LEAGUE OF WOMEN VOTERS® OF NEW JERSEY

May 2, 2019

Comments Submitted By: League of Women Voters of New Jersey

Regarding: Applications by Williams/Transco (Transcontinental Gas Pipe Line Company) for the Northeast Supply Enhancement Project (NESE)

DIVISION OF LAND USE FILE NO.: NJDEP File No. 0000-01-1001.3
CSW180001 Coastal Wetland, FHA180001, FHA180002 Flood Hazard Area, WFD180001, and WFD180002 Waterfront Development

DIVISION OF WATER SUPPLY & GEOSCIENCE FILE NO.:
1342D Temporary Dewatering Permit – Borough of Sayreville
1343D Temporary Dewatering Permit – Old Bridge Township

To:

Matthew Resnick
Division of Land Use Regulation
Mail Code 501-02A
P.O. Box 420
Trenton, New Jersey 08625 – 0420
Matthew.Resnick@dep.nj.gov

Robert Hudgins
Division of Water Supply & Geoscience
Mail Code 401-04Q
P.O. Box 420
Trenton, New Jersey 08625-0420
Robert.Hudgins@dep.nj.gov

Copies to:

Governor Phil Murphy
Office of the Governor
PO Box 001
Trenton, NJ 08625
Constituent.relations@nj.gov

Catherine R. McCabe, Commissioner
NJ Department of Environmental Protection
401 East State Street -7th Floor, East Wing-
PO Box 402, Trenton, NJ 08625-0402
Commissioner@dep.nj.gov

Ginger Kopkash, Assistant Director
Ginger.Kopkash@dep.nj.gov

The League of Women Voters of New Jersey is a nonpartisan public interest organization, founded on the principles of public participation, good government, and transparency. We are also concerned about public health issues including the right to clean air and water, the protection of natural systems, and the preservation of ecological integrity, biological diversity, and our food supply. Our comments here focus on Williams/TRANSCO's applications for wetlands permits for its Northeast Supply Enhancement Project, however, we wish to first point out a critical health issue regarding the Compressor Station 206.

Despite the fact an Air Quality permit for Compressor Station 206 has been issued, many health studies have recently been completed and all show that compressor stations have serious public health implications for residents in the area. In light of this new information, and in case New Jersey has adopted more comprehensive air quality or emission standards since the air permit for the Compressor Station was approved, if at all possible Williams should be made to reapply for an air permit.

A Technical Report Prepared in October 2017 for the Southwest Pennsylvania Environmental Health Project on "Health Effects Associated with Stack Chemical Emissions from NYS Natural Gas Compressor Stations 2008 – 2014" evaluated communities around 18 compressor stations which were, collectively, the seventh largest "point source" of air pollution in New York State. This study evaluated the potential health effects of the 70 chemicals emitted and catalogued. For the first time this study took the data on emissions and compiled it with their health impacts side-by-side. This has led to a new realization of the devastating impact these compressor stations can have on the health of those in the surrounding community. Health care professionals are encouraged to use this Report, and specifically Chapter 3, to identify the actual health conditions produced by the reported chemicals.

"By volume, the largest emissions are NO2, CO, VOCs, Formaldehyde, and Particulate Matter. Exposure to these chemicals can cause respiratory and cardiovascular diseases and death, neurological and developmental diseases, and cancer."

(Page 3: https://www.albany.edu/about/assets/Complete_report.pdf)

Also, it appears that the stormwater infiltration basin at the site of the Compressor Station is undersized and still does not meet design standards regarding the distance between it and the groundwater table. While this area of New Jersey used to average around 44-45 inches of precipitation a year, in 2018 our state received an additional 18 inches. Flooding at this site could impact contaminated groundwater at the Higgins Farm Superfund Site, and excess stormwater could flow into Carters Brook and end up in the Millstone and finally the Raritan River - a source of drinking water.

WETLANDS PERMIT

The Freshwater Wetlands Act states that individual freshwater wetlands or open water fill permits should be issued only if they will not cause or contribute to a violation of any applicable State water quality standard, not cause or contribute to a significant degradation of ground or surface waters, as defined at 40 C.F.R. 230.10 (c),; not cause or contribute to a violation of any applicable State water quality standard; and is in the public interest in preserving natural resources (and in the interest of property owners in reasonable economic development). It looks at the relative extent of the public and private need for the proposed regulated activity and where there are unresolved conflicts as to resource use, it looks at the practicability of using reasonable alternative locations and methods to accomplish the purpose of the proposed regulated activity.

