DEP Permit # E15-862 DEP Permit HDD Reference # PA-CH-0413.0000-RD DEP HDD # S3-0520 Township – East Goshen County - Chester HDD Site Name – Strasburg Road / Bow Tree Drive Crossing

3rd Public Comment Period

Commentator	Name and Address	Affiliation
ID #		
1	Bernard Greenberg. M.D.	Pipeline Committee,
	East Goshen Resident	Southeastern Pennsylvania
		Sierra Club Group, and
		Steering Committee East
		Goshen Safety and
		Environmental Advocates.
2	Lex Pavlo	
	611 South Speakman Lane	
	West Chester, PA 19380	
3	Nicholas Taugner	
4	Christina Morley	
	East Goshen Township	
5	Ron Cocco	
	633 North Speakman Lane	
	West Chester, PA	
6	Melissa Marshall, Esq.	Mountain Watershed
	P.O. Box 408	Association
	1414-B Indian Creek Valley Road	
	Melcroft, PA 15462	
7	Aaron J. Stemplewicz, Esq.	Delaware Riverkeeper
	925 Canal Street	Network
	7 th Floor, Suite 3701	
	Bristol, PA 19007	
8	Joseph Otis Minott, Esq.	Clean Air Council
	135 South 19 th Street, Suite 300	
	Philadelphia, PA 19103	
9	Alexander G. Bomstein, Esq.	Clean Air Council
	135 South 19 th Street, Suite 300	
	Philadelphia, PA 19103	
10	Kathryn L. Urbanowicz, Esq.	Clean Air Council
	135 South 19 th Street, Suite 300	
	Philadelphia, PA 19103	
11	Amanda Lange	
12	Michelle Guinan	
13	Erin Gallagher	

14	George Alexander 437 East Franklin Street Media, PA 19063
15	Mary Ann Kusner

1. Comment

Sunoco Pipeline's use of HDD in the construction of Mariner East 2 and 2X has been a catastrophe. It has resulted in over 220 documented drilling fluid spills, approximately two dozen water wells known contaminated, and many sink holes, some which have exposed Mariner East 1, forcing the shutdown of this pipeline. Construction has been halted by the courts, PUC, and the DEP and you have issued numerous violation notices. Furthermore this operator has the worst accident record in the US.

The letter you received on October 29th from Sunoco responding to your comments of the need to minimize the risks of Inadvertent Returns and impact to water supplies resulting from the use of HDD was signed not by a professional engineer but by a Certified Wildlife Biologist(CWB).

I strongly urge you to employ your own independent qualified professional geologists and engineers experienced in HDD to carefully review Sunoco's construction plans before considering approval. They should be paid by Sunoco so that you are not limited by your own inadequate budget.

The further use of HDD in densely populated East Goshen Township with geological concerns must be carefully considered so as to protect our precious environment, drinking water and the health of our residents. (1)

2. Comment

I am a resident whose property is adjacent to this HDD drilling. The impact here locally is as seen by some of the structural cracks around my chair rail in my dining room and in my kitchen. There have been noted spills here in East Goshen before and there is no reasonable reason to expect no future spills (or inadvertent returns as Sunoco calls them.) The exterior of my house has had a 'film' on it since the drilling began. I'll need to power was my house and as this project drags on I'll have to do it again I'm sure. I'd rather not. When first approached the information shared was 'we'll be done in 6 months or so and you will feel little impact.' That was two years ago.

I would also like to see the results of the geophysical testing. It would seem reasonable to post those results for the public to view. If that information had been shared with PUC or other agencies I believe it would be reasonable to share with those of us who live here. With no real end in sight this request would seem in the reasonable category as well.

Transparency and fact sharing for those of us who live here and have lived here in our community would seem like something that should be provided without asking. I would think that the township Board of Supervisors would be provided this information and transparency as well though after visiting the East Goshen Township

website there is no mention of this HDD Strasburg Road/Bow Tree Drive HDD issue which would indicate that the township has NOT been advised.

In closing, the further use of HDD in densely populated East Goshen Township with geological concerns must be carefully considered so as to protect our precious environment, drinking water and the health of our residents. (2)

3. Comment

I moved to this area in February with my twin daughters and wife. We couldn't be happier with the people in our neighborhood, community, and township. One thing I am very upset about is that I didn't realize how many hidden dangers lie so close to home.

