

December 16, 2020

Via Electronic Filing

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, Second Floor
Harrisburg, PA 17120

**Re: Docket Nos. P-2018-3006117, C-2018-3006116, C-2018-3005025,
C-2019-3006898, C-2019-3006905, and C-2018-3003605
Meghan Flynn, et al. v. Sunoco Pipeline, L.P.**

Dear Secretary Chiavetta:

Attached for filing with the Pennsylvania Public Utility Commission is the County of Chester's Brief in the above-referenced matter.

A copy of the attached has been forwarded in the manner indicated on the attached Certificate of Service.

If you have any questions regarding this filing, please feel free to contact the undersigned.

Sincerely,



Mark L. Freed
For CURTIN & HEEFNER LLP

MLF:bya
Enclosures
cc: Per Certificate of Service

**BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Michael Flynn, Rosemary Fuller,	:	
Michael Walsh, Nancy Harkins,	:	
Gerald McMullen, Caroline Hughes,	:	Docket No. P-2018-3006117
and Melissa Haines,	:	Docket No. C-2018-3006116
<i>Complainants,</i>	:	Docket No. C-2018-3005025
v.	:	Docket No. C-2019-3006898
	:	Docket No. C-2019-3006905
Sunoco Pipeline, L.P.,	:	Docket No. C-2018-3003605
<i>Respondents.</i>	:	

POST-HEARING BRIEF OF INTERVENOR CHESTER COUNTY

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Dated: December 16, 2020

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I. INTRODUCTION

Chester County (“Chester County” or the “County”) is a Pennsylvania county of the Third Class. The Sunoco Pipelines (defined below) run through the County and are sited in close proximity to homes of County residents, County-owned property such as the library in Exton, schools, ballfields, playgrounds, a nursing home, busy highways, stores, and offices.

The County, which provides for the health, safety and welfare of its residents, is expending its time, energy and resources to intervene in this action due to its concern over the lack of essential, clear and useful public safety and public awareness information and tools from Sunoco, and the grave consequences that could result from such lack of information and tools. Chester County is not alone in these concerns. As the list of parties to this action attests, residents, municipalities, school districts, principals, and first responders, among others, consistently complain that they do not have the information from Sunoco that they need to prepare and to properly protect themselves and their constituents in the event of a pipeline leak. They are concerned, confused and worried. Clearly, Sunoco’s public safety and public awareness programs have failed.

By this Brief, Chester County requests that the Commission order Sunoco to comply with the very reasonable demands made by the County herein, which demands contain the minimum actions required by Sunoco for the County to properly perform its emergency preparedness and response roles under both its police powers and under the Hazardous Material Emergency Planning and Response Act (“Emergency Planning Act”), and for the public to be properly informed of the dangers associated with Sunoco’s highly volatile liquids pipeline, and how to best protect themselves and their students, families and colleagues in the event of an emergency.

II. CONCISE STATEMENT OF THE CASE

A. Concise Procedural History

On or about November 19, 2018, Meghan Flynn, Rosemary Fuller, Michael Walsh, Nancy Harkins, Gerald McMullen, Caroline Hughes, and Melissa Haines (collectively “Complainants”) filed a Formal Complaint (as amended, “Complaint”) with the Pennsylvania Public Utility Commission (“Commission”) against Sunoco Pipeline L.P. (“Sunoco”) at docket number C-2018-30006116. Also on or about November 19, 2018, Complainants filed a Petition for Interim Emergency Relief (“Petition for Emergency Relief”) at docket number P-2018-3006117. By Interim Order dated December 3, 2018 the Honorable Elizabeth H. Barnes (“ALJ Barnes”) consolidated dockets C-2018-30006116 and P-2018-3006117 (collectively, the “Action”) and granted intervenor status to Andover Homeowners’ Association, Inc. and Range Resources – Appalachia, LLC.

Hearings (“Emergency Relief Hearings”) were held on the Petition for Emergency Relief on November 29, 2018 and November 30, 2018 before the Honorable Elizabeth H. Barnes (“ALJ Barnes”). By Order dated December 11, 2018, the Petition for Emergency Relief was denied (“Emergency Relief Order”). By Order dated June 6, 2019, ALJ Barnes consolidated the Action with the complaints against Sunoco of Melissa DiBernardino (docket C-2018-3005025), Rebecca Britton (docket C-2019-3006898), and Laura Obenski (docket C-2019-3006905), granted Intervenor status to Chester County, among others, and granted Complainants the right to file a Second Amended Complaint. By Order dated October 21, 2019, docket number C-2018-30003605, an action commenced by Andover Homeowners’ Association, Inc. against Sunoco, was consolidated with the consolidated Action. Each of the above actions consolidated with the Action

are referred to herein collectively as the “Consolidated Cases.”

Hearings were held before ALJ Barnes for eleven days, September 29, 2020, September 30, 2020, October 1, 2020, October 2, 2020, October 5, 2020, October 6, 2020, October 7, 2020, October 8, 2020, October 9, 2020, October 13, 2020, and October 14, 2020 (collectively, the “Hearings”).

Participating in the Hearings, in addition to Complainants and Sunoco, were Melissa DiBernardino, Rebecca Britton, Laura Obenski, Andover Homeowners’ Association, Range Resources Appalachia, Virginia Marcille-Kerslake, Downingtown Area School District, Rose Tree Media School District, East Goshen Township, Senator Tom Killion, Twin Valley School District, Uwchlan Township, Edgmont Township, Thornbury Township, Middletown Township, West Chester Area School District, West Whiteland Township, County of Delaware, and the Clean Air Council.

B. Concise Statement of the Action

Sunoco is a Texas limited partnership with its principal place of business in Dallas, Texas.¹ It is a public utility as such is defined under Pennsylvania law in Section 102 of the Public Utility Code, 66 Pa.C.S. §102.² It is a hazardous liquid public utility under 52 Pa. Code § 59.33(c). Sunoco owns and operates the Mariner East 1 pipeline (8 inch)(“ME 1”), the Mariner East 2 pipeline (20-inch)(“ME2”); a work-around 12-inch diameter pipeline (the “Work-Around Pipeline”) that circumvents construction that had been stopped on ME2; and the Mariner East 2X pipeline (16-inch)(“ME2X”). The Work-Around Pipeline “is a 1930s era pipeline that had been carrying petroleum products such as gasoline until Sunoco repurposed it to connect to ME2 in order to carry

¹ Complaint ¶2; Sunoco’s Answer to Complaint ¶2, Admitted.

² Id.

highly volatile liquids” (“HVLs”).³ *Wilmer Baker vs. Sunoco Pipeline*, C-2018-3004294, Initial Decision of ALJ Barnes, December 18, 2019 (“*Baker Decision*”), ¶53, p. 11. ME1, ME2, ME2X, and the Work-Around Pipeline are referred to herein collectively as the “Sunoco Pipelines.”

The Complainants are individuals from Chester County and Delaware County who reside and/or work and/or whose children attend schools in close proximity to the Sunoco Pipelines.⁴ Complainant-aligned intervenors (“Intervenors”) include Pennsylvania counties, townships, and school districts, among others, which are impacted by the Sunoco Pipelines.⁵

The Complainants, the complainants in the Consolidated Cases, and the Intervenors (collectively, the “Affected Parties”), or some of them, complain that, *inter alia*, the Sunoco Pipelines are being operated and/or proposed to be operated without adequate public education, emergency preparedness or emergency notification systems and that, as a result, the Affected Parties are at imminent risks of catastrophic and irreparable loss, including loss of life, serious injury to life, and damage to their homes and property. The Complainants contend that Sunoco’s actions constitute unreasonable, unsafe, inadequate and insufficient service which violates Section 1501 of the Pennsylvania Public Utility Code (“PUC Code”). 66 Pa. C.S. § 1501. The Complaint seeks, among other things, for Sunoco to improve its public awareness and emergency preparedness programs, implement better emergency notification systems, and that the Commission require an independent review of both the design and implementation of Sunoco’s integrity management program.

The Sunoco Pipelines cross Chester County, affect Chester County residences, and traverse property owned by Chester County. Particularly vulnerable locations in Chester County include

³ Emergency Relief Order, p. 1.

⁴ Emergency Relief Order, p. 1.

⁵ See dockets in this Action.

the Wellington at Hershey's Mill, a senior living center in West Chester where the multi-story buildings are all between 80 and 500 feet from the Sunoco Pipeline route, and Chester County's library, located in Exton, which is within 20 feet of the Sunoco Pipeline route. Marx Direct Testimony, St. 1, 49:10-17. Chester County uses its police powers "to promote the public health, morals or safety and the general well-being of the community." *Nat'l Wood Preservers, Inc. v. Com., Dep't of Envtl. Res.*, 489 Pa. 221, 231, 414 A.2d 37, 42 (1980)(internal citation omitted). Chester County emergency response personnel do not feel that Sunoco has provided them with the information and tools necessary to respond appropriately to an HVL incident and to protect the residents of and visitors to Chester County. Residents of Chester County, as well as school districts and municipalities within the County, are directly affected by the Sunoco Pipelines and object to the sufficiency and efficacy of Sunoco's public awareness program.

Chester County believes that Sunoco can and should be required to do the following:

- (1) enhance public warning;
- (2) provide detailed information regarding its infrastructure to the County;
- (3) assist in the development of an evacuation plan for use by municipalities with concept of how evacuation would occur;
- (4) create a public outreach and public education program; and
- (5) fund more training for first responders.

Turner Direct Testimony, St. 1, 7:20-22; 8:1-2.

III. STATEMENT OF QUESTIONS INVOLVED

A. Is Sunoco's public safety program directed to local emergency response agencies and officials deficient?

Suggested Answer: **YES.**

The public safety program has failed to provide local emergency response agencies and officials with crucial up-to-date information, equipment and guidance needed to enable them to prepare an appropriate emergency evacuation plan for and to properly respond to a HVL leak from a Sunoco Pipeline in their communities.

B. Is Sunoco's public awareness program directed to residents and public officials deficient?

Suggested Answer: **YES.**

The public awareness program has failed to specifically address the immediate concerns of the public; has failed to adapt to the specific conditions in Chester County; and has failed to provide the public with the required information and tools needed for residents, their children, parents, students, patrons, school districts, and municipalities to properly detect and safely evacuate from a HVL leak from a Sunoco Pipeline.

C. Does the Commission have the power and the authority to direct Sunoco to enhance and supplement its public safety and public awareness programs for the public, public officials and local emergency response agencies and officials where those programs have failed to meet the objectives of pipeline safety laws and regulations?

Suggested Answer: **YES.**

The Commission has the authority to direct Sunoco to enhance and supplement its public safety and public awareness programs under the Pennsylvania Public Utility Code, the United States Code, the Code of Federal Regulations, and RP 1162, as incorporated by reference into the Code of Federal Regulations, as well as by the police power inherent in the Commission to protect the health, safety, and welfare of residents of the Commonwealth of Pennsylvania.

IV. SUMMARY OF ARGUMENT

Sunoco is a hazardous liquid public utility transporting HVLs through densely populated areas of Chester County, with pipelines located in close proximity to homes, schools, playgrounds,

shopping centers, retirement communities, businesses, and restaurants. The odorless, colorless HVLs, when leaked, move with the wind and slide downhill. They are highly flammable, can ignite when in contact with any electrical device, including cars, and can cause asphyxiation, burns, and death. Sunoco is required to develop public awareness and public safety programs for residents in proximity to the pipelines and for schools and emergency responders. Those public awareness programs have failed to inform the public and have left individuals, school districts, and first responders, among others, confused and concerned about how to identify, prepare for, and to properly evacuate from an HVL leak. Sunoco's protestations that it has complied with the minimum requirements fall flat. Sunoco has failed to meet its obligations to conduct proper notification and training. Sunoco profits from its designation as a public utility and, in return, it has obligations to the public.

The number of parties and participants in the instant action pleading for more information from Sunoco is evidence in and of itself of the failures of Sunoco's awareness programs. Sunoco has the knowledge and the technical expertise. Stakeholders need clear, practical, usable information and cooperation from Sunoco in order to enable them to be prepared in the event of an HVL leak.

The Commission has the power and the authority to order Sunoco to take the reasonable and necessary steps required to develop and carry out a public awareness program that actually informs the public, fully cooperates with municipalities, such as Chester County, in emergency planning, training and preparedness, and provides stakeholders with the needed information and tools to prepare for and evacuate from an HVL leak that may affect their homes, their schools, and their communities.

V. ARGUMENT

A. Legal Provisions

The chapter on pipeline safety in the United States Code provides that “[t]he purpose of this chapter is to provide adequate protection against risks to life and property posed by pipeline transportation and pipeline facilities by improving the regulatory and enforcement authority of the Secretary of Transportation.” 49 U.S.C.A. § 60102(a)(1). The Secretary of Transportation is tasked with providing “*minimum* safety standards for pipeline transportation and for pipeline facilities.” 49 U.S.C.A. § 60102(a)(2)(emphasis added). Part 195 of the Code of Federal Regulations (“CFR”) provides those safety standards for pipeline facilities. The CFR states, in relevant part:

(a) Each pipeline operator must develop and implement a written continuing public education program that follows the guidance provided in the American Petroleum Institute's (API) Recommended Practice (RP) 1162 (incorporated by reference, see § 195.3).

(b) The operator's program must follow the general program recommendations of API RP 1162 and assess the unique attributes and characteristics of the operator's pipeline and facilities.

(c) The operator must follow the general program recommendations, including baseline and supplemental requirements of API RP 1162, unless the operator provides justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety.

(d) The operator's program must specifically include provisions to *educate the public, appropriate government organizations*, and persons engaged in excavation related activities on:

- (1) Use of a one-call notification system prior to excavation and other damage prevention activities;
- (2) Possible hazards associated with unintended releases from a hazardous liquid or carbon dioxide pipeline facility;
- (3) Physical indications that such a release may have occurred;
- (4) Steps that should be taken for public safety in the event of a hazardous liquid or carbon dioxide pipeline release; and
- (5) Procedures to report such an event.

(e) The program must include activities to advise affected municipalities, school districts, businesses, and residents of pipeline facility locations.

(f) *The program and the media used must be as comprehensive as necessary* to reach all areas in which the operator transports hazardous liquid or carbon dioxide.

49 CFR Part § 195.440 (emphasis added).

The American Petroleum Institute's Recommended Practice 1162 (“RP 1162”) recognizes that there cannot be a “one-size-fits-all” public awareness program. “[S]ome geographic areas have a low population, low turn over in residents, and little development or excavation activity; whereas other areas have very high population, high turn over, and extensive development and excavation activity.” RP 1162 at §2.6. Hence RP 1162 provides that there are situations where it is appropriate to enhance or supplement the baseline public awareness program. RP 1162 at §1.3.5.

The Pennsylvania Code provides that each public utility, such as Sunoco, “shall *at all times use every reasonable effort to properly warn and protect the public from danger*, and shall exercise reasonable care to reduce the hazards to which employees, customers and others may be subjected to by reason of its equipment and facilities. 52 Pa. Code § 59.33(a). The “*minimum* safety standards” for hazardous liquid public utilities, such as Sunoco, “shall be those issued under the pipeline safety laws as found in 49 U.S.C.A. § § 60101—60503 and as implemented at 49 CFR Parts 191—193, 195 and 199...” 52 Pa. Code § 59.33(b).

The Pennsylvania Public Utility Code provides the Commission with broad powers:

In addition to any powers expressly enumerated in this part, the commission shall have full power and authority, and it shall be its duty to enforce, execute and carry out, by its regulations, orders, or otherwise, all and singular, the provisions of this part, and the full intent thereof; and shall have the power to rescind or modify any such regulations or orders. The express enumeration of the powers of the commission in this part shall not exclude any power which the commission would otherwise have under any of the provisions of this part.

66 Pa.C.S.A. § 501(a).

Every public utility is required to maintain safe and reasonable service and facilities. 66 Pa.C.S.A. § 1501. The Commission has the power and duty under the Public Utility Code to enter such orders as are necessary to assure that the public utility service and facilities are safe and reasonable. 66 Pa.C.S.A. § 1505(a).

Further, under the Hazardous Material Emergency Planning and Response Act (“Emergency Planning Act”):

The General Assembly hereby determines, declares and finds that exposure to hazardous materials has the potential for causing undesirable health and environmental effects and poses a threat to the health, safety and welfare of the citizens of this Commonwealth, and that the citizens of this Commonwealth and emergency service personnel who respond to emergency situations should be protected from health hazards and harmful exposures resulting from hazardous material releases at facilities and from transportation-related accidents.

35 P.S. § 6022.102. Chester County is designated and constituted an emergency planning district under the Emergency Planning Act and has the obligation to establish a local emergency planning committee. 35 P.S. § 6022.202. Such County local emergency planning committee has the duty and the authority to take appropriate actions to ensure the implementation and updating of the local emergency response plans required by the Emergency Planning Act. 35 P.S. § 6022.203(g). The County’s emergency plan is required to include, among other things,

- Methods and procedures to be followed by ... local emergency and medical personnel to respond to any release of such substances;
- Methods for determining the occurrence of a release, and the area or population likely to be affected by such release;
- Evacuation plans, including provisions for a precautionary evacuation and

alternative traffic routes;

- The vulnerability radius for each extremely hazardous substance that meets threshold planning quantity requirements.

35 P.S. § 6022.203(k).

Finally, the broad power of the Commission and of the County to act to protect the health, safety and welfare of their residents is further derived from their police power.

The “police power” is one of the “most essential powers of government” *Hadacheck v. Sebastian*, 239 U.S. 394, 410, 36 S.Ct. 143, 145, 60 L.Ed. 348 (1915). It has been variously defined as the power “to promote the public health, morals or safety and the general well-being of the community,” *Commonwealth v. Harmar Coal Co.*, supra at 92, 306 A.2d at 316;... or as “the inherent power of a body politic to enact and enforce laws for the promotion of the general welfare,” or as a power extending to “all the great public needs.” The police power is fundamental because it enables “civil society” to respond in an appropriate and effective fashion to changing political, economic, and social circumstances, and thus to maintain its vitality and order. “The police power of the state (must therefore be) . . . as comprehensive as the demands of society require under the circumstances.” Of necessity, then, the police power is a broad and flexible power. See, e. g., *Berman v. Parker*, 348 U.S. 26, 32, 75 S.Ct. 98, 102, 99 L.Ed. 27 (1954); *Euclid v. Ambler Realty Co.*, 272 U.S. 365, 386-90, 47 S.Ct. 114, 118-19, 71 L.Ed. 303 (1926). Indeed, it is the state's least limitable power. See *Hadacheck v. Sebastian*, supra 239 U.S. at 410, 36 S.Ct. at 145.

Nat'l Wood Preservers, Inc. v. Com., Dep't of Env'tl. Res., 489 Pa. 221, 231–32, 414 A.2d 37, 42–43 (1980).