In addition, the extent and permanence of the beneficial or detrimental effects which the proposed regulated activity may have on the public and private uses for which the property is suited should be evaluated, along with the quality and resource value classification pursuant to N.J.A.C. 7:7A-3.3 of the wetland which may be affected and the amount of freshwater wetlands to be disturbed;

Also factored in must be the economic value, both public and private, of the proposed regulated activity to the general area; and the functions and values provided by the freshwater wetlands and probable individual and cumulative impacts of the regulated activity on public health and fish and wildlife (The Freshwater Wetlands Act Rules pp. 99-100)

The Freshwater Wetlands Protection Act Rules at 7:7A-1.3 defines Compelling Public Need as:

> "'Compelling public need' means that based on specific facts, the proposed regulated activity will serve an essential health or safety need of the municipality in which the proposed regulated activity is located, that the public health and safety benefit from the proposed use and that the proposed use is required to serve existing needs of the residents of the State, and that there is no other means available to meet the established public need."

We urge the NJDEP to deny the application for a Freshwater Wetlands Individual Permit for this project.

First, there is no there is no compelling public need for this pipeline. New York's expanded Clean Energy Standard calls for 70% of New York's electricity to come from renewable sources by 2030 and its Energy Master Plan goals anticipate cutting Greenhouse gases 80% by 2050.

https://rev.ny.gov

https://www.greentechmedia.com/articles/read/new-york-cuomo-green-new-deal-clean-energy#gs.7cjewi

https://www.powermag.com/press-releases/governor-cuomo-announces-third-solicitation-for-large-scale-renewable-energy-projects-to-accelerate-the-development-of-clean-energy-and-combat-climate-change/

New York City and Long Island face severe impacts from rising sea levels and the New York's Energy Master Plan looks to provide much more renewable energy in the future to the area the Williams/TRANSCO-NESE pipeline is intending to serve.

350.org published a study in March 2019 entitled "False Demand: A Case Against the Williams Pipeline" which documents why we do not need this gas and examines why the demand for natural gas in the area is anticipated to remain flat or even decrease in the future.

(http://350.org/wpcontent/uploads/2019/03/Stop_Williams_False_Demand.pdf)

New Jersey also supports transitioning to renewable energy sources as quickly as possible. This project and the infrastructure it would put in place are all intended to make us more reliant on natural gas, methane, which ultimately poses unacceptable risks to our wetlands, wildlife, marine life, food resources and safety as it contributes so heavily to climate warming and sea level rise.

Methane is 86 times more powerful as a greenhouse gas over its first 20 years than CO2. To mitigate the worst impacts of rising global temperatures and rising sea levels, accompanied by flooding and loss of our coastal areas and infrastructure there, we must sharply reduce our greenhouse gases well within this twenty year time frame. We cannot do this if we continue funding and building pipelines to deliver gas that is not needed. Rising sea levels also threaten

additional salt water intrusion into aquifers in New Jersey and on Long Island. Finally, the climate warming that our use of fossil fuels is accelerating leads to an expansion of range of disease carrying insects, heat waves that threaten public health and outdoor workers, and diseases more typical of tropical areas.

NEED FOR THE PIPELINE

Virtually none of this gas from this massive and intrusive Northeast Supply Enhancement Project of Williams/TRANSCO pipeline is intended for New Jersey. There is absolutely no public safety and health benefit for people in New Jersey from this project. Instead, we will absorb all the risks, including those of hazardous air emissions referred to earlier in association with the Compressor Station 206, though all pipelines also emit escaped methane throughout their entire length. It is unclear that Transco looked at alternative locations and 18 freshwater wetland areas are involved and at risk from this development in addition to risks posed to threatened and endangered species of wildlife, fish and other marine life and animals.

In fact, the risks to our environment and natural resources from this project also include threat of major recontamination of the Raritan Bay which the state NJDEP is tasked with protecting as a state water body under the Clean Water Act Section 401.

This project threatens to undo the progress we have made over the last 47 years in restoring life to the Raritan Bay and the sustainability of the economy of the Bayshore area which currently supports a thriving tourist industry as well as supports the livelihood of commercial fishermen and clammers and those who take people out for recreational fishing, whale watching etc. The clamming and oyster industries could be impacted for many years by this project and the loss to the Bayshore economy of this has not been calculated. The Bayshore also as four beaches as well as other waterfront activities which would be impacted.

