

Testimony of Eric Friedman, Middletown Coalition for Community Safety
Before the House Veterans Affairs and Emergency Preparedness Committee of the
Pennsylvania General Assembly
May 30, 2019

Good morning Chairman Barrar, Representative Sainato, and all Committee members in attendance. My name is Eric Friedman. I'm a resident of Thornbury Township here in Delaware County, and a member of the leadership team of Middletown Coalition for Community Safety. I also serve as the current president of the Andover Homeowners' Association, a Pennsylvania nonprofit corporation representing the interests of 39 Delaware County landowners. My most important role is to be the best dad I can to my nine-year old son, whose elementary school in the West Chester Area School District is just one of many placed at risk by Sunoco's proposed Mariner East pipelines.

I appeared before this Committee in November 2016 to testify about the public safety risks associated with Mariner East, and the lack of preparedness to protect the public from their unique hazards. Thank you for the opportunity to testify before you again, because these problems haven't gone away.

The primary purpose of Sunoco's proposed Mariner East system is not to provide fuel or energy or jobs for Pennsylvanians or Americans. Rather, it is to transport byproducts of fracked gas production to Sunoco's export terminal on the Delaware River for shipment overseas. To accomplish this export goal, Sunoco, a unit of a foreign corporation, Texas-based Energy Transfer, proposes to move ethane, propane and butane, some of the most dangerous materials transported by pipeline, through the densely populated hearts of Delaware and Chester Counties.

Ethane, propane, and butane are gases that can be compressed under high pressure into liquid form. But if released to the atmosphere, all of these materials rapidly convert back to gas, expanding in volume hundreds of times as they do. And these gases possess a deadly combination of properties: it is colorless, odorless, asphyxiating, extremely flammable or explosive, and perhaps worst of all, heavier than air. The gas can move downwind and downhill, flowing over the ground for long distances while remaining in a combustible concentration. The federal government calls these materials "hazardous, highly volatile liquids." They are extremely flammable or explosive, and many ordinary things can serve as an ignition source: a cell phone, a doorbell, a car, a light switch, even a flashlight intended to light your family's escape route.

From a preparedness standpoint, Mariner East is a perfect storm of risk: one of the leakiest operators in the business, proposing to transport industrial quantities of the most dangerous materials, through the densest population corridor in southeast Pennsylvania; all with no credible plan for the protection of the public.

Sunoco may tell you that it's a "safe" operator of pipelines, or that it's operated pipelines "safely" in Pennsylvania for many years. But the words "*safe*" and "*safely*" have no objective meanings, and Sunoco doesn't use them the way you or I do. For example, I might tell you that I've totaled three cars in the last year, but that I'm a very safe driver. The reality is that Sunoco has reported 309 pipeline accidents to the federal government since 2006. The last time I appeared before you, the corresponding number was 279, demonstrating that Sunoco continues to rack up accidents at an extraordinarily high rate.

To put this number in context, more than 2,000 pipeline operators are tracked by the federal Pipeline and Hazardous Materials Safety Administration (PHMSA). More than half of them have reported zero accidents over the same time period Sunoco has reported 309. Sunoco is far from the largest pipeline operator in terms of mileage, but it's at the very top of the list when it comes

to number of accidents. Sunoco's not just an outlier in this regard; it's an extreme outlier.

Delaware County has been the site of many of these accidents. Some representative examples:

- In 2000, a Sunoco pipeline ruptured in the John Heinz National Wildlife Refuge, spilling 192,000 gallons of hazardous liquids. Incidentally, the Wildlife Refuge was renamed for the late United States Sen. John Heinz after the aircraft in which he was flying was collided with by a helicopter operated by Sun Company, the predecessor of Sunoco. That needless accident killed everyone on board both aircraft. It also fatally injured two children on a school playground, onto which the burning wreckage fell.
- Edgmont Township has been the site of three recent Sunoco pipeline accidents, in 1988, 1992, and 2015.
- Middletown Township has been the site of two recent Sunoco pipeline accidents, one discovered in 1996 directly across the street from the entrance to Glenwood Elementary School, and another in 2004 near the intersection of heavily trafficked State Route 1 and State Route 452.
- And this past June 2018 yet another Sunoco pipeline ruptured near Philadelphia International Airport, releasing more than 34,000 gallons of gasoline into Darby Creek.

