DEP Permit # E06-701 DEP Permit HDD Reference # PA-BR-0181.0000-RD-16 DEP HDD # S3-0250

Township - Caernarvon County - Berks HDD Site Name - Joanna Road Crossing

1st Public Comment Period

Commentator ID #	Name and Address	Affiliation
1	Senator Judith Schwank Senate Post Office Box 203011	Senate of Pennsylvania
2	Harrisburg, PA 17120-3011 David Anspach	
	609 Joanna Road Morgantown, PA 19543	
3	Carrie Gross	
4	Margaret Quinn 503 Carmarthen Drive Exton, PA 19341	
5	Ellen Gerhart	
6	Susan M. Rosso	
7	Janet Marchetti	
8	Sharon Furlong 133 E. Bristol Road Feasterville, PA 19053	Bucks County Sierra Club, Bucks Environmental Action
9	Karen Feridun	Berks Gas Truth
10	Melissa Marshall, Esq. P.O. Box 408 1414-B Indian Creek Valley Road Melcroft, PA 15462	Mountain Watershed Association
11	Aaron J. Stemplewicz, Esq. 925 Canal Street 7 th Floor, Suite 3701 Bristol, PA 19007	Delaware Riverkeeper Network
12	Joseph Otis Minott, Esq. 135 South 19 th Street, Suite 300 Philadelphia, PA 19103	Clean Air Council
13	Alexander G. Bomstein, Esq. 135 South 19 th Street, Suite 300 Philadelphia, PA 19103	Clean Air Council
14	Kathryn L. Urbanowicz, Esq. 135 South 19 th Street, Suite 300	Clean Air Council

	Philadelphia, PA 19103	
15	Christina DiGiulio	
	Downingtown, PA 19335	
16	Melissa DiBernardino	

I am writing to offer comment and express concern on the Joanna Road Crossing HHD Reevaluation Report (PADEP Section 105 Permit No. E06-701, PA-BR-0181.0000-RD-16; (SPLP HDD No. S3-0250-16) submitted on February 13, 2019 by Sunoco to the Department of Environmental Protection.

The department and other government regulators are acutely aware of the multitude of problems that the Mariner East pipeline projects have caused. There have been repeated reports of Inadvertent Returns (including several in my district); groundwater and surface water impacts; private and public well contaminations; and, sinkhole formation, among other issues. In January, sinkholes again appeared around the Mariner East pipeline in West Whiteland Township, Chester County. Last year PUC shut down this pipeline when similar sinkholes opened in this same neighborhood. And, DEP and other agencies have taken significant regulatory and enforcement action against the company.

While there apparently was no "Karst geology" present at the Joanna Road Crossing Drill site nor at site of other apparent IR incidents (which I just became aware of) at a "Highway 222 Crossing" drill site (PA-BR-0071.0000-RD-16; SLP HDD No. S3-0200-16), geology in these areas apparently did play a role in these IR incidents. And, these IR incidents are no less of a concern than sinkhole incidents. More importantly, the proliferation of IRs, sinkholes, and other impacts, when taken cumulatively, indicate that the harms created by this project outweigh the benefits.

Further, it is clear to me that the operator of this pipeline does not fully know conditions of and around its infrastructure and certainly doesn't seem to grasp the threat it poses to public confidence and public safety. If the owner of this pipeline can't get it right now, then perhaps they should not be allowed to continue to operate, business as usual, as it seems they have been up until now.

As I stated in previous correspondence to the Department and other regulatory agencies: as the energy delivery infrastructure is built out in our state, Pennsylvanians have a right to know that their health and safety is being protected and the integrity of our environment is preserved, especially as these pipelines traverse heavily-populated areas." Thank you for your consideration. (1)

Letter – Senator Judith Schwank – Joanna Road Crossing – 2-25-19

Please see the attached public comment for the Joanna Road HDD reevaluation of the Mariner East project. If you would like further documentation including video and or correspondences that were mentioned in the attached document, please feel free to contact me. (2)

Letter – David Anspach

3. Comment

Regarding the reevaluating of the Joanna Rd crossing permits in Berks County for Sunoco/Mariner East, please deny them the right to drill the 16".

