

ANDOVER HOMEOWNERS' ASSOCIATION, INC.

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December 11, 2017

Pennsylvania Department of Environmental Protection

Via e-mail to:

ra-eppipelines@pa.gov

kyordy@pa.gov

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**Re: Public comment of affected property owner re: DEP Permit HDD
Reference # PA-CH-0421.0000-RD**

To whom it may concern:

Pursuant to the Corrected Stipulated Order entered at Environmental Hearing Board Docket No. 2017-009-L on August 10, 2017 ("Order"), please accept these comments on Sunoco Pipeline L.P.'s ("Sunoco") re-evaluation report ("Report") for the horizontal directional drilling ("HDD") proposed under "DEP Permit HDD Reference # PA-CH-0421.0000-RD." ("Arch Bishop / South Chester Road Crossing" in Westtown Township, Chester County and Thornbury Township, Delaware County).

The Department's Review

Pennsylvanians rely on the Department of Environmental Protection (DEP) to protect them from hazardous industrial activities that threaten their air, water, land and safety. The Department has recognized that the Sunoco's construction of its proposed Mariner East 2 hazardous, highly volatile liquids export pipeline has already done immense damage to the public. The purported purpose of Sunoco's re-evaluations of certain proposed horizontal directional drill (HDD) sites is to so that it does a better job assessing and mitigating the obvious risks to the public safety associated with the Mariner East project.

DEP's role is to review and assess Sunoco's Report before deciding what action to take on it. In considering whether to permit further construction to take place, it is DEP's responsibility to review and assess the Report with the primary goal of protecting the public, not to advance Sunoco's interests. Looking at the individual circumstances at the site in question is key. Critically important is accounting for input from those directly impacted by the project, who have a deeper connection with and greater knowledge of the land and the area than the alien company that proposes to construct transmission pipelines through it.

A meaningful, objective and substantive review and assessment by the DEP must ensure that any new or continued construction operations at the re-evaluated sites will cause minimal, if any, risk to the public safety and the environment. Anything less than a full, careful, and objective review would endanger the public and the environment. Pennsylvanians place their trust in the Department to do a thorough, science-based assessment, taking into account these and other comments, and approving Sunoco's

recommendation **only** if it would protect the public and the environment from any further harm.

Comments on DEP Permit HDD Reference # PA-CH-0421.0000-RD

This proposed HDD site stands out as being in one of the most densely populated areas along the entire pipeline route. It is also far longer than most other drills, at nearly 7,000 feet. The number of impacted residents and vulnerable water supplies is thus especially high. The hydrogeologists that Sunoco hired to review plans for the Site have made a number of recommendations geared toward avoiding complications during the construction process and protecting water supplies. Yet Sunoco has not adopted those recommendations, and instead proposes “no significant changes to the HDD plans” besides implementing standard “best management practices.” The Report provides no explanation of why Sunoco has ignored its scientists’ recommendations. It also appears, as with prior re-evaluation reports, that Sunoco has not provided its scientists with all necessary information regarding well locations and features. Critically, Sunoco has failed again to conduct a meaningful alternatives analysis. For these reasons, and as described in more detail below, the present proposal should be denied.

Sunoco has not conducted a meaningful alternatives analysis

Sunoco’s brief, generalized discussion of the re-route alternative does not provide nearly enough information about alternative routes to determine whether re-routing is preferable. It describes a potential route to the southwest as requiring clearing of “new greenfield” and then dismisses that alternative without providing any basis for comparing that route to the planned route. A meaningful alternatives analysis requires quantitative and qualitative details about the potential environmental impacts at each location, as well as the safety of each. Without such analysis, the appropriateness of the proposed route cannot be verified.

In fact, the “new greenfield” terminology is misleading at best and factually incorrect at worst. The planned alignment involves the acquisition through eminent domain of a greatly expanded easement across the private, preserved, residential open space owned by the Andover Homeowners’ Association. This expanded easement is *next to* an existing twenty-foot wide easement; but because the expanded easement consists of treed, maintained open space, it is in fact “new greenfield” itself. Sunoco’s argument that it has chosen the planned alignment for the purpose of avoiding the taking of “new greenfield” fails because it is simply wrong. Sunoco should be required to discuss alternative routings in meaningful detail, accurately quantifying the specific amount of “new greenfield” in each.