Sunoco may tell you it can detect leaks on its pipelines. The reality is that its leak detection systems are unreliable at best: none of the accidents I just mentioned were detected by Sunoco—but they all involved hazardous liquids that were not highly volatile. As pipeline consultant Richard Kuprewicz put it recently, "Upon pipeline rupture, HVLs will essentially release the entire volume between closed valves, regardless of pipeline elevation profile." For a typical six-mile segment of 20-inch pipeline, this volume is about half a million liquid gallons. Had any of these accidents involved HVLs, the result could have been a mass casualty situation.

And the release of a massive quantity of HVLs from a Sunoco pipeline is hardly hypothetical: in January 2015, Sunoco experienced an accident on its Mariner South system that released just under a half-million gallons of propane. This is just one of its seven reported HVL accidents since 2014, three of which occurred on Mariner East 1 in less than a year.

Sunoco may tell you that it "meets or exceeds" the regulatory requirements for pipeline construction and operations. The reality is that Sunoco has a long and checkered history of what the Pennsylvania Department of Environmental Protection (DEP) called "willful and egregious" **noncompliance** with state law and permit conditions. In an Administrative Order issued in January 2018, DEP stated that Sunoco had engaged in "unlawful conduct" that "demonstrates a lack of ability or intention on the part of Sunoco to comply" with the laws of our Commonwealth. It's the same story at the federal level too: PHMSA has initiated enforcement action against Sunoco Pipeline an astonishing 46 separate times since 2002.

What could the consequences of a large HVL accident look like? In 2018, Del-Chesco United for Pipeline Safety, with financial support from a number of municipalities, commissioned an expert risk assessment of Mariner East. This assessment concluded that a large release of HVLs could produce fatal impacts to people within about 2,100 feet from the point of release. Then, in November 2018, Delaware County Council publicly released its own risk assessment of Mariner East, and the results were shockingly far worse: the County study modeled lethal thermal and shock wave impacts that could extend to a mile and a quarter from the point of release. The report informs us that the shock wave from an HVL explosion will fatal to people within a one-

mile radius (a three-square mile area), regardless of whether they are inside of outdoors.

Sunoco's generic, one-size fits all "public awareness program" informs the public that, in the event of a suspected HVL leak, they should "leave the area immediately on foot." The impossibility of large numbers of residents successfully self-evacuating means that hundreds, if not thousands of people, may be trapped within a blast or impact zone awaiting an ignition source. And, as Tim Boyce, Director of Delaware County Emergency Services, put it recently "If these products are released in our community, they are going to find an ignition source. There's no reasonable person who says that if released in large quantity, it's not going to ignite."

Here are some things that Sunoco will **not** tell you.

- It will not share with you its estimate of the range at which thermal and blast effects from accidents on its HVL pipelines can be expected to kill people.
- It will not tell you its estimate of how many fatalities it believes will result from such an accident, or the cost of such an accident in terms of mass destruction of property.
- **It will not offer you any guarantee that its pipelines won't continue to leak.**

It's not my purpose to create unreasonable fear. After all, Sunoco hasn't had a pipeline rupture in Delaware County since June 2018. But it does have more reported leaks from its pipelines than just about any other operator, and highly volatile liquids present a greater hazard than virtually any other material.

After giving it a lot of thought, I've concluded that the most important function of government is to reasonably provide for public safety. After all, if you don't have "life," it's impossible to enjoy either "liberty" or "the pursuit of happiness." As members of a Committee responsible for emergency preparedness, I hope that you may agree.