DEP stands for Department of Environmental Protection. The mission statement is 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. Mariner East has proven to be a direct violation of this mission statement.

Another attempt to HDD in this area will inevitably cause more violations to the Chapter 105 (waterways) and Chapter 102 (erosion and sediment control) permits. Sunoco has proven this with their repetitive spills and violations. (3)

4. Comment

Please do not allow any more drilling of Sunoco Pipelines on Johanna Road section of Berks County. Deny the Permits based on past attempts and failures.

Horizontal Directional Drill Analysis Joanna Road Crossing PADEP Section 105 Permit No.s: PA-BR-00181.0000-RD, PA-BR-0181.0000-RD-16 & PA-BR-0183.0000 (SPLP HDD# S3-0250) HDD in this area will cause more violations to the Chapter 105 (waterways) and Chapter 102 (erosion and sediment control) permits.

The Anspach family still cannot use their private well. The DEP and Sunoco denied that the construction was the cause of their well's bacteriological contamination, however they supplied the family with a water buffalo- which froze this winter. it's pretty clear that Sunoco has punctured the aquifer there.

David Anspach, a resident in Berks County, who has been exploited by Sunoco (& their contractors); his land desecrated by this pipeline destruction.

There are many issues with the geology and hydrology in his location, throughout the entire drilling process and Sunoco wants to repeat this process. Do not allow this! There were 2 Inadvertent Returns during the installation of the 20" Mariner East 2. Sunoco is now preparing to drill again for their 16" Mariner East 2X in the same Right of Way. Do not grant these Permits! (4)

The Mariner East project has been fraught with problems since its inception. The incompetence and arrogance of this company begs belief. It is incomprehensible how or why the Department of Environmental Protection could seriously consider allowing Sunoco/ETP to continue operation. It has engaged in shoddy analyses of the geology, hydrology, topography, botany, and biology of the Commonwealth of Pennsylvania, all with the apparent blessing of DEP. The Department finally suspended the remaining Chapter 102 and 105 permits due to concerns over the company's failure to rectify the environmental disaster in Beaver County with the Revolution pipeline. Why then, would you allow Sunoco/ETP to drill under Joanna Crossing? What will it take for the Department to finally and permanently suspend this company's ability to operate? It has done nothing to earn the trust of the Department or the public. I strongly urge you to halt all further construction of the Mariner East Pipeline Project. (5)

6. Comment

I respectfully ask you to seriously consider denying Sunoco a permit to start drilling again due to the inadvertent returns. Sunoco has proven itself to be negligent and much too quick to hasten the completion of the pipelines with disregard to the safety of the communities. The pipeline path is too close to private wells, private homes, schools, and facilities for the elderly and infirmed.

In addition, there has been an exceptional amount of precipitation in this area over many months which has not been taken into consideration when drilling for the pipelines. The excessively saturated ground, when combined with HHD and pipeline installation, has contributed to landslides and sinkholes. The sinkholes are a danger to anyone or any creature in its path. A shift in the ground surrounding the pipeline has already caused the highly flammable gas to explode.

ETP/Sunoco has failed to prove itself as reliable. It has failed to restore the many miles of destruction caused by its pipelines. Yet, it has been allowed to continue to destroy our environment and personal property. For what gain - so that our environment can be polluted even more with plastic products.

Thank you for your time and consideration in this matter. Even if the decision is to allow the necessary permits, might a delay be considered in order to allow restoration of landscaping and to give the ground some needed time to dry. (6)

7. Comment

Joanna Road. Do not issue any permits for this site. SPLP acknowledges IRS will happen. It is your duty to protect the environment. SPLP needs to make good to the land owner and our environment in this area. SPLP has destroyed enough. It has to stop. (7)

I am writing today in order to urge that drilling not be permitted to begin once again on this project. This entire project, and this company, has been in flagrant violation of both known laws, regulations and permits, along with unwritten rules of "do no harm" by businesses in our State.

It is obvious to this bystander that Sunoco's practices have compromised the acquirer in the region, this destroying the water supply of at least one resident....denials to the contrary being , in my mind, superfluous. It is just a matter of time before the damage done there will extend, because that is the nature of water related issues.

