

TO: Regional Permits Coordination Office and Colleen Connolly, Community Relations Coordinator
RA-EPREGIONALPERMIT@pa.gov; coconnolly@pa.gov

FROM: Diana G. Dakey

RE: Comments to DEP on Chapter 102 and Chapter 105 permit applications for the Transco REAE project.

DATE: October 7, 2022

Thank you for the opportunity to comment on the Chapter 102 and Chapter 105 permit applications for the Transco REAE project. Chapter 102 Regulations relate to Erosion Control, Stormwater Management and associated permitting; Chapter 105 Regulations relate to Wetland, Stream and Floodway Encroachments. I found the applicant's documents on your portal.

<https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/REAEP/>

I comment as a long-time resident of northeast Pennsylvania with a great appreciation for our natural environment and as a person concerned about legacy impacts of additional gas infrastructure development.

Along with the copious documentation presented, I urge Pennsylvania DEP to consider:

- Minimal harm is not an absence of harm.
- There can be unexpected impacts.
- Does DEP have the wherewithal to enforce permit requirements?
- DEP must consider its permitting decisions in the context of the externalities such permitting will cause, including those related to safety, the injustice of eminent domain, noise, alteration of the natural environment, and climate and air pollutants.
- DEP must not greenlight construction for a project that has not received FERC and other agency permits.

A. Earth, stream, and habitat impacts

A1. Trenchless construction is not free of the risk of inadvertent return as recently occurred with the Mariner East 2. **DEP cannot assure REAE will be any different.**

The pipeline will pass under the Susquehanna River as shown in SLLA map

https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/REAEP/March_2022/Chapter%20105%20Luzerne/APPENDIX-2---SUBMERGED-LAND-LICENSE-AGREEMENT-REV1.PDF.pdf

Mariner East 2

<https://newsinteractive.post-gazette.com/mariner-east-2-pipeline-horizontal-directional-drilling/>

The Direct Pipe® Monitoring, Inadvertent Return Response, and Contingency Plan has been redacted from the documentation set.

https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/REAEP/March_2022/Chapter%20102%20ESCGP-3/SECTION%201-10%20CONSTRUCTION%20SPILL%20PLAN.pdf

A2. In cleared areas, sunlight patterns and natural groundcover will be changed for decades and permanently. Cutting forests and riparian buffers causes habitat fragmentation. Where forested buffers and shade are lost, there will be thermal impacts downstream affecting stream natural diversity. Once the tree cover, natural vegetation and soils are disturbed, along with changed sunlight patterns, invasive weed and shrub species have an opportunity.

The Project, as proposed, will require approximately 690 acres of earth disturbance, and impacts 2,626 linear feet of temporary impacts and 2,972 linear feet of permanent impacts to tributaries...
PENNSYLVANIA BULLETIN, VOL. 51, NO. 44, OCTOBER 30, 2021, p. 6842 Notices

Trees within 15 feet of the centerline and between existing pipelines will be removed to maintain the integrity of the pipeline.

https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/REAEP/March_2022/Chapter%20105%20Luzerne/L-5---MODULE-S4-REV1.PDF.pdf

A3. Stream degradation is unavoidable during construction. Transco makes no claim otherwise. A pipeline cannot be a justification for disturbing EV and HQ streams, found in limited areas in Pennsylvania.

The project would impact 114 Exceptional Value (EV) wetlands and 37 High Quality (HQ) streams. Many of the streams that would be crossed by the project are cold water trout streams, Class A or naturally reproducing trout streams that are very sensitive to degradation. Some of these streams include Tunkhannock Creek, Pohopoco Creek, McMichael Creek, and Mud Run - all of which have special protection designations.

https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/REAEP/March_2022/StateWaterQualityCertification/SECTION-4.0---RECEIVING-WATERS-AND-CH.-93-DESIGNATIONS---REV1.PDF.pdf

A4. Sediment plumes from pipeline crossings aren't supposed to happen, but they do – with permanent damage to streambeds, as recently occurred to the Loyalsock Creek and Pine Creek Watershed.