B. Highly Volatile Liquids (“HVLs”)

ME1 historically carried primarily petroleum products. *Baker Decision*, p. 24. However, the product transported through the pipeline has now changed. The “design, purpose and content of ME1 changed this past decade ... to transporting propane and ethane under higher pressures...” *Id.* Propane and ethane are natural gas liquids (“NGLs”). *In re Sunoco Pipeline L.P.*, No. 220 C.D.

2016, 2017 WL 2062219, at *2 (Pa. Commw. Ct. May 15, 2017). ME1 transports HVLs “through high consequence areas (HCAs) of Pennsylvania through the additions of newly constructed compressor, pumping and valve stations. [Sunoco] has expanded the ME1 right-of-way and has expanded ME1 through new construction...” *Id.* The applicable public awareness and emergency responder regulations, 49 C.F.R. Part 195.403, 49 C.F.R. Part 195.3(b)(8) (incorporating American Petroleum Institute (API) Recommended Practice (RP) 1162), 49 C.F.R. Part 195.440, expressly require an enhancement of a baseline public awareness program if there is heightened inquiry and construction in high consequence areas.” *Baker* Decision, p. 57, ¶13.

An HVL “is defined in pipeline safety regulations as a hazardous liquid that will form a vapor cloud when released to the atmosphere and has a vapor pressure exceeding 276 kPa (40psia) at 37.8 degrees C (100 degrees F). 49 CFR § 195.2” *Baker* Decision, p. 4, fn. 1. The physical properties of NGLs are that they are odorless, colorless, and tasteless. Noll, N.T. 3316:20-21. Though mercaptan, a chemical odorant, can be added to HVLs to give them a distinctive smell, mercaptan has not been added to products anywhere to the pipeline. Perez, N.T. 3159:5-7. The product in the Sunoco Pipelines is therefore colorless and odorless. Perez, N.T. 3159:5-7; 3160:22-24.

During a release of HVLs, there will be a condensation of moisture and air which will produce a visible vapor cloud. Noll, N.T. 477:15-19. However, the odorless, colorless, flammable vapors may extend beyond the visible vapor clouds. *Id.* The visible vapor cloud does not show the extent of the problem. Noll, N.T. 511:2-8. How far the cloud extends is dependent on the circumstances of the incident, including the weather conditions and the size of the breach. Noll, N.T. 500:11-21. Further, even where there is a visible vapor cloud, it would take a period of time for a person inside a building to observe that vapor cloud building up outside the building. Noll,

N.T. 3317:8-11.

Further, even if an HVL leak produced a visible vapor cloud, and even if that cloud built up over time so that a person in a building could observe it, if the leak occurred at night, it could be obscured by the darkness and could be missed by if the occupants of the building were sleeping. Indeed, even with a visible vapor cloud appearing in broad daylight, the person in the building could fail to see the vapor cloud while he or she is consumed with everyday activities such as working, child care and household chores. The vast majority of people do not spend their days checking out the window for vapor clouds. Finally, even if a person were to notice a vapor cloud, the average person would have trouble differentiating between a low-lying fog in a pipeline area and an NGL vapor cloud. Noll, N.T. 3337:6-16. Indeed, even Mr. Gregory Noll, a certified safety professional and certified emergency manager, who was proffered by Sunoco as an expert for incident management for pipelines, testified that he himself would have trouble differentiating between a low-lying fog and a vapor cloud. Noll, N.T. 460:1-5; 464:21-24; 3337: 6-16.

The two main dangers associated with a propane vapor leak are asphyxiation from displacement of oxygen and ignition of the cloud. Hubbard, N.T. 86:18-25; 87:1. A vapor cloud can ignite if it comes in contact with ignition sources such as automobiles or any electric device. Noll, N.T. 476:1-10; 503:17-20. Indeed, even cell phones may have to potential to ignite a vapor cloud and must not be used in the event of a pipeline leak. Turner, N.T. 2221:4-6; McGinn, N.T. 3238:15-23 (PHMSA and PEMA have a concern that a cell phone could be an ignition source).

Fatality is a potential consequence of exposure to HVLs. Perez, N.T. 3113:17-19. If a vapor cloud ignites, there is the potential for vast numbers of people to be burned and/or killed. Hubbard, N.T. 105:16-17; Perez, N.T. 3108:14-24. For example, between the Marsh Creek Sixth Grade Center and the Shamona Creek Elementary School, there are well over 2,000 staff and students on

location and, in a worst-case scenario, some or all of those numbers could be affected by severe injury, burns, and/or death. Hubbard, N.T. 2323:22-25; 23241-7.

C. Deficiencies in Public Safety Program for Emergency Services and Emergency Responders

In Chester County, most fire agencies are run by volunteers, and those volunteers are typically first on the scene of an incident, arriving in their personal vehicles. N.T. 96:19-21; 1135, 7-11. These volunteers are tasked with rushing to the scene of pipeline leak, putting themselves in danger to rescue others, all without appropriate information and equipment from Sunoco that would enable them to properly plan, prepare for and execute a safe evacuation plan. Sunoco has been proprietary, slow to release information, and all-around difficult to deal with. Sunoco's behavior is contrary to its obligations under the law and puts first responders and the communities they serve at risk.

Mr. Ronald Gravina has been a fire chief and first responder for 48 years and a township supervisor for 24 years with Edgmont Township in Chester County. N.T. 1121:16-22. He has been a volunteer member of the Edgmont Volunteer Fire Company No. 1 for 48 years. N.T. 1123:1-9. And yet, the Mariner pipeline was in operation for weeks before he was even made aware it. N.T. 1131:22-25; 1132:1. Mr. Gravina has been involved with multiple pipeline incidents in the past. N.T. 1125:2-6. One pipeline incident that occurred several years ago with the Sunoco pipeline involved a petroleum odor that was reported over multiple days by phone calls. Sunoco investigated and had difficulty finding the source, even within meters of the leak. N.T. 1126:10-14.

As a trained first responder, Mr. Gravina has major concerns about dealing with a potential problem or incident related to the current Mariner pipelines. N.T. 1126:21-25. Mr. Gravina is

concerned for the citizens of Edgmont because one cannot see, smell or taste a leak from Mariner pipelines. He is unsure how he would begin to figure out where the potential cloud of gas is located. N.T. 1127: 2-8. Mr. Gravina stated that fire companies have requested meters for detecting leaks, but have not received them yet. N.T. 1127: 9-13. The meters on the fire vehicles do not detect the product in the Mariner pipeline. N.T. 1127: 14-16.

Mr. Gravina does not believe he has been provided with sufficient information to respond to a pipeline incident in Edgmont Township for products in the Mariner pipelines. N.T. 1127:24-25; 1128:1-4).

Mr. Gravina's concerns are shared by the County. Mr. William H. Turner is employed by Chester County Department of Emergency Services ("DES") as the Deputy Director for Emergency Management. He is primarily responsible to ensure that the County has an emergency management program that addresses planning, preparedness, prevention, mitigation, response and recovery along with training for emergency-management coordinators and staff and community outreach. Turner, St. 1, 2:5-18. Mr. Turner was accepted as an expert in emergency management and emergency preparedness. N.T. 2197:1-5.

Mr. Turner holds a Professional Level Certification from PEMA for Emergency Management. This is the highest certification of the three levels. He also holds a certification for Business Continuity Professional from the Disaster Recovery Institute International which requires continued education courses annually. Finally, he is certified in continuity planning (i.e. how to keep governmental and emergency service on in an emergency situation). Turner, St. 1, 3:1-6.

The mission of the Department of Emergency Services is to promote and assist in providing safety and security to Chester County residents so they can work, live and grow in a healthy and safe community. Collaboration with pipeline operators whose facilities are located in the County

is critical to accomplish this mission. Turner, St. 1, 3:19-23.

Mr. Turner has attended the MERO training, CoRE meetings, a tour of the Eagle Point pump station on June 21, 2019, a plume modeling review on November 30, 2017, a meeting on July 30, 2019 that discussed plume modeling, integrity management, environmental compliance, and security programs, an emergency planning session for school with the Downingtown Area School District on December 11, 2018, and a training session on January 24, 2019 for schools of the Archdiocese of Philadelphia. N.T. 2212:4-8; 2212:13-23; 2215:24-25; 2216:1-22; 2217:1-4. Despite this, Mr. Turner does not have the information needed to develop a proper emergency response plan in the event of a pipeline incident. Unfortunately, it has been very difficult for him to get information from Sunoco. N.T. 2244:1-4.

Mr. Turner believes that Sunoco needs to be a part of the planning process with regard to emergency plans. N.T. 2210:12-16. Pipeline operators should be involved in the stakeholder planning teams that create a school's emergency response plan. N.T. 2242:14-24. Mr. Turner has sought out the information needed to develop a proper emergency plan, but dealing with Sunoco has been difficult. Indeed, Mr. Turner described his attempts at getting information from Sunoco to be like hitting a "brick wall." N.T. 2363:2-14. This is the exact opposite experience that Mr. Turner has had with TEPPCO/Enterprise. The TEPPCO/Enterprise representative is very easy to deal with, is readily available, and provides Chester County with what it needs. N.T. 2243:16-24. Compared to TEPPCO/Enterprise, it has been very difficult to get information from Sunoco. N.T. 2244:1-4.

Sunoco may tout the CoRE meetings and MERO trainings, but those events have failed to provide the information needed by those trying to formulate a proper emergency plan. Mr. Turner stated that the CoRE meetings were not actual "trainings," but simply a "buy dinner and provide

awareness of pipelines in your jurisdiction.” N.T. 2212:13-23. The MERO training was an hour and half Power Point presentation by Mr. Noll. N.T. 2243:1-15. Sunoco does not even allow its emergency response plan to be viewed or referenced in the MERO class. N.T. 3383:6-7. Indeed, Mr. Noll, the person conducting the MERO training, has not even seen the Sunoco emergency response plan himself. N.T. 3382:10-17. Any first responder who wants to view the Sunoco emergency response plan has been required to sign a nondisclosure agreement. N.T. 3382:10-17. Mr. Turner signed a nondisclosure agreement so that he could review a copy of Sunoco’s facility response plan, but he was not permitted to retain a copy of the plan. N.T. 2229:23-25; 2230:1.

The table top exercises are more of a sitting around a table and having a discussion than they are any practice in emergency responding. N.T. 2244:20-25; 2245:10; 2244:5-8, 25; 2245:2-3. In contrast, TEPPCO/Enterprise is funding a full-scale functional exercise that is actually a boots on the ground exercise where you are actually out in the field in the public simulating a real life pipeline emergency and you have responders moving equipment and simulating a real response. N.T. 2252:2-16.

Mr. Turner needs to know the type of product, maximum operating pressures, hazards of the product, location of valve stations, and flow direction of materials in the pipelines. These are all important facts necessary for creating an emergency response plan for natural gas liquid pipelines. N.T. 2233:13-25; 2234, 1-3.

Mr. Timothy Hubbard is the fire marshal/emergency management officer in Charlestown Township, Chester County. N.T. 68:21-25. He has primary responsibility to provide emergency oversight of emergencies that occur within the municipality. N.T. 69:1-9. He is certified in emergency management by PEMA and is partly responsible for developing and maintaining emergency policies and procedures. N.T. 71:18-25. Mr. Hubbard has encountered difficulties in

obtaining information from Sunoco that has caused him concern. N.T. 80:15, 18. He has found it to be very difficult to have “consistent contact that would be able to provide information that would be useful from an emergency management perspective, what product is flowing at any given time, when it’s flowing, when products are changing and the nature of the products.” N.T. 80:18-23. Mr. Hubbard stated that there was a lack of any real, true and credible assistance from Sunoco, such as “advice, expert advice from the perspective of a pipeline operator or resources in the event that an emergency were to occur.” N.T. 80:24-25; 81:1-2.

Some of the information Mr. Hubbard has been looking for is information that relates directly to the pipelines in question and the volume of product that they have to be considering to deal with should a catastrophic leak occur (i.e., what is the duration that that product is going to be released for?). Mr. Hubbard testified that he does not know how much product is going to be flowing potentially in and around our buildings until the shut-off valves are activated. Also, Sunoco has industry experts that would be useful to have in his planning process. N.T. 2318:25; 2319:1-13. Though Sunoco has made appearances before the township, “those appearances are lacking the information that is needed for us to rely upon.” N.T. 2319:23-25; 2320:1-3.

If the pipeline valve near the Downingtown Area School District had an emergency, Mr. Turner estimated that it would take 10 minutes from the time dispatch receives a call for someone to arrive on scene with a gas meter. N.T. 2240:12-19. The valve station alarms on the pipeline only notify the operator, not the public. N.T. 2241:10-13. Pipeline operators should be involved in the stakeholder planning team that creates a school’s emergency response plan. N.T. 2242:14-24.

Mr. Turner believes that Sunoco can and should be required to enhance public warning, provide detailed information regarding its infrastructure to the County, assist in development of an evacuation plan for use by municipalities with concepts on how evacuation would occur, create

a public outreach and public education program, and fund more training for first responders. N.T. 2245:23-25; 2246:1-17; Sunoco's public outreach and public education program should be enhanced. N.T. 2246:10-14; Turner Direct Testimony, St. 1, 7:20-22; 8:1-2.

With regard to warnings, Chester County recommends the following:

- Sunoco should install monitoring devices that integrate with public warning devices (such as feed into a siren) to improve notification to the community. This is currently being done for utilities with nuclear plants in the County.
- Sunoco should integrate direct connection from pipeline control centers with the County's 911 communications center. This will allow faster notification for emergency response and public warning in an emergency.
- Sunoco should develop standard notification templates for public warning systems to be used during a pipeline emergency and develop emergency classification levels which are specifically designed to make the public aware of the situation.
- Sunoco should add an odorant and dye to all odorless and/or colorless liquids and gasses to allow for quick identification of a release or spill to enhance detection and notification to the public.
- As technological improvements develop, Sunoco should install intrinsically safe (i.e. certified not to create a spark) warning devices, along the pipeline right of way which would notify the public of a leak, emergency, or potential danger along the pipeline. Currently there are such devices installed on the valves along the pipeline.

Turner, St. 1, 8:6-22.

With regard to the County having timely, specific detailed information regarding the pipeline activities so a consistent and clear message can be provided to the public, Chester County recommends the following:

- Sunoco has the technical expertise regarding the pipeline operations and should provide detailed information and assistance with the creation of specific annexes or plans so that state, county, and local emergency services organizations can be better prepared for the specific hazards of pipeline emergencies in their communities.
- As a critical stakeholder, Sunoco should provide local emergency planning assistance to local emergency management partners that could consist of dedicated employee(s) and or funding to support additional employees.
- Sunoco must be required to notify not only the County but all municipalities in Chester County of anticipated, scheduled or commenced work done in

Chester County.

- Sunoco must be required to notify County officials, in advance, of any pipeline activity, such as simulations, testing, routine maintenance, repairs etc.
- Chester County recommends that the notification process used by the nuclear power stations be replicated for Hazardous Liquid utilities. Based on its experience with the Limerick Nuclear Plant Generating Station, Chester County strongly urges the Commission to adopt this process.

Turner, St. 1, 9:9-22; 10:1-2.

Exelon funds a full-time position with responsibilities to plan exclusively for an emergency involving either the Limerick or Peach Bottom nuclear plants. In Mr. Turner's professional opinion, a dedicated pipeline planner would benefit the County since the planner would address the unique and specific needs of the municipalities and the public in a pipeline emergency. Turner, St. 1, 10:4-7, 9-14.

Chester County further recommends:

- Sunoco is the subject matter expert regarding a pipeline emergency and as a critical stakeholder must do more than "check the boxes" to show that they are a good corporate citizen.
- Sunoco needs to develop, in cooperation with state, county, and local emergency services and municipalities evacuation and shelter in place plans or annexes to the EOP for each county, municipality, neighborhood, high-occupancy structure, high-hazard area, school, hospital, church, public gathering place, or any other area or parcel that may need assistance or direction evacuating during a pipeline emergency.
- Sunoco should have regular and ongoing training, exercises, and community outreach / public education to anyone who may be impacted (directly or indirectly) by an evacuation or shelter in place order. Currently, Sunoco may be "checking the boxes" that complies with existing law, but it is generic and provide minimal information to the public.
- Sunoco should be required to maintain a comprehensive database of pipeline information and to provide this information to DES including:
 - a. Maps of all transmission lines listing material moved, pipeline diameter, mainline valve locations and maximum operating pressures (MOP), and maximum allowable operating pressure (MAOP);
 - b. Information about the location of any anomalies that merit pressure reduction in the pipeline and the presence of "immediate,"

"60-day" or "180-day" repair conditions for liquid pipelines or
"immediate" or "one- year" repair conditions for gas pipelines.

Turner, St. 1, 10:18-23; 11:1-17.

Sunoco must correct its lack of physical presence regarding public outreach and education in Chester County. Any public outreach and education must be specific to the neighborhoods, streets, and houses potentially affected. The public outreach and/or education program should not be a generic "one size fits all "approach. Sunoco should:

- Create a more robust public outreach and public education program to inform the public about what to expect during training or routine maintenance as well as what to do in a pipeline emergency.
- Work with the local communities to educate the public of the options to shelter in place or evacuate providing clear and consistent message. This will permit all residents to discuss and create responsible an individual plan for their family regarding sheltering in place and evacuation.
- Enhance planning funding/resources for pipeline emergencies.

Turner, St. 1, 12:19-23; 13:1-11.

D. Deficiencies in the Public Awareness Program Directed to Residents and public officials

Sunoco's public awareness program directed to residents and public officials is deficient and has failed to accomplish the purpose for which it was required. The public remains confused and concerned and has no clear idea how either to identify or safely escape from a leak from an HVL pipeline. Among others, school districts with buildings full of children, retirement communities with large numbers of residents with mobility issues, County residents, and the Chester County Library in Exton, which had 452,313 visits in 2018 and almost 1,000 programs for children, do not have adequate information or tools to identify a pipeline leak and to create

emergency plans to safely evacuate from it. N.T. 970:1-6.

Once leaked, the HVL's in the Sunoco pipelines would be in the form of an odorless, colorless gas, heavier than air, that moves with the wind and slides downhill. It is dangerous and highly combustible. For those in its path, it is like living near a silent, invisible enemy who you cannot see approach, but who can destroy your home, your children's school, and your business, and cause asphyxiation, burns, injuries, and death to you, your loved ones, your customers, and, for school districts and retirement communities, the children and elderly who are under your care. If you know it's there, which is not a given, you can flee it, but only on foot if you are fit and able and have a clear path. But even then, since you don't know where it is, you may actually be walking toward it. You cannot call for help because even your cell phone has the potential to cause the invisible enemy to explode. You cannot put school children on the bus or load your toddler or aged parent in your car in an attempt to escape because the simple act of turning on a vehicle could ignite the escaped gasses. You don't know how far to run, because you don't know the size of the leak and how far it has spread.