I am sure that additional violations and breaches will occur to permits 105 and 102 as there have been no substantive business changes regarding HDD practices. Why allow a new permit to occur with these same conditions when there has been no acknowledgement of culpability and therefore no changes to how this is going to be done? This is the definition of insanity, eh?

This must not happen. This must not be allowed. This is a rogue industry and it has trampled on the rights of people and property, and has done grave damage to the State and indeed, the planet. And it must stop. They are not above the law, and for a company, a permit is the law. They have been brazen in disregarding authority, both governmental and moral. When and where does it end? End it here and now. Thank you. (8)

9. 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 157-page report. DEP should extend the comment period after properly advertising it.

Two consulting firms provide a lot of the mapping and geological data in the report. Tetra Tech is a longtime Associate Member of the Marcellus Shale Coalition. The other, Skelly & Loy, lists among its professional affiliations the Marcellus Shale Coalition, as well. Their involvement in MSC calls both 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 an area of Berks County that has been particularly negatively impacted by Sunoco/ETP's HDD. In fact, this reevaluation follows earlier ones for the same HDD number. In each instance, David Anspach, whose family has suffered at the hands of this reckless company and continues to be impacted, has submitted comments. In each instance, you ignored his comments. In fact, a separate attempt by Anspach to have his case heard by EHB was rejected because he'd missed an arbitrary deadline by a matter of days. Juxtapose that against the protracted application process for the ME2 project that spanned years and the granting of permits in spite of the fact that after all that time the application still had countless remaining deficiencies. Who exactly do you serve? The very idea of allowing further harm to be done to Anspach, his family, and others in his community is absolutely 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. (9)

Letter - Karen Feridun, Berks Gas Truth

10. 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-0181.0000-RD-16 (the "HDD Site").

Sunoco's previous attempts at crossing Joanna Road represent an utter failure of planning and engineering. Many of the things that can go wrong with HDD—from inadvertent returns, well contamination, and flooding, to interfering with a sewer line, subsidence, and equipment failures—happened here during the installation of the 20-inch pipe. Even worse, many of these problems occurred *after* the Department had already greenlighted a reevaluation. This fact alone should give both Sunoco and the Department pause and should be reason enough to approach this second reevaluation with a heightened degree of caution and care. Unfortunately, the incomplete analysis Sunoco provides in the Report does not demonstrate that Sunoco has learned from its failures at the HDD Site or that it will do better as it installs the 16-inch line. The Department now has the opportunity and the responsibility to hold Sunoco accountable and to prevent Sunoco from making the same mistakes again.

1. Sunoco does not explain the cause of the mechanical failures it encountered during the drilling of the 20-inch line, the impacts of those failures, or how the proposed plans will avoid repeating those problems.

After the Department approved Sunoco's first reevaluation of the Site and Sunoco resumed drilling for the 20-inch line in early 2018, Sunoco encountered a series of mechanical problems. It lost 12 or more roller-cones underground. (The exact number is unclear from the documentation in the Report.) Numerous failed attempts were made to retrieve the roller-cones. In the process, Sunoco also lost two of the retrieval baskets and abandoned its recovery efforts multiple times to try from different angles and to drill new holes. One of the baskets was sheared apart. A reamer got stuck. Then the 20-inch pipe got stuck during pullback. This resulted in the pipe being "badly gouged," requiring more reaming, new pipe, and a separate pullback attempt. To some extent, mistakes and pitfalls arising from unexpected circumstances are normal while drilling. The eight months of problem-plagued drilling attempts that it took to get the 20-inch pipe installed at the Site are not normal. Such botched construction comes with environmental consequences. Sunoco owes the Department and the public an explanation of why these problems happened, what environmental risks they present if they happen again, and what the new proposal does to address them.

