### DEP Permit # E15-862 DEP Permit HDD Reference # PA-CH-0127.0000-RD-16 DEP HDD # S3-0320

Township – Uwchlan County - Chester

# **HDD Site Name – Herman O. W. Drive Crossing**

## 1st Public Comment Period

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2	Carrie Gross	
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#### 1. Comment

I live in the Rhondda Development in Uwchlan Township. I am writing about Sunoco's request for DEP Permit # E15-862. I ask that the DEP deny this request which will only destroy our public lands and water.

Sunoco's request to use HDD to install pipes through Upper Uwchlan to Uwchlan Township to the Goshen townships should be denied. They propose to install pipes that traverse the Marsh Creek State Park and along Marsh Creek. Marsh Creek provides recreational opportunities for residents but Marsh Creek is also our reservoir which provides drinking water to many thousands of residents. Sunoco has the worst record in the industry. In Chester County, Sunoco has damaged aquafers, polluted residents' wells, released multiple inadvertent returns, and damaged land forcing homeowners to sell and leave in silence. The list of damage I provided is not a list of possible harm but of harm already committed by Sunoco. Sunoco's inadvertent returns releases bentonite which would damage wild life, local streams, wetlands, and the source of our clean drinking water.

What we know is that pipelines leak! It is not a matter of how but when they will leak. Clean water is our lifeline. Without clean water, we would be like Flint, MI and other developing countries. This situation is not a situation to be gambled with. I ask that you deny the permits because our clean water is not something to chance. (1)

#### 2. Comment

The Department of Environmental Protection's mission 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. Sunoco/Energy Transfer has well over 100 Notices of Violation by the DEP and hundreds of spills of drilling mud.

It is clear that this dangerous pipeline can not be completely safely and without harm to our environment. I urge the DEP to stand by its mission statement and deny any new permits at this site or for the Mariner East project. Enough is enough. (2-4)

#### 3. Comment

As a resident of Chester County, I would like to comment on the current dangerous and unsupervised construction of Mariner East Pipeline through our community. First of all, this pipeline transports materials that benefit no one in our community. It is hazardous, old technology, and should be outlawed in this era of climate change. Second, the proximity of this dangerous pipeline to our communities, schools, highways and sensitive natural areas is foolhardy and is an accident waiting to happen. I demand an immediate halt to this construction and dismantling of this project as dangerous and unnecessary. Thank you. (5)

#### 4. Comment

I am against any pipeline projects and would like to make it clear. I support renewable energy and fazing out fossil fuels ASAP. Here is why: I have been a witness to the kinds of destruction pipelines cause by way of live stream and social media. There are many ways they are hurting humanity. My witness started when Standing Rock became a household name. We have come to understand the illegal and grossly negligent behaviors that Army Corps and Sunoco are responsible for. Over the last several months, we know Chester County District Attorney Thomas P. Hogan, Pennsylvania Attorney General Josh Shapiro, and Delaware County District Attorney Katayoun M. Copeland have launched criminal investigations into the project's construction, citing environmental risks and safety concerns. We remember watching our beloved family members standing against the Dakota Access Pipeline, telling you it would break, it would leak. It did and still does based on lapse EPA regulation. Currently we have the Gulf of Mexico being fed crude oil from a spill about to exceed Exxon's Horizon disaster. We know these pipelines are not safe as this administration is telling the public. We know the disenfranchised are in areas where people of color live. What kind of gross negligence are we really dealing with here.

Sunoco representatives told county employees that they intended to begin open trench construction of Mariner 2 on Chester County Library property in West Whiteland

Township. That excavation method, however, is not permitted on county land without special permission. Just like the pipelines before them Army Corps and Sunoco are breaking the law and "The People's" trust. To remind you, Standing Rock was because Water Protectors knew all pipelines leak, they knew Dakota Access would leak, it did.

I would like to also remind you of the case of two administrations by children. They are currently fighting for their "Right to Life" Against this Government. The part you and the politicians don't seem to want to take into account is "The People" feel their oxygen being depleted, their farms dying, their health being something our government doesn't care about because the fossil fuel industry lobbyists have their controlling banks accounts to bribe and buy our politicians. I say no more. The lawsuit filed in two administrations was originally filed against the Obama administration, which sought to have the case dismissed because the courts are "ill-suited" to oversee "a phenomenon that spans the globe," according to court papers. Then when the administration changed hands all reasoning went out the door in favor of profit. We know America is a Corporation since 1933. We know they have been placing profit over "The People" for decades. No more.