About a half a mile away is a pipeline carrying liquid fuel of some sort. This is actually the first time I'm hearing about possible HDD. I am now not upset, but actually angry.

I'm angry because I do know that while the pipelines may pose a threat, HDD always threatens. It threatens drinking water, ecosystems, natural beauty, habitats, and much more. Most people in our community are on well water. I fear so much for not only our water, but for the environmental impacts that are irreversible even if a HDD machine works as it is designed.

The liquids alone are dangerous enough to destroy the surrounding ecosystems for miles around for decades.

Please do not allow this. (3)

4. Comment

On October 29, 2018 Sunoco/Energy Transfer Partners submitted supplemental information to the DEP regarding HDD activity at the Strasburg Road/Bow Tree Drive location. As a longtime landowner and resident in the East Goshen community with stakeholder interests in the safety of this project, I submit the following comments:

1. Sunoco's response dated 5/12/18 makes reference to a Horizontal Direction Drilling Reevaluation Report. Their response specifically says " The Horizontal Direction Drilling (HDD) Reevaluation Report, First Report, is the work product, or summarized portions of, the work of several individuals. These include at minimum a Pennsylvania Professional Geologist (PG), a pipeline engineer licensed in the State of Pennsylvania, and an HDD expert who learned this construction craft through years of experience." I bring this to the attention of the DEP because the information provided by Sunoco on October 29, 2018 was signed by an individual who appears to be a Certified Wildlife Biologist and not an individual with the credentials necessary for managing a site where complex engineering skills are required. This is the same individual who submitted and signed the May 12th letter which also does not

adequately answer many of the important issues raised by the DEP. Further it is my understanding that the only requirements for attaining the CWB credential are a) becoming a member of The Wildlife Society b) submitting an application via email c) submitting payment. The definition of a Certified Wildlife Biologist, according to The Wildlife Society Website are as follows: Certified Wildlife Biologist® An individual with the educational background and demonstrated expertise in the art and science of applying the principles of ecology to the conservation and management of wildlife and its habitats, and is judged able to represent the profession as an ethical practitioner, will be designated as a Certified Wildlife Biologist®. The CWB® certification is valid for 5 years and may be renewed. Nowhere in that description of experience do I see anything that offers any level of assurance that the individual who submitted the letter on behalf of Sunoco has the engineering qualifications or skills to manage the operations of this project. For this reason alone, I urge the DEP to deny the restart of any operations at this site. Not only is it in the best interest of public safety to ensure that this project is managed by appropriately trained and licensed individuals but it is in the interest of the DEP that the Department only accept plans and recommendations from individuals who are qualified to offer those recommendations. If property damage or injury were to occur it would be almost comical to argue in a court of law that a wildlife biologist and not an engineer was the one managing this hazardous materials pipeline project. Furthermore, if the individual who signed the letter submitted on October 29, 2018 has submitted any other information on behalf of Sunoco to the DEP I urge you to re-examine that information as well for appropriate expertise.

2. In the response dated 10/29/2018, Sunoco states that a geophysics contractor will review the location of the HDD, the geology, and surrounding surface conditions then provide a recommendation on which type of geophysical analysis should be done. Even I, a layperson, in my cursory research of HDD drilling have found that one of the first steps that should be undertaken before construction begins at an HDD site is a thorough geophysical analysis, especially at locations where there could be subsurface voids. The fact that the DEP in previous correspondence had requested subsurface bore sampling and lab testing at this site and the same individual responded by saying that Sunoco felt they had enough information and would not do further testing to now come back after IRs have occurred should demonstrate that this corporation and its team of wildlife experts clearly is not following industry standards.

3. Tool Face Pressure and Annular Pressure Monitoring - In the 5/12/18 response submitted by Sunoco, the DEP repeatedly suggests that the history of this area suggests IRs are likely to happen and that surface soil would likely not be sufficient to prevent returns. The DEP asks for subsurface bore samples, lab tests, how max drill pressures will be established and monitored and Sunoco repeated skirts the questions by saying they have enough information. In the letter submitted on 10/29/18 by the same individual, once again, there are no pre-determined maximum drilling pressures or equipment alarms that warn the operator, as I have read about in other industry publications. Sunoco relies on real time monitoring, although they do not indicate if this pressure monitoring is done mechanically by automation or by personnel on-site. The fact that many of the documented IR incidents have been reported to Sunoco by residents indicates that their methodology is faulty.

