Kay E Whittle
1626 E Strasburg Rd
West Chester, PA 19380
East Goshen Township, Chester County, PA
kewhittle23@gmail.com
610-430-1824
August 21, 2019

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PA PUC
SECRETARY'S BUREAU

PUC
Attn: Secretary Rosemary Chiavette
400 North Street
Harrisburg, PA. 17120

L-2019-3010267

Dear Secretary Chiavette,

Enclosed is my response to the PUC's request for public and private comment on potential safety guidelines for the Pipeline Industry in Pennsylvania.

I am a resident of East Goshen Township, Chester County, PA. For over two years I have lived near, observed, and tried to learn about Sunoco Logistics Mariner East 1, 2, 2e Pipelines which traverse my community. In the process, I have learned a great deal about Pipelines and about Sunoco Logistics.

Sadly, most of what I have heard, seen, and learned is not good. Until the advent of fracking and HVNGLs, relatively little attention was paid to the pipelines that cross our communities.

HVNGLs are another matter entirely. New safety regulations are now imperative to protect the HCAs, many residential, that seemingly must accommodate these pipelines.

I look forward to the institution of safety procedures that will allow us to feel safe in our homes and communities again. I am tired of hearing "there's no regulation for that" and "that's not my responsibility." Our safety must be someone's responsibility. Make it yours.

Sincerely,

Kay E. Whittle

Kay E Whittle

Written Comments on Docket No. L-2019-3010267

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SUBJECT: PUBLIC COMMENT ON PIPELINE SAFETY

Comments to Amendment and Enhancement of 52 PA, Code Ch 59

More stringent regulation is needed for pipeline companies who expect to dig, trench, drill and install pipelines in Pennsylvania. Important safety procedures are critical when pipelines carry dangerous, highly pressurized natural gas liquids (NGLs) - invisible and odorless - and traverse High Concentration Areas (HCA.) The minimal standards set out by PHMSA (49CFR Part 195) are not sufficient to ensure the safety of pipeline neighborhoods. These deficiencies must be remedied by the PUC. To that effect, I submit for your consideration these comments on pipeline management, as you begin consideration of potential new safely regulations. I do not feel safe under the current, largely unregulated system. Too many of the inspections are left to the Pipeline Operators, whose conflict of interest in these matters is obvious.

A. Stringent Guidelines for Pipeline Materials should address

1. **Reversal of flow:** Pipelines must undergo careful and ongoing inspection when flow is reversed. Seals and gaskets should be replaced on all sections.

2. **Products**:

a. Operators should not be allowed to repurpose pipelines to carry product for which they were not designed and constructed without rigorous testing and upgrades. Independent engineers, not those working for Pipeline Operators, should undertake this testing.

b. Hazardous liquids (NGLs, natural gas, HVLs) must be transported only in coated steel pipes. Pipes should be constructed of US Steel supplies, so that we can be sure they were constructed to rigorous US standards. US steel uses better anti-corrosive coatings than foreign products.

c. There must be no grandfathered exceptions for uncoated pipe, bare tele-pipe, or other old-style, antiquated materials.

d. Also, the pipes should not be allowed to sit above ground for long periods of time before use, exposed to weathering, UV deterioration, vandalism, etc.. Instead they should be stored in accordance with the manufacturer's guidelines before and until they are installed. This includes protection from weather and UV degradation.

e. Covered pipelines that become corroded, rusted, and exposed through erosion, (for example, the rusted, exposed pipeline behind Stolen Sun Brewery in West Whiteland township, Chester County, PA) must be replaced and reburied.

3. **Age:** *Establish strict and safe "life expectancy " standards for pipes.*

a. "Sampling" does not suffice for inspecting old pipelines since corrosion, fracture, sinking or rising may occur at any point along the flow. The entire line must be exposed, inspected, replaced in necessary. For example, if longevity of a pipeline carrying oil is established as 80 years and that pipeline is repurposed to transport

hazardous volatile liquids (NGLs for example), that pipeline safety and efficacy must be re-assessed with regard to the new product for which it is to be repurposed.

b. The Pipeline Operator should not be allowed to make this assessment. It should be undertaken by an independent third-party who would send its findings to the PUC.