My personal Experience happened in the years 2016 -2017. I was what they called a keyboard warrior. I had access to over 250 groups some with over half a million members. I shared Standing Rock, I shared The Water Protectors encounter's and the live feeds they shared. I watched how the system bowled "The People" over. Caged them, put numbers on their arms and left them for more than 48 hours without water. Only to dismiss their cases because they had no right to arrest anyone being out of jurisdictions. Yet, they continue to break the law in these ways and more. (Unlawful Arrest) All part of the mercantile system to break the insurgents. That's right we saw their reports calling us insurgents. Mean time my sharing had hit phenomenal proportions. So much so my Internet was vandalized 3 times. All while the social media outlet worked to limit group shares in an effort to stop the algorithms of it all. I have records and photographs I reported to the DA of the time in San Diego. They targeted my house next and started pulling the cable from my wall. Then they sent an unlicensed contractor to fix it, which he didn't. All that on record. So, if a company is capable of all the things I've listed, if they are capable of attacking a single mom thousands of miles away the way they did you have to know no one is safe. Because, they are capable of so much more illegal actions. While they have this lawsuit drawn up by children against the fossil fuel industry, an industry who has known for more than 65 years they would change our air, they would shorten lives. Now these children have to fight in court to have emissions controlled so they can have a future. This is more than enough reason to stop this pipeline. Because, my described story is not in full I want to add what I've listed happened is the very short version. There were many attempts to scare me, to hurt me as well and stop my sharing. I blame the greed of the fossil fuel industry, their unwillingness to put, life first is of immediate concern. Their cancers are killing us. Stop the madness for the Uwchlan, for the kids. For goodness sake. No more. (6) Attachment – Rebecca Robles

#### 5. Comment

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and aesthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. The mariner east pipeline construction has continued to devastate Pennsylvania landscape for the past few years. It is time to shut it down preserve our environment before it's too late. I not only oppose any drilling or trenching for the Mariner East pipelines but furthermore insist this project needs to be stopped permanently. This has been over 90 inadvertent returns from HDD already and several sinkholes. Permits for any fossil fuel projects are a risk to climate change and Pennsylvania has been contributing for far too long. It's time for renewable energy to prosper in Pennsylvania.

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. This is the motto of the department of environmental protections, it's time to start doing what you're supposed to be doing. Please deny all permits pertaining to the Mariners pipelines, at least until the criminal charges have been processed, to remove all accountable corrupt officials. (7)

#### 6. Comment

I am so disgusted at this point. My family has enjoyed living in West Goshen since 1998. I always thought we would live here forever; our children would marry and have children; our home would always be home! Now that will not be the case.

Unfortunately, our beautiful community has been destroyed by Sunoco. Our well water compromised! Sink holes. Homes up the road from us evacuated. Weekly Certified letters making excuses for their mistakes.

This has to stop. I beg you! This dangerous pipeline (which some pipes are 70+ years old) runs along homes, schools, churches, retirement homes. .must I go on? Yes, I do! We receive literature explaining should there be an emergency to go up wind, on foot and call our local fire department. Guess what - the pipeline runs by the firehouse. Should we have an emergency our firehouse will be obliterated! Our home is within 450 feet so we are already screwed but we will not have anyone to call to help others.

Our community does not even have an emergency plan in place.

Obviously money talks and apparently is way more important than our children, families and community. I hope all who are lining their pockets are happy; I hope you can all live with your consciences!

I beg our representatives to get involved and start saying no to this large corporation that has no regard for our wellbeing or our community. (8)

#### 7. Comment

The danger to neighbors, shoppers, employees at the Herman O West site (ID 33-0320) is quite apparent. Please do not allow this to go forward. If you lived and worked in this vicinity, you would be angry and scared. (9)

#### 8. Comment

Heman O. W. Drive Crossing neither pipe has been installed. Drilling for the 16-inch pipe was initiated but is not yet completed. The plan that is up for comments is for the 20-inch pipe.

A frac-out occurred during drilling of the pilot hole for the 16-inch pipe. It happened as the drill approached its exit location, at the northwest end. The pilot hole was never completed. It is likely that additional frac-outs will happen when the 16-inch pilot hole is completed, and additional ones are likely there when augering (enlarging) of the 16-inch hole is completed.