HVLs are unique in this way. This is no hurricane, flood, house fire, earthquake, or tornado, event that can wreak havoc and cause catastrophe. People can see rising rivers and pile sandbags in front of their doors. People can smell smoke, feel heat, and hear the warnings from smoke detectors. They know to stop, drop and roll if in a burning building. People understand that they need to get outside when earthquakes shake their homes. Even approaching tornados come with sound and wind and often sirens that alert people to take cover. HVLs arrive silently and unpredictably. For those living in the danger zone, it is not enough for Sunoco to provide brochures every other year or recommend generic evacuation procedures. People need information, certainty, and solid, reasonable, practical plans for dealing with an HVL emergency. There is no other way

for people to live comfortably in their homes, send their children to school, or even visit the library with peace of mind that they, and those around them, have prepared and have a plan in place.

The public does not have this peace of mind. Sunoco's public awareness plan has failed.

1. Schools

Despite Sunoco's public awareness program, those whose job responsibilities include protecting the safety of the most vulnerable members of our society, children and the elderly, remain confused, concerned and anxious about their ability to safely evacuate those under their care in the event of a pipeline emergency.

a. Downingtown Area School District

Dr. Emile Lonardi is the superintendent of schools for the Downingtown Area School District. N.T. 901:14-21. There are five Downingtown area schools that are located near the Mariner East pipelines: Lionville Middle School, 600 feet from the pipeline; Downingtown East High School, 1,175 feet from the pipeline; Lionville Elementary School, 1,425 feet from the pipeline; Shamona Creek Elementary School, 300 feet from the pipeline; and Marsh Creek Sixth Grade Center, 1,000 feet from the pipeline. N.T. 904:13-24; 905:3-6; 906:6-18. There is an above-ground valve station on Dorlan Mill Road adjacent to Shamona Creek Elementary School. N.T. 907:1-3. Shamona Creek Elementary School sits on the top of a hill, and Marsh Creek Sixth Grade Center is located partway down that hill. Beyond the hill is a patch of rough, grassy terrain that is not tended by the school district. N.T. 908:11-18.

Dr. Lonardi has been given conflicting information. N.T. 913:4-5. She is not sure whether to shelter in place, use cell phones to call 911, or to use vehicles to evacuate. N.T. 913:4-10. Dr. Lonardi would like clarification on the precise emergency practices for pipeline emergencies from Sunoco. N.T. 913:11-17.

Dr. Lonardi has been asked by parents of her students whether or not their children are safe at Shamona Creek Elementary and she cannot look them in the eye and say with certainty that the answer is yes. N.T. 914:13-17. Dr. Lonardi has been told that children walking to school should look for dead animals or dead vegetation and to report them if found. This is not advice she can give to parents. N.T. 914:18-25. Dr. Lonardi wants a real early detection system so that the students can be safely evacuated in a timely manner. N.T. 914:25; 915:1. An early detection system should not include small children looking for dead animals on the way to school.

There is a Sunoco valve station located almost squarely between the exit and entrance of the Shamona Creek and Marsh Creek schools and these exits are used every day. N.T. 919:10-19. Dr. Lonardi does not have a “credible or practical or realistic plan in place to keep the students safe in the event of leak” from the Mariner East pipeline. N.T. 921:9-14. She was not even informed when HVLs started flowing through the 12-inch pipeline at the school. N.T. 921:23-25. The school district itself does not employ experts on pipelines, HVLs, or valve stations and does not have enough information to create its own emergency plans. N.T. 935:7-18; 936:13-15.

Mr. Timothy Hubbard is the Chief Security Officer of the Downingtown Area School District. He oversees school district security matters, coordinates emergency response procedures and protocols, evaluates current safety and security protocols and implements improvements as necessary. He acts as liaison with various local, county, state, and federal authorities, and develops and maintains the emergency policy and procedure manual. He performs security and risk assessments and assists with large scale event planning. He is also responsible for the management of contract security services to include staffing and personnel evaluation and for responding to emergencies in and around School District owned properties. He also assists the District PIO as needed, performs fire and life safety inspections at School District owned facilities, participates in

organization and evaluation of emergency drills to include Intruder, Fire, and Severe Weather, consults with school leadership regarding safety and security issues and presents training and professional development courses to various personnel in emergency response procedures and guidelines. Hubbard, St. 1, p. 3.

Sunoco's public awareness brochure suggests that in the event of a rupture, people should move on foot out of the area, both upwind and uphill if possible and should avoid turning light switches on or off or starting any motor vehicles. N.T. 87:10-17. However, the school district has a student population of children from kindergarten through twelfth grade. There are special needs children, including those in electric wheelchairs. N.T. 87:18-25; 88:1-11. There are 50 to 60 kindergarten age children as well as autistic support children. The school district is worried about how to move them. N.T. 90:9-17. Further, making a determination as to wind direction is a hit-or-miss situation. The best case scenario is if a flag has been raised and gives an indication, but the flag direction could also change. N.T. 91:1-9. The school district has also had internal discussions about sheltering in place as a response to a leak, but it has not been provided with information to make that decision. N.T. 103:10-16. No one at the school district currently has a meter that would detect natural gas liquid vapors. N.T. 113: 20-25. Mr. Hubbard is not aware of anyone at the school district who has "intrinsically safe communication devices." N.T. 113:17-19.

If a leak occurred across from the playground when young children were present it could cause asphyxiation. There are also roads nearby, so a car could drive through the cloud and ignite an explosion, whatever the size of the vapor cloud. N.T. 104:11-25; 105:1.

In Mr. Hubbard's professional opinion, the two-page brochure distributed by Sunoco is not sufficient to adequately inform the public to protect them. It does not provide enough information "for people to really have the knowledge to choose an action." N.T. 107:6-11. It is the pipeline

operators responsibility to give information to the schools which is sufficient to enable the schools to create their emergency response plan. N.T. 127:4-8.

There are four phases to any aspect of emergency management, mitigation, preparedness, response, and recovery. In the instant matter, Mr. Hubbard states that he is missing the mitigation and preparedness phases. N.T. 2313:8-22. Some of the information Mr. Hubbard has been looking for is information that relates directly to the pipelines in question and the volume of product that they would have to deal with should a catastrophic leak occur. Mr. Hubbard also needs to know what is the duration that that product is going to be released for. He does not know how much product is going to be flowing potentially in and around the school buildings until the shut-off valves are activated. Also, Sunoco has industry experts. It would be useful to have such experts in the planning process. N.T. 2318:25; 2319:1-13. Though Sunoco has made appearances, those appearances were lacking the information needed by Mr. Hubbard that he could rely upon. N.T. 2319:23-25; 2320:1-3.

The school agency has the custodial responsibility over the children and staff in the schools. With regard to identifying a potential vapor cloud that would result in the need to evacuate school property, Mr. Hubbard stated that the school district employees need to be able to make that determination prior to, in many cases, the first responders arriving on scene. It would be irresponsible to wait for the first responders to tell them what to do. N.T. 2326:7-20.

Up until December 2018, when there was a meeting at which Sunoco had a consultant present who gave incorrect information, the Downingtown Area School District didn't have proper information with respect to the pipeline, its contents, pressures and things of that nature. Up until that point and even beyond, "we have been met with a brick wall." N.T. 2363:2-14.

b. West Chester Area School District

Dr. James Scanlon has been the superintendent of the West Chester Area School District, which includes the townships of West Whiteland, West Goshen, East Goshen, Westtown, and Thornbury, for 11 years. N.T.1214:16-23; 1215:20-23. There are approximately 12,070 students in the school district. N.T. 1215:1-5. The school buildings in closest proximity to the Mariner East pipeline are Pennwood Elementary School, 1,700 feet from the pipeline; Exton Elementary School, 1,500 feet from the pipeline; and East Goshen Elementary School, 1,700 feet from the pipeline. N.T. 1216:3-11, 15-21.

Dr. Scanlon stated that the West Chester Area School District is obligated to protect the health, safety and welfare of its students, staff, and users of its facilities by law and its goal is to make things as safe as possible for the kids, the staff and the community. N.T. 1218:4-8; 1223:4-9.

Dr. Scanlon is not comfortable with the present early notification process for a breached pipeline. N.T. 1223:10-13. He is concerned that under the current protocol it could be three or four minutes from the time of a breach until the school district is notified. N.T. 1224:11-13. An entire school can be evacuated in three minutes. N.T. 1224: 14-16. Dr. Scanlon requested that Sunoco immediately notify the school district if there is a breach instead of having to wait to receive notice indirectly from first responders. N.T. 1224:17-25; 1225:2-6. He also would like improved detection measures such as detection devices that can be put around the schools to detect the odorless gas. N.T. 1225:7-21. School principals are supposed to use a walkie-talkie or email to communicate off-site in the event of an evacuation, but Dr. Scanlon does not even know if these devices or modes of communication are intrinsically safe. N.T. 1237:16-25; 1238:1.

Kevin Campbell is the director of facilities and operation for the West Chester Area School District and has held the position for 20 years. N.T. 1247:2-7. He is also the school safety and

security coordinator. N.T. 1247:8-13. Mr. Campbell is one of the first responders to any emergency. He oversees the emergency plan generation and annually reviews the plan from 17 sites in the district. N.T. 1247:17-25; 1248:1-2. He is familiar with Exton Elementary, East Goshen Elementary, and Pennwood Elementary. N.T. 1248:3-7.

Mr. Campbell has stated that there is information regarding the pipeline that he does not have that would make a difference to him in carrying out his job. N.T. 1248:8-12. Because he does not have information on the types of material moving through the pipeline, and their pressure, he cannot predict the blast zone. If he cannot predict the blast zone, he cannot develop an effective emergency plan. N.T. 1249:14-24. Mr. Campbell has received notification from another company, Interstate Energy, that the evacuation zone for their 18-inch pipeline is 1,000 square feet because their pipeline carries natural gas. This allows Mr. Campbell to plan accordingly. N.T. 1250:15-25. He has also received information on recommended evacuation distance from other companies that he has not received for ME1 or ME2, making it impossible to develop an evacuation plan. N.T. 1251:1-5.

Mr. Campbell wants Sunoco to provide information on what product is traveling in the pipeline, the speed it is traveling, and, based on the national standards, the appropriate safe distances for an evacuation. Other pipeline operators have provided this information. N.T. 1252:19-25; 1253:1-6).

Sunoco has never told Mr. Campbell how long it would take them to come to the site to help with an evacuation. N.T. 1255:8-11. In Mr. Campbell's experience with hazardous material response, a full hazmat team might take between one and four hours to arrive on site. N.T. 1261:2-18. It could take as long as 15 minutes for the County emergency personnel to respond to a gas leak at some of the school and even longer than that for many others. N.T. 1254:12-17; 1260:10-

17.

c. Twin Valley School District

Mr. William Clements is the principal of Twin Valley High School in the Twin Valley School District. N.T. 1307:12-14. Twin Valley School District is located in northern Chester County and part of Berks County. N.T. 1307:16-21. He has been the principal for six years. N.T. 1308:7-11. The Mariner East pipeline passes the middle school, high school, and the Twin Valley Elementary Center in fairly close proximity. The pipeline is 390 feet from the elementary center, 435 feet from the high school, and 565 feet from the middle school. N.T. 1310:7-14.

The school district safety committee holds regular meetings with local first responders. The school district's emergency action plans are discussed with the first responders, and the first responders help form the action plan. N.T. 1311:3-6. Mr. Clements understands the safety zone to be a half a mile from the pipeline, so the plans for a pipeline emergency are to evacuate students at least a half-mile away from the pipeline. N.T. 1311:11-17. A Sunoco representative attended a committee meeting with emergency responders in September or October 2017. N.T. 1321:7-17. N.T. 1312:18-21. However, Mr. Clements has not had any contact with Sunoco since 2017. N.T. 1313:35; 1314:1.

Mr. Clements attended the hearings in this matter due to his concern that he will not be aware that there is a problem with the pipeline until the local fire department is driving past the school. N.T. 1314:1-5. The Twin Valley Fire Department is a volunteer fire department and the response time to the school in an emergency is about 10 to 12 minutes. N.T. 1314:17-18.

The high school is on the top of a hill, so it is not possible to evacuate "uphill" of the high school. N.T. 1315:14-19. Evacuating uphill would mean crossing the pipeline to the north. N.T. 1315:19-22. To the east or west of the high school are dead end roads. The only possible route for

a safe evacuation a half-mile away from the school is to the south, which is downhill. N.T. 1315:23-25; 1316:1. The same is true for the middle school. N.T. 1316:2-3. At the elementary school, if the students were required to go south, they would be trapped by the Pennsylvania Turnpike. N.T. 1319:11-20. Mr. Clements doesn't know how long it would take to shut down traffic on Route 23 to get the middle and high school children down the hill from their schools. N.T. 1321:5-9.

Mr. Clements is concerned because he does not have any means of independently checking whether there has been a pipeline leak himself or through an employee at the school. There is no early notification or early warning system in the event of leak. N.T. 1317:20-25. He is concerned about things that might spark an explosion such as cell phones, wheelchairs, and vehicles. N.T. 1317:2-10. And he is concerned about being able to effectively communicate in an area where he has been advised not to use cell phones during a pipeline leak. N.T. 1317:10-13.

2. Wellington Senior Living

Mr. Thomas McDonald lives in East Goshen Township, Chester County. He is familiar with the Wellington facility where his 88-year-old mother resides. The ME1 and Work-Around pipelines are approximately 200 feet opposite the entrance to the facility. N.T. 995:9-14; 996:10-13, 22-23. Mr. McDonald's mother is unable to walk on her own and uses a walker or a wheelchair. If an incident occurred at night, she would need help to get out bed. N.T. 1003:8-23. She would not be capable of evacuating on her own. There are 35 residents on her floor, and only four staff members, and it would take approximately 25 minutes for her to be evacuated assuming she was in the middle of the line of elderly being evacuated from her floor. N.T. 1002:22-25; 1003:4-7; 1006:9-23. Further, the only way for first responders to get access to the Wellington facility would be to cross the pipeline. There is no other access road. N.T. 1004:9-20. The only way for the residents to evacuate uphill would also be to move toward the pipeline. N.T. 1004:24-25;

1005:1-3. The elevators are electrical and some of the residents have motorized wheelchairs. N.T.
1005:20-21. The fire station is approximately a half mile away, but the first responders would have to cross the pipeline to leave the fire house and cross it again to reach the Wellington facility. N.T.
1007:15-19.

3. Residents.

Despite the Sunoco public awareness program and their familiarity with it, Chester County residents Dr. Gerald McMullen, Nancy Harkins, Caroline Hughes, Virginia Marcille-Kerslake, and Thomas McDonald, among others, have testified that they remain unsure of what to do in the event of a pipeline leak.

The McMullens have resided in their home in Meadowbrook Manor in West Whiteland Township, Chester County, for 44 years. Sunoco pipelines are literally in their backyard. N.T.
944:8-12. ME1 is 35 feet and the Work-Around Pipeline is 60 feet from the McMullen home. N.T.
945:22 -25; 946:1-10.

The evacuation recommendations from Sunoco, to walk upwind, uphill and avoid ignition sources, are entirely unfeasible. Following the Sunoco guidelines would require the McMullens to negotiate a fence, walk across four pipelines, walk down a sloped driveway and arrive at the Exton Mall. The McMullens believe the Sunoco evacuation recommendations to be equally impossible for many of their neighbors. The 200 block of Hillside Drive has several elderly widows who are hemmed in by a cyclone fence. A handicapped neighbor several homes away from the McMullens has spina bifida with associated mobility problems. She would be unable to evacuate on foot. N.T.
952:14-25; 953:1-18.

Nancy Harkins, who lives with her husband in West Chester, Chester County, in a home approximately 1100 feet from the pipelines, is familiar with the brochure that Sunoco has

distributed as part of its safety program, and yet she still does not know what to do. N.T. 20:4-9; 21:12-25; 22:1-12. The Sunoco flyer states, "From a safe location, call 911 or your local emergency response number and call the 24-hour emergency number for the pipeline operator." Ms. Harkins does not know what is meant by a "safe location." N.T. 21:12-25; 22:1-12. Ms. Harkins husband had open-heart surgery and for weeks afterward could not even walk up the driveway. N.T. 28:2-10. Her neighbor uses a motorized scooter and oxygen. He could not evacuate away from the pipeline both because there is rough ground behind his house and his scooter operates with an electrical switch. N.T. 29:1-10; N.T. 29:13-18.

Caroline Hughes resides with her husband and two young children in East Goshen Township, Chester County, 700 feet from the Mariner East pipeline. Her son attends Saints Peter and Paul School which has a Mariner easement on its property, and her daughter attends Fugett Middle School in the West Chester Area School District which is in the evacuation zone for Mariner East. N.T. 1037:12-19. The Mariner East pipeline affects Ms. Hughes home, work and commute to work. N.T. 1029:12-25; 1030: 1-16; N.T. 1032:4-13.

Ms. Hughes has found that Sunoco's information regarding emergency planning and detection of leaks is sorely lacking. N.T. 1072:3-5; 1062:24-25; 1063:1-2. Sunoco's formal recommendation is that in the event of a leak from a Mariner East pipeline one must evacuate on foot, uphill, upwind, at least one-half mile while avoiding ignition sources. This presents a logistical burden on larger, vulnerable communities like schools, nursing homes, senior facilities, health care centers, and those with limited mobility. N.T. 1032:14-20.

Ms. Hughes testified that on August 5, 2019, she was driving home from work and was approximately 500 feet from the Sunoco Boot Road Pumping Station when she heard a loud explosion noise. She noted that her family, and many residents in the area, reported that their house

shook one mile away. This accident was initially reported by Sunoco as “routine maintenance.” Ms. Hughes believes this incident highlights the challenges residents face when trying to obtain clear, factual information in an expedient way to determine what to do in the case of an emergency. N.T. 1046:13-25; 1047:1-25.

Virginia Marcille-Kerslake has extensive community interactions and testified that many people were unaware of what to do in the event of a Mariner East leak. N.T.1640:8-14. Ms. Marcille-Kerslake is also concerned in that there are residents in the blast zone of West Whiteland Township who do not have the ability to evacuate a half mile on foot, as instructed, in the event of a leak on Mariner East. These include, but are by no means limited to, residents of Sunrise Living and other aged or physically challenged individuals known to Ms. Kerslake. N.T. 1939:12-25; 1640:1-4.

E. The Inadequacy of Sunoco’s Defense

Throughout these proceedings, Sunoco has protested that it has met minimum, baseline responsibilities. Sunoco has sent mailers. Sunoco argues that if those mailers didn’t reach everyone, that is not Sunoco’s fault. Sunoco does not use response cards with their mailings so that stakeholders can give feedback. N.T. 3181:3-8. The mailers do not contain specific information with regard to HVLs or vapor clouds and do not specify what distance is a “safe location” from a vapor cloud. But again Sunoco protests that it has done the minimum. It has not.

The public awareness program is required to “assess the unique attributes and characteristics of the operator's pipeline and facilities.” 49 CFR Part § 195.440(b). “The program and the media used must be as comprehensive as necessary to reach all areas in which the operator transports hazardous liquid ...” 49 CFR Part § 195.440(f). Despite Sunoco’s claims that it only

needs to comply with baseline requirements, RP 1162 recognizes that there cannot be a “one-size-fits-all” public awareness program. RP 1162 at §2.6. Hence, RP 1162 provides that there are situations where it is appropriate to enhance or supplement the baseline public awareness program. RP 1162 at §1.3.5. Further, the Pennsylvania Code provides that each public utility, such as Sunoco, “shall at all times use every reasonable effort to properly warn and protect the public from danger ...” 52 Pa. Code § 59.33(a).