In addition, the Andover residential subdivision contains a historic site registered in the Historic Resource Inventory of Thornbury Township, Delaware County. This site contains two structures built during the late 1700s, the foundations of at least four other structures, and a wide field of potential historic or cultural significance which has not been evaluated by Sunoco, the Pennsylvania Historic and Museum Commission, or the U.S. Army Corps of Engineers. This site was previously determined to be eligible for listing in the National Register of Historic Places. The Andover Homeowners’ Association believes that items of significant historic and archeological significance, and possibly human remains as well, may be contained in the area which Sunoco proposes to disturb as part of the planned alignment. In fact, grubbing activities by Sunoco in the vicinity of its proposed new greenfield easement have brought artifacts to the surface. Sunoco took not the slightest notice or care of these artifacts as it was disturbing them, but they were recovered and remain available for inspection by a competent authority. Sunoco should be required to discuss alternative routings in meaningful detail, evaluating and quantifying the effects on

cultural and historic resources of each alternative.

In terms of public safety risks, the planned alignment contemplates the construction of two new hazardous, highly volatile liquid transmission pipelines, at open-trench depth, less than 100 feet from residences in a densely populated “high consequence” area. Every one of the 39 residences in Andover is within 800 feet of the proposed route. One expert model predicts blast and thermal impacts from a large release of highly volatile liquids could extend to 1,800 feet from the point of release.¹ Another expert model predicts “life-threatening effects or death” from heavier-than-air gas at 2,400 feet, and a “lower explosive limit” of flammable or explosive gas² extending to 3,900 feet from the point of release.³ Corroborating these models, a 2015 accident involving a release of ethane, with ignition, from a 20-inch diameter new pipeline, resulted in thermal damage at 2,000 feet from the point of rupture. And Sunoco has reported more leaks from its pipelines than any other operator tracked by the federal government, 290 of them since 2006 alone. Many of these accidents have occurred in Pennsylvania, including a 2015 leak of hazardous liquids in Edgmont Township; a 2016 rupture which released a reported 55,000 gallons of gasoline near Williamsport (Sunoco’s fourth leak on that particular pipeline segment⁴) and a 2017 leak of hazardous, highly volatile liquids in Morgantown. In 2016, the last full year for which data are available, Sunoco reported leaking a greater quantity of hazardous liquids from its pipelines than in the previous six years (2010-2015) *combined*.

Sunoco has provided no credible plan to protect vulnerable, dense, immobile populations from a release of highly volatile liquids. Last week, in New Mexico, a pipeline accident involving methane (a less dangerous material than highly volatile liquids) prompted the Eddy County Office of Emergency Management to advise, via Twitter at approximately 2:00 a.m., that residents should “self-evacuate” a four-mile diameter circle. That’s about 12.5 square miles, or the land area of a typical Pennsylvania municipality. In the case of heavier-than-air, extremely flammable highly volatile liquids, such self-evacuation must be carried out in the correct upwind direction and on foot—vehicles cannot safely be used. Such a scenario is certain to cause difficulties (to say the least) for seniors and families with children, especially at night or during inclement weather.

In the event of a large, unignited combustible vapor cloud, immediate self-evacuation is the only possible means of protection of lives. Yet Sunoco has not established or identified any system by which residents would be warned of the need to begin a rapid self-evacuation.

Sunoco should be required to discuss alternative routings in meaningful detail, quantifying (at a minimum) the public safety risks of each in specific terms of the area likely to be impacted in a worst-plausible-case release of hazardous, highly volatile liquids; the numbers of people reasonably expected to be in that area at various times of day; and the potential self-evacuation routes and obstacles to self-evacuation of each alternative. The attached charts integrate U.S. Census Data with Sunoco’s proposed route as illustrative of the magnitude of this issue.

¹ http://docs.wixstatic.com/ugd/1e3b45_fd1018817f144a3e9f7db5a6a1a51127.pdf, last visited December 11, 2017.

² The concentration threshold at which the vapor could ignite in the presence of an ignition source.

³ http://proceedings.esri.com/library/userconf/petrol16/papers/petrol_22.pdf, last visited December 11, 2017, slides 18 and 24.

