



Talking Points for Mariner East Application to the Delaware River Basin Commission November 10, 2015 Public Hearing

Thank you for coming out to express your concerns about Sunoco Logistics Mariner East Pipeline Project that the Delaware River Basin Commission (DRBC) docket on this pipeline proposal. Below are some suggested talking points to help with your testimony. Testimony is likely limited to 3 minutes but can be shortened by the Commission the day of the testimony.

As it currently stands, with its deficiencies and impacts outlined in the docket, DRBC should outright deny the current docket as it stands with multiple deficiencies and issues that are not fully addressed or considered or at a minimum, delay the docket decision until the public has adequate time to review and comment on Sunoco's application.

Public Needs More time to Review materials - An extension of the public review and comment period is needed – December is too soon for docket decision-making.

The public deserves and needs additional time to review the materials associated with Sunoco's application and docket to craft and submit informed public comment to the DRBC. For mysterious reasons this application and docket seem to have been fast tracked for approval. No other permits have been secured yet by this date.

- When viewed in total, this timeline means the public had a mere 16 days from the date of public notice of the hearing to the comment deadline on November 11 to secure the documents, review them, craft and submit comments.
- If you make the count from the date Delaware Riverkeeper Network (DRN) had access to the supporting documents by virtue of our proactive efforts to review the file as soon as we learned of the application in the NAR, the time frame for review and comment is even shorter, spanning from October 30 (the day of our file review) to November 11, so a mere 12 days.

In short, the public has had a woefully short period of time to secure access to all of the files associated with this docket, to review those documents, to secure necessary scientific/technical reviews and to submit informed comment to the DRBC. Additional time is necessary in order to ensure a fair and adequate opportunity for the public to comment.

The public deserves more hearings for the Mariner East pipeline project. DRBC should conduct multiple hearings along the proposed route of the Mariner East pipeline in Berks, Chester, and Delaware Counties where the pipeline could cut. This pipeline would impact 3 counties and the Commission meets over an hour away from where the pipeline would go. This is inaccessible for the vast majority of residents.

DRBC should delay any action on the project until it is determined whether or not the project has public utility status – Public utility status and if the pipeline operator can occupy people’s land through eminent domain status has not been decided by the court and litigation is ongoing. DRBC must exercise the precautionary principle and not rush into a decision. To date no permits, including Section 401 or Chapter 102 permits have been issued to date.

DRBC must examine the cumulative impact of all pipelines, including the Mariner East pipeline, the Penn East Pipeline and others collectively. The amount of pipeline cuts for the Mariner East pipeline alone, indicates significant land disturbance and irreparable stream and habitat harm. Over a dozen large intrastate pipelines are slated to or have recently cut across the Delaware River Basin. DRBC is the only entity to do a cumulative impact of all of these pipelines impacts together.

The Mariner East will cause significant and broad land disturbance and harm to streams and wetlands in the Delaware River Basin, many of which have special protection status.

- The Mariner east pipeline cuts alone would cut across at least **170 streams in the Delaware River Basin:**
 - 48 streams in Berks County
 - 65 streams in Chester County
 - 57 streams in Delaware County
- The Mariner East will cause significant and broad land disturbance and harm to **66 wetlands in the Delaware River Basin.**
 - 31 wetlands in Berks County
 - 27 wetlands in Chester County
 - 8 wetlands in Delaware County
- The Mariner East will cause significant and broad land disturbance and harm atleast:
 - 221 acres in Berks County
 - 184 acres in Chester County
 - 83 acres in Delaware County

Allowing natural succession as a plan for environmental restoration is not appropriate and, without planned intervention, will allow for further environmental degradation.

The proposed docket states that in those areas where forest has been cut for purposes of so called “temporary workspaces”, that the pre-existing forest “will be allowed to recover through a natural regrowth of trees.” Invasive plants and irreparable soil compaction that alters groundwater, wetlands and stream hydrology, and lack of success of woody vegetation regrowth have all been documented in so called pipeline “temporary work spaces”. The loss of mature trees, issues with deer browse, issues with soil disturbance that leads to spread and colonization of invasive plant species, are all things not currently being addressed in the docket. In the absence of a proactive maintenance plan invasive species are likely to take over and establish a degraded rather than healthy ecological condition. The failure to discuss or include a maintenance plan for the control of invasive species is a serious deficiency in this docket.