RP 1162 requires notice of potential hazards and potential consequences posed by HVL’s. RP 1162 §§ 4.2 and 4.3.1. N.T. 3112:11-14. Though fatalities and burns are hazards associated with unintended releases of HVLs, that information appears nowhere in the Sunoco mailers. Neither the Sunoco mailer nor the Sunoco website inform stakeholders how far to evacuate on foot and what to do if evacuation is not possible. N.T. 3135:16-25; 3136:1-2. Stakeholders have testified that the evacuation information in the Sunoco mailers is impractical and unusable for their situations.

As part of its public awareness program, Sunoco has not evaluated the feasibility of going uphill or downhill at various locations along the pipeline, has not evaluated the ease or difficulty of people evacuating on foot from places near valve sites, has not evaluated the impact of public facilities such as restaurants, apartment complexes, schools and other places where people would gather near Sunoco’s valve sites. N.T. 3126:22-25; 3127:1-4; 13-17. The mailers, by design, do not include people who regularly work in the impacted zone or regularly come to shop in the impacted zone or for any other reason come to visit on a regular basis such as to the businesses, restaurants, and library. N.T. 3138:11-25. There does not appear to be any public awareness program or attempt by Sunoco to reach such people. The mailings to individual stakeholders are generic and are addressed to “resident.” N.T. 3182:7-10. Sunoco does not use radio or television

to notify the public that the mailing is coming, that it is important, that stakeholders should be on the lookout for it. N.T. 3181:18-23. Sunoco does not email the mailer to an email distribution list. N.T. 3181:24-25; 3182:1-2.

With regard to the RP 1162 supplemental activities to enhance the public awareness system such as frequency of communication, enhanced message content and delivery/media methods, and broadening or widening the stakeholder audience, Sunoco argues that those supplemental activities are purely optional. Perez, St. 5, 3:22-26; 4:13-15.

Sunoco states that its public awareness brochures are all similar across the state and typically all contain the same baseline information. This is done for, among other reasons, “consistency to avoid stakeholder confusion.” Perez, St. 5, 5:1-8; N.T. 372:17-25; 373:1-5. As the instant Action has amply demonstrated, stakeholder confusion has not been avoided. Quite the opposite. Stakeholder confusion is the norm with regard to what to do in the event of an HVL leak from a Sunoco Pipeline.

Sunoco claims that it has gone above and beyond the baseline. It has placed its public awareness brochures on its website which is not a requirement. Perez, St. 5, 9:4-6. It provides a non-emergency phone number on its brochures where members of the public can call even though this is not required by RP 1162. Perez, St. 5, 9:7-9. It has attended open houses to meet with the affected public even though this was not required. Perez, St. 5, 9:8-13. Sunoco argues that its only obligation to schools is to mail a brochure every two years and that it has no obligation to counties and municipalities to develop emergency response plans, only to provide necessary information to assist with the effort. Perez, St. 5, 10:20-23; 11:11-14, 19-20, 25-28.

Sunoco’s position, in addition to coming across as callous toward the very public it serves and profits from, is untenable. Sunoco has failed to conduct a proper public awareness program.

Stakeholders such as emergency planning agencies, first responders, residents, school districts and municipalities are confused and concerned and all are clamoring for information necessary to protect themselves and their communities. The very existence of this Action and the number of parties involved and participants at the Hearings speaks to the failure of Sunoco's public awareness program. Sunoco has presented no evidence regarding return mailers, feedback surveys, evaluations, or audits as to the effectiveness of its public awareness program.

With the right to do business in Pennsylvania comes responsibility. N.T. 3228:9-11. Sunoco is a private company that is benefitting from easements on private property. *Baker* Decision, p. 34. Further, "[a] public utility should want to meet with the public and use the media to get its message out to the public. *Id.* As ALJ Barnes stated in *Baker*:

An informed public and well-trained emergency officials reduce the likelihood of injury or damage to everyone and all property involved. For example, parents need to be educated on what actions they should take if there is a leak between the parent and his/her child(ren) at school. School districts need to know whether they should shelter in place, shut down air handlers, or whether they should evacuate and in what direction in the event of leaks near their schools. Hence, the utility owes a duty to inform and educate those members of the public residing, working, and congregating near HVL pipelines owned by the utility within the meaning of API 1162 as incorporated by 49 CFR 195 as well as 52 Pa. Code § 59.33(b).

Baker Decision, p. 34.

As discussed more fully above, Sunoco's public safety efforts are equally lacking. As Mr. Turner noted, Sunoco's CoRE meetings and MERO trainings have failed to provide the information needed by those trying to formulate a proper emergency plan. Mr. Turner stated that the CoRE meetings were not actual "trainings," but simply a "buy dinner and provide awareness of pipelines in your jurisdiction." N.T. 2212:13-23. The MERO training was an hour and half Power Point presentation by Mr. Noll. N.T. 2243:1-15. Sunoco does not even allow its emergency response plan to be viewed or referenced in the MERO class. N.T. 3383:6-7.

Mr. Noll conducted a tabletop exercise for Chester County on May 18, 2018 and surveyed the participants afterward. N.T. 3359:5-15. One of the questions asked respondents to list three areas of improvement based upon what they had observed in the day's exercise. The following responses were given: educating the public; more information from pipeline operators; interaction with pipeline operators. N.T. 3360:4-10. Another question in that survey asked, based on what you learned today, what recommendations do you have to improve your organization's ability to plan, react, respond to a transmission pipeline incident? N.T. 3360:11-16. The responses included the following: continued need for additional pipeline training, development of pipeline props, pipeline training, additional training for LE personnel who will likely be first on scene; continual improvement of communications between stakeholders, clarify lines of communication, and process to get up-to-date, accurate information. N.T. 3360:17-22; 3361:4-8.

After Mr. Noll's tabletop exercise in Chester County in December 2018, seven of the participants who filled out the questionnaire after the event said, in response to a request to list three areas for improvement based on the day's exercise, that there should be more pipeline operator information and involvement. N.T. 3362:14-22. This was the most received comment based on the December 13, 2018 tabletop exercise. N.T. 33623:2-5.

Chester County and its Emergency Management Department need Sunoco's cooperation, its information, expertise, and tools in order to prepare a proper emergency plan for evacuation of institutions and residents in the event of an HVL leak. As Mr. Noll, Sunoco's own witness on emergency management, clearly stated, "[a] lack of preparedness could increase the risk of hazards to life and property." Sunoco enjoys the benefits of its designation a public utility. It must also meet its obligations. Chester County is asking for nothing more than what it requires to properly protect its residents with the best possible emergency management plan.

In sum, there is a common theme from all stakeholders. They do not have what they need from Sunoco to plan and prepare for, to respond to, and to understand what action to take in the event of a pipeline leak of HVLs. Sunoco's outreach to educate the public is lacking. People lead very busy lives. Simply sending an inadequate generic mailer every two years addressed to "resident" is not going to have the required effect. Having a Facebook page may be nice, but it is highly unlikely that the general public will be "friending" Sunoco on Facebook and gleaning any important information there. So too Sunoco's website. People are unlikely to go to Sunoco's website proactively to learn what little they can there about HVL leaks.

The information provided to stakeholders should be on a scale relative to the seriousness of the catastrophe that could result. And that information must be disseminated in the most effective manner possible. Messaging is important. It must reach its desired audience and it must be complete and understandable.

F. The Powers of the Commission

As set forth more fully in Section V(A) above, the Commission has the duty and the authority to direct Sunoco to improve its public awareness program. The Commission has the power under the Public Utility Code to enter an order requiring Sunoco to make such changes and improvements as are reasonably necessary for the safety and convenience of the public. 66 Pa.C.S.A. § 1505(a).

There may be national energy policy codified in the code of federal regulations, but the Pennsylvania Public Utility Commission as an independent regulatory commission is in a position to address these more localized problems... It is the duty of regulation to harmonize the privilege of a private utility with the public interest.

Baker Decision, p. 36.

Chester County respectfully requests that the Commission grant Chester County relief and order Sunoco to take those actions as are set forth in the County's Proposed Ordering Paragraphs set forth in the Appendix hereto.

VI. CONCLUSION AND REQUESTED RELIEF

Sunoco has violated baseline requirements and failed to adopt any significant supplemental requirements pursuant to RP 1162 with regard to its public awareness program. Residents, school districts, municipalities, and first responders, among others, all require clear, usable information and tools in order to protect themselves and their communities and to be properly prepared in the event of an HVL leak from a Sunoco Pipeline. Chester County respectfully requests that the Commission enter an order encompassing the Proposed Ordering Paragraphs attached hereto as Appendix A.

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Dated: December 16, 2020

APPENDIX A

Proposed Findings of Fact

Proposed Conclusions of Law

Proposed Ordering Paragraphs

PROPOSED FINDINGS OF FACT

Local Emergency Response Agencies And Officials

Mr. William H. Turner, Chester County Department of Emergency Services

1. Mr. Turner was accepted as an expert in emergency management and emergency preparedness. N.T. 2197; 1-5.

2. Mr. Turner is employed by Chester County Department of Emergency Services (DES) as the Deputy Director for Emergency Management and has been employed by DES since July 2011. He is primarily responsible to ensure that the County has an emergency management program that addresses planning, preparedness, prevention, mitigation, response and recovery along with training for emergency-management coordinators and staff and community outreach. St. 1, 2:5-18.

3. Mr. Turner holds a Professional Level Certification from PEMA for Emergency Management. This is the highest certification of the three levels. He also holds a certification for Business Continuity Professional from the Disaster Recovery Institute International which requires continued education courses annually. Finally, he is certified in continuity planning (i.e. how to keep governmental and emergency service on in an emergency situation). St. 1, 3:1-6.

4. The mission of the Department of Emergency Services is to promote and assist in providing safety and security to Chester County residents so they can work, live and grow in a healthy and safe community. Collaboration with pipeline operators whose facilities are located in the County is critical to accomplish our mission. St. 1, 3:19-23.

5. Chester County believes that Sunoco can and should be required to do the following: (1) enhance public warning, (2) provide detailed information regarding its infrastructure to the County, (3) assist in the development of an evacuation plan for use by municipalities with

concept of how evacuation would occur, (4) create a public outreach and public education program and (5) fund more training for first responders. St. 1, 7:20-22; p. 8:1-2.

6. Chester County recommends the following: Sunoco should install monitoring devices that integrate with public warning devices (such as feed into a siren) to improve notification to the community. This is currently being done for utilities with nuclear plants in the County. Sunoco should integrate direct connection from pipeline control centers with the County's 911 communications center. This will allow faster notification for emergency response and public warning in an emergency. Sunoco should develop standard notification templates for public warning systems to be used during a pipeline emergency and develop emergency classification levels which are specifically designed to make the public aware of the situation. Sunoco should add an odorant and dye to all odorless and/or colorless liquids and gasses to allow for quick identification of a release or spill to enhance detection and notification to the public. As technological improvements develop, Sunoco should install intrinsically safe (i.e. certified not to create a spark) warning devices, along the pipeline right of way which would notify the public of a leak, emergency, or potential danger along the pipeline. Currently there are such devices installed on the valves along the pipeline. St. 1, 8:6-22.

7. Public safety will be enhanced as a result of the County having timely, specific detailed information regarding the pipeline activities so a consistent and clear message can be provided to the public. St. 1, 9:1-5.

8. Chester County recommends the following: Sunoco has the technical expertise regarding the pipeline operations and should provide detailed information and assistance with the creation of specific annexes or plans so that state, county, and local emergency services organizations can be better prepared for the specific hazards of pipeline emergencies in their

communities. As a critical stakeholder, Sunoco should provide local emergency planning assistance to local emergency management partners that could consist of dedicated employee(s) and or funding to support additional employees. Sunoco must be required to notify not only the County but all municipalities in Chester County of anticipated, scheduled or commenced work done in Chester County. Sunoco must be required to notify County officials, in advance, of any pipeline activity, such as simulations, testing, routine maintenance, repairs etc. Chester County recommends that the notification process used by the nuclear power stations be replicated for Hazardous Liquid utilities. Based on its experience with the Limerick Nuclear Plant Generating Station, Chester County strongly urges the Commission to adopt a process. St. 1, 9:9-22; 10:1-2.

9. Exelon funds a full-time position with responsibilities to plan exclusively for an emergency involving either the Limerick or Peach Bottom nuclear plants. In Mr. Turner's professional opinion, a dedicated pipeline planner would benefit the County since the planner would address the unique and specific needs of the municipalities and the public in a pipeline emergency. St. 1, 10:4-7, 9-14.

10. Chester County recommends the following: Sunoco is the subject matter expert regarding a pipeline emergency and as a critical stakeholder must do more than "check the boxes" to show that they are a good corporate citizen. Sunoco needs to develop, in cooperation with state, county, and local emergency services and municipalities evacuation and shelter in place plans or annexes to the EOP for each county, municipality, neighborhood, high-occupancy structure, high-hazard area, school, hospital, church, public gathering place, or any other area or parcel that may need assistance or direction evacuating during a pipeline emergency. Sunoco should have regular and ongoing training, exercises, and community outreach / public education to anyone who may be impacted (directly or indirectly) by an evacuation or shelter in place order. Currently, Sunoco

may be "checking the boxes" that complies with existing law, but it is generic and provide minimal information to the public. Sunoco should be required to maintain a comprehensive database of pipeline information and to provide this information to DES including: a. Maps of all transmission lines listing material moved, pipeline diameter, mainline valve locations and maximum operating pressures (MOP), and maximum allowable operating pressure (MAOP); b. Information about the location of any anomalies that merit pressure reduction in the pipeline and the presence of "immediate", "60-day" or "180-day" repair conditions for liquid pipelines or "immediate" or "one-year" repair conditions for gas pipelines. St. 1, 10:18-23; 11:1-17.

11. Chester County takes its obligation to protect confidential and proprietary information very seriously. As with the plans for other active operators, the County has a process in place to protect that information. St. 1, 12:8-10.

12. Sunoco provided the County with a briefing on their risk assessment, but they have not shared the document in its entirety. Sunoco should be required to identify threats that can cause a failure on the pipeline segment in High Congestion Areas and what assessment method (smart pigs, hydrotesting, direct assessment or other technology) is used to evaluate and address threats in a timely manner. St. 1, 12:12-17.

13. Sunoco must correct its lack of physical presence regarding public outreach and education in Chester County. Any public outreach and education must be specific to the neighborhoods, streets, and houses potentially affected. The public outreach and/or education program should not be generic as "one size fits all" generic approach across Sunoco's footprint in the Commonwealth:

- Create a more robust public outreach and public education program to inform the public about what to expect during training or routine maintenance as well as what

to do in a pipeline emergency.

- Work with the local communities to educate the public of the options to shelter in place or evacuate, providing a clear and consistent message. This will permit all residents to discuss and create a responsible individual plan for their family regarding sheltering in place and evacuation.
- Enhance planning funding/resources for pipeline emergencies.

St. 1, 12:19-23; 13:1-11.

14. In Mr. Turner's professional opinion, the requested recommendations will enhance public education and awareness and the services provided by first responders. St. 1, 13:13-16; 14:13-16.

15. Mr. Turner had reviewed Sunoco's public awareness pamphlets issued for emergency responders, public officials, the public and excavators. N.T. 2199:9-13.

16. Mr. Turner stated that public awareness programs should be "targeted to all potentially impacted stakeholders." N.T. 2202:2-7.

17. Mr. Turner agreed that evaluating the effectiveness of a public awareness program involves evaluating all the necessary ways in which an operator communicates the necessary information with respect to responding to a release from a pipeline. N.T. 2202:12-17.

18. Mr. Turner believes that pipeline operators should be part of the planning process for emergency plans. N.T. 2210:12-16.

19. Mr. Turner attended the MERO training in Chester County held by Sunoco. N.T. 2212:14-19.

20. Mr. Turner has attended CoRE meetings. He did not describe them as "trainings"

but as “buy dinner and provide awareness of pipelines in you jurisdiction.” N.T. 2212:13-23.

21. Mr. Turner attended a tour of the Eagle Point pump station with Chester County Association of Townships on June 21, 2019. N.T. 2215:24-25; 2216:1-2.

22. Mr. Turner attended a plume modeling review at the Chester County Department of Emergency Services on November 30, 2017. N.T. 2216:6-9.

23. Mr. Turner attended a meeting on July 30, 2019 that discussed plume modeling, integrity management, environmental compliance, and security programs. N.T. 2216:10-14.

24. Mr. Turner attended an emergency planning session for schools with the Downingtown Area School District on December 11, 2018. N.T. 2216:19-22.

25. Mr. Turner attended a training session on January 24, 2019 for schools of the Archdiocese of Philadelphia. N.T. 2217:1-4.

26. There may be differences in how emergency response to a pipeline differs from other hazardous material emergencies. N.T. 2218:19-25; 2219:1-2.

27. Mr. Turner signed a nondisclosure agreement so that he could review a copy of Sunoco’s facility response plan. N.T. 2229:18-22. He was not able to retain a copy of Sunoco’s facility response plan. N.T. 2229:23-25; 2230:1.

28. Mr. Turner stated that knowing the type of product, maximum operating pressures, hazards of the product, location of valve stations, and flow direction are important to creating an emergency response plan for natural gas liquid pipelines. N.T. 2233:13-25; 2234:1-3.

29. If the pipeline valve near the Downingtown Area School District had an emergency, Mr. Turner estimated that it would take 10 minutes from the time dispatch receives a call for someone to arrive on scene with a gas meter. N.T. 2240:12-19.

30. Mr. Turner believed that the valve station alarms on the pipeline only notify the

operator, not the public. N.T. 2241:10-13.

31. Mr. Turner stated that pipeline operators should be involved in the stakeholder planning team that creates a school's emergency response plan. N.T. 2242:14-24.

32. Mr. Turner attended a MERO training at the Lionville Fire Department that lasted about an hour and a half and included a power point presentation by Mr. Noll. N.T. 2243:1-15.

33. Mr. Turner stated that the representative from TEPPCO/Enterprise has "been very easy to work with" and that "he is readily available and provides Chester County with what they need." N.T. 2243:16-24.

34. Compared to Enterprise, it has been "very difficult" to get information from Sunoco. N.T. 2244:1-4.

35. Mr. Turner described the table top exercises as a "scenario-based exercise" that is more of a discussion than practice responding. N.T. 2244:20-25; 2245:1-3.

36. The pipeline operators oftentimes have some sort of air monitoring, weather monitoring or additional sensors that are strictly for the valve station. The alarm just notifies the operator; it does not notify the public. N.T. 2241:2-13.

37. Mr. Turner attended the two tabletop exercises presented by Mr. Noll. The County hired Mr. Noll. It is a discussion, not actual responding. It is sitting around a table and having a discussion. N.T. 2244:5-8, 25; 2245:2-3.