Similarly, frac-outs can be expected if drilling for the 20-inch line goes forward. If they are substantial, or if there is construction runoff at that end of the project, Shamona Creek is adjacent and may be contaminated. Sunoco's record of pipeline construction so far shows that it does a very poor job of containing drilling mud at frac-outs and construction run-off.

The route of this stretch crosses under Herman O. W. Drive at its eastern end, near the drill location. If there were to be a large leak or rupture at that location once the pipeline is in operation, it would trap hundreds of employees at West Pharmaceutical Services, whose only access to their building is via Herman O. W. Drive. This is clearly a bad route for a dangerous pipeline. But Sunoco, again refusing to consider alternatives, says only that "deviation from the proposed route would pass through numerous commercial and residential developments similar to the setting to the currently permitted alignment." But might some of those options eliminate the need to cut off the only possible escape route for those with offices in the vicinity of the pipeline? Sunoco apparently didn't consider that factor to be worth looking into. (10)

#### 9. Comment

I am a homeowner and resident of Chester County PA. I have grave concerns over this proposed plan from Sunoco. Previous attempt to drill the Pilot for the 16" pipe resulted in an inadvertent Return of Drilling Fluid. The HDD was never completed for the first 16"pipe. Now Sunoco is risking our water by continuing to propose this HDD drilling for an environmentally sensitive area. It is the DEP's duty to protect our streams and drinking water. To approve this permit would not meet the standards of protecting our water ways, Shamona Creek and its floodway. Sunoco's reasoning for disregarding other methods in not within the scope of the PA DEP. Sunoco's justification for not using Auger Bore: "Comparing the level of direct effect to existing businesses by a bore/open cut work plan to a 15 gallon IR event, results in

SPLP's opinion that the HDD remains the preferred pipeline installation method. That is not the PA DEP's scope for permitting. The potential damage to Shamona Creek and the surrounding floodway and ecosystem, along with water quality issues due to the petitioner's history of Poor E&S. Poor erosion and sediment control along with the history of inadvertent returns of Drilling fluid is too big of a risk to Shamona Creek and the aquifer. Contamination of Shamona creek would result in further contamination of the water. This would not only jeopardize our public water supply and well water, endangered species and wildlife would suffer irreparable harm due to poor water quality caused by HDD and poor E&S. I urge you under the express duties given to your Department to protect our wildlife and water that this permit must be denied. It is not an issue of extra time and money for Sunoco, that is not our problem. This project must be re evaluated for its impact on our Water and no amount of time or money is too much to protect our most precious resource, our water. (11)

#### 10. Comment

The County of Chester hereby submits its comments to the above referenced HDD Reevaluation Report submitted by Sunoco Pipeline, L.P. Specifically, the County of Chester herein submits the July 2, 2019 review comments of the County's experts McCormick Taylor. A complete copy of the McCormick Taylor July 2, 2019 review comments is attached.

The McCormick Taylor review comments are as follows:

- The Report indicates that the initial HDD for the 16-inch pipe resulted in an Inadvertent Return (IR) and that the HDD of the 16-inch pipeline is yet to be completed. The report should address planned completion of the 16-inch pipeline, particularly since the proposed alignment more closely matches the approved 16-inch pipeline's location including entry and exit points.
- The Report discusses appropriate grouting techniques but does not discuss how the previous IR was adequately addressed, or whether it is anticipated to release in this area again.
- The Report does not evaluate the anticipated drilling pressures to complete the remainder of the 16-in bore, and whether those anticipated pressures will result in additional IRs.
- The Alternatives Analysis includes repeated statements that "comparing this plan of construction to a 15-gallon IR event, results in SPLP's opinion that HDD remains the preferred pipeline installation method." However, as stated in the introduction, the 16-inch pipeline installation caused the 15-gallon IR event during the pilot bore and the remainder of the boring has not been completed therefore it is not appropriate to assume that further IR events would not occur during its completion,

