COMMENT / RESPONSE DOCUMENT

On April 9, 2021, Transcontinental Gas Pipe Line Company, LLC (Transco) submitted a 25 Pa. Code Chapter 102 ("Chapter 102") Erosion and Sediment Control Permit Application, ESG830021002-00 and two 25 Pa. Code Chapter 105 ("Chapter 105") Water Obstruction and Encroachment Permit Applications, E4083221-006 and E4583221-002, for the Regional Energy Access Expansion Project ("REAE Project"). The Pennsylvania Department of Environmental Protection ("DEP" or "Department") reviewed these submissions and determined that the applications contained all necessary information and met the requirements of DEP's regulations. As part of the review of the REAE Project, DEP's review is coordinated internally and with various local, state and federal entities where necessary. Other state and/or federal agency concurrence may also be necessary prior to commencement of the expansion project.

On September 18, 2021, DEP published notice in the Pennsylvania Bulletin that it would be accepting public comments, per its regulatory requirements, from September 18, 2021 until October 18, 2021. On October 15, 2021, DEP extended the public comment period until December 6, 2021. The public comment period was reopened on August 27, 2022 when DEP published a Notice of Public Hearing in the Pennsylvania Bulletin, written comments were accepted through October 12, 2022. DEP held the public hearing, in virtual format, on October 5, 2022.

Numerous unique comments from a total of 881 different commentors were received by DEP during this formal comment period. In some cases, comments were received that may not necessarily be applicable to the REAE Project expansion specifically, but rather relate to health, safety and environmental concerns in a more general sense. In other cases, individual comments expressed concerns which DEP has summarized in order to provide a comprehensive response to the individually expressed concerns on related issues. Regardless, DEP has considered all comments received during review of the submitted applications. This comment response document reflects that consideration.

A list of the commenters, including names and affiliations (if any) is provided <u>under separate</u> <u>cover</u>. Each individual who submitted a comment is assigned a Commenter ID number, which is then listed at the end of the corresponding comment in the document. This comment

response document is broken down into two parts. The first part contains a table of the commenters that commented during the comment periods and contains links to any attachments that the commentator submitted with the public comment. Part two of the document contains that comment submitted and the department's response to the comment received. Each public comment is listed with the identifying Commenter ID number at the end of the comment. Please note, for ease of use, this document has been divided into sections based on subject matter. Comments that covered multiple topics were separated and placed in the appropriate sections, to be discussed along with other comments on the same topic.

More information pertaining the REAE Project is available at: https://www.dep.pa.gov/Business/ProgramIntegration/Pennsylvania-Pipeline-Portal/Pages/Regional-Energy-Access-Expansion-Project.aspx

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List of Acronyms:

ABACT antidegradation best available combination of technologies

ATV all-terrain vehicle

BMP(s) best management practice(s)

CSL Clean Streams Law

DCNR Pennsylvania Department of Conservation and Natural Resources

DEP Department of Environmental Protection

Department of Environmental Protection

DSEA Dam Safety and Encroachments Act

EI environmental inspector

EIS Environmental Impact Statement

EJ Policy Environmental Justice Policy

E&S Permit Erosion and Sediment Control Permit

E&S Plan Erosion and Sediment Control Plan

E&S/SR Plan Erosion and Sediment Control/Site Restoration Plan

EV exceptional value

FERC Federal Energy Regulatory Commission

GIF General Information Form

LOD limit of disturbance

O&M operation and maintenance

OSHA Occupational Safety and Health Administration

PEM palustrine-emergent wetlands

PFBC Pennsylvania Fish and Boat Commission

PFO palustrine-forested wetlands

PGC Pennsylvania Game Commission

PHMSA Pipeline and Hazardous Materials Safety Administration

PSS palustrine-scrub-shrub wetlands

ROW(s) right-of-way(s)

USACE United States Army Corps of Engineers

USFWS US Fish and Wildlife Service

Request to Extend the Public Comment Period

This section addresses the comments received by the Department during the public comment period on extending the public comment period. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

1. Comment

The Delaware Riverkeeper Network ("DRN") is providing the following preliminary comments and would object to these permits being issued due to the impacts and threats that fracked natural gas is causing to the climate, in the shale fields, in Pennsylvania's community and known health impacts where drilling is occurring, in our waterbodies and impacts to Pennsylvania's air, forests, and public lands. If permits are being considered, DRN requests at least a 90-day extension of public comment to be considered by the Pennsylvania Dept of Environmental Protection (DEP) as it reviews Transco's proposed Regional Access Expansion ("REAE Project"), a segmented natural gas pipeline project of the larger Transco line that has already inflicted additional harm from other recent projects like the Transco Leidy Southeast Line (Franklin Loop). We would kindly request that the DEP makes it known early in this short 30-day comment period if an extension will be granted so Commenters can plan accordingly.

DRN provides several reasons we believe this extension is warranted below. DRN also requests that the DEP hold several public hearings along the route and virtually (due to COVID concerns), to ensure that impacted communities in Pennsylvania have the opportunity to comment on a pipeline that encompasses parts of at least six Pennsylvania counties. It's important to note that this Transco REAE Project also includes NJ project segments which should be considered in light of recent NJ protections and rejections of pipeline applications and practices.