38. Mr. Turner believes that Sunoco can and should be required to enhance public warning, can and should be required to provide detailed information regarding its infrastructure to the County, and can and should be required to assist in development of an evacuation plan for use by municipalities with concepts on how evacuation would occur, and can and should be required to create a public outreach and public education program, and can and should be required to fund

more training for first responders. N.T. 2245:23-25; 2246:1-17.

39. The key is immediate notification. It's possible that Sunoco will find out about a pipeline leak before the County does, and the County wants notification as soon as possible so it can let the public know and initiate some sort of warning to the public. N.T. 2249:17-21.

40. Enterprise has procured weather stations for the schools along their pipeline and Enterprise is funding a full-scale functional exercise that is actually a boots on the ground exercise where you are actually out in the field in the public simulating a real life pipeline emergency and you have responders moving equipment and simulating a real response. N.T. 2252:2-16.

Mr. Kevin Miller – Emergency Management Coordinator

41. Mr. Kevin Miller is employed by East Goshen Township as the public works foreman. He has been employed by the Township for 14 years. He also holds the appointed position of emergency management coordinator. N.T. 1444:23-25; 1445:1-5. Mr. Miller is the acting fire chief. N.T. 1469:21-22.

42. Mr. Miller was appointed to be the emergency management coordinator (EMC) by Governor Wolf in June 2015. N.T. 1445:6-11.

43. Mr. Miller's duties as the EMC are to provide "plans, preparedness and prevention for emergency acts." Mr. Miller is responsible for implementing the emergency operation plan for East Goshen Township. N.T. 1445:12-18.

44. As emergency management coordinator, Mr. Miller's role is to coordinate efforts, resources, anything that would assist the incident commander in the event of an emergency. N.T. 1447:17-21.

45. Mr. Miller wants "more transparency for safety and communication" and additional

information. N.T. 1448:13-17.

46. Mr. Miller is also asking for specific locations of facilities along the pipeline so that they can be considered in assessment of emergency preparedness. N.T. 1448:18-24.

47. The more information East Goshen has, the more refined its emergency plan can be. N.T. 1448:25; 1449:1-3.

48. East Goshen Township wants advance notice of any planned work or activity along the pipeline. N.T. 1449:20-23.

49. Within the first five minutes of an emergency anywhere in the township Mr. Miller expects police and fire units to respond. N.T. 1468:8-13. Within the first ten minutes Mr. Miller expects fire, EMS. N.T. 1468:18-22.

Mr. Ronald Gravina – First Responder

50. Mr. Ronald Gravina has been a fire chief and first responder for 48 years and a township supervisor for 24 years with Edgmont Township. N.T. 1121:16-22.

51. Mr. Gravina has been a volunteer member of the Edgmont Volunteer Fire Company No. 1 for 48 years. N.T. 1123:1-9. Mr. Gravina has held every position with this fire department and considers himself a first responder for incidents within the township of Edgmont. N.T. 1123:10-14.

52. The township includes rural areas, as well as very dense areas, it also contains a retirement home. N.T. 1122:6-12.

53. There are continuing care facilities, senior facilities, townhouses, apartments, and shopping facilities in the township. N.T. 1122:16-25.

54. Mr. Gravina has received training from Sunoco related to access to the pipeline

sites within the township, once with the contractor Otis and against with the contractor Michaels. N.T. 1124:1-9.

55. Mr. Gravina has been involved with multiple pipeline incidents in the past. N.T. 1125:2-6.

56. In the 1980s he responded to a smell in an area on Meadow Lane and discovered a fountain 100 feet high of product coming from the pipeline. N.T. 1125:7-12. He became involved with the response after a neighbor called emergency services. N.T. 1125:13-17.

57. The neighbor who made the call to emergency services reported hearing and smelling something from the pipeline. They walked outside to see a large amount of liquid going into the air. N.T. 1125:19-24.

58. Another pipeline incident occurred several years ago with the Sunoco pipeline. A petroleum odor was reported over multiple days by phone calls. Sunoco investigated and had difficulty finding the source of the leak, even with the use of meters. N.T. 1126:10-14.

59. As a trained first responder, Mr. Gravina has major concerns about the dealing with a potential problem or incident related to the current Mariner pipelines. N.T. 1126:21-25.

60. Mr. Gravina is concerned for the citizens of Edgmont because he will not be able to see, smell or taste a leak from Mariner pipelines. N.T. 1127:2-5. He is unsure how he would begin to figure out where the potential cloud of gas is located. N.T. 1127:6-8.

61. Mr. Gravina stated that fire companies have requested meters for detecting leaks, but have not received them yet. N.T. 1127:9-13. The meters on the fire vehicles do not detect the product in the Mariner pipeline. N.T. 1127:14-16.

62. Mr. Gravina does not believe he has been provided with sufficient information to respond to a pipeline incident in Edgmont township for products in the Mariner pipelines. N.T.

1127:24-25; 1128:1-4.

63. Mr. Gravina believes that government organizations and Sunoco have a responsibility to assist communities in how to deal with pipeline incidents. If the products do not have smell, color, or taste, how are first responders supposed to do their job? N.T. 1128:5-17.

64. Mr. Gravina has responded to propane leaks, gas leaks, and diesel fuel leaks. These types of leaks were identified by people, not equipment, because there was a color, odor, smell or taste to the products. N.T. 1129:21-25; 1130:1.

65. Additional detection systems would help safeguard the residents of Edgmont Township. N.T. 1130:8-16.

66. Mr. Gravina stated that the pipeline was in operation for several weeks before he knew it was operating. N.T. 1131:22-25; 1132:1.

67. Mr. Gravina is “less than comfortable” with the emergency plan currently in place in the event of a leak on the Mariner East pipeline. N.T. 1133:10-13.

68. Mr. Gravina described the situation regarding the number of volunteer fire fighters in the Commonwealth of Pennsylvania as “dire.” N.T. 1134:9-24.

69. It is Mr. Gravina’s experience that volunteer fire fighters often are the first to respond to incidents and will do so in their personal vehicles. N.T. 1135:7-11.

Mr. Timothy Hubbard – Emergency Management Expert

70. Mr. Hubbard is accepted as an expert in emergency management, specifically with regard to the Downingtown Area School District. N.T. 2312:5-9; N.T. 78, 23-24.

71. The purpose of his testimony is to offer his opinion on the adequacy of the information, notices, warnings and planning provided by Sunoco as it relates to the effective

implementation of an emergency response to a pipeline failure and how Sunoco can improve its practices from an emergency response perspective to help schools. St. 1, 2: 9-12.

72. Since November of 2014, Mr. Hubbard has been the Chief Security Officer of the Downingtown Area School District, located in Downingtown, Pennsylvania. He oversees school district security matters, coordinates emergency response procedures and protocols, evaluates current safety and security protocols and implements improvements as necessary. He acts as liaison with various local, county, state, and federal authorities, and develops and maintains emergency policy and procedure manual. He performs security and risk assessments and assists with large scale event planning. He is also responsible for the management of contract security services to include staffing and personnel evaluation and for responding to emergencies in and around School District owned properties. He also assists the District PIO as needed, performs fire and life safety inspections at School District owned facilities, participates in organization and evaluation of emergency drills to include Intruder, Fire, and Severe Weather, consults with school leadership regarding safety and security issues and presents training and professional development courses to various personnel in emergency response procedures and guidelines. St. 1 3: 5-17.

73. Mr. Hubbard worked for 17 years with the Westtown-East Goshen Regional Police Department in Chester County. N.T. 66:10-17. He worked as a first responder and law enforcement officer. N.T. 67:8-12. He interacted with fire, EMS and emergency management coordinators. N.T. 68:1-4.

74. From 2011 to the present, Mr. Hubbard has been the fire marshal/emergency management office in Charlestown Township, Chester County. N.T. 68:21-25. This position is required by law and is the position of primary responsibility to provide emergency oversight of emergencies that occur within the municipality. N.T. 69:1-9. As fire marshal he has oversight of

the fire police and is the primary response office for any sort of structure fire and investigation of that fire to determine cause and origin. N.T. 69:10-19.

75. Mr. Hubbard is also the chief security officer for Downingtown Area School District. His primary responsibility in this position is to oversee and assist both training and management of any emergencies that may occur. N.T. 69:25; 70:1-10. He is a liaison with the fire companies and emergency management agencies from the municipalities that the school district is within to make sure they work cooperatively. N.T. 70:14-19.

76. Mr. Hubbard participates on the school district safety committee and on the security round table. N.T. 71:4-8.

77. Mr. Hubbard is certified in emergency management by PEMA and is partly responsible for developing and maintaining emergency policies and procedures. N.T. 71:18-25.

78. Mr. Hubbard has been involved with the school district and emergency management since the start of the most recent Mariner East pipeline expansion. N.T. 72:1-7.

79. Mr. Hubbard has encountered difficulties in obtaining information from Sunoco that has caused him concern. N.T. 80:15, 18. It is very difficult to have “consistent contact that would be able to provide information that would be useful from an emergency management perspective, what product is flowing at any given time, when it’s flowing, when products are changing and the nature of the products.” N.T. 80:18-23.

80. Mr. Hubbard cited “lack of any real, true and credible assistance that would be [Sunoco’s] advice, expert advice from the perspective of a pipeline operator or resources in the event that an emergency were to occur.” N.T. 80:24-25; 81:1-2.

81. There are 17 buildings in the school district and six are located in close proximity to the Mariner pipelines. N.T. 81:9-18.

82. The Mariner 2 and 2X pipeline will be about 700-750 feet from a middle school. N.T. 81:22-25; 82:1-2.

83. The ME1 eight-inch pipeline runs close to about five schools. It is 200 feet from several schools and immediately across the street from a playing field. N.T. 82:3-10.

84. Mr. Hubbard understands that the ME1 pipeline used to carry liquid petroleum but now carries HVLs (propane, butane, ethane). N.T. 82:11-19.

85. Mr. Hubbard does not know which direction the fluids are moving because of a lack of information sharing between those responsible for emergency response and emergency management along the length of the pipeline. N.T. 82:20-25; 83:1.

86. Mr. Hubbard understands that HVLs are different in character than gasoline fluids. N.T. 83:6-9. While liquid petroleum product would pool, HVL products form clouds of vapor that can have explosive and asphyxiation potential. N.T. 83:9-16.

87. Mr. Hubbard has not been provided with information on how large a leak must be for a vapor cloud to form. N.T. 84:18-25; 85:1-4. Mr. Hubbard does not believe that mercaptan has been added to the HVL in the Mariner pipelines. N.T. 84:8-20.

88. Mr. Hubbard understands that propane is significantly more explosive than natural gas. N.T. 86:8-11. Propane is heavier than air, so a leak would settle in a low spot and stay along ground level. N.T. 86:12-17.

89. The two main dangers associated with a propane vapor leak are asphyxiation from displacement of oxygen and of ignition of the cloud. N.T. 86:18-25; 87:1.

90. Mr. Hubbard's understanding of Sunoco's public awareness brochure is that it suggests in the event of a rupture to move on foot out of the area, both upwind and uphill if possible, to not turn on or off any light switches or any motor vehicles. N.T. 87:10-17.

91. The Downingtown Area School District has a student population of kindergarten through twelfth grade. There are special needs children, including children in electric wheelchairs in the district. N.T. 87:18-25; 88:1-11.

92. Mr. Hubbard has concerns about someone trying to evacuate while in an electric wheelchair because it is a power source that could generate a spark from the battery or from static electricity. N.T. 88:12-22.

93. Mr. Hubbard is concerned with a student being able to use an electric wheelchair to evacuate at all. He is also concerned about the speed of evacuation using an electric wheelchair because those wheelchairs are limited as to how fast they can go and they could be overtaken by a vapor cloud. N.T. 88:23-25; 89:1-14.

94. Mr. Hubbard would not expect autistic support children to be able to understand the directions to escape a distance of a half-mile during a leak. N.T. 90:9-12.

95. The Downingtown Area School District is worried about being able to move 50 to 60 kindergarten age students to safety in a quick and efficient manner. N.T. 90:12-17.

96. Mr. Hubbard described the making of a determination as to wind direction a “hit-and-miss situation.” The best case scenario is if the a flag has been raised and gives an indication, but the flag direction could also change. N.T. 91:1-9.

97. It is likely a hit-and-miss question whether the first responders that arrive on scene first are familiar with the pipeline. N.T. 95:4-10.

98. Most fire agencies in Chester County are volunteer run. N.T. 96:19-21.

99. Mr. Hubbard believes that Sunoco would dispatch field workers to a leak. At one public forum it was stated that it could take over an hour for Sunoco responders to arrive, depending on traffic conditions. N.T. 99:9-20.

100. Mr. Hubbard estimated in a hypothetical situation where a leak occurred that it could take between 5 minutes and an hour to detect the leak after first responders arrive on the scene. N.T. 102:4-15.

101. The Downingtown Area School District has had internal discussions about sheltering in place as a response to a leak, but have not had information provided to make that decision. N.T. 103:10-16.

102. If a leak occurred across from the playground when young children were present, it could cause asphyxiation. There are also roads nearby, so a car could drive through the cloud and ignite an explosion, whatever the size of the vapor cloud. N.T. 104:11-25; 105:1.

103. Mr. Hubbard said it was “a major safety concern” to have a pipeline running so close to vulnerable populations. N.T. 105:6-10.

104. There is the potential for “vast numbers of people to be burned and/or killed” in a pipeline accident. N.T. 105:16-17.

105. In Mr. Hubbard’s professional opinion, the two-page brochure distributed by Sunoco is not sufficient to adequately inform the public. It does not provide enough information “for people to really have the knowledge to choose an action.” N.T. 107:6-11.

106. Based on his experience and expertise, Mr. Hubbard believes it is a bad idea to place HVL pipelines next to public school facilities. N.T. 107:19-22.

107. Mr. Hubbard is not aware of anyone at the school district who has “intrinsically safe communication devices.” N.T. 113:17-19.

108. No one at the school district currently has a meter that would detect natural gas liquid vapors. N.T. 113:20-25.

109. The Downingtown Area School District is mandated to have an emergency

response plan by the Department of Education. An annual review is also required. N.T. 120:8-15.

110. The schools in the Downingtown Area School District do not have wind socks. Some have flags. N.T. 122:2-5.

111. Mr. Hubbard's demands for information would change for a new pipeline versus an old pipeline. N.T. 169:24-25; 170:1. The information requested would change based on the capacity of the pipeline. N.T. 170:2-4. The information requested would change if the scope of the pipeline changed over the course of its construction. N.T. 170:6-9.

112. There are four phases to any aspect of emergency management, mitigation, preparedness, response, and recovery. In the instant matter, we are missing on mitigation and preparedness phases. N.T. 2313:8-22.

113. Risk and hazards vulnerability assessments should include considerations for hazards that may occur in the future along with their consequences and likelihood of occurring. N.T. 2314:24-25; 2315:8.

114. The challenges that exist related to the valve station are a lack of some information that would be helpful and useful in clarifying where the threat falls within a threat assessment matrix. N.T. 2316:3-7.

115. Some of the information Mr. Hubbard has been looking for is information on the volume of product in the pipelines. This is necessary to know so that the County can know what it is dealing with should a catastrophic leak occur. The County needs to know the duration of time that the product will be released. The County does not know how much product is going to be flowing potentially in and around its buildings until the shut-off valves are activated. Also, Sunoco has industry experts that would be useful to have in the planning process that has been lacking. N.T. 2318:25; 2319:1-13.

116. Sunoco has made appearances, but those appearances are lacking the information that is needed and that can be relied upon. N.T. 2319:23-25; 2320:1-3.

117. Between the Marsh Creek Sixth Grade Center and the Shamona Creek Elementary School, there are well over 2,000 staff and students on location. In a worst-case scenario, some or all of those numbers could be affected by severe injury, burns, and/or death. N.T. 2323:22-25; 2324:1-7.

118. The fire agencies that would be called upon at the Marsh Creek Sixth Grade Center and the Shamona Creek Elementary School would be primarily volunteer agencies. N.T. 2324:16-22.

119. At Marsh Creek Sixth Grade Center and the Shamona Creek Elementary School, the first engine responding would be from Lionville Fire Company and it would be on scene probably within ten to 20 minutes. N.T. 2325:11-14.

120. The police generally do not carry gas detection equipment or gas meters. N.T. 2325:22-25; 2326:1-4.

121. The school agency has the custodial responsibility over the children and staff in the schools. With regard to identifying a potential vapor cloud that would result in the need to evacuate school property, the school agency would need to be able to make that determination prior to, in many cases, the first responders arriving on scene. It would be irresponsible to wait for the first responders to tell the school what to do. N.T. 2326:7-20.

122. Mr. Hubbard has concerns regarding evacuation of the Marsh Creek Sixth Grade Center and the Shamona Creek Elementary School sites based on the general recommendations that are provided in the Sunoco material and mailers. The recommendation is to get a half-mile away uphill. The only uphill area would cause the folks to walk directly past the valve station.

Everything else in that area is mostly downhill from the schools and the valve station. N.T. 2326:21-25; 2327:1-7.

123. Mr. Hubbard compared preparing for an active shooter versus a pipeline leak. With regard to the former, there are historical events that can be studied and learned from and there has been extensive training. You can predict the issues that you would have to deal with in an active shooter situation and can both mitigate and prepare for those events by training staff on what their options would be based on scenarios that have occurred in the past. N.T. 2329:7-16.

124. For severe weather events, it is the same. You can look at historical events and learn from them. There are specific drills that are conducted for both active shooter and weather events. N.T. 2329:24-25; 2330:1-8.

125. Up until December 2018, when there was a meeting in which Sunoco had a consultant present who gave incorrect information, the Downingtown Area School District didn't have proper information with respect to the pipeline, its contents, pressures and things of that nature. Up until that point and even beyond, Downingtown Area School District has been met with a brick wall. N.T. 2363:2-14.

126. When you sign a nondisclosure agreement, you can look at the materials but you cannot discuss them which makes them essentially useless for emergency management and emergency planning. N.T. 2363:18-21.

127. There is a scheme under PEMA for safety plans with respect to municipalities and school districts and those plans require input from a planning team. Downingtown has a planning team. If Mr. Hubbard signed a non-disclosure agreement he could not discuss any of the materially important data that he saw unless all members of the planning team had also signed NDAs. Not all members of the planning team are controlled by Downingtown Area School District. Further,

there are pieces of the plan that would then need to be rolled out to staff and contractors and folks that could be occupying the schools. N.T. 2363:22-25; 2364:1-25; 2365:1-4.

Dr. Mehrooz Zamanzadeh, Ph.D. (“Dr. Zee”)

128. Sunoco documents examined by Dr. Zee and his team included documents reflecting leaks, punctures and ruptures going back to 1986. Zee Direct Testimony, p. 7:12-23, 38-39.

129. The Public 113 documents (Exhibit Zee-4) included accident reports with failures stated as pinhole leaks, Viton O-ring leaks, improper plug installation, and “undetermined.” Zee Direct Testimony at p. 19:18-28.