The project threatens all the marine life from the benthic community on up the food chain to include the mollusks, crustaceans, fish, and mammals which live in, or make use of, the Raritan Bay.

This pipeline expansion which brings no benefit to our state would also further expose New Jersey residents to the risks of accidents and explosions, including in densely populated areas. Across the country the pipeline industry has been increasing the pressure and volume of gas through aging pipelines, leading to more stress at welds, greater corrosion, and more ruptures and explosions. Some of the pipeline Williams/Transco is relying on to feed the NESE Project falls into this category. The ability to reverse the flow direction of gas at will also accelerates wear on pipelines. Shockingly, some of our worst pipeline accidents are now occurring in areas with new pipelines, calling into question the integrity of the steel and the welding. All pipelines bring risk.

WETLANDS PROTECTIONS

As Williams/Transco has not satisfactorily proven that the NESE Project is either needed or in our public interest, we believe their application for a Freshwater Wetlands permit should be denied. The construction they request permits for could pose great threats to the over 20 acres of freshwater wetland areas it seeks permits to disturb, six of which are exceptional value wetlands. It will also be constructed in areas where contaminated soils and groundwater may exist causing additional problems for dewatering and potential runoff from and degradation to other areas of wetlands or stream corridors.

In addition, this project will indisputably re-contaminate the Raritan Bay and create conditions that could permanently damage its ability to support healthy marine life from benthic communities on up the food web.

As noted, decisions made by states regarding their Energy Master Plans indicate the need for this project does not exist. It is not in the public interest of residents of New Jersey, or even those in New York due to sea level rise, and it will threaten public health, environmental integrity, and wildlife and marine life both directly and indirectly. In addition, methane escapes from all pipelines transporting gas.

Some of the areas that will be destroyed/degraded by this project include habitat for threatened and endangered species such as osprey, black-crowned night-heron, and bald eagles. Secondly, this pipeline would result in the destruction of more than 16 acres of forested wetlands and the removal of even more acres of upland forest with mature trees. All this will impact stormwater management and reduce infiltration to groundwater. Along the Madison Loop the pipeline will cross 18 wetlands of which six are classified as “exceptional.” In some of these locations horizontal directional drilling (HDD) is to be used.

This drilling technique is used to insert pipelines under sensitive wetlands or heavily developed areas. In reality this process is not always successful and it has been responsible for some notable disasters. In Ohio in April of 2017 the Rover Pipeline project’s horizontal directional drilling under wetlands failed and several million gallons of "bentonite slurry"—thick mud laced with chemicals (used to help drill underground) -- bubbled up into 6.5 acres of the state's highest quality wetlands, burying them under up to two feet of drilling muds. It will take decades for them to recover if in fact that is even possible. More recently during the construction of the Mariner 2 Pipeline in Pennsylvania HDD has been responsible for a series of accidents including soil subsidence – again set off by accidental leaks of drilling fluids. Williams doesn’t have a particularly good safety record either.

This picture helps make clear what HDD accidents can bring to an area and it is essential that TRANSO have a backup plan approved in advance as to where and how they would find an alternate location for the pipeline before any Permit is considered.

Rover Pipeline spill in Stark County, OH. One of Energy Transfer Partners' state violations involved the release of “several million gallons” of thick mud, used for drilling underground, into some of the state’s highest quality wetlands. Credit: Ohio EPA.

(https://insideclimatenews.org/news/11052017/ohio-pipeline-spill-wetlands-violations-ferc-energy-transfer-partners)

The proposed NESE pipeline traverses extensive areas of freshwater wetlands, acid soils, and potentially contaminated sites before it reaches the Raritan Bay. The possible impact of dealing with potentially contaminated soils and/or groundwater doesn't appear to have been adequately addressed in their application. When acid soils are disturbed and exposed to the air, they produce sulfuric acid making site restoration and vegetative stabilization difficult to impossible to establish. Construction activity in some of these instances could impact nearby wetlands if there is runoff. Additionally pipelines laid in areas of acidic soils are subject to increased corrosion. This situation should have been addressed in their Freshwater Wetlands Permit application. See Map of known contaminants along the route of the Williams/TRANSCO-NESE pipeline at:
https://documentcloud.adobe.com/link/track?uri=urn%3Aaaid%3Ascds%3AUS%3A34a77b52-10d0-4ef8-8249-fa8b427ce326

Source of Map: Supplemental Submission to FERC (05/11/18) by Williams/Transco. Attachment 10 – Part 5 – Materials and Waste Management Plan. FERC Accession No. 20180511-5170 (32881805)