When the Department awarded Sunoco Chapter 105 and 102 permits for its Mariner East 2 project, those approvals, and the subsequent approvals of plans that changed, were based on a projection of the environmental impacts those plans would have. The additional heavy equipment, extra holes drilled, and shifting and expansion of workspace for pullback and other activities to install the 20-inch line surely caused more damage than was anticipated and permitted in this wetland-rich location. The extended period of time over which drilling operations were actively attempted also means more time that impacts have gone unmitigated, and more opportunity for runoff, compaction, and other erosion and sediment control problems. These impacts should be discussed in the context of the current proposal.

Perhaps even more importantly, Sunoco's series of failures suggests a gross miscalculation regarding the underlying geology at the Site. The Department should require Sunoco to provide a thorough discussion of how these construction incidents relate to geological features. The current proposal must also be adjusted to account for those features.

2. Sunoco does not discuss the cause of the subsidence features encountered during the drilling for the 20-inch line, or how the proposed plans account for subsidence.

During drilling for the 20-inch line, Sunoco encountered two subsidence features. It is unclear whether Sunoco caused this subsidence, or if it was present all along and Sunoco just failed to identify it before it started drilling. The Report merely mentions the subsidence features were encountered and dozens of cubic yards of grout were used to fill one of them. It does not provide analysis. Subsidence in proximity to the pipelines can present a significant risk to the public and the environment, as residents living near the construction of the Mariner East pipelines have unfortunately learned

firsthand. A careful assessment of the Site geology is needed and must be included in the Report.

First, Sunoco should provide all basic details about the subsidence that was encountered, including the precise location and depth of the subsidence features and their size. This information should also be included on the maps in the Report and shared with any workers who Sunoco intends will participate in future construction at the Site. Then, at a minimum, the Department should require Sunoco to answer the following questions:

- 1) Were the subsidence features caused by Sunoco's construction activities? If so, how?
- 2) How did the characteristics of the local geology contribute to these subsidence features?
- 3) What is the current status of the subsidence features? Did they change over the course of construction?
- 4) Has Sunoco conducted testing or surveys to ensure there are not more subsidence features in the vicinity of the 20-inch and proposed 16-inch pipeline profiles?
- 5) What impacts could the identified subsidence features, or future subsidence at the Site, have on local groundwater, drinking water supplies, other natural resources, property, the progress of construction, and the pipelines?

Finally, Sunoco should discuss how the new plans for the 16-inch line will ensure additional subsidence will not result from further construction at the Site. To answer these questions, Sunoco may need to conduct geophysical surveys. If Sunoco determines that Site is not suitable for geophysical surveys, it should provide the Department a complete rationale and commit to alternative means of gathering the needed information. The Report asserts that geophysical surveying was not considered because Sunoco has a complete geologic profile from the drilling of the 20-inch line. This is inadequate. Knowing the specific geology of the 30-inch borehole for the 20-inch line does not reveal whether there is subsidence or the potential for subsidence in the path for 16-inch line.

If Sunoco actually *does* have a "complete geologic profile," then the Report does not comply with the Order, which specifies at paragraph 5.i that "The Report shall document in detail the information considered for the re-evaluation of the design of the HOD at that site." This "complete geologic profile" is nowhere to be found in the Report. Moreover, it does not appear to have been made available to Sunoco's hydrogeologists, who wrote, "Due to the lack of site- specific data, it was not determined if the groundwater table occurs within the soils or bedrock."

3. Sunoco ignores previous water well complaints.

A very serious incident of well water contamination was reported in relation to the construction of the 20-inch line. Sunoco makes no mention of it in the Report. Sunoco has previously taken the position that it is not responsible for the contamination of the Anspach family's well and has blamed the bacteria in the water on Mr. Anspach's chickens—despite the chickens being present on the property long before Sunoco and there being there being no issues with his water. Curiously, Sunoco now admits that "[n]o groundwater modeling was performed for the area surrounding HDD S3-0250." Not only was groundwater not modeled for the Site, but even in the context of the present reevaluation, "no detailed characterization" of the bedrock flow aquifer was performed. Instead, the Report offers a generalized conclusion about the safety of wells: "...due to the documented nature of the geology surrounding the HDD profile and groundwater movement patterns, an affect [sic] to these wells is highly unlikely." This is contrary to the evidence at hand. In the absence of thorough analysis, Sunoco and the Department are in no position to conclude that the contamination of the Anspach's well was not caused by Sunoco's construction, or that other wells will be safe as construction continues. What's worse, as Mr. Anspach has documented in his comment on the Report, his water remains contaminated with sediment from the drilling.