In closing, I suggest that DEP has been, for a long time, asking the right questions and requesting proper testing and documentation for this site but as demonstrated by the correspondence from Sunoco dated on 5/12/18 and 10/29/18 received insufficient information from Sunoco in order to fully understand the geology of this site and the appropriate planning necessary to ensure safe construction activity. It is also abundantly clear that Sunoco does not have properly credentialed staff overseeing the planning of this project and I would encourage the DEP to require proper PA licensure and certification from any individual who is involved in this project moving forward.

Thank you for your consideration of these comments. (4)

5. Comment

My property backs up to 352 and close to the Directional drilling that took place on the New Kent apartment site. Drilling stopped many months ago, but we are informed it may start up soon. Still dealing every day with drilling sight eye sore along with pipes sitting along 352. When the drilling was active, we had dust dirt and incredible high noise sometimes over 10 hours a day. I am very concerned about Sun's safety record running highly volatile liquids through high density areas. They have had numerous spills including one at New Kent site. There current plan to piece the 16 and 20 inch pipe with a existing 70 year 12 inch pipe is a scary option. I therefore recommend that all work stop until there is an independent review of their current plan, assurances that a safety plan is in place and that information is communicated to everyone in close proximity of these pipes, including Schools, church's and senior living facilities. Thank you in advance for your attention in this matter (5)

6. Comment

On October 29, 2018, Sunoco submitted a supplemental letter to the Department in response to the Department's March 13, 2018 request for additional information regarding horizontal directional drilling ("HDD") Site PA-CH-0413.0000-RD ("Site"). Pursuant to the Corrected Stipulated Order entered on EHB Docket No. 2017-009-L on August 10, 2017 ("Order"), and on behalf of Clean Air Council, Mountain Watershed Association, Inc., and the Delaware Riverkeeper Network ("Appellants"), we respectfully submit these comments in reply. Our comments first address point by point Sunoco's letter, then discuss additional matters.

1. Geophysical Surveys

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

While Sunoco has committed to perform surface geophysics, it is still ignoring the Department's request to perform a suite of downhole geophysics and caliper testing at the Site. These are different survey techniques that provide different data and Sunoco still has neither agreed to perform these additional tests nor provided a valid reason as to why they cannot be performed. The Department should continue to require Sunoco to conduct downhole testing.

2. Proactive Measures

The proactive measures Sunoco describes in point 2 are not "supplemental" to Sunoco's previous, inadequate submissions, but merely a recitation of practices that Sunoco is already required to use, has committed to using, or both. For example, in this October 29, 2018 letter, Sunoco describes using Annular Pressure Monitoring (APM) as a method of data collection; however, in its first supplemental response, submitted May 12, 2018, Sunoco stated: "Upon the start of this HDD the use of an APM tool is mandatory." Moreover, the HDD IR Plan plainly requires the use of APM: "The following requirements shall be placed upon each HDD contractor with respect to drilling fluid control: Instrumentation – The HDD contractor shall monitor the annulus pressure of returns during the HDD pilot hole phase of HDD using an annular pressure monitor." Similarly, the explanations of "tool face pressure" and "tracking of cuttings removal," are not new or additional preventative measures; they are standard operating procedures that, while necessary, have proven inadequate for this site.

3. Grouting

In point 3, Sunoco describes two grouting measures it may generally use at HDDs, under the heading "Proactive Treatment by Annulus Grouting." These grouting plans appear to conflict with earlier grouting plans Sunoco described to the Department, which involve the injection of bentonite chips rather than cement or sand/cement. It is unclear if both protocols will co-exist or this is intended to supplant the old

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

Additional Deficiencies

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

The summary of water supply testing results submitted by Sunoco still does not comply with the Order. A number of wells were not analyzed for E. coli, total coliform, and fecal

coliform. Testing for such pathogens is explicitly required by the Water Supply Plan. Sunoco cannot rely on the incomplete tests it has summarized and landowners should be made aware that they are entitled to not only whatever testing Sunoco may have completed, but specifically testing for these bacteria.

