

**DEP Permit # E15-862 & E23-524**  
**DEP Permit HDD Reference # PA-CH-0421.0000-RD**  
**DEP HDD # S3-0541**  
**Township – Westtown & Edgemont**  
**County – Chester & Delaware**  
**HDD Site Name – Arch Bishop / South Chester Road Crossing**

**2nd Public Comment Period**

<b>Commentator ID #</b>	<b>Name and Address</b>	<b>Affiliation</b>
1	Jennifer Nichols	GreenWeaver Landscapes
2	Kathleen Federici 1209 Farmington Lane West Chester, PA 19380	
3	Lisa Replogle	
4	Margaret Quinn	
5	R. Lerario Upper Chichester Township	
6	Alexa and Kevin Manning 805 Graystone Lane Downingtown, PA 19335	
7	Judith McClintock Ardentown, DE	
8	Annette Murray Chester County	
9	George Alexander Media, PA	
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 <sup>th</sup> Floor, Suite 3 Bristol, PA 19007	Delaware Riverkeeper Network
12	Joseph Otis Minott, Esq. 135 South 19 <sup>th</sup> Street, Suite 300 Philadelphia, PA 19103	Clean Air Council
13	Alexander G. Bomstein, Esq. 135 South 19 <sup>th</sup> Street, Suite 300 Philadelphia, PA 19103	Clean Air Council
14	Kathryn L. Urbanowicz, Esq. 135 South 19 <sup>th</sup> Street, Suite 300 Philadelphia, PA 19103	Clean Air Council

## **1. Comment**

Longwood Gardens, and work with several watershed organizations and the Philadelphia Water Department in implementing best practices in managing water resources. The most basic lesson that I teach is that what we do on the land directly impacts our water.

It is with this background that I am writing regarding the Sunoco drilling at Arch Bishop/South Chester Road Crossing. I am very concerned with Sunoco's track record on the ME2 pipeline and their apparent lack of concern for protecting our water. Sunoco's response to requested information regarding potential water supply impacts, groundwater flowback, and inadvertent returns is simply not adequate.

It is time the DEP holds Sunoco accountable for providing information and implementing solutions to keep our water safe. (1)

## **2. Comment**

I understand Sunoco has supplied the DEP a report regarding potential water supply impacts, groundwater flowback and inadvertent returns for the Arch Bishop/South Chester Road crossing. I don't see the actual issues that were identified addressed in this report. Drilling so close to family residences and schools is completely irresponsible and a recipe for disaster. Chester County homeowners have suffered enough due to this ME 2 Project to make plastics for overseas sales.

Residents have already lost their water supply, DEP, you need to stop this. The continuing and numerous frac outs are irresponsible and need to stop. That wastewater from a frac out is considered industrial toxic waste. This is completely unacceptable in a densely populated suburban area.

Sunoco is not drilling in Texas, our water tables are higher than those in TX and they obviously don't have all the data they need to be responsible with our water tables and aquifers. For example, at the Turnbridge drill site and the Shoen Road drill site, Sunoco drilled into a hill and the water table was higher than the drill site. This incident drained local aquifers and spoiled wells.

This same type of incident can and most likely will be repeated at the 352 (Andover and Saints Simon and Jude) HDD site which is in question. Please stop this and do not allow them to HDD in this area.

With a Children's Hospital of Phila. note in hand regarding my daughter's health I already had to remove my children from Saints Peter and Paul School. Medically speaking and medically documented, these drilling activities absolutely should not be conducted in or around our densely populated, suburban area. I have a Doctors note stipulating the removal of my children from that school directly due to the drilling up the road on Boot Road and 25 feet from that school to prove it. Its not easy to have your right taken from you to send your kids to a school of your choice. It is still a hard pill to swallow, especially as an American living in Chester County, PA.

Now, to affect or even potentially impact more of our water supplies is completely irresponsible of our lawmakers and governing bodies to allow. DEP, protect us, Uphold your mission; 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.

Please do your job and protect us. Do not allow Sunoco to HDD in these areas. (2)

**3. Comment**

I am writing in reference to Sunoco's response to the Department of Environmental Protection's request for additional information about the ME2 pipeline work at the "Arch Bishop/South Chester Rd Crossing" site. Sunoco should be required to perform a thorough investigation of the potential ground-water and well problems in the area that it proposes to drill, as this has proven to be a consistent problem since this process began. Continued frac-outs in suburban areas are unacceptable and a detriment to our environment. I urge you to require Sunoco to present a detailed plan for prevention of groundwater flowback, in addition to conducting their own research on local well depths to prevent further issues. Thank you for your attention to this matter. (3)

**4. Comment**

Sunoco Mariner East 2 pipeline) along Rte 352 between the Andover subdivision at Route 926 and the Sts. Simon & Jude

Groundwater flowback. This is what happened at the Tunbridge drill site in Delaware County and the Shoen Road drill site in Chester County. In those locations, Sunoco drilled into a hill, and the water table they encountered was higher than the drill site, so the water came flowing back to the drill, draining local aquifers and spoiling wells.