<https://www.sungazette.com/news/top-news/2022/09/dep-marcellus-shale-company-polluted-loyalsock-creek/>

DEP: Marcellus Shale company polluted Loyalsock Creek. The Loyalsock Watershed is classified by DEP as an Exceptional Value stream whose water quality must be protected by law, with no degradation. The Creek was also named by the Department of Conservation and Natural Resources as the 2018 Pennsylvania River of the Year. The Loyalsock Creek is also home to the Eastern Hellbender, named the state's official amphibian.

A habitat can be destroyed by pipeline crossings, as has been recently documented in the case of Loyalsock Creek's habitat of the eastern hellbender.

<http://paenvironmentdaily.blogspot.com/2022/09/rare-eastern-hellbender-habitat-in.html>

THURSDAY, SEPTEMBER 15, 2022 (excerpts)

Rare Eastern Hellbender Habitat In Loyalsock Creek, Lycoming County Harmed By Sediment Plumes From Pipeline Crossings, Shale Gas Drilling Water Withdrawal Construction Projects

Surveys of Loyalsock Creek in Lycoming County over the last two summers by Dr. Peter Petokas, from Lycoming College Clean Water Institute, found habitats of the rare Eastern Hellbender salamander are being significantly impacted by sediment plumes from natural gas pipeline crossing and shale gas drilling-related water withdrawal construction projects.

“What we found about a month ago, we were diving one of the most downstream sites just above Montoursville, and we discovered that much of the creek had filled in as a result of the instream gas pipeline work that they did last summer,” said Dr. Petokas.

“That construction literally filled in much of the [Hellbender] habitat immediately downstream of it [with sediment],” said Dr. Petokas. “And so that did a significant amount of damage to the habitat.”

“And you also get a lot of the fine sediment, too, that literally fills in the gaps in the rocks. So that instead of having spaces between rocks, we call these interstitial spaces,” Dr. Petokas explained.

A5. Streams continue to be impacted during pipeline maintenance, years hence. This is not factored into initial permitting decisions.

https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/REAEP/March_2022/Chapter%20105%20Luzerne/L-2---MODULE-S1-REV1.PDF.pdf

The existing Transco pipelines and adjacent utility corridors are subject to routine maintenance in order to maintain safe and reliable energy transmission. The wetlands crossed by the existing ROW's are in many instances an extension of the same resource associated with the Project. These resources would only be temporarily impacted to conduct routine maintenance and are not further discussed due to not being considered permanent impacts.

A6. Wetlands will be permanently lost in Luzerne and Monroe Counties. Creating wetland mitigation sites in Northumberland County does not compensate the environments of Luzerne and Monroe Counties.

Published in Pennsylvania Bulletin

E4083221-006. The Luzerne County

The proposed project impacts in Luzerne County include a total of 2,340 linear feet of temporary impacts and 2,724 linear feet of permanent impacts to tributaries to Shades Creek (HQ-CWF, MF), Shades Creek (HQ-CWF, MF), Little Shades Creek (HQ-CWF, MF), tributary to Meadow Run (HQ-CWF, MF), Meadow Run (HQ-CWF, MF), tributaries to Bear Creek (HQ-CWF, MF), Bear Creek (HQ-CWF, MF), tributaries to Little Bear Creek (HQ-CWF, MF), tributaries to Mill Creek (CWF, MF), Mill Creek (CWF, MF), tributary to Gardner Creek (CWF, MF), Gardner Creek (CWF, MF), tributaries to Susquehanna River (WWF, MF), Susquehanna River (WWF, MF), Abrahams Creek (CWF, MF), tributaries to Abrahams Creek (CWF, MF), tributaries to Toby Creek (CWF, MF), tributaries to Trout Brook (CWF, MF), Trout Brook (CWF, MF); 13.46 acre(s) of temporary floodway impacts; 6.51 acre(s) of permanent floodway impacts; 5.28 acres of temporary impacts to PFO, PSS, and PEM wetlands; and 8.18 acres of permanent impacts to PFO, PSS, and PEM wetlands.