This ongoing contamination incident must be thoroughly investigated and included in the Report so the Department and the public can be sure the new plans for the Site do not put wells at risk.

4. Sunoco has misidentified a wastewater treatment facility and fails to address the effluent pipe incident.

In its Alternative's Analysis, Sunoco references a "presumed agricultural building associated with a public school located south of the HDD." This is likely a mistake and potentially a mistake with significant consequences. It appears what Sunoco is actually referring to is the Twin Valley School District wastewater treatment plant. If Sunoco has misidentified this building, it has likely neglected to account for related infrastructure, such as underground pipes.

Already, Sunoco has interfered with and potentially struck an effluent pipe while drilling for the 20-inch line. This resulted in an inadvertent return to waters of the Commonwealth. Exactly what happened is unclear from the Report as Sunoco's attempts at running cameras through the line did not cover the full area of concern. While the Report mentions a leak between two sections of the effluent pipe that might have let in the pressurized drilling fluid, it is unclear whether this was the only problem. It is also unclear if there are similarly vulnerable segments that could be further damaged by Sunoco introducing highly pressurized drilling fluid in the area. This must be examined in detail in the Report. If a strike did occur, this is especially concerning because Sunoco should not have even been drilling close enough to the

effluent pipe for a strike to be a possibility. The Report does not provide the details needed to ensure Sunoco will avoid a similar problem with the 16-inch pipe.

5. A resident has documented several additional serious problems with the HDD Site that the Report fails to even mention, let alone address.

Mr. Anspach submitted a comment on the Report with extensive visual documentation and narrative of the sordid history of Sunoco's drilling on his land in the past two years. His reporting has brought to light several additional very serious issues never mentioned in the Report. The failure of Sunoco to address these violations of the law and to try to ensure that the drilling of the 16-inch pipe does not recreate or exacerbate them is a fatal flaw with the Report. The Department should not approve this plan because it is almost certain to lead to more serious violations of law and significant harm to the residents and the local environment.

A. Oil spills (35 P.S. § 691.301, 25 Pa. Code § 91.33, Permit No. E06-701)

Mr. Anspach has on several occasions in the last year found oil sheens on surface waters at the HDD Site where the only industrial operations are Sunoco's. No publicly available information suggests that the spill or spills causing these sheens were reported to the Department, and Mr. Anspach believes they have not been reported.

If this is indeed the result of spills from Sunoco's machinery or otherwise caused by Sunoco's operations, Sunoco has violated 35 P.S. § 691.301, 25 Pa. Code § 91.33, and special condition xviii of the Berks County Chapter 105 permit (E06-701) and needed to have reported the spills to the Department and taken immediate measures to clean them up. The Department should investigate and take enforcement action as appropriate.

B. Unpermitted damming of a waterway (Dam Safety & Encroachments Act, 25 Pa.Code § 105.11(a))

Mr. Anspach also took multiple photos of sandbag dams installed by Sunoco on an unnamed tributary to East Branch Conestoga River. The Berks County Chapter 105 permit issued by the Department two years ago did not authorize the installation of these sandbag dams. Unless the Department authorized these dams in a separate approval action of which Appellants are not aware, these are violations of the Dam Safety & Encroachments Act and 25 Pa. Code § 105.11(a).

C. Illegal waste dumping and landfilling (18 Pa. C.S. § 6501, E&S Permit No. ESG0300015002)

Section V of Part C of E&S Permit No. ESG0300015002 specifies that "No building material or wastes or unused building materials shall be burned, buried, dumped, or discharged at or from the site." *See also* 18 Pa. C.S. § 6501 (dumping is criminal).

Mr. Anspach documented that in November of 2018, a sandbag E&S structure was "pushed into soils and presumed buried." This appears to be an instance of illegal dumping contrary to the criminal code and the E&S permit. The Report itself documents (as noted above) a number of pieces of drilling equipment that were abandoned underground. The Department should take enforcement action.