This may well happen at the Andover drill site, since there is a big hill between there and Sts. Simon & Jude. Sunoco's report concedes that "these elevation differences could cause...groundwater discharge at the entry/exit points...potentially lowering of the water table in the area of the high point...." But the report doesn't tell how this will be prevented.

Water supply impacts. If flowback occurs, there is likely to be a water supply impact (wells may go dry). Sunoco has identified 41 wells within 450 feet of the drill route, but it has obtained limited data on water depth parameters for only 11 of them.

Sunoco didn't try to collect well depth data itself, but depended on a state agency (the Pennsylvania Groundwater Information System, PaGWIS) which has spotty data, some of it very old. Some is incomplete. On its own website, PaGWIS admits to a backlog of data on hundreds of thousands of wells that have yet to be entered into its system. Sunoco should have collected this data itself. And the five boreholes it drilled

to check on the geology of the area provided little data on the water-table issues. There is simply not enough information to know where an aquifer might get hit.

Sunoco plans to conduct this HDD without any real idea about the water problems it may cause.

Inadvertent returns. “Inadvertent returns” are the frac-outs—drilling mud surfacing where it shouldn’t—that have plagued Sunoco’s drilling efforts in our area. Sunoco’s report claims that “IRs during the pilot phase have occurred at some nearby HDD’s and not at others.”

That’s stretching the truth. The Slitting Mill site, which is adjacent to the south, has had multiple frac-outs. The Boot Road/Chester Road site and the Giant supermarket site, both of which are nearby to the north, have also had frac-outs. And the only change in drilling procedure mentioned in the report is a very minor one (if it is a change at all). It seems likely that there will be frac-outs on this stretch of the route. (4)

**5. Comment**

Regarding Sunoco’s response to the DEP’s request for additional information about the work for the Mariner East 2 pipeline at the “Arch Bishop/South Chester Road Crossing” site in Chester County: Sunoco should be required to do a thorough investigation of the potential ground-water and well problems in the area where it proposes to drill, and that the continuing frac-outs are unacceptable in a suburban area.

PA residents who live along the route are grateful and gratified for the temporary halt on construction of the pipeline. We want to make it permanent because of the widely recognized safety dangers regarding the volatile liquefied gases that can explode and produce fast-traveling fireballs through ignition from just one smart phone or doorbell -easily manifested in populous Chester and Delaware counties. I am also contacting Governor Wolf and my state legislators again. (5)

**6. Comment**

We are very concerned about the proposed route of the Mariner East 2 pipeline in this area. We request that the company do a comprehensive study and plan in regard to groundwater and well protections in the highly populated area. Inadvertent return where or anywhere else are unacceptable.

Thank you for all that you are doing to protect the health and safety of people and the land in PA. (6)

**7. Comment**

Here is my “Public Comment” regarding Sunoco’s request for more HDD drilling for the Mariner East 2 pipeline along Rte 352 between the Andover subdivision at Route 926 and the Sts. Simon & Jude School at Route 3.

The report which had been requested by the DEP and which was submitted by Sunoco, is inadequate. The DEP had asked for more information “regarding potential water supply impacts, groundwater flowback, and inadvertent returns.” There is some additional text in the new report, but little new information, on each of these topics.

Sunoco should be required to do a thorough investigation of the potential ground-water and well problems in the area where it proposes to drill. The continuing frac-outs are unacceptable in a suburban area.

Moreover, Sunoco has generally proven itself to be untrustworthy when it comes to abiding by regulations. They have shown flagrant indifference towards human life and for the quality of life, with their 100 or so infractions since they’ve begun this disastrous Mariner 2 project.

As State Rep. Leanne Krueger-Braneky, D-161, has stated, “Construction on the Mariner East 2 pipeline across Pennsylvania — but especially in Delaware and Chester counties — has impacted drinking water, wreaked havoc on private property, and posed a grave danger to our citizens. Sunoco Logistics has shown a blatant disregard for these things that we hold dear and which are protected by our state Constitution.”

With the above in mind then, my opinion as far as condoning further drilling by this egregiously irresponsible company?? An emphatic NO!

Thank you for taking my thoughts into consideration. (7)

#### **8. Comment**

I am commenting on Sunoco’s response to the DEP’s request for additional information about the work at the “Arch Bishop/South Chester Road Crossing” site.

Sunoco’s respond is inadequate and weak. How are they going to protect the quality of the 41 wells in the area?

Please demand that they do more to protect Chester County wells! Do not permit them to gloss over their previous infractions and insist on more details for future safeguards on any construction. (8)

#### **9. Comment**

Sunoco’s investigation of potential ground-water issues at this site is completely inadequate. It mostly depends on old data from the Pennsylvania Groundwater Information System, which that organization admits on its own website is woefully out of date. Sunoco itself did almost nothing to determine where aquifers are and where the water table is along its drilling route. It will be drilling into a substantial hill in the middle portion of this route, and it is very likely that groundwater will flow back to the drill site.