This Committee has been informed, since at least 2016, of the "triple threat" associated with the transport of industrial quantities of extremely dangerous materials in close proximity to dense, vulnerable populations by a leaky and accident-prone operator. This Committee has been notified that there is no credible plan to protect the public from continued Sunoco accidents. This Committee should be fully aware that a large accident on Mariner East could result in the destruction of an elementary school, church, residential subdivision, or senior living facility. Public emergency preparedness for such an accident is wholly inadequate, and in fact appears impossible. So perhaps the question before this Committee and the General Assembly is "Just how often are we willing to lose an elementary school full of children?" If you, like me, find that prospect unthinkable, then I respectfully urge you to exercise the authority you possess to ensure it never happens.



Private, supposedly preserved-in-perpetuity R-1 residential open space in Delaware County, before and after Sunoco. This property contains a historic site occupied by people since at least the 1700s, and a wide field of cultural and historic significance. It was determined to be eligible for listing in the National Register of Historic Places. In the "before" image, Sen. Tom Killion is receiving a briefing on Sunoco's planned destruction of the site. Both images are of the exact same spot.

Del-Chesco United for Pipeline Safety

Dear Fellow Pennsylvanians,

We know that Sunoco's recent full-page advertisement in this newspaper has increased community concerns over its proposed hazardous, highly volatile liquids export project marketed as "Mariner East." We believe this proposed project's public safety risks, its negative impacts on the economic well-being of our area, and its infringement on private property rights guaranteed under our Constitutions are probably at the forefront of your concerns. We offer this information to help set the record straight.

Sunoco marketing myth #1: "Mariner East 2 is a critical energy infrastructure project, not only for Pennsylvania's economy but for the thousands of people it puts to work every day...The value of this project cannot be overstated."

The reality: Mariner East is not about fuel or energy or jobs for Pennsylvanians. It's about exporting ethane overseas, for the primary benefit of foreign corporations like Range Resources, INEOS, and Sunoco, a unit of Energy Transfer Partners, based in Texas. One source relied upon by Sunoco is a report commissioned by Sunoco itself. The study's author admitted in a court proceeding that he had made no effort to include regional economic downsides such as impaired property values, inability to obtain insurance, losses to property tax bases, and so on, in his report. Because of this, the study is biased and fatally flawed. Economic "reports" like this fall into a genre which is well-understood by economists. StateImpact Pennsylvania recently reported on the subject, writing "Haynes Goddard is a retired environmental economics professor at the University of Cincinnati and an expert in cost benefit analyses, which include calculations of social and environmental costs of large projects. Goddard said this type of report is meant to "buck up politicians" who support the project and the company that stands to make money off it. 'They're really ultimately misleading because they're a very incomplete analysis of all the economic impacts positive and negative that these kinds of projects could have,' Goddard said."

A more honest and complete assessment completed in 2017 titled "Economic Costs of the PennEast Pipeline: Effects on Ecosystem Services, Property Value, and the Social Cost of Carbon in Pennsylvania and New Jersey," which sought to quantify both positive and negative impacts of another proposed pipeline, found that the total estimated economic cost of this pipeline in the study region was between \$13.3 and \$56.6 billion. The report concluded that the costs are several times larger than the proposed benefits. These are hardly trivial numbers, but they will come as no surprise to any landowner in Chester or Delaware Counties facing the economic destruction already wrought on our area by Sunoco.

West Goshen Township has been specific about the economic catastrophe it's facing. In West Goshen Township alone, Sunoco's proposed project has scuttled a multi-million-dollar senior living facility, thereby seriously and permanently impacting the tax bases of both West Goshen and the West Chester Area School District. West Goshen has in addition incurred hundreds of thousands of dollars in legal expenses in connection with its efforts to simply get Sunoco to comply with an agreement it voluntarily entered into with the township. These negative impacts are both quantifiable and typical. They are visible in township after township across our area. As the office of Congressman Pat Meehan recently put it, "ME2 is unlikely to bring any economic benefit to the midline areas of the project which run through his district...We completely agree

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with you that any “projected” ME2 benefits are likely to be outweighed by the serious safety concerns surrounding the construction and operation of this pipeline.”