- The Report does not address either the engineering analysis that led to the Permitted alignment, nor the (quite different) partially completed 16-inch pipeline alignment. It would be beneficial to compare the assumptions that have led to three varied alignments being proposed for a single HDD corridor.
- The proposed revised alignment more closely parallels the partially completed 16" pipeline bore for long distances. The report does not address the possible loss of drilling fluid to the parallel bore where faults and fractures could allow flow to migrate. There is potential that this can result in unexpected IR events along the other bore's path.
- Section 3.2 of the HDD Hydrogeologic Reevaluation Report (HRP) states that MEII HDD IRs have occurred in similar geologic settings where "bedrock is densely fractured (sometimes indicated by a fracture trace)", yet the summary (Section 4.2) states "All of the MEII IRs that have occurred in this region, to date are exit IRs where the overburden is relatively thin," As shown on Attachment A, two fracture traces occur in close proximity of Shamona Creek and associated wetlands. The proposed profile indicates only 75' depth of cover in this area, and no borings have been provided to analyze geology of this location. Additional documentation and calculations to support why the pipeline depth at this location was selected should be provided.
- The Best Management Practices included in the Conclusion of the report are generic. Project specific practices should be noted and employed including specifying that monitoring reports including drilling pressures and return amounts be kept and filed with the Department; signing and sealing reports by qualified professionals; noting the frequency of reporting; specifying the pilot tool and drilling pipeline diameters; specifying the exact methods of monitoring for inadvertent returns and loss of fluid, and qualifying the specific Loss Control Materials that can be used.
- A site-specific IR Plan describing in detail how potential IRs will be addressed both within and beyond the project ROW, should be required. The plan should address all requirements that FERC regulated pipelines must provide, including measures to be followed in uplands, wetlands, and waterbodies for both containment and cleanup. Equipment and materials to be onsite and/or available on short notice should be provided including any subcontractors on-call. (See FERC Guidance for Horizontal Directional Drill Monitoring, Inadvertent Return Response, and Contingency Plans, Draft, October 2018)
- Where IRs are most likely, including entry and exit points and along known faults/traces, adjacent property owner right of entry should be obtained in advance of construction to facilitate efficient containment and cleanup of IR fluids."

In addition, the County of Chester submits the following comments from Jan Bowers, Director, Chester County Water Resources Authority, and Michael Murphy, Director, Chester County Department of Emergency Services. Director Bowers states that installing the 20" pipeline at a greater depth is preferable since the reportis indicate this will reduce the risk of construction impacts to properties, existing infrastructure and environmental resources compared to other installation methodologies, Director Murphy concurs that from a public safety perspective, installing the pipes deeper is preferred because it would lessen the chance that the pipelines are struck by third party digging. (12-14)

Letter – Chester County Commissioners – 7-3-19

Letter – McCormick Taylor – 7-2-19

#### 11. 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-CH-0127.0000-RD (the "HDD Site").

1. This reevaluation is premature and incomplete because the installation of the 16- inch pipe is ongoing and has been significantly delayed without explanation.

Drilling for the installation of the 16-inch line at the Site began in early September 2017. Nearly two years later, the Report reveals that "[t]he HDD of the 16-inch pipeline is yet to be completed." The Hydrogeologic Report describes 95% of the pilot hole for the 16-inch HDD being finished, meaning the reaming phase has not even begun. The extreme delay in the construction at this Site warrants thorough analysis and should be central to this reevaluation. Yet Sunoco barely acknowledges the delay. The brief chronology for the Site that Sunoco provides describes "insignificant" loss of circulation and a 15-gallon inadvertent return during the first attempt at drilling for the 16-inch line. In the greater scheme of Sunoco's construction messes, these incidents appear on their face to be quite minor, and certainly do no not seem to explain abandonment of the pilot hole and a very lengthy delay in construction. It is critical that Sunoco fill in the gaps in this story. Without a thorough analysis of what happened – and is happening – with the construction of the 16-inch HDD, this reevaluation is incomplete and premature. Such an analysis is the starting point for understanding how to prevent similar problems during the installation of the 20-inch line.

2. Sunoco's plans do not account for the challenges associated with drilling through the heterogeneous rock found at the Site.

The Hydrogeologic Report describes in depth the challenging characteristics of the three rock types encountered along the proposed profile, yet Sunoco fails to

acknowledge this assessment at all in its plans for the redesign. The Site is underlain by felsic and intermediate gneiss, banded mafic gneiss, and diabase. The Hydrogeologic Report characterizes each rock type as "[d]ifficult to excavate," and Sunoco should proceed with "slow drilling rates." The felsic and intermediate gneiss and the diabase both have large boulder inclusions, which "can create difficulty." The banded mafic gneiss has "[j]oints / fractures of an irregular pattern, moderately to poorly formed, of moderate abundance, widely to moderately spaced, irregular, steeply dipping and open." These qualities, particularly the heterogeneousness of the gneiss, could pose serious problems for drilling. Unless Sunoco drills at an especially slow rate, the drill bit can become unwieldy and difficult to steer when encountering a boulder which has a different hardness than the surrounding rock. As a result, the bit can steer off the planned alignment.

