDD Plan and Profile with 20-Inch IR Data," and is filled with confusing and contradictory information. The drawing number does not fit in the pdf. The start of it is "PA-BR-0071.0000-RD-16," not PA-BR-0075.0000-RD-16. Yet with the drawing number in the following Figure 2, the site identification is switched again, and is listed as "PA-BR-0075.0000-RD-16." The evidence that these figures do not show a pair of "original" and "revised" drawings is corroborated by the box showing "revisions" at the bottom of each. A review of each line in the revisions shows that each drawing had different revisions at different times for different purposes. One would expect instead the same revision history except a new line for the "revision" of the "original." This confirms that there are multiple HDD plans being discussed in the same Report.

In fact, a review of the actual permitted 16-inch HDD plan and profile in the application materials on the Department's website reveals further troubling inconsistencies. As one would expect, the Report's Figure 2 reflects the same dates of review as the permitted drawing. Yet the "Permitted" Figure 1, reflects entirely different dates of review. It is unclear then what Figure 1 represents.

All of this perhaps suggests that there are or were multiple planned HDDs or multiple plans for HDDs in the area. But why would Sunoco have an undisclosed parallel plan for the 16-inch pipeline at the Site which it is only now showing the Department for the first time, relabeled as a redesign? It is a muddle which Appellants cannot straighten out, and which needs to be cleared up in the first instance by Sunoco. Appellants have no confidence that the Report is for a single redesign of a single HDD site. The questions do not end with the unknown identity of the plans at hand. Other curiosities pervade the figures in the Report. The Plan View of Figure 1 has a reference to a "16" ASBUILT PIPELINE." Hopefully this is inaccurate, or Sunoco has already built the line is it proposing to re-evaluate here. The Profile View of Figure 1 refers to a "16" PROPOSED HDD REDESIGN" which differs dramatically from the 16-inch redesign found in Figure 2. Instruction #9 in both figures has somehow been converted into a long string of dots.

Section 1.0 of the Hydrogeologic Report states, "The inclination of the entry and exit angles has remained unchanged, but the redesign of the bore profile will allow for approximately 10 feet of additional protective cover at the location of the IRs that occurred during the installation of the 20-inch pipe." This contradicts the main Report in two separate ways.

First, the main Report states that the entry and exit angles change from 14–16 degrees in the original design to 8–16 degrees in the revised design, growing shallower with the revision. The profile drawings do not help because unlike drawings from earlier reports, this and other recent reports have several dots in place of the customary written indications of angles of entry and exit. Second, the main Report states that the revised design has "a depth of cover under the previous IR location increased by 35 ft. from the permitted design," not 10 feet.

The Hydrogeologic Report and the main Report also give inconsistent explanations for why geophysical assessments were not conducted at the site. The main Report explains, "At this HDD location the use of geophysics assessments was not conducted because the SPLP possess [sic] a complete geologic profile from the drilling of the 20-inch pipeline. This data in combination with vertical geotechnical data is sufficient for the needs for analysis of the 16-Inch HDD profile." In contrast, Section 6.0 of the Hydrogeologic Report states: "geophysical surveys during this hydrogeologic re-evaluation was considered for study purposes; however, was not used since the Hammer Creek Conglomerate is not deemed susceptible to the solution activity present in carbonate geologic formations in Pennsylvania." In other words, according to the Hydrogeologic Report, because there was no karst present, geophysics was not used. Appellants can only speculate that this explanation is likely the correct one. While Sunoco says it "possess a complete geologic profile from the drilling of the 20-inch pipeline," at no location in its Report does it provide, let alone rely on, any of that information it supposedly possesses "for analysis of the 16-Inch HDD profile." This violates the Order, which requires that reports "Re-examine the geology at each site using information and data gathered during HDD operations at that and other sites during construction of the pipelines subject to the permits in the above-captioned Appeal," Order at ¶ 4.i. (emphasis added).

This is a very sloppy Report with a mishmash of conflicting and confusing statements. Appellants have concerns about its quality and the depth of analysis that went into it. Appellants note that there has recently been a flood of re-evaluation reports done by the same individuals at Rettew. Perhaps the dropoff in attention to

detail has been caused by the rush. Regardless, the result is that the Department and the public cannot rely on the information in the Report. All in all, there is no way for Appellants or the Department to complete the task of providing analysis and comment because it is impossible for either party to even tell what Sunoco is proposing. Appellants do not know what to comment on here.

2. The Department should require Sunoco to evaluate profiles of differing depths.

Sunoco does an analysis for re-routing, but fails to do any analysis of alternative HDD profiles. Sunoco should have analyzed the possibility of profiles at differing depths that may cross 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 could be made to go longer. West of the planned western exit pit is open farmland for several hundred more feet.

The more recent set of borings, which dug deeper, encountered some zones where the RQDs were much higher than the depths to which the revised profile would be bored. Sunoco has not analyzed setting the pipe into those depths, which would be less susceptible to IRs and water well contamination. Appellants urge the Department to require Sunoco to evaluate the potential benefits of profiles at differing depths that may reduce inadvertent returns.

Sunoco's alternatives analysis also suffers from reliance on a statement that contradicts its other statements. The Report says that "[c]onventional auger bore is technically limited to less than 200 linear foot [sic] at a time varying by the underlying substrate." Sunoco's Trenchless Construction Feasibility Analysis states at Section 4.1.2, however, 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/MarinerEast II/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

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?

3. The risk to water wells from the revised profile is high.

This Site has a large number of residential water wells nearby. See Well Location Map. Based on the geology and the experience with the 20-inch installation, there is a high risk of damage to the residential water wells at the Site.

Sunoco's statements on the matter are somewhat misleading. The Report says, "No complaints from the owners of private water wells were received during drilling and installation of the 20- inch pipeline." That may be true. But well complaints were received during installation at the adjoining HDD just one farm field to the east of the Site, PA-BR-0079-0000-RD. See attached Exhibit A-313 at SCR0006285 ("We have a water well contaminated with sediment near the Peachtree Lane HDD. We are providing water to the family [REDACTED] and taking corrective action to regain returns.").

Given the rampant errors and contradiction in the Report, the large number of nearby wells, the risk of damage to the wells, and the history of damage to nearby wells, the Report in its current state is completely unacceptable. Just as the Department requires completeness before beginning its technical review, the Department should require Sunoco to provide a complete, error-free, and thoroughly analyzed replacement report and give commenters time to evaluate and comment on it before considering approval.

Thank you for considering these comments. Please keep us apprised of your next steps on the HDD Site. (2-6) Letter – Clean Air Council – 2-28-19 – Highway 222 Crossing