Sunoco marketing myth #2: “Sunoco Pipeline agrees the building all pipelines, including Mariner East 2, to the highest federal and state safety standards—and often going above and beyond—is our top priority throughout construction.”

The reality: The result of the federal and state regulatory scheme on Sunoco’s operations is an abysmal, industry-topping record of pipeline accidents—300 of them since 2006 alone (more than two per month on average), many of which have occurred right here in southeast Pennsylvania. Edgmont Township alone has experienced three Sunoco pipeline leaks in recent history, none of which were detected by Sunoco. After the most recent one was discovered by a landowner in 2015, MTBE, a gasoline additive manufactured by Sunoco, was detected in area wells. (Sunoco disclaimed responsibility).

Sunoco also has a long and checkered history of enforcement actions for NOT following minimum standards set forth in federal regulations, including repeated failures to make required reports to both the federal and state governments. For example, on April 6, 2017, Sunoco received a federal Notice of Probable Violation and Proposed Compliance Order. This document stated "SUNOCO failed to submit a written DOT Form 7000-1 for an accident that occurred on August 12, 2016, at its Terminal facility in Nederland, Texas. The accident involved a release of crude oil, ignition of the crude oil, and injuries requiring in-patient hospitalization." In fact, seven people were injured in this accident. The underlying accident (which Sunoco failed to report) was the subject of a separate enforcement action in which the federal government alleged violations of fifteen separate areas of federal safety regulations ranging from construction practices, to procedures manuals, to drug and alcohol testing. The government notes that two of these fifteen areas were repeat violations and proposed a civil penalty of \$1,539,800.

This same pattern of noncompliance, including failure to make required reports and the use of unauthorized construction methods, has been displayed at the state level too. Sunoco has repeatedly been issued Notices of Violation by the Pennsylvania Department of Environmental Protection that include failure to make reports required by state law, permit conditions, or both. The pattern is clear: Sunoco has accidents, fails to report them, receives enforcement action, and then continues to have accidents and to make required reports.

Sunoco marketing myth #3: “Our Mariner Emergency Responder Outreach (MERO) program has conducted specialized training sessions this year for more than 750 first responders in communities where Mariner East will operate.”

The reality: As attested to by recent letters to the Public Utility Commission from the Chester County Commissioners and West Chester Area School District, local agencies and first responders are without adequate plans to protect our dense, vulnerable populations from a release of colorless, odorless, extremely flammable heavier than air gas. The Delaware County Department of Emergency Services recently acknowledged that its public alerting system, which is designed to trigger hundreds or thousands of electronic devices, has not been evaluated for its potential to provide an ignition source.

Beyond that, the federal government’s recommendation in the event of a known or suspected leak of these extremely dangerous materials—on foot self-evacuation in the correct upwind or uphill direction—is simply not credibly possible for many area residents, particularly at night or

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during inclement weather. Unfortunately, a release of hazardous, highly volatile liquids from Mariner East is not hypothetical; it's already happened at least three times in less than a one-year period. The recent strike on a nonoperational piece of Mariner East across the street from Glenwood Elementary School illustrates the problem: industrial quantities of these materials simply cannot be transported near schools or through residential subdivisions without incurring unacceptable risk.

We believe that Sunoco's recklessly conceived Mariner East project, if completed, will do much more than destroy wells, cause sinkholes that threaten homes and other utilities, and continue to drive down the value of our properties. If this project is completed, it will form a permanent and ongoing threat to our homes, schools, Little League fields, senior living and child daycare facilities, malls and libraries. It will do this while we, the residents of southeast Pennsylvania, have no credible plan to protect ourselves or our families, all in the name of private gain from overseas export. Sunoco, Range Resources, and INEOS want to reap the gain, while forcing on us all the risk.

We are committed to the defense of our inalienable American rights, including public safety, property values, and Constitutional private property rights.