Thank you for considering these comments. Please keep us apprised of your next steps on this HDD Site. (6-10) Clean Air Council – 11-2-18 – Strasburg Road / Bow Tree Drive Crossing

7. Comment

I am a new resident of East Goshen Township and moved my family here for a safer, quieter lifestyle than our previous neighborhood in Montgomery County offered. If I had known about the pipeline and all of the issues involved in it I would not have even considered East Goshen (or anywhere with proximity to the proposed pipeline). While I admittedly do not fully understand all of the potential dangers of the HDD's impacts on well water, I know that the legitimate concerns of countless citizens are being ignored by Sunoco, the PUD, and the state and local government. Given that Sunoco has had such utter disregard for such safety concerns, has operated with zero transparency, has avoided taking responsible proactive action to address potential dangers, acting with only its best interest and profit in mind, I certainly can not believe that things will change in the future once the pipeline is installed. I feel that the wool has been pulled over our eyes and nobody seems to care. If the company was acting with integrity and transparency perhaps we would be in a different situation. However, they have been entirely irresponsible. What happens if there is a

leak? How should we prepare? The "plan" to run downwind of a leak of gas that is odorless and colorless is comical at best and leaves hundreds if not thousands of citizens in danger's way with no real understanding of what to do if an emergency happens. I can't articulate my opposition to the pipeline enough, and my fear is growing by the day. I urge local and state government to stop this project without delay. How much are your citizens' lives worth?

As a follow up, the list of "Notices of Violations" available on the DEP's website is absolutely inexcusable! If Sunoco was acting responsibly this list could not possibly be as long. Again, what's next? What's to come? Please shut this down. (11)

8. Comment

I would like to express my concern with the HDD that will be used in close proximity to my house. The fact that the report shows that there are wells that could be affected by this HDD should put an immediate stop to this project.

Sunoco was granted public utility status. The definition of a public utility is "an organization supplying a community with electricity, gas, water, or sewerage." Since this pipeline runs to Marcus Hook and is being exported overseas, please explain to me how it is helping this community. The only one who is benefiting from this is Sunoco not my community.

When lives are lost because this pipeline malfunctions in some way, I hope you can live with yourself. Do something now! (12)

9. Comment

Please make sure you re-evaluate allowing Sunoco to continue to build this extremely dangerous pipeline right through the neighborhoods of East Goshen. The way Sunoco continues to paste together an untested and potential catastrophic pipeline is very concerning. This is dangerous to all the residents along the pipeline route.

Enough is enough Sunoco needs to reassess its plan and safety of this pipeline. We the residents of PA deserve some safety analysis before rushing to allow the continuance of such a dangerous project. Please represent the people and not big business and money. That is your job to make sure Pa is safe for all.

Please do not allow Sunoco to work on the pipeline. With all the problems looks Like they should have complete a full analysis of the project and present to the communities. Sunoco's track record has shown they cannot be trusted and they own the people the next steps and they Must be adequately vetted and reviewed to ensure using current data.

Please save the communities along this pipeline. Stand up to Sunoco. This project needs to be reevaluated and presented again the overall scope and risk analysis. (13)

10. Comment

This is a comment on Sunoco's plans for HDD in the Bowtree/Strasburg Road area.

- 1. Sunoco is required (by the August 2017 settlement) to consider alternative routes, and they brushed it off as "not practicable". It is obvious from Google Earth that are far better alternatives than the one proposed here, especially to the northeast. Sunoco must be required to actually consider them. The fact that they have put pipe in the ground that leads up to this location is not a defense for them: they did that in spite of knowing that they should have been considering other routes.
- 2. Sunoco is also required to consider alternatives to HDD. In this case, several stretches of conventional boring should have been considered. That would minimize risk wells and aquifers. Sunoco said HDD was needed because the alignment was too long for conventional boring. Of course it is too long for a single bore. Sunoco should have considered a series of conventional bores.
- 3. Sunoco failed to take into consideration the apparent fault lines and fault zones in the area. Sunoco's own scientists recommended going beyond 450 feet in its well analysis in areas where faults might provide a link a channel for water flow from the drill zone to wells. Instead, Sunoco arbitrarily ignored the recommendations of its own scientists.

4. Sunoco still has not shown how it will prevent contamination of groundwater and wells. The provision of "water buffaloes" to landowners whose wells become unusable is not a solution.