130. SPLP 00005764, Sunoco’s initial PHMSA Report, stated: “On April 1, 2017 at 15:57, a call was received by the Sunoco Pipeline LP (SPLP) Control Center via the company emergency number from a landowner reporting a possible leak along the pipeline ROW at 5530 Morgantown Rd, Morgantown, PA. Internal notifications were made and SPLP field personnel were immediately dispatched to the field to investigate. Field personnel arrived onsite at approximately 17:00 and confirmation of the release was made at approximately 17:04.” Zee Direct Testimony at p.21:17-21.

131. The Bureau of Inspection and Engineering alleged that the total product loss at Morgantown was 840 gallons. Field Testimony, N.T. 4119:17-25, 4120:1-2.

Schools and Municipalities

Dr. Emile Lonardi – Superintendent of Schools for Downtown Area School District

132. Dr. Emile Lonardi has been the superintendent of schools for the Downtown Area School District since 2017. N.T. 901:14-21.

133. The Downingtown School District serves 13,000 students across eight municipalities: East Cain, Downingtown Borough, East Brandywine, Uwchlan, Upper Uwchlan, West Pikeland, Wallace, and West Bradford. N.T. 902:9-19.

134. Dr. Lonardi characterized the communities as densely populated and growing. N.T. 902:23.

135. Dr. Lonardi characterized her testimony as directed towards the safety of the students and teachers who work in her schools. N.T. 903:15-19.

136. There are five Downingtown area schools that are located near the Mariner East pipelines. N.T. 904:3-6. Lionville Middle School, Downingtown East High School, Lionville Elementary School are affected buildings that are part of Uwchlan Township, Chester County. N.T. 904:13-24. The other affected schools are Shamona Creek Elementary School and Marsh Creek Sixth Grade Center. N.T. 905:3-6.

137. Dr. Lonardi knows the distance between pipelines and the schools because the distances have been measured. N.T. 905:19-24. Downingtown East High School, 1,175 feet from the pipeline; Lionville Elementary School, 1,425 feet from the pipeline; Lionville Middle School, 600 feet from the pipeline; Marsh Creek Sixth Grade Center, 1,000 feet from the pipeline; Shamona Creek Elementary, 300 feet from the pipeline. N.T. 906:6-18.

138. There is an above-ground valve station on Dorlan Mill Road adjacent to Shamona Creek Elementary School. N.T. 907:1-3. This valve station is located in Uwchlan Township. N.T. 907:10-15.

139. Shamona Creek Elementary School sits on the top of a hill, Marsh Creek Sixth Grade Center is located partway down that hill. Beyond the hill is a patch of rough, grassy terrain that is not tended by the school district. N.T. 908:11-18.

140. The Downingtown School District has concerns about leaks or explosion of the pipeline during operation because of its close proximity to their buildings. N.T. 912:18-23.

141. Dr. Lonardi has been given conflicting information about emergency response caused by the pipeline. N.T. 913:4-5.

142. Dr. Lonardi is not sure whether to shelter in place, use cell phones to call 911, or to use vehicles to evacuate. N.T. 913:4-10. Dr. Lonardi would like clarification on the precise emergency practices for pipeline emergencies from Sunoco. N.T. 913:11-17.

143. Dr. Lonardi and parents are concerned about Shamona Creek Elementary's position on the top of the hill and how that impacts their emergency response. N.T. 914:1-10.

144. When parents ask Dr. Lonardi if their children are safe at Shamona, she does not feel she can look them in the eye and say with certainty that the answer is yes. N.T. 914:13-17.

145. Dr. Lonardi has been told that children walking to school should look for dead animals or dead vegetation and to report them if found. N.T. 914:18-21. Dr. Lonardi does not feel this is advice she can give to parents. N.T. 914:22-25.

146. Dr. Lonardi wants a real early detection system so students can be evacuated in time. N.T. 914:25; 915:1.

147. It is not realistic to say that kindergarten through fifth grade can be evacuated down the back of the hill with the rough terrain. N.T. 915:1-5. An early detection system would allow the children to be transported far away from the issue. N.T. 915:5-7.

148. There are many disabled students and some temporarily disabled adults in the buildings, so evacuating a far distance will be difficult. N.T. 915:10-15.

149. The valve station is located almost squarely between the exit and entrance of the Shamona Creek and Marsh Creek facilities. N.T. 919:10-13. These exits are used daily. N.T.

919:14-19.

150. Dr. Lonardi does not have a “credible or practical or realistic plan in place to keep the students safe in the event of leak” from the Mariner East pipeline. N.T. 921:9-14.

151. Dr. Lonardi was not informed when HVLs started flowing through the 12-inch pipeline at the school. N.T. 921:23-25. She is not sure how or when she eventually found out that it had started to transport HVLs. N.T. 922:1-11.

152. The school district does not employ experts on pipelines, HVLs, or valve stations. N.T. 935:7-18.

153. Dr. Lonardi does not believe the school district has enough information to create their own emergency plans. N.T. 936:13-15.

Dr. James Scanlon – Superintendent of the West Chester Area School District

154. Dr. James Scanlon is the superintendent of the West Chester Area School District. N.T. 1214:16-18. He has been a school superintendent for 21 years and has been the West Chester Area School District Superintendent for 11 years N.T. 1214:19-23.

155. West Chester Area School District is the tenth largest school districts in the state of Pennsylvania with about 12,070 students. N.T. 1215:1-5.

156. The school district’s attendance area includes the townships of West Whiteland, West Goshen, East Goshen, Westtown Township, and Thornbury Township. N.T. 1215:20-23.

157. The school buildings in closest proximity to the Mariner East pipeline are Pennwood Elementary School, Exton Elementary School, and East Goshen Elementary School. The school district’s office in West Whiteland Township is also in proximity to the pipeline. N.T. 1216:3-11.

158. Pennwood Elementary School is 1,700 feet from the pipeline. N.T. 1216:15-18. Exton Elementary School is approximately 1,500 from the pipeline. N.T. 1216:19-21. East Goshen Elementary is approximately 1,700 feet from the pipeline. N.T. 1216:22-25.

159. Dr. Scanlon first learned about the Mariner East pipeline in 2016. N.T. 1217:5-10.

160. The West Chester Area School District is obligated to protect the health, safety and welfare of its students, staff, and users of its facilities by law. N.T. 1218:4-8.

161. The West Chester Area School District's goal is "to make things as safe as possible for our kids and our staff and our communities." N.T. 1223:4-9.

162. Dr. Scanlon is not comfortable with the school district's early notification process for a breached pipeline. N.T. 1223:10-13.

163. Dr. Scanlon said that the Sunoco's protocol is to notify emergency services at 911 in the event of a breach and then emergency services would contact the school district. This could be Chester County or Delaware County emergency services as the district has schools in both counties. N.T. 1223:14-19.

164. The direction of evacuation is dependent on the location of the breach and the wind direction. N.T. 1224:1-5.

165. Dr. Scanlon is concerned that under the current protocol it could be three or four minutes from the time of a breach until the school district is notified. N.T. 1224:11-13. An entire school can be evacuated in three minutes. N.T. 1224:14-16. Dr. Scanlon requested that the school district receive immediate notification from Sunoco if there is a breach. N.T. 1224:17-25. The school district currently would receive notice indirectly from 911 first responders. N.T. 1225:2-6.

166. Dr. Scanlon also seeks improved detection measures. N.T. 1225:7-14.

167. Since the product moving through the Mariner East pipeline is odorless, the school

district is asking for detection devices that can be put in and around schools to detect the odorless gas. N.T. 1225:15-21.

168. Dr. Scanlon requested that an odor be added to the product in the pipeline, so that it is detectable. N.T. 1226:9-17.

169. Dr. Scanlon was not aware of any detection or leak devices in the proximity of the pipeline nearest the elementary schools in closest proximity. N.T. 1226:18-21. Dr. Scanlon would like such detection devices to be installed. N.T. 1226:22-24.

170. The School District is also requesting that if there is a leak that the pipeline be shut down until it is repaired and that the school district receive documentation confirming it has been repaired successfully before it resumes operation. N.T. 1226:25; 1227:1-5.

171. Dr. Scanlon has not received clarification on the use of cell phones during a pipeline emergency to notify parents or other persons. The material put out by Sunoco indicates that using a cell phone during a leak creates risk. N.T. 1227:6-16.

172. Dr. Scanlon does not have information about how first responders would react to a situation involving a vapor cloud at one of the schools in the district. N.T. 1235:19-22.

173. The current emergency plan calls for cell phones to be turned off during an evacuation for a pipeline incident. All communications are moved off-site in the event of an evacuation. N.T. 1237:8-15. The principal is supposed to use a walkie-talkie or email to communicate off-site. Dr. Scanlon did not know if these devices or modes of communication were “intrinsically safe.” N.T. 1237:16-25; 1238:1.

174. Dr. Scanlon does not recall being informed about the Mariner East pipeline operation before 2016. N.T. 1240:5-11.

Mr. Kevin Campbell – Director of Facilities and Operation for the West Chester Area School District and School Safety and Security Coordinator Pursuant to Act 44

175. Mr. Kevin Campbell is the director of facilities and operation for the West Chester Area School District and has held the position for 20 years. N.T. 1247:2-7.

176. Mr. Campbell also was made the school safety and security coordinator in 2018 pursuant to Act 44. N.T. 1247:8-13.

177. In his roles, Mr. Campbell is one of the first responders to any emergency. He oversees the emergency plan generation and annually reviews the plan from 17 sites in the district. N.T. 1247:17-25; 1248:1-2.

178. Mr. Campbell stated there is information regarding the pipeline that he does not have that will make difference in carrying out his job. N.T. 1248:8-12.

179. Mr. Campbell needs more information about the reverberations of an accident on all the students in the district. N.T. 1248:14-24.

180. The buildings in the school district are not blast proof. East Goshen, Exton, and Pennwood are the facilities of first concern for a blast. N.T. 1248:25; 1249:1-7.

181. Because Mr. Campbell does not have information on the types of material moving through the pipeline, and their pressure, he cannot predict the blast zone. This means he cannot develop an effective emergency plan. N.T. 1249:14-24.

182. Mr. Campbell and other school district personnel often beat other first responders to the scene during an emergency. N.T. 1250:3-7.

183. It would be beneficial to the school district and its hazardous materials protocols and plan to have the substance in a particular leak or explosion identified. N.T. 1250:8-12.

184. Mr. Campbell has received notifications from Interstate Energy that the evacuation zone for their 18-inch pipeline is 1,000 square feet because their pipeline carries natural gas. This

allows Mr. Campbell to plan accordingly. N.T. 1250:15-25.

185. Mr. Campbell has received information on recommended evacuation distance from other companies that he has not received for Mariner East 1 or 2, making a plan to evacuate impossible to develop. N.T. 1251:1-5.

186. Timeliness of information is critical to know where the leak is in relation to the facility. What material is leaking and how the wind is blowing affect decision making. N.T. 1251:14-18.

187. The greatest risk from not closing the air handlers would be sucking gases into the building because most explosions that take lives occur through the ignition of the source in a trapped environment. N.T. 1251:19-25; 1252:1-3.

188. Sunoco has not provided any instruction on the use of cell phones during an emergency. As a result, the school district has gone with the most conservative guidance which states that cell phones should not be used within a half mile of a gas leak. This accounts for the protocol to not use cell phones during an evacuation for a gas leak. N.T. 1252:4-18.

189. Mr. Campbell wants Sunoco to provide information on what product is traveling in the pipeline, the speed it is traveling, and based on the national standards, the appropriate safe distances. Other pipeline operators have provided this information. N.T. 1252:19-25; 1253:1-6.

190. Response times of police and first responders to school buildings depends on the specific building. N.T. 1254:2-9.

191. Police officers, who are the closest, might not be useful in a response to a pipeline leak. N.T. 1254:10-15.

192. Sunoco has never told Mr. Campbell how long it would take them to come to site to help with an evacuation. N.T. 1255:8-11.

193. Based on the current standard operating procedures, Mr. Campbell would never hear from Sunoco directly if a leak occurred. N.T. 1255:12-17.

194. It would be less than 15 minutes for Chester County EMS to respond to several schools, but could be more than 15 minutes for the remaining 16 schools. N.T. 1260:10-17.

195. Mr. Campbell's experience with hazardous material response is that a full hazmat team might take between one and four hours to arrive on site. N.T. 1261:2-18.

196. Mr. Campbell stated that a "one-size-fits-all" approach cannot be taken. N.T. 1274:13-22)

Mr. William Clements – Principal of Twin Valley High School in the Twin Valley School District and a Member of the Twin Valley School District Safety Committee

197. Mr. William Clements is the principal of Twin Valley High School in the Twin Valley School District. N.T. 1307:12-14. He has been the principal for six years. N.T. 1308:7-11.

198. Twin Valley School District is a fairly rural school district in southern Berks County and northern Chester County with five schools, three elementary schools, one middle school, and one high school. N.T. 1307:16-21.

199. Mr. Clements is a member of the school district safety committee, which consists of himself, the superintendent, the assistant superintendent and the student services director. N.T. 1308:3-6.

200. The high school and middle school are adjacent to farm fields. There are two roads that pass the schools, Twin Valley running north-south and Clymer Hill Road running east-west. Clymer Hill Road is the only road that services the middle school. N.T. 1308:20-25; 1309, 1.

201. The elementary school is between two roads, Route 23 and Route 401. Route 401 is the only access to the elementary school. N.T. 1309:4-10.

202. Twin Valley road is the only road that services the high school. N.T. 1309:11-13.

203. Each elementary school has approximately 325 to 350 students, the middle school has approximately 1,030 students and the high school has approximately 1,050 students. N.T. 1309L17-20. Each elementary school has approximately 50 staff and the middle school and high school each have approximately 100 staff. N.T. 1309:23-25.

204. The Mariner East pipeline passes the middle school, high school, and the Twin Valley Elementary Center in fairly close proximity. The pipeline is 390 feet from the elementary center, 435 feet from the high school, and 565 feet from the middle school. N.T. 1310:7-14.

205. Mr. Clements understands the safety zone to be a half a mile from the pipeline, so the plans for a pipeline emergency are to evacuate students at least a half-mile away from the pipeline. N.T. 1311:11-17.

206. Mr. Clements has not had contact with Sunoco since 2017. N.T. 1312:25; 1313: 1.

207. The first steps in responding to a pipeline emergency are to shelter in place and close all the outside air intakes to the building. N.T. 1313:2-11. Sealing the building from outside air is a manual and electronic process and Mr. Clements was not sure how long it takes. N.T. 1313:12-18.

208. The reason why Mr. Clements attended the hearings in this Action is because he is concerned that he won't have the information that there is a problem with the pipeline "until the local fire department is driving past our school." N.T. 1314:1-5.

209. The Twin Valley Fire Department is a volunteer fire department. N.T. 1314:10-11. The response time for the fire department to the school in an emergency is about 10 to 12 minutes. N.T. 1314:17-18.

210. The school district would remain in place until they received additional information

from the fire department. N.T. 1314:22-25; 1315:1-4.

211. The high school is on the top of a hill, so it is not possible to evacuate “uphill” of the high school. N.T. 1315:14-19. Evacuating uphill would mean crossing the pipeline to the north. N.T. 1315:19-22. To the east or west of the high school are dead end roads, so the only possible route for a safe evacuation a half-mile away from the school is to the south, which is downhill. N.T. 1315: 23-25; 1316:1. The same is true for the middle school. N.T. 1316:2-3.

212. The elementary school would evacuate across Route 401 to the district-owned property in that area. The reason evacuation is across a road is because the other directions are towards the pipeline or the fire department, which would need room for staging. N.T. 1316:4-16.

213. Mr. Clements shares the concerns expressed by other school districts regarding things that could potentially spark an explosion such as cell phones, vehicles, and wheelchairs. N.T. 1317:2-10. Mr. Clements shares the concern of being able to effectively communicate in an area where the advice has been to not use cell phones during a pipeline leak. N.T. 1317:10-13.

214. Mr. Clements does not have any means of independently checking whether there has been a leak himself or through an employee at the school. There is no early notification or early warning system in the event of leak. N.T. 1317:20-25.

215. Mr. Clements joined the concerns expressed by the other school districts in requesting relief regarding better communication and better planning. N.T. 1318: 2-8.

216. The Pennsylvania Turnpike is located directly south of the elementary school. If evacuations were forced to go in southerly direction the students would be stuck. N.T. 1319:11-20.

217. Mr. Clements stated that it takes 3 to 5 minutes to evacuate a school building. The district had not practiced the full half-mile evacuation, but he estimated it would take about 10

minutes. N.T. 1319:21-25; 1320:1-4.

218. Mr. Clements does not know how difficult it would be to shut down traffic on Route 23 to get children or students down the hill from the high school or middle school because it has not been practiced. N.T. 1321:5-9.

Sunoco Admissions

Mr. Joseph Perez – Sunoco’s Senior Vice President of Project Services for E&C Group

219. Joseph Perez is employed by Sunoco Energy Transfer as senior vice president of project services for E&C Group. N.T. 3096:20-22; Perez, St. 5, 1:1-2.

220. Mr. Perez admitted that the public awareness brochures do not include fatalities or burns as possible hazards associated with unintended releases though item two of 195.440 requires it. N.T. 3107:14-24

221. Mr. Perez admitted that burns or fatalities could occur from an unintended release of HVL’s. N.T. 3108:14-24.

222. Section 4.2 of 1162 is titled Hazard Awareness and Prevention Measures. N.T. 3111:13-17. Section 4.2 provides that “Operators should provide a very broad overview of potential hazards, their potential consequences, and the measures undertaken by the operator to prevent or mitigate the risk.” N.T. 3111:23-25; 3112:1.

223. Section 4.3.1 provides that “Information about specific release characteristics and potential hazards posed by hazardous liquids or gasses should be included.” N.T. 3112:8-10

224. Mr. Perez admitted that 4.2 and 4.3.1 require notice of potential hazards and potential consequences posed by HVLs. N.T. 3112:11-14.

225. Fatality is a potential consequence of exposure to HVL. N.T. 3113:17-19.

226. API RP 1162 requires Sunoco to provide the affected public with a very broad overview of the potential hazards and consequences. N.T. 3113:22-24.

227. In the public awareness program, Sunoco requires people to determine what direction the wind is blowing. N.T. 3125:2-7. Sunoco expects the public to be able to determine that direction. N.T. 3126:11-12.

228. As part of the public awareness program, Sunoco has not evaluated the feasibility of going uphill or downhill at various locations along the pipeline and has not evaluated the ease or difficulty of people evacuating on foot from places near valve sites and has not evaluated the impact of public facilities such as restaurants, apartment complexes, schools and other places where people would gather near Sunoco's valve sites. N.T. 3126:22-25; 3127:1-4, 13-17.