In the summary portion of the Report, Sunoco merely acknowledges that the three types are "present" without going into detail about the difficulty posed by their irregularity and the impaired ability to navigate through them. Sunoco's hydrogeologists have made suggestions for this exact situation in past reevaluations. Their proposed recommendations have included governing drilling rates and using greater than typical alignment checks to maintain alignment. They also prescribe that Sunoco should lower bit and mud pressures, given that higher bit pressures can slow the advancement of the HDD. If an area has a particularly high amount of hard rock zones, another suggestion involves the use of diamond bits to maintain the cutting surface and steer through hard rock zones.

Not only does Sunoco not consider the past recommendations from its hydrogeologists for drilling through similar types of rock, Sunoco does not specify any plan for addressing the problems posed by the three rock types. The Department should require Sunoco to develop such a plan.

#### 3. Sunoco needs to justify the depth of the redesigned profile.

Although Sunoco's redesign of for the Site includes deepening the drilling profile, Sunoco has not explained why it has chosen the specific depth it proposes to pass through, or why that depth is preferable to any other depth. At this Site, deeper depths appear to correlate with higher rock integrity with some variability. See Figure 1 Graph of RQD Results by Depth (below). Drilling deeper to access the higher quality and more granite-like material could be a good strategy to avoid inadvertent returns, LOC, and another abandoned pilot hole so long as the appropriate depth is chosen. The Department should require Sunoco to justify the depth of its redesigned profile by contrasting it with the possibility of drilling at other depths.

# 4. Sunoco cherry-picks results from the rock coring samples and excludes the information about the coring sample taken near the location of the IR (B6-8W).

It appears Sunoco attempted six geotechnical cores at the Site. The first four attempts encountered early auger refusal with the bores only reaching tens of feet; they did not even reach half the depth of the proposed HDD profile. Two additional test bores were able to reach deeper, but produced differing results. Regarding the results of geotechnical boring, the Report states, "Most core recoveries were in a range from 74 to 100 percent." This statement is not attributed to an individual boring site but stated as a general description for all boring sites. The numbers, however, only correspond to one bore. The Hydrogeologic Report provides some detail about the two successful test bores: bore B6-8W had "most core recovery at 42 to 50 percent," B6-8E had "[m]ost core recoveries...in a range from 74 to 100 percent" that also included a fault zone with a recovery of 20 to 30 percent. Sunoco cherry-picks only the results from B6-8E, omitting entirely the results from B6-8W. This omission is especially significant because B6-8W was taken only 100 feet away from the site of the prior IR and B6-8E was taken almost 2,100 ft away from the prior IR, and these points correspond roughly with the entry/exit points of the HDD. Sunoco has not provided data on the expanse in between and ignoring half the data that is available. Sunoco should be required to fill in this significant gap in information and to discuss the implications of all test bore results on its redesign.

# 5. The Department should require Sunoco to generate a credible plan to handle groundwater discharge.

Sunoco should have in place a plan to deal with the expected groundwater discharge at the Site. The Hydrogeologic Report states that "A theoretical hydraulic head difference of approximately 30 feet exists between the southeastern part of the drill and the northwestern entry/exit on profile HDD S3-0320. As such, the drilling plan for HDD S3-00320 should account for a potential groundwater discharge when the pilot boring is complete." The Report, however, nowhere appears to account for the risk of groundwater discharge.

This is a consequential risk. Elsewhere in Chester County, as of this writing, Sunoco's work is causing groundwater discharge to run across a neighbor's yard and into a pond which it is polluting. The Department has not required Sunoco to abate the harm. That is unacceptable.

The Department cannot allow Sunoco to continue to breach groundwater and simply let it out to run outside the limits of disturbance onto other people's property and into waters of the Commonwealth. The time to plan to prevent that is now.

Thank you for considering these comments. Please keep Appellants apprised of any next steps. (15-19)

Letter – Clean Air Council – 7-3-19 – Herman O. W. Drive Crossing