These are just a few of the issues raised in the public comment period ending May 12, 2018 that Sunoco has failed to address. The company's response does not address most of the issues raised by Clean Air Council, Delaware Riverkeeper Network, and Mountain Watershed Association in their joint comments. In fact, Sunoco's response appears to be nothing more than a recital of their normal operating procedures for HDD. This is simply evasive behavior and the DEP needs to insist that Sunoco be truthful and responsive, especially given the company's record of past non-compliance. The DEP should reject Sunoco's bogus response and ask for a real one. (14)

11. Comment

On October 29, 2018, Sunoco submitted a supplemental letter to the Department in response to the Department's March 13, 2018 request for additional information regarding horizontal directional drilling ("HDD") Site PA-CH-0413.0000-RD ("Site"). Pursuant to the Corrected Stipulated Order entered on EHB Docket No. 2017-009-L on August 10, 2017 ("Order"), and on behalf of Clean Air Council, Mountain Watershed Association, Inc., and the Delaware Riverkeeper Network ("Appellants"), we respectfully submit these comments in reply. Since my colleague's comments will address point by point Sunoco's letter, then discuss

additional matters, my comments will address the potential horror that Sunoco's Pipeline can inflict upon us.

I live in a gated over 55 community containing 1720 homes with borders on Boot Road and Greenhill Road. Contiguous properties are shopping center, mid-rise eldercare facility for independent living as well as assisted and skilled nursing care. Next is a church and school. Local Fire Company is on the corner of Boot and Greenhill. Across Boot Road are several development of homes as well as large commercial buildings.

Our greatest fears are being incinerated by fireball. Hundreds of us are in immediate danger of death, injury, loss of property, etc. Our instructions are to run as quickly as possible upwind from fireball. Many have mobility problems. We are completely helpless to alleviate the risk of HVL explosion. To help identify a gas leak, natural gas contains Mercaptan to make gas smell like rotten eggs. Sunoco stated they cannot add this substance to warn residents of impending problem. In addition, there are no warning system, alarms, sirens. Why? Sunoco's terrible record of over 1600 leaks and explosions is all the more reason why you must stop all four pipelines from being put into service. Why should our lives be destroyed because Sunoco wants to make millions more by selling HVL gas to Scotland? (HVL= three highly volatile gases on the own, Propane, Butane, and Ethane!) Sunoco should have never been allowed to cover their incompetence by being protected by PUC. They have taken advantage of eminent domain by bullying land owners, taking over their land, and putting an innocent home owner in jail. This is more like the Wild West. What happened to a man's home is his castle? Some foreign countries are known for lack of human rights. We should be above this. We are Citizens of the United States of America!

If leak and explosion occurs on a windy day, it will burn our densely wooded area for miles before anyone has a chance to react. Potentially hundreds will die. San Bruno did not have large area of dense trees. (Go online: SanBruno Explosion (natural gas) to further understand my requests). Please contact me for a visit to our neighborhood to see for yourself.

Our country has suffered numerous deaths due to machine guns. Every time it happens, we are upset and cannot understand why. Some attributed to mental illness. When pipelines cause death and destruction, most are glad they do not live near these sites. Certainly, Sunoco executives and employees do not live near pipeline areas. If and when an explosion occurs in our neighborhood and hundreds die, I feel it should be considered as a deliberate terroristic act upon the part of Sunoco and those officials who accepted money from them and allowed this to happen. They are just as terrible as the terrorists who caused 9/11, the deaths of children, worshipers in churches and synagogues, night clubs, schools, etc. with their guns. There is NO difference. Some officials in San Bruno have been fined and/or received jail time. This is of no help to those who live in fear of when, where, why does this need to happen.

My ancestors came to America on the Mayflower to escape wrongdoing and to live a life of freedom. Our country has always helped those in need, made laws to protect Citizens, and fought for our freedom. My Mayflower ancestor, John Howland fell overboard into the Atlantic Ocean during the crossing. He managed to grab a rope. Men on ship helped pull him back on board. They did not abandon John. They felt it their duty to help him. Even though there are many of us, please do not turn your back on us in our time of greatest need.

I have lived in my West Chester home for almost 19 years. This was going to be my final residence. I enjoy my small home and planned to live here for the rest of my life. My searches for a new place have been in vain. Nothing compares. Most houses have two stories with steps which are not conducive for me. My three sisters and their families live near Route 352 between Routes 1 and 202 just as I do. They are all in danger as well.

Numerous times, I have rejoiced upon learning that Sunoco and Partners were caught with violations, unsafe practices, contaminating creeks and private wells during HDD, causing sink holes on private property, etc., since all work was stopped due to litigation, court appearances, Judges ruling in favor of Citizens and litigation, and huge fines imposed on Sunoco. Appears Sunoco's unlimited funds and their lawyers are no match for the common person. Grossly unfair. (15)