229. As part of the public awareness program, Sunoco has not conferred with emergency responders and their ability to respond to various locations in the immediate vicinity of Sunoco's valve sites. N.T. 3127:22-25; 3128:1

230. The list kept by Sunoco with regard to mailers reflects that the mailers were sent but does not speak to whether the mailer actually made it into the mail or was received by the stakeholder. N.T. 3133:22-25; 3134:1-6.

231. The Sunoco mailer does not say how far to evacuate on foot and does not say what to do if evacuation is not possible. N.T. 3135:16-23.

232. The website does not say how far to evacuate on foot and does not say what to do if evacuation is not possible. N.T. 3135:24-25; 3136:1-2.

233. The mailers do not include people who regularly work in the impacted zone or regularly come to shop in the impacted zone or for any other reason comes to visit on a regular basis such as to the businesses, restaurants, library. N.T. 3138:11-25.

234. Effective public awareness needs to include municipalities and school districts as part of the program. N.T. 3143:8-13.

235. Information is mailed to a generic address and not to any individual person at the school district or the municipality. N.T. 3143:14-24.

236. School districts receive a brochure every two years and townships every three years. N.T. 3144:20-24.

237. When Sunoco conducts tests to test the condition of its pipeline, for example as it runs through Middletown Township, that information is not typically shared with local officials and townships. N.T. 3154:12-23. Specific data is something that is not communicated back to the township. N.T. 3155:8-10.

238. Natural gas liquids are odorless unless mercaptan, a chemical odorant is added to give it a distinctive smell. Mercaptan is not anywhere in the pipeline. N.T. 3159:5-7.

239. The product in the Mariner East pipelines is colorless. N.T. 3160:22-24.

240. Sunoco does not use response cards with their mailings so that stakeholders can give feedback, but it does have an 800 number on its mailings. N.T. 3181:3-8.

241. Sunoco does not use radio or television to notify the public that the annual September safety pamphlet mailing is coming and that they should be looking for it in the mail. N.T. 3181:18-23.

242. Sunoco does not email the pamphlet to an email distribution list. N.T. 3181:24-25; 3182:1-2.

243. The mailings from Sunoco are addressed only to “resident.” N.T. 3182:7-10.

244. API RP 1162 generally requires pipeline operators to develop and implement a program to “communicate relevant information to four groups of stakeholders – the affected

public, local public officials, emergency officials, and excavators.” Perez, St. 5, 3:14-17.

245. There are three principal compliance elements for an operator to be in compliance with 49 C.F.R. §195.440. These principles are incorporated into API RP 1162 at 2.3. Those three elements are public education, emergency responder liaison activities, and damage prevention. Perez, St. 5, 3:17-20.

246. API RP 1162 also contains baseline requirements an operator must take as well as supplemental activities that an operator may undertake if it determines those activities are warranted pursuant to API RP 1162 Section 6. The supplemental activities are optional. Perez, St. 5, 3:22-26.

247. For the affected public (residents located along transmission pipeline right of way and places of congregation, including schools, API RP 1162 Section 3.1), a pipeline operator must implement “targeted distribution of print materials” every two years and pipeline markers. API RP 1162 recommends a mailing or “buffer” zone for distribution of these print materials of a “minimum” of 660 feet on each side of a pipeline or “as much as 1000 feet in some cases.” Perez, St. 5, 3:34-38.

248. Regarding supplementing or enhancing the public awareness program, API RP 1162 provides three primary forms: increased frequency of communication, enhanced message content and delivery/media methods, and broadening or widening the stakeholder audience. Perez, St. 5, 4:13-15.

249. API RP 1162 guides pipeline operators to consider various industry group resources in creating their Public Awareness Program, including the American Petroleum Institute, Association of Oil Pipe Lines, American Gas Association, Interstate Natural Gas Association of America, and the American Public Gas Association. Public awareness brochures for pipeline

companies within the state are all similar and typically contain the same information – because we are all required to communicate the same baseline messages –which becomes standardized industry approach. This is in part due to the regulations that require these programs, but also for consistency to avoid stakeholder confusion. Perez, St. 5, 5:1-8. N.T. 372:17-25; 373:1-5.

Mr. Joseph McGinn – Vice President of Public and Government Affairs for Energy Transfer Partners

250. Mr. Joseph McGinn from May 2019 to the present, has been Vice President of Public and Government Affairs for ETP. McGinn, St.6 1:2-3.

251. McGinn leads Sunoco’s public and government affairs efforts in the East Coast and Midwest operational areas. This includes community relations, local and state government outreach. McGinn St. 6 2:1-3.

252. The brochures do not contain information about possible burns and possible fatalities as a consequence of the unintended release of HVLs. N.T. 3218:5-10.

253. Mr. McGinn is personally aware that burns are a possible consequence of the unintended release of HVLs. N.T. 3218:19-24.

254. Mr. McGinn is personally aware that fatalities may be an unintended consequence of the unintended release of HVLs. N.T. 3218:25; 3219:1-3.

255. Mr. McGinn admitted that the number of plaintiffs and plaintiff aligned intervenors in this matter and their identities indicates that there are questions and continued information that folks want on the Mariner East pipeline system. N.T. 3220:4-10.

256. Open communication is helpful both for the company and the public. N.T. 3226:19-23.

257. Mr. McGinn has received feedback over the years from various entities, both public

and government, both orally and in written form, that they needed more information and some of those communications indicated that they needed more information for preparedness. N.T. 3227:8-15.

258. Mr. McGinn believes that with the right to do business in Pennsylvania comes responsibility. N.T. 3228:9-11.

259. Only 24 people follow the PA Pipeline Safety Facebook page and 21 people have liked it. N.T. 3230:5.

260. PHMSA and PEMA have a concern that a cell phone could be an ignition source. N.T. 3238:15-23.

261. Because a cell phone could be an ignition source and persons would have to wait until they are a safe distance away before using it to call 911, it would be important to know what that safe distance was. N.T. 3238:24-25; 3239:1-3.

262. County and municipalities have to sign a non-disclosure agreement when they look at the hazard assessment from Sunoco. N.T. 3245:12-15.

Mr. Gregory G. Noll – Sunoco’s proffered expert

263. Mr. Noll was proffered as an expert in the area of emergency planning, emergency response, public awareness and incident management for pipelines. N.T. 464:21-24.

264. Mr. Noll has not visited the various valve sites on this project in Delaware and Chester Counties and is not familiar with the lay of the land in any of these locations. N.T. 3310:22-25; 3311:1-3.

265. The physical properties of NGLs are odorless, colorless, tasteless. N.T. 3316:20-21.

266. It would take a period of time for a person inside a building to observe a vapor cloud building up outside their building. N.T. 3317:8-11.

267. The four stages of emergency management are mitigation, preparedness, response, and recovery. N.T. 3329:6-9.

268. A lack of preparedness could increase risk of hazards to life and property. N.T. 3329:14-16.

269. A failure to mitigate, prepare, or respond could have a direct effect on the recovery phase. N.T. 3329:21-25.

270. In most cases, the more information available, the better mitigation, preparedness, and response. N.T. 3330:12-15.

271. Time is a critical factor in emergency response. N.T. 3334:6-8.

272. Early detection and early warning awards more time to respond. N.T. 3334:9-11.

273. The flammable vapors from NGLs go beyond what the visible vapor cloud is. The visible vapor cloud is actually condensed moisture in air. The flammable vapors can go beyond what you see. How far they go, that's purely speculative. N.T. 3336:23-25; 3337:1-5.

274. Mr. Noll stated that the average person – and even he himself – would have trouble differentiating between a low-lying fog in a pipeline area and NGL vapor clouds. N.T. 3337:6-16.

275. Mr. Noll was unaware that municipalities and counties have alleged publicly and through these proceedings that they felt the information shared with them has not been sufficient. N.T. 3338:12-16.

276. If someone saw a vapor cloud and called 911 for guidance, the type and quality of information a caller would get would vary. N.T. 3344:20-25; 3345:1, 19-23.

277. In terms of how long a person attending or receiving a training retains the

information that is presented, it depends on the kind of delivery, classroom, field, or online. Field delivery has the highest retention. N.T. 3346:10-22.

278. There is a serious decline in volunteer firefighters and that is a national crisis. N.T. 3348:20-24.

279. In a rupture scenario, catastrophic worst-case scenario, the ability of emergency responders to change the outcome is limited. In the puncture scenario, there are a lot of things emergency responders can do that can have a positive impact upon the outcome. N.T. 3350:19-25.

280. The MERO training is two to two and a half hours. N.T. 3355:9-11.

281. When asked what the training involves other than going through the PowerPoint, Mr. Noll stated that the key to the MERO training in his mind is establishing relationships with the attendees. N.T. 3356:7-21.

282. Mr. Noll stated that he was a generalist, not a specialist. The operations folks from Sunoco are really the product and container specialists. N.T. 3357:7-19.

283. GN-3 is the After Action Report from the May 18th, 2018 tabletop exercise. As part of that exercise, Mr. Noll did a survey at the conclusion and the results of that survey are summarized in the After Action Report. N.T. 3359:5-15.

284. One of the questions asked in the surveys was list three areas for improvement based on what you observed in today's exercise. N.T. 3359:20-24. In response to that question, people gave the following responses: educating the public; more information from pipeline operators; interaction with pipeline operators. N.T. 3360:4-10.

285. Another question in the survey was based on what you learned today what recommendations do you have to improve your organization's ability to plan react, respond to a transmission pipeline incident. N.T. 3360:11-16. The responses to that include the following:

continued need for additional pipeline training, development of pipeline props, pipeline training, additional training for LE personnel who will likely be first on scene; continual improvement of communications between stakeholders, clarify lines of communication, and process to get up-to-date, accurate information. N.T. 3360:17-22; 3361:4-8.

286. There was another tabletop exercise in Chester County in November or December of 2018 and there was an After Action Report associated with that tabletop exercise. N.T. 3361:9-17. This document has been marked as Chester County Cross-Exhibit 5. It is the After Action Report from December 13, 2018. N.T. 3362:4-9.

287. Seven of the people who filled out the questionnaire said in response to the question of three areas for improvement based on today's exercise, more pipeline operator information and involvement. N.T. 3362:14-22. This was the most received comment based on the December 13, 2018 tabletop exercise. N.T. 3363:2-5.

288. In developing emergency response and evacuation plans, the county and the municipalities and the emergency responders cannot develop those plans without information from the pipeline company. But it's not limited to the pipeline company. Mr. Noll stated that the key point is in developing a county plan is to have input from the facilities where hazardous materials are stored, transported, and used. N.T. 3365:16-25; 3366:1-5.

289. One of those facilities is the pipeline company or the pipelines operated by the pipeline companies. N.T. 3366:6-9.

290. Mr. Noll stated that in order to develop a plan, one has to have access to the information needed to develop the plan. That information includes documents as well as information that may need to be communicated through meetings and discussions. N.T. 3366:10-12, 22-25; 3367:1-4.

291. The gases that are being transported by Mariner 2 are of the type that would cause triggering if they were in the atmosphere near a hydrocarbon sensor. N.T. 3373:5-8.

292. When a hydrocarbon sensor is triggered, typically it will go back to a control center or a monitoring location. N.T. 3373:9-13.

293. Mr. Noll understands that first responders in the various municipalities must sign nondisclosure agreements if they want to view Sunoco's response plan. Mr. Noll himself has not viewed Sunoco's emergency response plan. N.T. 3382:10-17.

294. Sunoco's emergency response plan may not be viewed or referenced in the MERO class. N.T. 3383.

295. It could be more difficult to discern a vapor cloud at night. N.T. 3389:3-5.

296. The visible vapor cloud is not the extent of the flammable vapors. N.T. 3389:12-14.

297. An average resident is not going to have an air monitor on them to be able to determine the extent of the flammable vapor cloud. N.T. 3389:19-22.

298. In order to call for help, a resident would need to continue to move until they feel they are a sufficient distance away from the vapor cloud. N.T. 3390:2-6.

299. Moving 100 yards away from the source, a person should be safe. That number is not indicated anywhere in the public materials. N.T. 3392:7-13.

300. Mr. Noll was not involved in aspects of public awareness beyond training emergency responders and the community around emergency response. N.T. 465:13-7.

301. During a release there will be "condensation of moisture and air which will give you a visible vapor cloud." It is possible for flammable vapors to go beyond the visible vapor cloud. N.T. 477:15-19.

302. There is also the potential for a “flash fire area” which in open vapor cloud scenarios involves an ignition source that is further from the release point. N.T. 477:20-22.

303. It is critically important for pipeline operators and the local emergency response community to develop relationships to facilitate the MERO emergency response process. N.T. 478:19-25; 479:1.

304. According to Mr. Noll, “the obligation on the pipeline operator is to provide information sufficient for the local or county planning and emergency responders to develop their emergency response plan.” N.T. 480:21-25.

305. How far a propane cloud extends from the point of origin is dependent on the circumstances of the incident. N.T. 500:11-15. The factors to consider for propane are the type of container, the size of the container, the weather conditions, the size of the breach, and others. N.T. 500:17-21.

306. Mr. Noll has never personally been involved in an HVL leak from a pipeline. N.T. 500:22-25.

307. The “safe distance” from a pipeline event will depend on the specific facts of an incident and is a subjective determination. N.T. 501:15-23.

308. In a scenario with a vapor leak, the “quicker I can bring air monitoring into the process” that will provide a scientific basis to say that an area is safe. N.T. 501:24-25; 502:1-3.

309. Sometimes it might be necessary to put a disabled person that has been removed from a structure in a vehicle to remove them from the scene of the accident. N.T. 503:2-9.

310. It is true that people are warned not to turn on electrical switches and not create a source of ignition in a vapor leak event. N.T. 503:17-20.

311. Emergency responders should not drive their vehicles into a vapor cloud and should

be provided with training to minimize that taking place. N.T. 503:21-25; 504:1-6.

312. Mr. Noll did not know what type of air monitoring equipment Sunoco would provide to emergency responders along the pipeline route. N.T. 505:11-14.

313. The MERO materials describe ethane, propane, and butane as “odorless and colorless” at standard temperature and pressure. N.T. 507:12-19.

314. A visible vapor cloud is only showing the moisture in the air condensing, it is not showing the extent of the problem. There can be vapors that extend beyond the vapor plume. N.T. 511:2-8.

Wellington Retirement Home

Mr. Thomas McDonald

315. Mr. Thomas McDonald resides at 646 Thorncroft Dr. East Goshen Township, Chester County. N.T. 994:11-25; 995: 8-12.

316. Mr. McDonald is familiar with the Wellington facility where his mother resides. It is an independent living facility, with assisted living and skilled nursing. It is located at 1361 Boot Road next to a church and small parochial school. It is down the street from the firehouse and the intersection of 202 and Boot Rd. It borders the Hershey Mill Community. N.T. 995:13-25; 996:1-2. The Mariner 1 and workaroud pipelines are approximately 200 feet opposite the entrance of the facility. N.T. 996:3-19.

317. Mr. McDonald’s mother, Loretta McDonald, is 88 years old. N.T. 996:20-23.

318. Loretta McDonald lives in the last room next to the service elevator on the second floor in the assisted living facility. She is unable to walk on her own and uses either a wheelchair or walker. N.T. 998:8-20.

319. In the event of an evacuation, Loretta McDonald would need to wait for assistance. There are at least 35 residents on her floor, and Mr. McDonald estimates that it would take approximately 25 minutes for his mother to evacuate the facility in the event of an emergency assuming she were in the middle of the 35 residents to be evacuated. N.T. 1001:2-25; 1003:1-8.

320. Mr. McDonald is aware that there is a fire evacuation plan and drills but no HVL specific evacuation plan. Mr. McDonald's mother would require assistance to get out of bed if an incident were to happen at night. N.T. 1003:8-23.

321. Mr. McDonald is concerned that first responders will have to cross the pipeline to reach the facility. There is no access road completely around the facility. There is a wooded area behind the facility. N.T. 1004:3-10.

322. In order to get to a higher elevation residents would have to evacuate towards the pipeline to reach the shopping center parking lot next door. N.T. 1004:10-20.

323. The elevators are electrical and some of the residents' wheelchairs are motorized which could be an ignition source N.T.1005:20-21.

324. On Loretta McDonald's floor there are 4 staff members for 35 residents, all of whom need assistance N.T. 1006:19-23.

325. The fire station is approximately half a mile away on Boot Rd. But first responders have to cross the pipeline to leave the fire station and then cross it again to access the facility. Boot Rd. is a very heavily travelled road and cars are an ignition source N.T. 1007:15-25; 1008:1-4.

326. Mr. McDonald is concerned that no matter how quickly first responders arrive, how quickly will they get to his mother in assisted living when residents in skilled nursing are more vulnerable N.T. 1008:15-21.

327. Mr. McDonald's mother has lived in the Wellington facility 8-9 years. She moved

there without knowing about the potential for the Mariner pipelines to be repurposed N.T. 1013:1-5.

328. Mr. McDonald is now more knowledgeable and his knowledge comes from word of mouth and his preparation for the hearing not from Sunoco. N.T. 1013:11-17.

Residents

Virginia Marcille-Kerslake

329. Ms. Kerslake testified that she does not believe the operation of Mariner East to be safe, adequate and reasonable. N.T. 1644:7-8.

330. Based on her extensive community interactions, Ms. Kerslake testified that many are unaware of what to do in the event of a Mariner East leak N.T.1640:8-14. Her family themselves were not even aware that HVLs were flowing through Mariner East 1 and what to do until late 2017 even though they had been flowing since late 2014. N.T. 1618:10-14.

331. This lack of public awareness is a concern for the entire community's safety as we are "only as safe as our least informed." There are residents in the blast zone of West Whiteland Township who do not have the ability to evacuate a half mile on foot, as instructed, in the event of a leak on Mariner East. These include, but are by no means limited to, residents of Sunrise Living and other aged or physically challenged individuals known to Ms. Kerslake. N.T. 1939:12-25; 1640:1-4.

332. Ms. Kerslake expressed concern for detecting the non-odorized product, the history of leaks on the ninety- year-old pipelines and a lack of trust in this operator. N.T. 1644:25; 1645:1-25; 1646:1-10.

Caroline Hughes

333. Ms. Caroline Hughes resides in East Goshen Township, Chester County, 700 feet from the Mariner East pipeline. She lives with her husband, Sean, a civil engineer, and her two children, ages 13 and 11. She is a physical therapist and works in an outpatient ambulatory care facility in Exton, Pennsylvania, in a building adjacent to the Mariner East pipelines. N.T. 1029:12-25; 1030:1-16. Her son attends Saints Peter and Paul School, which has a Mariner easement on school property, and her daughter attends PugetMiddle School in West Chester Area School District, which is in the evacuation zone for Mariner East. N.T. 1037:12-19.

334. Ms. Hughes initially learned about Mariner East in an email sent to Saints Peter and Paul families regarding installation of a gas pipeline that the school understood would only disrupt the school playground for a few weeks at most, or occur over summer months. N.T. 1030:17-25; 1031:1-2. Further research led Hughes to understand that the Mariner East project would run highly volatile liquids at high operating pressures. N.T. 1031:7-17. She also learned that it impacted her home, work, and commute to work, and found that information regarding emergency planning and detection of leaks was sorely lacking. N.T. 1032:4-13.