4. **Pressures:**

a. Pipeline pressure levels must not exceed the standards set at the time of their design, construction, and deployment.

b. Document 49CFR 195.114 specifies that older pipelines may be used with reduced pressure to ensure safety. If so, that reduced pressure then must be applied to the entire length of the pipeline. No pressure along the pipeline should exceed the pressure specified for its weakest link. Infr Section II, B, 3

5. **Underground Clearance.** Section 195.250 mandates that underground pipe must have a clearance of 12 inches from the outside of the pipe to the nearest edge of any other underground structure. (49 CFR, subsection 195.250).

a. The safe depth of a pipeline in HCAs depends upon conditions like soil composition, geology, nearby structures, water resources, etc. Safe depth standards must be set by the PUC, especially when pipelines cross HCAs.

b. Minimum depth decisions should be determined during mandated site visits by qualified third party industry experts (whose credentials have been reviewed and accepted by the PUC.)

c. Pipeline Operators should not be allowed to change depth requirements for the purpose of "practicality," in essence their convenience. Only the PUC can grant exceptions to the 12 inch rule, and then only upon testimony of certified experts who have visited the site. For example, Sunoco has repeatedly cited 4-foot depth standards, but when the pipelines are inspected (or utility/construction companies inadvertently unearth them), the pipelines are often found to be far closer to the surface

than the Operator stated. Utility construction in Exton, PA, has inadvertently damaged pipelines that were not buried to the depths that Sunoco attested.

d. Operators must be held accountable to standards set by the PUC. Their compliance must be rigorously investigated and documented. PUC should set a standard depth for NGLs that cannot be overruled by pipeline operators without oversight from that commission.

e. Depths of 30" are not sufficient to dilute explosive force of pressurized gas failure nor is 12" enough distance between adjacent pipelines. Domino effect suggests that one explosion may displace, unearth, rupture, or ignite nearby pipelines.

6. Valves: Section 195.258 currently requires valves to be installed at locations accessible to authorized pipeline employees and protected from damage or tampering. More details are needed to specify how these locations are to be protected.

a. Since valves may pose more risk than regular buried pipeline, placement is crucial to safety. Valve placement should follow the Natural Gas Hazardous Gas Liquids requirements. Further study is needed to determine correct spacing criteria, for spacing must balance concerns about the amount of product in the lines with the enhanced potential for leaks at the sites of pipeline valves.

b. These valves must also be protected from incidental damage. Valves located close to busy highways, for example, are vulnerable to vehicular damage in the event of accidents. Notably, some of the Mariner valves are placed in precarious positions, close to busy highways. This condition currently exists by Duffers Restaurant at Rt 352 in Westtown Township, Chester County, PA.

c. Professional guidance is needed to place these valves; Pipeline Operators should not be allowed to place valves for their own convenience. The increased danger of valve sites should preclude their placement close to human habitations. An example is the Sunoco's decision to move the valve placement specified in their Township agreement from north of Route 202 at Boot Road to south of 202, adjacent to the East

Goshen Firehouse. No one, certainly not the East and West Goshen Townships, gave permission for this change. In fact, the it was contrary to stated sections of the agreement between Sunoco and the Township. Moreover placing a valve next to the Firehouse in East Goshen threatens to endanger the very emergency personnel who are tasked with helping residents in case of an emergency. In addition the placement of a valve adjacent to the smokers' door of Duffer's Restaurant seems a reckless choice. The PUC must establish safe and effective guidelines for placing valves.

d. Environmental impact studies, paid for by the Operators but not executed by them, need to be enacted as well to establish guidelines for air quality, since these valves routinely burn off escaping gases. All valve and compressor stations should be required to install gas monitoring and central alarm devices that cover 100% of the footprint of the station. These devices are available and commonly used in gas storage and production facilities.

e. Natural Gas pipeline spacing, regulated by Title 49 Section 192.179 of the Federal Code, establishes a maximum of 8 miles between valves. HL pipelines regulated by Title 49 Section 195.250 specify that valves shall be sited at locations to minimize damage. HL pipelines should comply with the Natural Gas valve spacing requirements. To minimize the risk, a gas detection meter ($2500) should be installed at each valve location. New installations would have to comply with this requirement immediately. Existing pipelines would be brought into compliance in a timely way.

B. Operation and Maintenance Pipeline conversion:

1. 80 year old pipelines should be replaced not repurposed.
   a. Presumably the quality of the pipeline materials have improved as new products have made their way to market. Introducing highly volatile, highly pressurized product through old, substandard pipelines is a questionable tactic. Unless the entire pipeline is

thoroughly inspected and the pipes updated to the latest technology for transporting these HGLs, the safety of the pipeline is suspect.

b. The Pipeline Operators should not be allowed to perform these inspections or make these decisions. Instead, the PUC must provide adequate oversight in these decisions.

c. Pipeline Operators should be required to pay for these inspections. That cost is a natural result of laying pipe safely. Repurposing of existing pipeline to carry more volatile products and/or products which will operate at a higher pressure, will require advanced notification and approval of the PUC. Approval should only follow consultation with a certified third-party industry expert.