D. Punctured aquifer and resulting hydrological alterations (Permit No. E06-701, E&S Permit No. ESG0300015002)

Based on notices of violation the Department issued for the HDD Site on September 17 and 18, 2018, the Department appears to be aware that at least at one-point Sunoco experienced a major problem with groundwater inundation of the drilling pit that caused overflows of drilling fluid and turbid water onto adjacent land and into waters of the Commonwealth. Mr. Anspach has documented this problem existed at least as early as March 2018 and has continued through this week. His reporting makes clear that the flow has drained an aquifer and radically altered Site hydrology by (at least) creating new wetlands and a new stream including outside the permitted limits of disturbance. This drainage may be contributing to the ongoing contamination of his water well.

Besides being self-evidently very harmful to Mr. Anspach's private property and to the environment at the HDD Site, it violates special condition jjj of Permit No. E06-701,2 and the impacts outside the limits of disturbance are also not permitted under E&S Permit No. ESG0300015002. The Department accordingly should take enforcement action.

6. The Governor's request to halt the advance of the drill needs explanation.

In reference to the drilling of the pilot hole for the 20-inch pipe in July 2017, the Geology Report notes: "SPLP stopped the advancement of the boring at the request of the Pennsylvania Governor." This has never previously been disclosed to Appellants. For the Governor to have such a targeted request involving construction at a particular Site is a stunning and significant development, especially given the long and contentious history of these pipelines and the public's persistent and often unanswered calls for relief. If the Geology Report has accurately described this course of events, it suggests there were very serious concerns involving the Site leading up to the Governor's request. Such concerns are not addressed in the Report at all. They need to be. The first reevaluation also did not include those details, and perhaps if it had been complete, the installation of the 20-inch pipe would have encountered fewer problems.

7. The Report does not make clear that Sunoco has offered water testing associated with the construction of the 16-inch pipeline.

It is not clear that Sunoco has offered a new round of water testing associated with this reevaluation. Even if water testing were completed as required for the 20-inch line, drilling for the 16-inch line presents a new set of risks, separate from the risks associated with the construction of the 20-inch line. The Department must not allow Sunoco to shortcut water testing protocols. Previous testing may serve as a baseline, but it does not satisfy the requirement of the Order that testing be offered during and after construction. Sunoco must make renewed efforts to contact landowners, offer testing as required, and document these communications.

Thank you for considering these comments. Please keep us apprised of your next steps on the HDD Site. (10-14)

Letter – Clean Air Council – Joanna Road Crossing – 2-27-19

11. Comment

First and foremost- the re-eval SPLP submitted is lacking several key factors which leads me to believe they are hiding something. The land owner, and on several occasions, myself, have been witness to the operations at this site. As previous field scientist and analytical chemist (with a focus on environmental and worked alongside engineers for the DoD), I am quite familiar with the scientific method as well as good practices in environmental sampling engineering. There is a complete lack of initiative on the part of the DEP and SPLP when it comes to protecting the waterways and wetlands. So we, the residents have taken on the duties of documenting - we have evidence that there has been a massive under reporting of inadvertent returns. The conservation district, as well as the DEP, had been contacted several times and we were told that they'll get out there "sometime in the next few days". How do you inspect a violation where running water is involved, a few days later? SPLP covers it up. Again, we have documentation of that. The DEP cannot day SPLP has met the requirements of these permits because their history proves they do. It understands the geology or hydrology as it relates to the current conditions of the climate and the fact they SPLP has permanently disrupted said geology and hydrology. The hydrology has changed. There has not been sufficient testing conducted to show otherwise. However, the land owner has documented and tested water coming out of the ground from the same aguifer his well pumps from. (His house is on the large hill above the drill site.) as seen in the "conclusions", SPLP is misrepresenting well depths in comparison to the hydro-geology the drill has impacted. The landowner closest to the Joanna road drill can prove his well was impacted. Has DEP or SPLP been able to prove it was not the HDD or construction activity? Scientific good practices would require one to follow the scientific method which means since the well owner has correlation data showing bacteriological contamination to his well began when they began drilling. He made ill and if the well was contaminated before drilling, the land owner would have been sick before then- he was not. All of the data and information the DEP needs to understand this is publicly available, it just takes a little research effort. This is about using science and logic. Correlation data trumps the simple

denial of responsibility that was given to the landowner. Now the burden is on the DEP and SPLP to prove it was not them, and that means you need to require them to figure out what (with high certainty) did contaminate the well. In fact, the agency should be doing this work, not the serial offender.