RARITAN BAY LOOP – COASTAL WETLAND AND WATERFRONT DEVELOPMENT

We also oppose the granting of the Waterfront Development Permit as it would allow the Horizontal Directional Drilling at the Morgan Shore location where they would be drilling down through Sections 7 and 11 of the Raritan Bay Slag Superfund site which have yet to be remediated. The excavation for the exit pit would be in these sections as well. This activity would release the toxins and heavy metals already at the Superfund Site to the Raritan, and there would be some leakage of the drilling muds and chemicals used in the drilling process to the Raritan as well. Given the currents in this area, these might be redistributed along the portions of the Superfund Site already remediated and on to the south and east along the Bayshore in Monmouth County. The work done on the nearby areas of this Superfund site which have already been remediated had to be carefully orchestrated and staged due to the complexity of the tides and other currents which operate in this area.

The trenching of the seafloor the length of the Raritan Bay in order to bury the pipeline will be enormously destructive of the water quality of this state water body we have worked so hard to restore since the passage of the Clean Water Act. It still has an "impaired" status and our hard work must continue as bringing this water body back into compliance is so economically and environmentally important. This project will result in massive resuspension of the toxics, heavy metals and chemicals now stabilized under the seafloor, and will lead to a major redistribution of these on top of the seafloor and to a great extent along the Bayshore of Monmouth County.

This activity could have very long term implications for an important part of the Bayshore economy that now depends on commercial clamming and fishing, and an oyster industry where the livelihoods of many men depend upon being able to sell their catch to retail and wholesale markets. In addition it is likely it will drive away many of the fish and the marine animals that have led to a thriving tourist industry of recreational fishing and whale watching.

The noise that will be produced by pile driving in Sections 7 and 11 of the Raritan Bay Slag Superfund Site will also drive fish and marine mammals away and cause damage to their hearing. The marine end of this process to lay the HDD pipeline at the Morgan shoreline will be done by a Clamshell bucket. Much of the trench to lay this pipeline in the shallower waters of the Raritan will be excavated by a

Clamshell Dredger. Even with an environmental bucket being used, the amount of seafloor disturbed will be massive. According to the Permit application the width of the trench at the top with the Clamshell Dredger will be from 59 to 91 feet. This will totally disturb miles of the seafloor of the Raritan Bay, release major volumes of toxic chemicals and heavy metals, including mercury, PCB's, dioxin, arsenic, lead, and a host of other chemicals and contaminants. This will impact the safety of the fish, clams, oysters and crustaceans which people rely on for food.

Once the toxics are redistributed and lie on top of the seafloor they will impact the benthic communities upon which the food chain depends. The construction plan would also dig through an area where clams are infected with Quahog Parasitic Unknown (QXP) which could be spread by the dredging activity and do further damage to an industry key to the Bayshore economy.

Bottom feeding species, which play a key role in the marine food web, would be particularly harmed by the release of toxic sediments. Other fish eating them would increase in toxicity and the impact of this would not be "temporary or short term" despite what TRANSCO says. In addition fish eggs and habitat would be destroyed and cause more long term damage to our ability to bring the Bay back to a healthy condition.

As the fish and shellfish become unsafe for human consumption, it will affect the Bayshore economy for a long time and permanently affect the livelihood of commercial fishermen and clammers, and also put the owners of depuration plants in the Bayshore out of business.

While TRANSCO has mostly only acknowledged temporary or short term estimates of disruption, based on how long it will take for the turbidity and disturbed sediment to go back to ambient conditions or, based on the time period in which the marine construction lasts, it is clear that the impact of this project would fall heavily on the Bayshore economy resulting in even permanent job loss, damage the tourism and recreational activities along the Bayshore, to include the safety of swimming at four beaches in the area, and it could lead to permanent losses in some critical marine species -- horeshoe crabs among them.

The noise from the construction and pile driving where Horizontal Directional Drilling will take place will impact the seals and whales and other marine life that have been drawn to this area and which currently bring tourists and others to the area for fishing and whale watching excursions. From looking at the FEIS, it would appear that there is no period of the year in which this construction can be taken that will not be seriously destructive of some of the marine life of the area.