d. A detailed risk assessment should be mandated by the PUC to consider factors such as the age of the pipes, density of commercial and residential development nearby, initial use of pipeline, history of failure (leaks), proposed operating pressure. Pipelines should not be repurposed if they are found to pose a risk to public safety. Independent PUC risk assessment should pre-empt any risk assessment performed by Pipeline Operators, who already have a major stake in the project.

e. Pipeline maintenance history and documentation is notoriously faulty. Third-party inspections should be done on a regular basis and the results meticulously recorded. Residents and emergency personnel close to pipeline locations should be able quickly to access details that affect public safety, such as how long it has been since a pipeline has been inspected. Just last year In West Whiteland, Chester County, PA, the old Mariner 1 pipeline was breached by construction because Sunoco said the pipe was buried 8 feet underground. The pipe was ruptured by utility workers because it was buried only 3 feet underground.

2. **Construction Compliance:** Mariner East is over 80 years old.

a. There should be a specified limit to the lifetime of a pipe/pipeline. Old pipe cannot meet the safety code of more modern pipelines designed to carry NGLs. To repurpose old pipelines without current standard safety coatings, under the demands of reversed

flow, increased pressure, highly volatile NGLs is a safety hazard, especially in HC residential areas.

b. Moreover, the PUC must provide effective oversight in areas in which the Operators are not knowledgeable, i.e. location of wells and water supply safety. During the duration of the current Mariner 2 project, Sunoco has fouled wells and stream beds, not to mention caused sinkholes and drilling by-product leakage, grossly underestimating the number of said wells and water sources affected.

3. **Pressure testing**

a. There should be no exceptions to pressure testing requirements for pipelines that transport hazardous materials. Older pipelines that do not pass pressure tests must be replaced. Pressure testing should be conducted frequently. Authorized pressures for the entire pipeline must be kept within the specs of the lowest pressure rating of the weakest link in the line.

b. Results of pressure testing must be shared with emergency personnel, but should also be made available to the public by request. The results of these inspections must be made available immediately, not 3 weeks later as is the current standard. Notably, Sunoco officials currently maintain that test data is "only good on the day the pressure is tested." If that is the case, then testing must occur frequently and be reported immediately.

c. Remote control product flow emergency devices should be included on all pipelines - new, repurposed, and old.

4. **Line Markers**

a. The public has a right to know exactly where the pipelines are buried; so do local authorities and other contractors that may be tasked with construction projects in the area. The location of the pipeline should be clearly marked along its entire length. Valve placement also should be so designated.

b. Sunoco is currently refusing to disclose the exact locations of all of the pipelines because of security issues. This is unacceptable. If the public cannot be informed, at least the emergency personnel and government officials should know. Sunoco is not going to be here for consultation, on site, when a failure occurs.

5. **Risk assessment:**

   a. Independent (third party) risk assessments must be MANDATED and implemented as soon as pipeline projects are proposed, not when the pipes are in the ground.

   b. Hazardous liquid pipelines, regulated by Title 49, Section 195.452 require pipeline operators to develop an Integrity Management Program (IMP.) Requirements for the IMP are set out in Title 49, section 192.

   c. Existing federal regulations and state law require that pipeline companies provide "local pipeline safety agencies" with copies of pipeline IMPs where the Office of Pipeline Safety has an interstate agent agreement. Pennsylvania has such an agreement with the US Dept of Transportation.

   d. Moreover, the Public Utility Confidential Security Information Disclosure Protection Act specifically references political subdivisions, so the legislature clearly anticipated that Townships would be able to access this information.

6. **Emergency Flow Restricting Devices, see VALVES above.**

7. **Leak Detection**

PUC must require gas detection at all HL valve locations. The question is not WHETHER leak detection can be accomplished but how it MUST be accomplished, especially in HCAs. .

a. All pipelines that transport hazardous liquids must be equipped with external leak detection systems. These external systems are additional to typical monitoring of operating parameters (flow rate, pressure etc) to detect leaks.

b. Alarms for these systems (in ground or air) should notify the public and emergency immediately of a leak.

c. External leak detection systems are essential for above ground valve stations since these pose enhanced danger from leaks.

d. Inspections of pipeline should not be the job of the Pipeline Operator, whose conflict of interest is obvious. The Pipeline Operators should pay for them, however. It's the cost of doing business safely.

e. Oderant must be added to the NGLs. Smelling gas before it ignites gives advanced warning both to residents who must flee on foot "from the direction the wind is blowing" (Sunoco's "safety" guide.) Early warning would also allow emergency personnel to move quickly to inform and to evacuate populations.

f. Operators in many cases (Sunoco, for example) claim that the oderant cannot be removed from the product post-delivery. That is not true. It can be removed; it is just costly to do so. Public safety en route necessitates the use of oderant. Removing oderant is simply one of the costs of transporting HLs.

g. Direct Current Voltage Gradient (DCVG) testing can detect size and location of buried pipeline coating defects. Pipeline owners should be required to conduct DCVG surveys at least annually in all HCAs.