Questions to answer: Why has a thorough scientific investigation not occurred, in accordance with good scientific practices, which can prove the contamination was not Sunoco and can prove what did contaminate the well with a high certainty? Meaning show the evidence. The land owner has evidence SPLPs activities are the only thing which could have caused this type of well damage. Please acknowledge the science.

8.0 Conclusions: "Based on published geologic and hydrogeologic information, the S3-0250 HDD location is underlain by clastic sedimentary rocks (conglomerate, siltstone/sandstone, and shale) of the Stockton Formation and dense, very fine to coarsely crystalline intrusive diabase. Groundwater movement within these rocks is primarily through a network of interconnected secondary openings (e.g., fractures, joints, and faults) that were developed by external forces following deposition of these geologic units. Geotechnical rock core observations have confirmed that the local bedrock underlying the site is fractured and comprised of steeply dipping joint and bedding planes. All of the water supply wells identified in the vicinity of HDD S3-0250 are constructed in the deeper bedrock portion of the LMAS indicating that none of the domestic wells relies on the shallow (uppermost) LMAS that provides a source of sustaining groundwater discharge to the wetlands and unnamed tributaries discharging to the East Branch Conestoga River. The HDD profile extends entirely within both the shallow unconsolidated regolith materials and weathered to highly weathered bedrock."

In regard to the plans for the 16 inch horizontal directional drill site at the Joanna Road crossing in Berks County, all permits must be denied due to insufficient data from lack of necessary physical testing, lack of understanding of the effect SPLP has had on the geology and hydrology at the site, and lack of transparency to the agency and public on the part of SPLP. The duties of the DEP are to ensure SPLP has done the necessary studies which analyze the current geo-hydrology as it is now, not 17+ years ago (referring to the studies they have used in their re-eval).

Questions to answer: Can you ensure, with the current information they have given you, that they will not permanently impact wells, waterways, or wetlands?

The reports SPLP uses are dated 2002, 1981, 1999, and 1971. The analysis is too general, and this process has proven to problematic in pretty much every area they have tried to drill, specifically Chester and Delaware counties. The fact is: SPLP has changed the hydrology and created another wetland and possibly new spring which is breaching the surface. (Because the aquifer has been punctured or the obstructed a subsurface spring). This means the saturation, drainage, and overall biology has been permanently impacted.

Now that they have disturbed the hydrology, as well with the extensive rainfall- 300% more than the average- which is predicted to be a common occurrence, their evaluation - and by following the good practices of science -a responsible company and agency would bring in scientists (who have no ties to oil and gas- as Skelly and Loy do) who are specialists in the geology of this area or region. The documented changes in the property owners Land, both on and off the easement shows a major change, which renders their data and therefore re-evaluation insufficient and incomplete. **especially because of the historical data of their inability to answer for or correct what they have done to the aquifer and the land owners well.

Due to this new evidence, it would behoove the agency to protect themselves and have their own geo-hydrological and geophysical studies done. As well, SPLP must be required to perform a modern and thorough hydro-geological study and geophysical testing, to ensure the safety of residents drinking water and to ensure they have not introduced deadly bacteriological contamination, as well they must observe and document the changes to the groundwater, surface water, and wetlands due to the previous activity. That's the only way you guarantee they will not hurt another resident, destroy another life, and destroy the pristine nature. The DEP has that authority. Before the DEP approves anything, it is their duty to have solid, evidence based (current data) and be able to answer questions with evidence based certainty not theoretical probabilities:

- 1. Where did the bacteria in David Anspach's well come from- was it the bentonite (is bentonite a food source for certain microbes)?
- 2. Has Sunoco punctured the aquifer, changing both the ground water and surface water dynamics?
- 3. What new bacterial growth is seen in the wetlands and the tributary (David's images)?
- 4. Has Sunoco recently done core samples, flow testing of the groundwater, or any geophysical testing to ensure the stability of the entire area or are they simply using old data and theoretical assumptions (they do use the word "presume" quite often in their report)?