To compensate for the proposed functional conversion of PFO and PSS wetlands associated with the project impacts in Luzerne County, Applicant is proposing 6.91 acres of successful compensatory wetland mitigation (Permittee-Responsible Mitigation) through wetland enhancement at the Grajweski Property Mitigation Site (Latitude: 41° 11 41.8776, 76° 12 29.952; Longitude: -76° 12 29.952) in Huntington Township, Luzerne County and at the Perin Property Mitigation Site (Latitude: 40° 50 41.3124; Longitude: -75° 14 10.6224) **in Plainfield Township, Northampton County.**

E4583211-002. The Monroe County portion of the project

The proposed project impacts in Monroe County include a total of 286 linear feet of temporary impacts and 248 linear feet of permanent impacts to tributaries to McMichael Creek (HQ-CWF, MF), tributary to Pohopco Creek (CWF, MF), Sugar Hollow Creek (CWF, MF), tributary to Poplar Creek (EV, MF), tributary to Mud Run (HQ-CWF, MF), tributaries to Tunkhannock Creek (HQ-CWF, MF); 0.68 acre(s) of temporary floodway impacts; 0.65 acre(s) of permanent floodway impacts; 1.20 acres of temporary impacts to PFO, PSS, and PEM; and 1.62 acres of permanent impacts to PFO, PSS, and PEM wetlands.

To compensate for the proposed functional conversion of PFO and PSS wetlands associated with the project impacts in Monroe County, Applicant is proposing 1.16 acre of successful compensatory wetland mitigation (Permittee-Responsible Mitigation) through wetland enhancement at the Perin Property Mitigation Site (Latitude: 40° 50 41.3124; Longitude: -75° 14 10.6224) **in Plainfield Township, Northampton County.**

<https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/REAEP/>

Transco is proposing wetland mitigation at an off-site location in Northampton County. The PNDI review indicated a potential occurrence of the bog turtle. A Phase 1 Survey was completed at the site in September 2020, and it was determined that potentially suitable bog turtle habitat is present. A Phase 2 Survey is proposed in the spring of 2021.

A7. DEP may not be staffed with sufficient human resources to monitor the wetlands plan.

https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/REAP/March_2022/Chapter%20105%20Luzerne/L-5---MODULE-S4-REV1.PDF.pdf

TRANSCO PROJECT-SPECIFIC WETLAND AND REGIONAL ENERGY ACCESS EXPANSION WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

Within three years after construction, Transco will file a report with the Secretary identifying the status of the wetland revegetation efforts and documenting success as defined in Section VI.D.5, above. In addition, comply with the USACE and PADEP permit terms and conditions regarding monitoring and successful restoration requirements in addition to FERC requirements. For any wetland where revegetation is not successful at the end of three years after construction, Transco will develop and implement (in consultation with a professional wetland ecologist) a remedial revegetation plan to actively revegetate wetlands. Continue revegetation efforts and file a report annually documenting progress in these wetlands until wetland revegetation is successful.

Example: DEP's recent experience with Chesapeake showed that follow-up and enforcement were delayed by years.

<https://www.bizjournals.com/pittsburgh/news/2021/03/25/chesapeake-energy-consent-agreement.html>

The Pennsylvania Department of Environmental Protection and the U.S. Environmental Protection Agency have reached a proposed consent agreement and a potential \$1.9 million fine for Chesapeake Appalachia over alleged violations of the Clean Water Act and the Pennsylvania's Clean Streams Law. In a lawsuit filed Wednesday in the U.S. District Court for Middle Pennsylvania, EPA and DEP charged that Chesapeake Appalachia was responsible for unauthorized dredge and fill into 76 separate sites in Pennsylvania. The alleged incidents "resulted in the unauthorized discharge of dredged and/or filled material into waters of the United States and/or caused and created unauthorized water obstructions, encroachments and pollution in, along, across or projecting into the waters of the Commonwealth."

A8. Noise will be an expected consequence of compressor stations.

Noise pollution decibel standards, such as the 55 decibel level identified for certain outdoor areas where human activity takes place, are averages and do not account for peaks that interfere with quality of life.