8. Geophysical testing

Geophysical testing and baselining of the proposed pipeline corridor should be undertaken before easements are granted. If easements are already in effect for specified product, testing must be performed and pipeline updated to include new products for which the pipe is being repurposed. These tests must NOT be performed by the potential Pipeline Operators but by an independent, qualified, certified and knowledgeable third party. Karst and limestone geological formations make poor locations particularly for HGL pipeline placement in HCAs.

9. Past Safety Records

The past safety record of pipeline contractors should be taken into consideration before the companies are granted easements and Public Utility status. Bad Performers (for example,

companies with a past history of failures and inattention to detail, like Sunoco Logistics) should not be rewarded with contracts to work in Pennsylvania. Surely there are more responsible operators.

10. Corrosion Control and Cathodic Protection

a. All pipelines that transport hazardous liquids must be equipped with corrosion control and cathodic protection systems regardless of when the pipeline was placed in service. There must be no Grandfathered exceptions. Like a chain, a pipeline is only as strong as its weakest link.

b. Close Interval Potential Surveys (CIPS) are effective tests for catholic protection effectiveness. Pipeline owners should conduction CIPS surveys annually in all SCA designated areas.

C. <u>Additional Subject Areas for Public Comment</u>

1. **<u>Communication:</u>** Pipeline Operators must maintain an open line of communication with affected communities. Local government officials and the general public must be included in discussions of emergency planning and emergency response coordination. The public must understand what to do if and when an emergency arises. Periodic drills would be useful to foster trust among local residents for the projects and operators. [Incidentally, on August 5, a loud boom was emitted from the valve at Boot Rd and Rt 352 in East Goshen township. It was heard and felt by much of the community, rattling houses and shaking pictures from the walls. The shaking reportedly lasted for 6-7 seconds. Calls to 911 from frightened residents garnered responses of "I don't know" from emergency responders and police alike. When word finally came from the Operator (in this case Sunoco Logistics), residents were told that it was the result of normal maintenance. In the past, residents had been warned in advance of "normal maintenance" that could make loud sounds or percussive effects. The point is citizens who live in proximity to Mariner do not have a credible response program. Sunoco Logistics has admitted to Senator Andy Dinnamon

and Representative Carolyn Committa that our safety is not their problem. However, since they are the ONLY people with the answer, we must make it their problem if they want to work in our neighborhoods. Any communication problem is theirs; they must be held accountable.

2. **Gas Safety Plan:** PUC should adopt rules based on the Texas Railroad Commission regulations set forth in Section 8.310: Hazardous Liquids and Carbon Dioxide Pipeline.
3. **Public education and Awareness:** PUC should adopt the Texas Railroad Commission regulations set forth in Section 8.315, specifically Hazardous Liquids and Carbon Dioxide Pipelines Public Education and Liaison. As part of the Public Awareness program PUC shall establish Emergency Response standards for operators of PUC-regulated pipelines.
4. **Notification:** Liaison activities must be required at least once a year between Pipeline operators and township officials, emergency personnel, and the public. Standardized criteria should be established to report accidents and incidents. Advance notification should be mandated to local communities for any major construction activities a minimum of 90 days prior to commencement of construction of any installation totaling one mile or more of pipe. Notification should include proposed origin and terminal points for the pipeline, municipalities to be traversed, size and type of pipe to be used, types of service, design pressure, and length of the proposed line. Written notification must also be sent to each of the municipalities to be traversed. (For guidance, see section 8.115 fo the Texas Railroad Commission regulations. TITLE 16 ECONOMIC REGULATION, PART 1 RAILROAD COMMISSION OF TEXAS CHAPTER 8 PIPELINE SAFETY REGULATIONS, SUBCHAPTER A GENERAL REQUIREMENTS AND DEFINITIONS,.
5. **Standards and regulations** for the actual impact of pipeline construction on the surrounding community must be standardized by the PUC: noise limits, vibration limits, working hours (7a-7p, Monday-Friday), dust limits (PA Code 123.1), etc. If these limits are not standardized by the PUC, construction activities must comply with local municipal

ordinances. In no case should the Pipeline Operator be allowed to alter the limits set by the PUC and/or local ordinances.

