

24 August 2016

PA Department of Environmental Protection
South Central Regional Office
Waterways and Wetlands program
909 Elmerton Ave.
Harrisburg PA 17110

To Whom it May Concern;

I am submitting the following comments in regards to Sunoco Logistics LP 105 permit application. After reading through it and the accompanying documents I found that these permit applications are still incomplete, contain inadequacies and in some cases omission of pertinent information. Some of these insufficiencies might be considered minor while others, if not fully addressed, could result in grave consequences for families living along the pipeline route.

Water and Wetland crossings

The Mariner East 2/Pennsylvania Pipeline Project is comprised of 2 parallel pipelines (1 20" the other at minimum 16") that would cross hundreds of freshwater wetlands (581) and streams (1,227) and permanently impact 8.6 acres and 35.3 acres respectively over 306 miles of our state.

The proposed pipeline route traverses various soil types and underlying geology. Each has unique characteristics that react differently to natural and man-made forces. There are three general rock types (geology) and their associated soils that the pipeline will cross in Cumberland County including the following: sandstone (mountain ridges), shale (north of Conodoguinet Creek) and finally carbonate bedrock (e.g. limestone/dolomite), that exhibits strong karst characteristics. This geology along with regional topography and soil types influence occurrences and nature of surface and ground waters in the region.

Most of the streams in the northern part of Cumberland County begin along the sandstone ridge of the Blue Mountain. Those streams along with numerous limestone springs found in the central part of the

county comprise part of the Conodoguinet Creek watershed; a watershed upon which numerous municipalities throughout the county are fully dependent upon for their water needs. Those not dependent on the Conodoguinet either rely on the Yellow Breeches Creek or the numerous public and private wells many of which originate or are located along the path of the proposed pipeline route as well.

As per site plans submitted with their 105 application Sunoco intends to employ open cuts as opposed to HDD bores at the majority (~75%) of these water crossings. In particular, there are several locations in Cumberland County where HDD bore would be the correct and more environmentally responsible option to cross waterways as opposed to the current open cut plan. These sites include Opossum Creek (indicated as an area of concern in their PNDI site maps), Cedar and Hogestown Runs. Each of these have moderately wide floodplains in the proposed crossing areas. Bores at these locations would prevent sedimentation impacts to these waterways that can ultimately affect larger creeks in the region.

By employing open cuts, a disproportionate number of the wetlands and streams in Cumberland County will incur both short and long term impacts resulting from the removal of emergent and herbaceous vegetation, shrubs and trees, clearing for staging areas directly adjacent to streambanks and the operation of heavy equipment in and near wetlands and streambeds. Cumulatively within these areas impacts to wetlands and waterways could be profound including loss of bank/stream stability, loss of aquatic habitats, increased erosion and turbidity, and changes in thermal conditions (primarily in forested areas).

In one particular location that I'm familiar with, their site plan depicts an open cut through a roughly 300m long streambed/wetland. Approximately half of this open cut will repeatedly take place within ~150 meters of the existing streambed so that the ME2 pipeline can be laid alongside the existing ME1 (page 22 of their detailed site plans). Although Sunoco plans to do stream restoration work there I highly question the crossing method planned at this site based on the orientation of the pipeline in conjunction with the streambed, stream flow, floodplain area and other on-site characteristics. It is guaranteed that normal annual processes combined with future expected heavy precipitation and or more extreme weather events, will ultimately result in washout of streambed materials over time, future sedimentation

events and eventual exposure of pipeline. In this case boring beneath is the only intelligent and correct option.

Sunoco’s proposed pipeline ME2/Pennsylvania Pipeline Project has the potential to impact wetlands and waterways in Cumberland as well as 16 other counties across the southern tier of the state if there are any shortcomings or omissions in the proposed site plans. It is my opinion that Sunoco and their environmental contractor underestimated the overall area size and potential environmental impacts that could result from proposed open cuts across the numerous stream and runs especially in areas of moderate elevation. Temporary or permanent alteration of stream flow and floodplains were not fully considered when determining the numerical extent of permanent and temporary impacts to waterways and adjacent stream banks. Furthermore, Sunoco does not address potential stream degradation and sedimentation that could occur post construction and restoration efforts.

Act 167 compliance

Although Sunoco provided summary tables for each of the three regions (SE, SC and SW) in regards to Act 167 and compliance responses they didn’t include the actual letters/responses from most of the 85 townships, which is required by law. The letters that are included contain similar comments in that Sunoco failed to provide enough information to make a determination. Going through the tables and making some basic calculations it didn’t take long to conclude that 42% of all townships had issues with Sunoco’s storm water plans and 38% had issues regarding floodplains (see table below). Without agreement from the municipalities and inclusion of letters saying so this portion of their application is grossly incomplete.