You should insist that Sunoco do a better evaluation of this possibility and consider adjusting its plans accordingly. There are at least 41 wells that could be impacted. (9)

#### **10. Comment**

On January 2, 2017, Sunoco submitted a letter and updated materials to the Department in response to the Department's requests regarding horizontal directional drilling sites PA-CH- 0421.0000-RD, and PA-CH-0421.0000-RD-16 ("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"), please accept these comments in reply.

Throughout the re-evaluation process of Mariner East II HDD sites, the Department has consistently sought additional information from Sunoco regarding issues of critical importance, such as impacts to water supplies, that have not been adequately addressed in Sunoco's reports. The Department has also sought such information for this Site, but the requests have taken a different form. The Department's letter to Sunoco dated December 22, 2017 provides:

The Department has concluded that supplemental information and evaluations are needed to properly address issues discussed in the Report regarding potential water supply impacts, groundwater flowback and inadvertent returns. We request that this information be provided.

Appellants agree with and support these requests and believe the information the Department seeks is necessary for ensuring the safety of the public and the environment. In contrast to previous Department requests though, these requests have less specificity, thus making it difficult to understand exactly what it is the Department seeks and to determine whether the issues identified by the Department fully address deficiencies raised in the first round of comments. If additional guidance has been provided to Sunoco in regard to these requests, Appellants ask that any such guidance be made available to the public so Appellants and residents near the Site are in the best position possible to respond. Regardless, the amended re-evaluation for the Site ("Amended Report") raises serious concerns.

If there was any ambiguity in the initial re-evaluation ("Report") as to whether the plans for the Site put water supplies at risk, the Amended Report has resolved that ambiguity; Sunoco admits it "believes that HDD activities could affect individual well use during active drilling for wells located within 150 linear ft." Sunoco goes on to explain:

HDD is an active "pressure event" in the aquifer that pushes upon the static ground water and at a minimum could agitate settled sediments within the water bearing zones, or could result in transport of diluted drilling fluid towards the withdrawn zone for individual wells. As a result, active well use during HDD activities potentially could result in the uptake of turbid water.

This finding is crucial. It is also only a starting point.

First of all, Sunoco provides no explanation as to why it believes only wells within 150 feet of the alignment are at risk. It appears Sunoco has drawn an arbitrary line based on the limited outreach it is willing to conduct, rather than the extent of geologic connectivity at the Site, which is located in a densely populated area where hundreds of residents could potentially be impacted. Furthermore, while Sunoco speaks to the nature of some of the well impacts that might occur, it has failed to address the consequences of that sediment or drilling fluid infiltration. Sunoco provides no basis for concluding that the impacts to well water will only occur “during active drilling.” Previous infiltration events related to Sunoco’s drilling have resulted in wells being rendered permanently unusable; drilling fluid can block the flow of water into a well by sealing off fractures and other channels that connect the well to the surrounding aquifer. There is no reason, based on the Amended Report, to believe the wells at the Site will not suffer the same fate.

Without any scientific support, Sunoco has also concluded that the well infiltration “does not present a health hazard,” positing only “it can be unsightly to users and could affect taste.” This statement is, at best, dangerously misleading. By disrupting the filtration functions of an aquifer, drilling leaves wells vulnerable to any variety of contamination. In particular, bacteria has a tendency to bind to the particulate matter Sunoco admits may infiltrate wells at the Site. Sunoco’s previous drilling has already led to bacterial contamination of wells. As a result, the Order implements an enhanced water testing protocol that includes testing for bacterial pathogens. Yet, Sunoco has made no effort to address or discuss this risk in the Amended Report. It’s solution for dealing with contaminated wells is simply for residents to use other water. The purpose of the re-evaluation process is not for Sunoco to recognize problems then do as it pleases, but to avoid harming the public and environment.

The Amended Report also falls short addressing challenges with steering, which can add to the risk of inadvertent returns, and groundwater flowback. In its first comment on this Site, Appellants pointed out that Sunoco, without explanation, chose not to follow the recommendations of its own scientists. In particular, the hydrogeological report that was part of the initial Report provided the following recommendations:

The only practical solutions for optimizing progress and staying on alignment may be to govern drilling rates and continue to use greater than typical alignment checks to maintain alignment. In addition, consideration should be given to lowering bit pressures, as well as mud pressures... Diamond bits may be beneficial for maintaining the cutting surface and steering through hard rock zones.

This language has simply been removed from the Amended Report. Similarly, the initial hydrologic report suggested “[i]t would be advantageous to intersect north of the intervening hill to better manage groundwater and the southeast entry point.” This language too has simply been removed from the Amended Report. Of course, deleting

the recommendations of its scientists does not make them any less applicable. Failing to provide an explanation for not following the recommendations of its scientists, even when given a second opportunity to do so, suggests no scientifically defensible reason for that decision exists.

Sunoco's Amended Report does not address the concerns raised by the Department or Appellants and it certainly does not establish that its plans for the Site are safe. For the forgoing reasons, Appellants ask that the proposal for the Site not be approved.

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

Letter – [Clean Air Council – 1-7-18 – Arch Bishop/South Chester Road Crossing](#)