⁴ DEP e-mail to Eric Friedman

Conclusion

For these reasons, the Andover Homeowners' Association, Inc. requests that this proposal be denied.

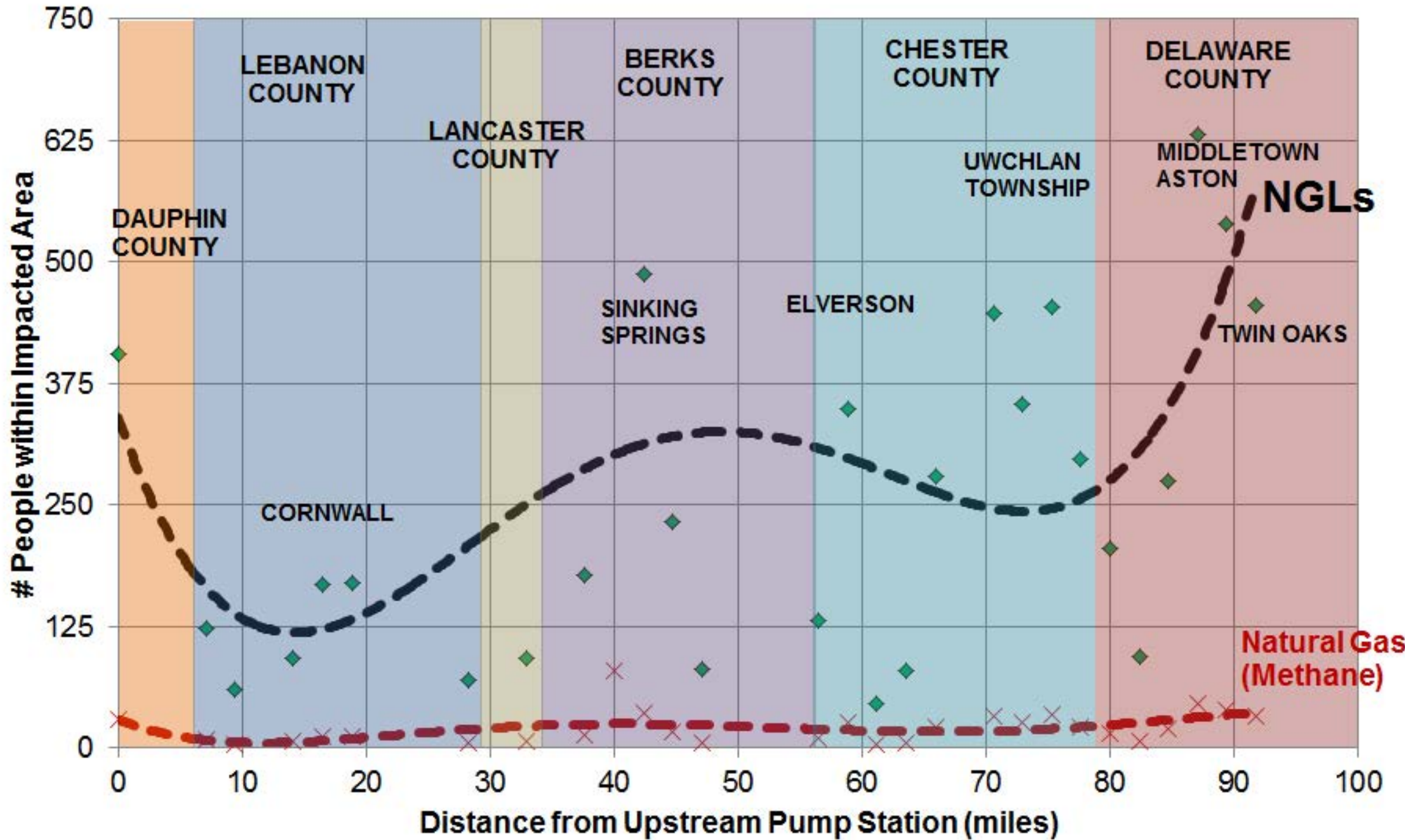
Sincerely,

/s/

Eric Friedman
President

People within 3min Delayed Ignition Potential Impact Radius 20in Diameter Pipeline with 1,440psi Pump Station Pressure