RARITAN BAY TIDES AND CURRENTS

To get a better understanding of the impact this trenching and laying of a pipeline across the Raritan Bay may have on sediment dispersal, see the text from page 21 to the top of page 23 of Harry P. Jeffries classic 1962 study on the "Environmental Characteristics of Raritan Bay, A Polluted Estuary." (https://aslopubs.onlinelibrary.wiley.com/doi/epdf/10.4319/lo.1962.7.1.0021)

Diagram # 2 on page 22 illustrates the complicated currents and tidal activity in Raritan Bay. Jeffries characterizes the currents as sluggish but moving in a prevailing counterclockwise direction. However in a number of areas of the Raritan there are additional gyres with clockwise currents. These can allow for

a further settling and dispersal of sediment and pollutants and bring them to the Bayshore of Middlesex and Monmouth County - even if the activity that stirred them up is not close.

The tides bring water in from the ocean but as the water nears the mouth of the Raritan River the current turns and follows the Bayshore toward the east. Pollutants may also get further concentrated along the Bayshore in NJ in a slow moving, clockwise (cyclonic) circulation pattern (an eddy or gyre) which you can see along the muddy flats between Keansburg and the Naval Weapons Station Earle Pier in Leonardo.

Short-term investigations Jeffries cited "demonstrated that the flushing of Raritan and Lower Bays was dependent primarily on the resultant of localized inequalities in duration and strength of ebb and flood tides. In relation to volume of the embayment, little water escapes with each cycle." "Flushing times calculated by Ketchum (1951b) for Raritan Bay ranged from 32 to 42 tides for maximum and minimum river flows. Sixty tides were required to flush river water through the entire estuary during the December, 1948 survey."

(Page 22 https://aslopubs.onlinelibrary.wiley.com/doi/epdf/10.4319/lo.1962.7.1.0021)

At Rutgers hydrographic studies have found that the mixing of fresh water from Raritan River and saltwater from lower New York Bay creates a large, slow moving counter-clockwise circulation pattern with much back-and-forth movement within Raritan Bay. Fresh water entering the bay from the Raritan River has a net movement toward the ocean of about 500 yards a day. They concluded that it takes 16 to 21 days for the Bay to flush itself (Bennett, 1983). Tidal action represents a major influence in the distribution of pollutants in the estuary, with a mean tidal range of 1.5 meters (5 feet). Tidal current and flow velocity charts for the New York Harbor area, including Raritan and Sandy Hook Bays, are depicted in the following figures published by the U.S. Department of Commerce (NOAA, 1956).
(Page 41 http://raritan.rutgers.edu/wp-content/uploads/2015/10/Zimmer-2004-Raritan-and-sandy-hook-bays-sanitary-survey-report-1997-2000.pdf)

Therefore, it would appear that the toxics and heavy metals that get re-suspended may not so readily settle down in the same locale and the estimations made in the FEIS for turbidity to go back to ambient conditions and their estimates for the likely distances for sediment to drift seem not to have been based on the specific conditions within the Raritan Bay.

CONCLUSION

The League opposes the granting of any water permits for the Williams/Transco-NESE pipeline. This application for a Freshwater Wetlands Individual Permit fails to fully indicate or request approval for backup plans should planned construction result in contamination of water sources from dewatering, trenching through areas of contaminated soils or groundwater, or from failure in the attempted use of horizontal directional drilling (HDD) which process still has too great a failure rate. Six of the wetland areas they plan to disturb are of exceptional value along the Madison Loop and all possible problems for a project this large in such a densely developed state need to be addressed up front at the time a permit is granted.

In addition, true need for this project has not been established, while it is clear that there will be major risks to public health, wetlands, wildlife and marine life. The project would turn back our progress cleaning up the Raritan Bay. It is now viable and supports biodiversity in its marine environment in

addition to a multitude of permanent jobs for residents of the area. It would be unconscionable to allow this project which would result in a large-scale recontamination of the Raritan Bay in violation of the intent of the Clean Water Act, Section 401.

Of at least equal importance is the question of how the state plans to protect the water quality of the state waters of the Raritan Bay, as it is legally required to do. The League has long been concerned as to how the current process within NJDEP allows for evaluating and ruling on Clean Water Act, Section 401 issues when the individual permit applications they focus on are geared only to comment on site specific impacts. It appears that under the CAFRA Rules, a Section 401 Certification will be granted when a wetlands permit is approved.

This Project epitomizes the need for the NJDEP and the state of New Jersey to be able to look at the **cumulative impacts** the granting of an individual permit can result in when it comes to protecting the water quality of our state waters.

Given all the information we have stated above, we urge NJDEP to deny all of these water related permits.