6. **Protection of public and private water wells and water supplies.** There is no central database of private wells in Pennsylvania. Although some counties and municipalities may collect this information, it is neither uniform nor complete. The PUC should coordinate a plan to document these public and private wells and water supplies, so that Pipeline operators can be required to identify private well owners within a specified number of feet from the pipeline. (Standardized number of feet from pipeline to well will be set by certified independent expert who reports to the PUC.) Pipeline operators may not make these decisions. Property owners should also receive certified letters advising them of the project and the need for information concerning their well.
7. **Background investigations of Pipeline employees and contractors.** Pipeline operators are tasked with making sure that their workers, especially those working in proximity to schools, are not listed as dangerous persons on Meghan's List, for example. Since many of the workers are not local, they will not be flagged by local registrations. Out of state offenders, for example, should have their registrations transferred to the local community, so school systems know who they are and where they are.
8. **Integration of new regulations on existing facilities.** Grandfathered exceptions to new regulations for existing facilities must be rare occurrences that are approved by the PUC on a case-by-case basis. Under no circumstances should the Pipeline Operators or their Parent Company be allowed to declare these exceptions.

SUMMARY

New guidelines are essential if pipelines are to traverse safely neighborhoods throughout the county and the state. PUC and PHMSA as well as the DEP will be held accountable by citizens for what has occurred already along the Mariner East 2 (and 1) routes. Sunoco's Mariner East has left in its wake punctured aquifers, polluted wells, drilling fluid spills, sinkholes - all these

problems arose with the decision to pipe dangerously volatile product through one of the most densely populated townships in Pennsylvania. The pipeline runs within feet of elementary schools, apartment buildings, elder care communities, not to mention private residences and the local station of emergency responders.

Sunoco representatives recently acknowledged to PA Senator Andy Dinnaman and PA Representative Carolyn Committa (Harrisburg talks in May) that resident safety is really "not their job." Apparently "it's the job of local governments and emergency personnel." So citizens along the pipeline route must shoulder all the risks and get nothing in return.

This debacle is not our fault. If our safety is not Sunoco's job, it's yours - PUC, PHMSA, Governor Wolfe- it's yours. So please revise the guidelines. If pipelines must go in, make them safe and don't reward bad actors like Sunoco for irresponsible and destructive behaviors and intimidation. PUC should take the history of performance into consideration when granting Public Utility status to corporations who then may exercise virtually unrestricted eminent domain control over our homes, services, property, and environment.

The explosion which rocked homes near the emergency valve (Rt 352 and Boot Rd) on August 5, 2019 was a wake-up call. The percussion was felt by those close to the site, but the explosion was heard miles away. The PUC has closed the books on this incident finding that the communities were not endangered. However, a very important issue remains: Emergency response information was not available to frightened residents who called 911. Residents did not even know if they should evacuate or not. Here's the big issue: **We don't know what to do when pipeline emergencies occur.** We've been advised to evacuate on foot, run downwind, keep cell phones off as well as light switches, garage door openers, and vehicles, any activity that might ignite latent gas. Is that reasonable?! Is it reasonable that a township of over 40,000 people can be held hostage to one uninformed resident! (let alone many) who has not been coached on the protocols of emergency?

PUC, you invited these folks into our communities. You gave them Public Utility status. You are being called upon to make them safe and effective partners in our communities going

forward. If you make the right series of rules, we can all work together for the good of our community, our state, our country. This problem will not go away. Please give us effective guidelines so that pipelines can be placed in appropriate locations and carry product safely and responsibly among us.

Thank you for allowing local citizens to comment on new guidelines for the pipeline industry. Now, it's up to you.

Sincerely,

Kay E Whittle

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Resident, East Goshen Township

Chester County, PA

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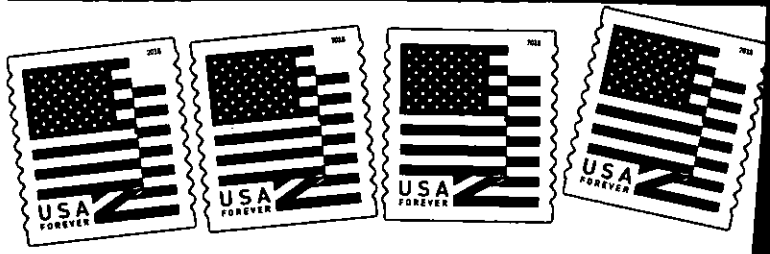

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Harrisburg, PA
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