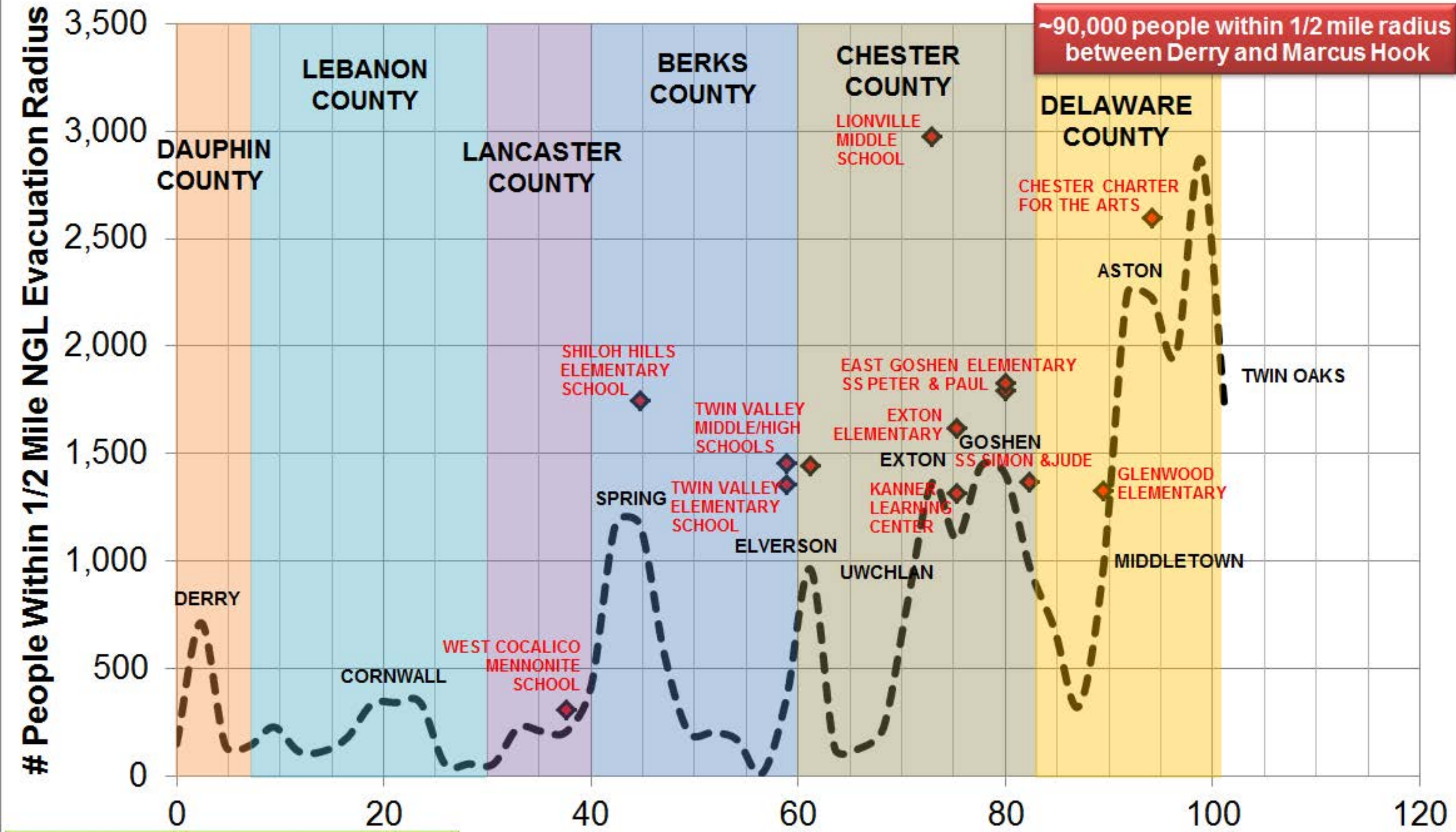
◆ ETHANE × METHANE



People Within Half-Mile Evacuation Radius Along ME2 Route

PHMSA Recommended Evacuation Distance for Natural Gas Liquids pipelines

-- People within NGL Evacuation Area ◆ Including School Populations



~90,000 people within 1/2 mile radius between Derry and Marcus Hook

*Does not account for larger/smaller populations in adjacent municipalities

Location Along Mariner East 2 Route (miles)