<https://www.epa.gov/laws-regulations/summary-noise-control-act>

<https://www.epa.gov/archive/epa/aboutepa/epa-identifies-noise-levels-affecting-health-and-welfare.html#:~:text=Levels%20of%2045%20decibels%20are,order%20to%20prevent%20hearing%20loss.>

The levels are not single event, or "peak" levels. Instead, they represent averages of acoustic energy over periods of time such as 8 hours or 24 hours, and over long periods of time such as years. For example, occasional higher noise levels would be consistent with a 24-hour energy average of 70 decibels, so long as a sufficient amount of relative quiet is experienced for the remaining period of time.

Noise levels for various areas are identified according to the use of the area. Levels of 45 decibels are associated with indoor residential areas, hospitals and schools, whereas 55 decibels is identified for certain outdoor areas where human activity takes place.

Compressor station noise is well recognized.

<https://stateimpact.npr.org/pennsylvania/2014/08/25/state-regulators-take-a-closer-listen-to-gas-compressor-stations/>

Williams' compressor station noise has been a problem in Bradford County.

I point DEP to recent complaints about a Williams compressor in Wilmot Township, Bradford County where area residents experience noise and vibrations, in all directions, up to two miles away, as an almost daily

occurrence. I do not know whether the above complaint was lodged with DEP. But Williams would have a record of the complaint.

<https://www.rocket-courier.com/articles/thank-you-for-recent-article-2/>

August 24, 2022

Noise and light pollution hurt wildlife. Noise and light pollution standards have not been determined for wildlife.

<https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2019/10/22/noise-pollution-hurts-wildlife-but-states-have-trouble-turning-down-the-volume>

Most local noise ordinances address nuisance noise in residential areas, the kind of racket that draws neighbors' complaints and has been shown to harm human health. Fewer legal guidelines exist to protect wildlife.

B. Air and climate concerns beyond permitting

Whereas DEP completed the Air Quality permitting process for Compressor Station 515, I urge that the Air Quality permitting be put into a larger context.

B1. Only Compressor Station 515 required/received an air quality permit. That means that methane leaks from pipeline connectors and methane leaks during pipeline and compressor maintenance will not be accounted for.

B2. According to the project listing, some of the compressors are electric driven (did not need AQ permits), whereas 515 is gas driven (requiring AQ permit). 515 is an expansion.

https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/REAE/PAEP/March_2022/StateWaterQualityCertification/SECTION-5.0---REQUIRED-PADEP-PERMITS---STATUS---REV1.PDF.pdf

Why must 515 continue to be gas-driven? Emissions from compressor stations are significant.

<https://www.fractracker.org/2020/03/air-pollution-pennsylvania-compressor-stations/>

Air pollution from Pennsylvania shale gas compressor stations is a significant and worsening public health concern.

B3. Under Pennsylvania air quality permitting, cumulative emission impacts are not considered, therefore, the project can simply add GHG, VOC and other pollutants, as permitted.

B4. The project runs contrary to the Pennsylvania Climate Action Plan that, since 2021, outlined a pathway to reaching Pennsylvania's greenhouse gas reduction goals: 26% by 2025 and 80% by 2050 from 2005 levels.

B5. Given that this is an expansion of pipeline capacity and compressor horsepower, documentation is missing to show an accounting of current vs. proposed total GHG and several other air pollutants. In other words, does this project increase GHG, VOC, and other emissions for the Transco system or does it decrease emissions?

B6. There must be no new gas infrastructure if we are to have a chance to meet climate targets, according to the IEA, *Net Zero by 2050* report. This project represents gas infrastructure expansion with inherent fence-line, as well as upstream and downstream emissions.

<https://www.iea.org/reports/world-energy-model/net-zero-emissions-by-2050-scenario-nze>

B7. DEP should hold off on permitting the REAE, while EPA has new regulations under consideration for pipeline and compressor station emissions.