The failure to ensure healthy native riparian buffer protection along impacted streams is a serious deficiency with significant adverse impacts for waterway health.

Of the 170 streams and/or floodways the two proposed pipelines will cross, 12 of the streams are designated as Exceptional Value, 40 of the streams are designated as High Quality-Trout Stocked Fishery, 12 of the streams are designated as Warm Water Fishery, 44 of the streams are designated as Cold Water Fishery, and 45 are designated as Trout Stocked Fishery. Healthy vegetated buffers are a key part of preserving and maintaining the kind of good water quality necessary to support these clean water designations. The removal of vegetation and subsequent revegetation with low growing grasses and plants will expose the waterways to degradation and pollution.

For each of the pipeline construction techniques proposed there is a resulting loss of vegetation and foliage associated with clearing the stream banks. Riparian vegetation is an important part of a healthy ecosystem that protects the land adjoining a waterway which in turn directly affects water quality, water quantity, and stream ecosystem health. The body of scientific research indicates that stream buffers, particularly those dominated by woody vegetation that are a minimum 100 feet wide, are instrumental in providing numerous ecological and socioeconomic benefits.¹

Riparian corridors protect and restore the functionality and integrity of streams. A reduction in streamside health and mature streamside vegetation reduces stream shading, increases stream temperature and reduces its suitability for incubation, rearing, foraging and escape habitat.² While horizontal directional drilling may move the construction footprint further away from the stream, it too results in vegetative losses and soil compaction that can have direct stream impacts.

The loss of vegetation also makes the stream more susceptible to erosion events, exacerbating the sedimentation impacts of construction. In crossings that result in open forest canopies, increases in channel width, reduced water depth, and reduced meanders have persisted in the years after using an open cut method of installation.

The Floodplain Regulations give DRBC both the opportunity and the mandate to reject this project given the large number of stream crossings and floodplain impacts required.

Section 6.3.4 of the DRBC Floodplain Regulations allow construction of pipelines in the floodplain if it is the subject of a special permit granted by the DRBC. According to the DRBC Floodplain Regulations, a special permit “may” be granted in certain circumstances but there is by no means an expectation or presumption that special permits for pipelines will be granted. Given that the proposed Mariner East pipelines will cross a large number of streams, including their floodplains, and will also result in construction activities in the floodways of additional streams, the quick determination that a special permit was appropriate with so little review is not appropriately supported and should be revisited with a greater level of scrutiny.

Furthermore, in order to secure a special permit DRBC’s Rules of Practice and Procedure require that there is a “clear balance in favor of the public interest in terms of ...” among other things:

- “The importance of the facility to the community.”
- “The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.”
- “The relationship of the proposed use to any applicable comprehensive plan or flood plain management program for the area.”
- “The degree to which the proposed activity would alter natural water flow or water temperature.”

¹ See e.g. Newbold et al. 1980, Welsch 1991, Sweeney 1992, Sweeney and Newbold 2014

² CAPP (2005), *supra* note 16, at 1-4.

- “The degree to which ... endangered or rare species or animal or plants, high quality wildlife habitats, scarce vegetation types, and other irreplaceable land types would be degraded or destroyed.”
- “The degree to which the natural, scenic and aesthetic values at the the proposed activity site could be retained.”

The criteria that allow for issuance of a floodplain special permit demonstrate that this permit should in fact not be issued. Mariner East will create more damage than benefit to the local communities. Mariner East is not needed by the community, in fact the natural gas liquids (NGLs) it will carry are primarily targeted for export and not for use in our communities, as such there is not a need for the project and certainly not an importance of the project that warrants the high level of damage and harm it will inflict.

The pipeline is not in keeping with existing development or anticipated development. In order to construct this pipeline the company is having to threaten landowners with the power of eminent domain - that alone demonstrates an inconsistency with existing development.

Additionally, given the dangerous conditions due to incidents and accidents that the pipeline will expose the existing residential communities and families along its path, this pipeline is clearly not in keeping with existing development. In addition, in the time we had to review the files, it does not seem that there was consideration of local floodplain planning, protection or regulations and so we question the consistency of the proposal with such local plans.