County and township storm water & floodplain agreement numbers

	Storm water plan consistent	Calculated percent	%	Flood plain consistent	Calculated percent	%
YES	36	42.3529	42	45	52.9412	53
NO	2	2.3529	2	0	0	0
TBD	39	45.8824	46	32	37.6471	38
W/O	4	4.7059	5	1	1.1765	1
N/A	4	4.7059	5	7	8.2353	8
Totals	85	100.00	100	85	100.0001	100

Old Unlined Landfill

Another concern: Sunoco and their consultants totally failed to address an old unlined sanitary landfill in Cumberland County that according to documents in Sunoco's submitted application is in the proposed pipeline path. This unlined landfill operated from at least the 1950s through to the early 1970s; long before environmental laws mandated the safe operation of this type of site or safe disposal of toxic wastes. As a result, it was the unregulated dumping ground for numerous industries (e.g. C.H. Masland & Sons Carpets, Kinney Shoe Corporation, Carlisle Frog and Switch and Carlisle Tire & Rubber) along with municipalities in and around the Carlisle area. Consequently, copious amounts of both hazardous and municipal wastes were dumped at this site including but not limited to industrial chemicals, other manufacturing wastes, heavy metals, household wastes, unused pesticides like DDT, asbestos, paints, varnishes, etc. all combining to create a toxic soup below the surface. Leachate started oozing from this location back in the early to mid-1960s ending up in the nearby Conodoguinet Creek. Years later leachate is still finding its way along rock crevices in the shale formation to its face indicating that a toxic mess still exists beneath the surface.

Considering factors already impacting the creek that could be compounded by potential release of pollutants from this old unlined landfill it is imperative that Sunoco identifies and addresses all the existing and potential issues associated with developing this location. It should also be required that they develop and submit a comprehensive site plan, before this permit process proceeds, in order to prevent further and or additional release of this toxic mix of pollutants into the nearby waterway.

Karst topography, sinkholes and groundwater

The bedrock in the central region of Cumberland County is primarily limestone that exhibits characteristics of karst topography, a complex underground physical structure resulting from physical and chemical processes that erode carbonate rock over time. Karst topography is a matrix of interconnected vertical and horizontal fractures and openings allowing water movement below while the land above is characterized by subtle to deep subsidence features and open sinkholes. According to the Pennsylvania Topographic and Geologic Survey (2015) construction of underground utility lines can exacerbate the development of sinkholes in karst areas. After pipelines are laid in trenches and backfilled rainwater

water will infiltrate soils following the length of pipeline until encountering a karst drain/fracture. The water will slowly flush soils from the drain eventually leading to subsidence or worse case scenario a total collapse beneath that section of pipeline causing a pipeline rupture. This could be particularly catastrophic with a natural gas liquids (NGL) pipelines such as the ME2/PPP. Geologists highly recommend conducting extensive studies prior to this type of construction project to prevent pipeline failures or potential tragedies.

Another issue in karst topography concerns accidental release of chemicals/contaminants during the construction process. In the event of an unplanned spill groundwater contamination in karst topography is a given so extra measure must be taken in this respect. Yet in regards to both issues Sunoco has failed to produce sufficient evidence that they have appropriately planned for either of these events.

Safety

Sunoco's past and current track record relative to environmental violations and safety should be considered as well as scrutinized in this process since 1. Sunoco included these in their applications, and 2. Their overall performance has remained consistent throughout their history in Pennsylvania through to today. They have received numerous notices of probable violation from the Pipeline and Hazardous Materials Safety Administration (PHMSA) resulting in over \$2,300,000.00 in enforced and proposed fines since 2002. They have been cited by DEP for at minimum 42 violations for work done on the Mariner 1 in 2015 including a \$95,000.00 penalty for six industrial waste spills. In addition they were fined 2.3 million by DEP for a leak that resulted in 12,000 gallons of gasoline. Most recently they appear to be responsible for the MBTE contamination of water wells located in Edgemont Twp.

Finally, it is my belief based on the current information available that this permit application is incomplete, has inadequacies and errors and fails to address fundamental issues affecting human and environmental health. I therefore request in all fairness this comment period should be suspended immediately then restarted once Sunoco actually submits a complete and accurate application packet. Then due to the magnitude of the proposed project, the quantity of accompanying documents, and time needed by citizens to fully process information and respond in an informed manner DEP should do the

following: Announce a 90 day comment period where submissions can occur via eComment (verifies receipt and allows others to view comments), U.S. Postal Service, or email to insure that people have sufficient opportunities to submit comments. After all Sunoco was afforded ample amounts of time to submit their applications two times so far Pennsylvanian families deserve the same courtesy. Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Kim Van Fleet".

Kim Van Fleet
Lower Frankford Twp.
Cumberland County PA

Addendum

17 Counties 85 twps

	Total storm water plan consistent	Calculated percent	%	Total flood plain Consistent	Calculated percent	%
YES	36	42.3529	42	45	52.9412	53
NO	2	2.3529	2	0	0	0
TBD	39	45.8824	46	32	37.6471	38
W/O	4	4.7059	5	1	1.1765	1
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