It is the burden of the company to prove without a doubt that they have not contaminated the aquifer or the surrounding waterways and wetland. This testing must be done by an authority not connected to the Marcellus shale play - and in best practice and scientifically speaking the only way to accomplish this is through obtaining current samples and gathering empirical data to weight it against the historical data they are using. The resources and capabilities are there, why is this not being done? Since the ground and hydrology has been disturbed, it is not possible to know to what extent the area has been effected. The best authority for geohydrological knowledge is the USGS, and this must be who conducts the study.

This data must be owned by the government and the public. This process must be transparent.

In summary, until Sunoco/ET can show they have not adversely impacted this resident well, the local geology, or the hydrology it is scientifically irresponsible and defiantly criminal to allow them to continue to put the environment and our water at risk. What happens if somebody gets sick and dies from bacterial contamination? We keep getting lucky, when will the luck run out? And all these comments and evidence we have - our cries for the agency to do their jobs and go above and beyond for their community- allowing a serial offender to abuse our system and bully both the agency and the residents is abhorrent. Yet still we have pointed out valid concerns and the DEP continues to issue permits; doesn't that make you accountable as well? There is well documented evidence by experts in geo-hydrology, water and earth sciences, and other citizen scientists and documentarians specific to this site. All evidence is time stamped and location stamped and will be evidence that would withstand the scrutiny, if need be, of a trial in Pennsylvania or Federal courts. I would suggest the DEP investigate the concerns thoroughly and transparently.

At this point the environmental firms and the DEP have failed to protect the geology and hydrology of our area (and shows they do not possess the expertise, regardless of titles, and more importantly the understanding of the dynamic geohydrological in this area. Therefore, it would behoove the agency to recuse themselves from conducting the studies and employ the professionals who have the capabilities and the published scientists with the experience, some of the top scientist in the country- as a readily available resource who has been studying this area for decades- this inevitably would protect both the agency and the public.

Therefore, it is the duty of the DEP to deny permits and require Sunoco answer these questions as well the DEP must request assistance of the USGS, the professionals who have the background to conduct the appropriate and necessary studies to check Sunoco's work. Conclusion: please answer the questions and concerns in my response. I look forward to your communications. (15)

12. Comment

We just learned that equipment was moved back onto the Joanna Road site today. We are noting the activity for the record, given that the comment period has not yet ended nor have comments been considered and addressed by DEP, nor a decision rendered. We hope the company has no reason to believe that they should start moving equipment onto the site because their plans for HDD will be approved. (9)

13. Comment

Please accept my comment in regards to the JOANNA ROAD CROSSING Re-Evaluation in Berks County.

While I continue to be appalled at the fact that there have even been deficient permits approved from the start, I am just flabbergasted that these permits remain in the hands of Sunoco with the number of violations and re-evaluations that have been even considered for the Mariner East (Pennsylvania) Pipeline Project. Yet here we are.

Horizontal Directional Drilling has been sold to you, other agencies and the public as an environmental savior as it leaves large areas "untouched" without trenching straight through, disturbing environmentally sensitive areas and causing an inconvenience to the public. One of many issues is that the DEP does not protect private wells and that was obvious when you accepted Sunoco acknowledging something like 22 wells in close proximity to this project.

It is documented and shown at this point that this project has negatively impacted Mr. Anspach's property and health, along with many other residents of Pennsylvania and the DEP has the authority to stop this.

Has the Pennsylvania Public Utility Commission been made aware of the 2 ground subsidence incidences that occurred in close proximity to active pipelines that they regulate? They weren't on Lisa drive in West Whiteland.

Sunoco has changed the geography of this area and it need to be taken into consideration in the comment period. Do your jobs and protect Pennsylvania's environment. (16)