Additionally, according to the DRBC Floodplain Regulations, special use permits “shall not” be issued for projects that, among other things, “endanger human life”, “have high flood damage potential” or degrade significantly runoff, erosion, sedimentation, the quality of surface water or the quality or quantity of ground water. The Mariner East pipeline is a significant danger to human life and as such should not be the subject of a special permit. Pipelines are a serious source of human harm and property damage. Between 1986 and 2012, “pipeline accidents have killed more than 500 people, injured over 4,000, and cost nearly seven billion dollars in property damages.”³ Looking at this 28 year period, on average pipelines killed or injured 173 people a year causing over \$269 million a year (269,230,769) in property damage.

Given the denuding of the stream banks, the frequent E&S failures during pipeline construction, the increased soil compaction that results during pipeline construction and exists beyond construction, and given that pipelines are known to redirect groundwater flows, the cumulative impacts of all of these harms coupled with the high number of stream crossings and floodplain development plans associated with it, a special use permit should not be issued.

Because open trench pipeline installations may unnaturally alter both stream bank and streambed (i.e., channel) stability, there is an increased likelihood of scouring within backfilled pipeline trenches. This is because open trenches themselves, when backfilled, may not be compacted to stable pre-trench sediment permeability conditions. Flooding rivers can scour river bottoms and expose pipelines to powerful water currents and damaging debris. Additionally, unusually heavy rains including those associated with climate change, threaten to increase overall stream degradation and channel migration – thereby exposing shallowly buried pipelines.

³ ProPublica, *Pipelines Explained: How Safe are America’s 2.5 Million Miles of Pipelines?*

An expert at HydroQuest has determined that, at a minimum, any pipeline installed using the open trench cut method needs to be installed at least 24 feet below the stream bed in order to prevent exposure from scour.⁴ While bridge piers are more readily exposed to stream scouring than pipelines, it is telling that bridge failure analyses have determined that channel scour occurs to depths of up to three times that of maximum river floodwater depth (e.g., scour to 30 feet with a 10 foot floodwater depth).

A significant environmental risk associated with both wet and dry trench methods of gas pipeline crossings of rivers and streams is the potential of releasing hydrocarbons or other contaminants directly into surface water and fragile downstream ecosystems, including hydrocarbon laced liquids such as benzene that are part of the gas being delivered by the pipeline.

Gas, as it is extracted from a well, may be mixed with hydraulic fracturing fluids. Hydrocarbon-laced condensate or natural gas liquids (NGLs) associated with natural gas (e.g., benzene) pose an environmental risk if pipe rupture occurs (e.g., to potential bog turtle habitat and travel corridors, fisheries, downstream drinking water supplies as well as underlying aquifers recharged by stream water). For example, a damaging flood event in Texas ruptured eight pipelines and spilled more than 35,000 barrels of oil and oil products into the San Jacinto River.⁵ The Bureau of Land Management recognized and addressed this critical issue: *"In 2002, the U.S. Fish and Wildlife Service raised concerns about the potential for flash floods in ephemeral stream channels to rupture natural-gas pipelines and carry toxic condensates to the Green River, which would have deleterious effects on numerous special-status fish species".*⁶

Clean up associated with pipeline breaks can be extremely expensive. For example, ExxonMobile expects that cleanup costs associated with fouling an estimated 70 miles of shoreline of the Yellowstone River may cost about \$135 million.⁷ The Department of Environmental Quality in Montana is also concerned with the thousands of pipelines that cross small or intermittent streams. Federal officials investigating a July 2011 pipeline break that spilled 1,500 barrels of oil into a Montana river said that few companies take river erosion and other risks into account when evaluating pipeline safety. The DRBC docket and special use permit does not adequately consider this important threat and given the language of the regulations should be denied.

⁴ Expert Report from HydroQuest.

⁵ Billings Gazette, *supra note 75*.

⁶ Fogg and Hadley, *supra note 70*.

⁷ Billings Gazette. Feb. 8, 2012: http://billingsgazette.com/news/local/feds-few-pipeline-plans-account-for-river-risks/article_b2ecac80-d313-53c9-a914-906a97aedb9d.html?oCampaign=hottopics