335. Energy Transfer/Sunoco formal recommendation, like PHMSA recommendations, that in the event of a leak from a Mariner East pipeline one must evacuate on foot, uphill, upwind, at least ½ mile while avoiding ignition sources, presents a logistical burden on larger, vulnerable communities like schools, nursing homes, senior facilities, health care centers, and those with limited mobility. N.T. 1032:14-20.

336. Ms. Hughes participated in a school task force charged with emergency planning, and testified that the answers provided by Sunoco in response to the task force questions were very vague and weren't directly applicable to HVLs. N.T. 1039:2-14. Ms. Hughes also chairs the East Goshen pipeline taskforce, and testified to the challenges that both the taskforce and Chester

County first responders face with emergency planning due to a lack of specific information required to both detect leaks and plan evacuation in the case of a leak scenario. N.T. 1072:3-5; 1062:24-25; 1063:1-2.

337. She also testified that safely evacuating the hundreds of visitors at the ambulatory health center where she worked in an expedient manner in the recommended manner would be virtually impossible. N.T. 1035:11-20.

338. Hughes testified that on August 5, 2019, she was driving home from work, and was approximately 500 feet from the Sunoco Boot Road Pumping Station when she heard a loud explosion noise. She noted that her family reported that their house shook one mile away, as did many residents in the area. This event, initially reported by Sunoco as “routine maintenance,” highlights the challenges posed by residents to obtain clear, factual information in an expedient way, to determine what to do in the case of an emergency. N.T. 1046:13-25; 1047:1-25.

Nancy Harkins - PUC lay hearing Oct. 2019, Day 2

339. Ms. Harkins lives in West Chester, PA with her husband. N.T. 20:4-9. Her house is approximately 1100 feet from the pipeline. N.T. 21:9-11.

340. Ms. Harkins is familiar with Flynn Exhibit 2, the brochure that Sunoco distributed as part of their safety program. Among other things the flyer states “From a safe location, call 911 or your local emergency response number and call the 24-hour emergency number for the pipeline operator.” After she read this she still did not know what was meant by a “safe location.” N.T. 21:12-25; 22:1-12.

341. Ms. Harkins is concerned about other statements in the brochure. One concern is over her ability to detect a pipeline leak as referenced in Sunoco’s safety brochure when it is not

visible, for example at night. N.T. 23:4-9.

342. Ms. Harkins is concerned about her ability to detect a pipeline leak as referenced in Sunoco's safety brochure because there is no odor. N.T. 23:21-23.

343. While she knows what products are transported in Mariner pipelines it is not readily available information and is not communicated in the Sunoco safety brochure. N.T. 1197:3-11.

344. Based upon what she has read, Ms. Harkins believes that a propane cloud may extend 2100 feet from the source of a leak or rupture on ME1. In order to evacuate, her plan would be to walk west away from the pipeline. Depending on where exactly the leak occurred she could be downhill and/or downwind from the source of a leak or rupture on ME1. If it were downwind, that could cause a combustible vapor cloud to migrate to low lying areas. (N.T. 26:7-15.

345. As she understands it, if Ms. Harkins were engulfed by a vapor cloud there would be a serious risk of suffocation, burns and death. This would especially be a concern for her because her husband had open heart surgery in 2017. For several weeks after he couldn't even walk up their driveway. N.T. 28:2-10.

346. Ms. Harkins is concerned for a neighbor who uses a motorized scooter and oxygen. His property is directly on the Mariner pipeline right of way. There is no way for him to evacuate away from the pipeline because there is rough ground behind his house. N.T. 29:1-10. Ms. Harkins is also concerned because the scooter operates with an electrical switch and Sunoco safety brochure advises against use of electrical. N.T. 29:13-18.

347. Ms. Harkins is familiar with Flynn Exhibit 2, the brochure that Sunoco distributed as part of their safety program. She believes it is wholly inadequate because it is not appropriate nor complete and could not be executed by many people. She believes there is also an issue with people being able to determine when a leak has occurred. N.T. 35:12-15.

Dr. Gerald McMullen

348. Dr. Gerald McMullen and his wife, Nancy, have resided in their home in West Whiteland Township in Meadowbrook Manor for 44 years. N.T. 944:8-12.

349. Mariner East 1 (ME1) is 35 feet from his home and Sunoco's 12-inch "workaround" pipeline is 60 feet (mistakenly called 50 feet in the transcript) from his home. Sunoco has created numerous problems in West Whiteland Township. These problems include contaminating wells and creating sinkholes. Sunoco's construction plan in West Whiteland completely changed because they inadequately accounted for basic features such as topography and aquifers. N.T. 945:22 -25; 946:1-10.

350. When the McMullens moved into their home during March 1975, they knew a pipeline in their backyard carried refined petroleum products to western Pennsylvania. Understanding the nature of the products, they never felt threatened. N.T. 946:14-23.

351. During December 2013, construction machinery arrived to perform work on the pipeline now called Mariner East 1 (ME1). When the McMullens spoke with the foreman, they both left that conversation with the impression that the pipeline work was "routine maintenance." This was deceptive. The McMullens found out through other (non-Sunoco/ET) sources that:

- The pipe was "retired" during 2013;
- The work was not "routine maintenance," it was intended to "repurpose" the 80+- year-old pipe to carry natural gas liquids under high pressure. N.T. 946:14-25; 947:1-25; 948:1-12.

352. The McMullens have natural gas in their home and feel safe because PECO gas contains an odorant that quickly and clearly warns of danger. Dr. McMullen does not remember being informed by Sunoco/ET of the change in products, the associated risks, or safety procedures

imposed by NGLs until well after the products were flowing through the lines. N.T. 946:14-25; 947:1-25; 948:1-12.

353. The evacuation recommendations offered by Sunoco to walk upwind, uphill, and avoid an ignition sources are not feasible for the McMullens or their neighbors. With prevailing winds coming from the west, they would have to negotiate a fence, walk across four pipelines, walk down a sloped driveway, and arrive at Exton Mall near the food court. Additionally, the 200 block of Hillside Drive has several elderly widows who are hemmed in by a cyclone fence. The evacuation recommendations are not practicable for residents in Meadowbrook Manor. N.T. 952:14-25; 953:1-12.

354. A handicapped neighbor several houses away has spina bifida with associated mobility problems. She would be unable to flee on foot. N.T. 953:13-18.

355. Dr. McMullen is concerned for the safety of his family and community because: the NGLs transported by Mariner East have no odorant; they are odorless, colorless, and tasteless; there is no warning system along the pipeline; and, NGLs are highly volatile. N.T. 953:21-25.

356. West Whiteland Township in general, and Exton in particular, is a high-density, high-consequence area that is the commercial and residential hub of Chester County. Mariner East's path goes through the heart of Exton. The consequence of a mishap in this area would have an exceptional level of consequence compared with other paths that might have been chosen. N.T. 961:4-14.

357. Mariner East also passes near major West Whiteland recreational areas including Miller Park, Meadowbrook Manor Park, Ship Road Park, and Exton Park. It's in close proximity to schools including Church Farm School, Laborers' Training Center, Exton Elementary, and the Goddard School. N.T. 962:6-13.

358. Illustrating the high-consequence nature of Exton, Mariner East's path is within or in close proximity to Whiteland West Apartments, Sunrise Living Center, Target, Fairfield Shopping Center, Meadowbrook Manor Park with its two Little League fields, Exton Commons Business Center, Exton Square Mall with its Main Line Health Center, Whole Foods, under-construction apartments (Hanover at Exton Square), residential neighborhoods (including Meadowbrook Manor and Swedesford Chase), Chester County Library and District Office, as well as major transportation thoroughfares including U.S. Route 100, U.S. Route 30, the Route 30 Bypass, and the SEPTA/AMTRAK rail lines. N.T. 963:18-25; 964: 1-11.

359. Mariner East is in close proximity to Fairfield Place Shopping Center. This center includes a high-volume Giant Grocery Store, stores such as Staples, and T.J. Maxx, and seven restaurants. As shown in McMullen 21, Wendy's, Buho Mexican, Capriotti's Sandwich, and Anthony's Coal Fired Pizza are close to Mariner East and could serve as ignition sources in the event of a leak. N.T. 967:15-25; 968:1-5.

360. Mariner East passes under Meadowbrook Manor Park, a 5.2-acre recreational area with two ball fields, two tennis courts, and a playground. N.T. 968:20-25; 969:1- 2.

361. ME1, the 12-inch workarround pipeline, and potentially ME2 and 2X all pass within 50 feet of Chester County Library and District Center. During 2018, this library had 452,313 visits and offered almost 1,000 programs for children and over 500 programs for adults. Siting four pipelines next to such a busy facility poses unnecessary risk to the public. N.T. 970:1-6.

362. Based on informal interviews with people working in close proximity to Mariner East, such as Chester County Library and Anthony's Coal Fired Pizza, few workers in Exton are aware of the nature of the products transported by Mariner East, their potential danger, or what to do in case of an a mishap on these lines. N.T. 992:17-25.

PROPOSED CONCLUSIONS OF LAW

1. The Pennsylvania Public Utility Commission (PUC) has jurisdiction over the parties and the subject matter of this proceeding by virtue of the Public Utility Code, 66 Pa. C.S. § 101, et seq.

2. Sunoco Pipeline, .L.P. (“Sunoco”) is a “public utility” with respect to the operation of the Mariner East pipelines. *See* 66 Pa.C.S. § 102.

3. Sunoco is a hazardous liquid public utility under 52 Pa. Code § 59.33(c).

4. Sunoco’s decisions are subject to review by the PUC to determine whether Sunoco’s service and facilities “are reasonable, unsafe, inadequate, insufficient, or unreasonable, discriminatory, or otherwise in violation of the Public Utility Code.” *Delaware Riverkeeper Network v. Sunoco Pipeline, L.P.*, 179 A.3d 670, 693 (Pa. Cmwlth. 2018) (citing 66 Pa.C.S. § 1505(a))

5. The PUC regulations at 52 Pa.Code § 59.33, promulgated pursuant to 66 Pa.C.S. § 1501, require that hazardous liquid utilities shall have minimum safety standards consistent with the pipeline safety laws at 49 U.S.C. §§ 60101-60503 and the regulations at 49 CFR Parts 191-193, 195 and 199.

6. 49 U.S.C.A. § 60102(a)(1), which addresses pipeline safety, provides that “[t]he purpose of this chapter is to provide adequate protection against risks to life and property posed by pipeline transportation and pipeline facilities by improving the regulatory and enforcement authority of the Secretary of Transportation.”

7. The Secretary of Transportation is tasked with providing “minimum safety standards for pipeline transportation and for pipeline facilities.” 49 U.S.C.A. § 60102(a)(2).

8. PUC regulations adopt federal safety standards for hazardous liquid facilities, including standards also address emergency preparedness and public awareness plans. *See* 49 CFR § 195.440.

9. The Pipeline Safety Act, 49 C.F.R. Part 195, applies to the Mariner East pipelines (ME1 as well as ME2 and ME2X), which carry natural gas liquids.

10. Pipeline operators must develop and implement a written continuing public education program that follows the guidance provided in the American Petroleum Institute's (API) Recommended Practice (RP) 1162 (incorporated by reference, see § 195.3). 49 CFR Part § 195.440(a).

11. Pipeline operators must follow the general program recommendations of API RP 1162 and assess the unique attributes and characteristics of the operator's pipeline and facilities. 49 CFR Part § 195.440(b).

12. Pipeline operators must follow the general program recommendations, including baseline and supplemental requirements of API RP 1162, unless the operator provides justification in its program or procedural manual as to why compliance with all or certain provisions of the recommended practice is not practicable and not necessary for safety. 49 CFR Part § 195.440(c).

13. Pipeline operator's public education program must specifically include provisions to educate the public, appropriate government organizations, and persons engaged in excavation related activities on:

- (1) Use of a one-call notification system prior to excavation and other damage prevention activities;
- (2) Possible hazards associated with unintended releases from a hazardous liquid or carbon dioxide pipeline facility;

- (3) Physical indications that such a release may have occurred;
- (4) Steps that should be taken for public safety in the event of a hazardous liquid or carbon dioxide pipeline release; and
- (5) Procedures to report such an event.

49 CFR Part § 195.440(d)

14. Pipeline operator's public education program must include activities to advise affected municipalities, school districts, businesses, and residents of pipeline facility locations. 49 CFR Part § 195.440(e).

15. Pipeline operator's public education program and the media used must be as comprehensive as necessary to reach all areas in which the operator transports hazardous liquid or carbon dioxide. 49 CFR Part § 195.440(f).

16. "The applicable public awareness and emergency responder regulations, 49 C.F.R. Part 195.403, 49 C.F.R. Part 195.3(b)(8) (incorporating American Petroleum Institute (API) Recommended Practice (RP) 1162), 49 C.F.R. Part 195.440, do expressly require an enhancement of a baseline public awareness program if there is heightened inquiry and construction in high consequence areas." *Baker Decision*, p. 57, ¶13.

17. The Pennsylvania Code provides that each public utility, such as Sunoco, "shall at all times use every reasonable effort to properly warn and protect the public from danger, and shall exercise reasonable care to reduce the hazards to which employees, customers and others may be subjected to by reason of its equipment and facilities." 52 Pa. Code § 59.33(a).

18. The Commission has the power and duty under the Public Utility Code to enter such orders as are necessary to assure that the public utility service and facilities are safe and reasonable. 66 Pa.C.S.A. § 1505(a).

19. Every public utility is required to maintain safe and reasonable service and facilities. 66 Pa.C.S.A. § 1501.

20. The PUC has the authority to direct Sunoco to enhance and supplement its public safety and public awareness program under the Pennsylvania Public Utility Code, the United States Code, the Code of Federal Regulations, and RP 1162, as incorporated by reference into the Code of Federal Regulations.

21. Chester County is designated and constituted an emergency planning district under the Emergency Planning Act and has the obligation to establish a local emergency planning committee. 35 P.S. § 6022.202.

22. The Chester County local emergency planning committee has the duty and the authority to take appropriate actions to ensure the implementation and updating of the local emergency response plans required by the Emergency Planning Act. 35 P.S. § 6022.203(g).

23. Chester County's emergency plans are required to include methods and procedures to be followed by local emergency and medical personnel to respond to any release of hazardous chemicals. 35 P.S. § 6022.203(k)(2).

24. Chester County's emergency plans are required to include methods for determining the occurrence of a release, and the area or population likely to be affected by such release. 35 P.S. § 6022.203(k)(5).

25. Chester County's emergency plans are required to include evacuation plans, including provisions for a precautionary evacuation and alternative traffic routes. 35 P.S. § 6022.203(k)(7).

26. Chester County's emergency plans are required to include the vulnerability radius for each extremely hazardous substance that meets threshold planning quantity requirements. 35 P.S. § 6022.203(k)(11).

27. Chester County uses its police powers "to promote the public health, morals or safety and the general well-being of the community." *Nat'l Wood Preservers, Inc. v. Com., Dep't of Env'tl. Res.*, 489 Pa. 221, 231, 414 A.2d 37, 42 (1980)(internal citation omitted).

28. Sunoco's public awareness plan has failed to provide adequate notice of procedures sufficient to ensure the safety of the public in the event of a leak or rupture of an HVL transmission pipeline.

29. Sunoco's failure to create a legally compliant public awareness program violates 66 Pa.C.S. § 1501 as well as 52 Pa. C.S.A. § 59.33(b).

PROPOSED ORDERING PARAGRAPHS

It is ordered that:

1. Sunoco shall designate a specific individual to be the contact person for Chester County who will address concerns and issues raised regarding pipeline safety.
2. The individual designated by Sunoco as a contact person for Chester County shall have the authority to investigate and timely respond to communications from public officials and citizens of Chester County.
3. Sunoco shall establish a direct connection from pipeline control centers to Chester County 911 centers to allow for faster notification for emergency response and public warning during pipeline emergencies.
4. Sunoco shall install monitoring devices for gas leak detection that are capable of integrating with warning devices.
5. The warning devices installed by Sunoco shall be intrinsically safe and installed along the right of way of the Mariner East pipelines.
6. The warning devices installed by Sunoco in the Mariner East right of way shall be capable of notifying the public of pipeline leaks and emergencies
7. Sunoco shall develop standard notification templates for public warning systems to be used during a pipeline emergency.
8. Sunoco shall add odorants and dye to all odorless and/or colorless liquids and gases transported by the Mariner East pipelines to allow for quick identification of a release.
9. Sunoco shall provide local emergency planning assistance to local emergency management personnel in Chester County.

10. Sunoco shall designate a dedicated employee to act as a liaison with local emergency management personnel in Chester County.

11. Sunoco shall provide funding for additional personnel to assist local emergency management personnel in Chester County in creating local emergency response plans.

12. Sunoco shall provide funding to support local emergency response agencies in Chester County to assist with planning resources for public emergencies.

13. Sunoco shall provide Chester County with detailed information to assist in creation of emergency response plans specific to pipeline emergencies .

14. Sunoco shall hold ongoing, quarterly, community outreach and/or public education trainings for anyone in Chester County who may be impacted (directly or indirectly) by an evacuation or shelter in place order.

15. Sunoco shall develop in cooperation with state, county, and local emergency services and municipalities in Chester County specific evacuation and shelter in place plans for each county, municipality, neighborhood, high-occupancy structure, high-hazard area, school, church, public gathering place, and any other area or parcel that may need assistance or direct evacuation during a pipeline emergency.

16. Sunoco shall maintain a comprehensive database of pipeline information and to provide this information to the Chester County Department of Emergency Services including:

- a. Maps of all transmission lines listing material moved, pipeline diameter, mainline valve locations and maximum operating pressures (MOP), and maximum allowable operating pressure (MAOP);
- b. Information about the location of any anomalies that merit pressure reduction in the pipeline and the presence of "immediate," "60-day" or "180-day" repair

conditions for liquid pipelines or "immediate" or "one- year" repair conditions for gas pipelines.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true copy of the foregoing filing upon parties identified below via email, unless otherwise indicated:

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ADDENDUM TO CERTIFICATE OF SERVICE

I hereby certify that I served a true copy of Chester County's Post Hearing Brief and the PUC transmittal form upon the Honorable Elizabeth H. Barnes identified below via email on December 16, 2020, which I failed to state in my Certificate of Service on December 16, 2020.

As further evidence, please see email to the Honorable Elizabeth H. Barnes and the rest of the parties, as referenced in my Certificate of Service dated December 16, 2020.

The Honorable Elizabeth H. Barnes (PDF version & Word version)
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Date: Wednesday, December 16, 2020 12:25:11 PM
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Ltr. to Chiavetta attaching County of Chester's Brief & COS 12-16-20.pdf
New Filing - Chester County Brief - Accepted - 12-16-20.pdf

Dear Your Honor, Counsel and Pro Se Parties:

On behalf of Mark Freed, attached please find a copy of Chester County's Post-Hearing Brief and the PUC's transmittal form in regard to the above-referenced matter.

Thank you.

- Becky



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