<https://www.epa.gov/ghgreporting>

C. Externalities are shifted to the public

C1. Explosion risk

Pipelines bring safety risks as evidenced by pipeline explosions this year in Pennsylvania, Louisiana and Texas.

https://www.bradfordera.com/news/details-trickling-in-about-pipeline-explosion/article_1d2097f9-f82f-59ac-956f-0d3e0d23e6b7.html

<https://pgionline.com/news/2022/september/natural-gas-pipeline-explosion-sparks-fire-in-louisiana-waters>

<https://www.click2houston.com/news/local/2022/07/07/authorities-on-scene-of-pipeline-explosion-in-fort-bend-county/>

C2. Lack of insurance or financial assurance

Consequences are shifted to public, given that natural gas pipelines are not required to have basic insurance or financial assurance in place to cover property damage, bodily harm and environmental cleanup if a leak or explosion happens.

<http://www.paenvironmentdigest.com/newsletter/default.asp?NewsletterArticleID=53391&SubjectID=216>

C3. Legacy footprint

Once a pipeline exhausts its useful life, there is no obligation of the pipeline company to remove it or at least monitor it for alterations to the landscape such as trenches and sinkholes. There is no bonding to address these legacies.

C4. Upstream harms have not been considered by this permit review process. REAE will expand fracking, a large-scale industrial process.

<http://paenvironmentdaily.blogspot.com/2022/06/senate-hearing-body-of-evidence-is.html>

D. DEP must not give earth-disturbance go-ahead to a project that may not receive necessary permits or that may change course and scope.

The Regional Permit Coordinating Office's website notes that RPCO coordinates its Chapter 102 and 105 reviews with other agencies, including the federal FERC. DEP must not greenlight the REAE to commence land clearing and earth moving while the project has not secured other necessary permits.

D1. A FERC certificate is not a given.

The route may be uncertain. Pennsylvania does not have criteria for or a process for reviewing pipeline routes. That is the purview of FERC.

An affected landowner has challenged the project to FERC.

Furthermore and, most importantly, it is not a given that the project will receive a FERC certificate. The veracity of Transco's precedent agreements has been challenged (FERC Docket 21-94) by the state of New Jersey and others (including myself, who does not find them credible). One of the challengers has requested and evidentiary hearing.

FERC docket, CP21-94:

Document Accession #: 20220928-5150 Filed Date: 09/28/2022

Document Accession #: 20220916-5237 Filed Date: 09/16/2022

Document Accession #: 20220915-5032 Filed Date: 09/15/2022

Document Accession #: 20220909-5000 Filed Date: 09/09/2022

Document Accession #: 20220906-5099 Filed Date: 09/06/2022

D2. The urgency of Transco's proposed service date (fourth quarter of 2024) has not been substantiated.

Transco anticipates construction of the Project would commence in second quarter 2023 to meet a proposed in-service date in fourth quarter 2024.

As noted in the FERC docket CP21-94 "Transco is not entitled to certification on any particular timeline; rather the public is entitled to the Commission's protection against corporate abuse."

Document Accession #: 20220928-5150 Filed Date: 09/28/2022

D3. Initial project construction steps cause environmental alterations.

Even prep work irreversibly alters the environment, as shown by Transco in its statement that, typically, pipeline construction will take place in the following order:

- Surveying and Staking
- Installation of Erosion and Sediment Controls
- Clearing, Grading, and Fencing
- Trenching
- [Other]

D4. Post-approval project modifications must undergo a public comment period.

Initial project construction work may cause Transco to determine that it needs to alter the route. This, then may cause additional land and waterway alterations, expanding the footprint of the project. As is the past practice for similar projects, construction modifications do not undergo public disclosure and comment.

E. Conclusion:

E1. DEP has a mission statement:

The Department of Environmental Protection's mission is to protect Pennsylvania's air, land and water from pollution and to provide for the health and safety of its citizens through a cleaner environment. We will work as partners with individuals, organizations, governments and businesses to prevent pollution and restore our natural resources.

<https://www.dep.pa.gov/About/pages/default.aspx#:~:text=The%20Department%20of%20Environmental%20Protection's,citizens%20through%20a%20cleaner%20environment.>

Permits "permit" a certain amount of environmental disturbance and pollution.

I have identified several untoward sequelae of this project. Only a decision to not permit will prevent these impacts.

E2. Pennsylvania has an environmental rights amendment.

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

This project is inconsistent with its tenets.