In its application, Transco proposes to:

- Construct 22.3 miles of 30-inch diameter pipeline in Luzerne County, Pennsylvania;
- construct 13.8 miles of 42-inch-diameter pipeline in Monroe County, Pennsylvania;
- construct the new 11,107 hp Compressor Station 201 in Gloucester County, New Jersey;
- construct an additional 15,800 hp at its existing Compressor Station 505 in Somerset County, New Jersey;
- construct an additional 46,742 hp at its existing Compressor Station 515 in Luzerne County, Pennsylvania;
- increase the certificated station compression by 5,000 hp at its existing Compressor Station 195 in York County, Pennsylvania;
- modify its existing Compressor Station 200 in Chester County, Pennsylvania;
- increase the certificated station compression by 4,100 hp at its existing Compressor Station 207 in Middlesex County, New Jersey; and

• additional modifications to tie-ins, regulators, and delivery meter stations in Pennsylvania, New Jersey, and Maryland.

At least a 90-day extension is warranted with a series of public hearings adequately advertised in advance and offered because:

The Transco REAE Project is expansive in scope with abundant proposed waterbody crossings and cuts this pipeline would warrant. On quick review of the 401 application the aquatic resource table alone appears to propose to impact at least 114 Exceptional value (EV) wetlands and 37 High Quality (HQ) streams in Pennsylvania. Yet the Compensatory Mitigation Plan highlights different waterbody impacts and is conflicting. For example, the Plan notes, "Construction of the Project will result in temporary impacts to one hundred and eight PEM, PSS and PFO wetlands. Permanent functional conversion impacts (PFO/PSS to PEM) wetlands located within the proposed maintained pipeline ROW will occur to 39 wetlands, for a total of 1.67 acres. Temporary functional conversion impacts of wetlands located within the temporary workspace will occur to 47 wetlands, for a total of 3.47 acres." The public needs time to review and digest and cross check this information to ensure a complete application and it would appear already the applications are not complete or correct in the first place despite the Dept issuing several deficiency letters to Transo throughout this process;

DRN lauds the DEP for not deciding or issuing the Section 401 certification before evaluating and either denying or approving the Chapter 105 and Chapter 102 applications before it, albeit we are unsure if the applications are truly complete at this time. However, because of the extensive nature of all three regulatory applications that involve vast areas of the state with many waterbody encroachments and steep slope disturbances, more time beyond 30 days is sorely needed.

No kmz or shape files appear to be included on the pipeline portal to assist the public in review of these expansive applications despite multiple requests for multiple pipeline projects over the years for the applicant and agency to provide this electronic information to aid thorough public and agency review;

The PennEast pipeline which is another fracked gas pipeline project that is proposed has been experiencing many delays, community resistance, and rejected water quality permits in New Jersey. Despite a Supreme court decision in June 2021 against New Jersey that was standing up to protect its public preserved lands from threats like pipelines, the PennEast pipeline announced just today that it was withdrawing requests to seize NJ public lands to build its pipeline after all. Would it not be prudent for the DEP to hold off in starting this review of the PA portions of the project and wasting finite staff time, resources and tax payer dollars until this other pipeline process plays out with the Penneast pipeline? Several years ago the Governor held pipeline meetings to encourage a more thorough evaluation and regional pipeline planning to avoid overbuilding of pipelines and redundant pipeline cuts and paths. Holding off until more is known about the fate of the PennEast pipeline would also assist in not wasting finite agency staff time reviewing projects that may never come to fruition.

Williams/Transco's Atlantic Sunrise Pipeline (ASP) is yet another north to south 186-mile greenfield pipeline that cut across the state of Pennsylvania west of the proposed line in 2017 and began running natural gas October 6, 2018. In fact, at that time communities opposing this line called it the "shortcut" for the already existing Transco multi-line to the east that is part of the proposed Transco REAE. Already this greenfield ASP pipeline has been expanded and not too many years ago a segment near the proposed REAE was upgraded with the Transco Leidy Line (Franklin Loop). How many more pipeline expansions does Transco really need and how much more harm can Pennsylvania communities afford from the overbuilding of pipelines to possibly export gas to the highest bidder using harmful and climate exacerbating LNG?

There is also a long hard ban on fracking in the Delaware River Basin (Basin) by the DRBC that has finally come to fruition after community resistance since 2010 – this ban prohibits slickwater hydraulic fracking wells in the Basin – this ban should also put into question why yet another Transco pipe needs expansion at this time.

To DRN's knowledge, the Transco REAE has not yet developed its EIS or EA for FERC. DRN would argue that an EIS is critical for the FERC process and an EA would not suffice. Again, pushing the PA process and public comment period along when these federal documents are not yet out for comment may be pre-empting a project that may never come on line. What is the harm in waiting?

Thank you for your time and consideration to reject or delay consideration of this new pipeline project outright or for an extension request of at least 90 days with multiple public hearings with adequate advertisement in advance for the public to attend and provide thorough public review and comment. (1)

2. Comment

I am writing to respectfully request that the Pennsylvania Department of Environmental Protection extend the comment period for the state water quality certification, water obstructions and encroachments, and erosion and sediment control applications being considered by the Department for the Transcontinental Gas Pipeline Company's Regional Energy Access Extension. These three categories of Department approvals – the permits to be issued under Chapter 102, the permits to be issued under Chapter 105, and the state water quality certification to be issued under Section 401 of the Clean Water Act were noticed for a 30 day-comment period in the PA Bulletin on September 18, 2021, making comments due on October 18, 2021.

Thirty days is simply not enough time for the public to adequately review and comment on these significant proposed authorizations and the highly technical information contained in the applications.

First, this is a lengthy pipeline crossing a great deal of Pennsylvania. The proposed project will extend across three DEP regions and 7 counties: 3 counties in the Northeast Region (Luzerne, Monroe, Northampton), 3 counties in the Southeast Region (Bucks, Chester, Delaware), and 1 county in the Southcentral Region (York). There are permits sought for earth

disturbances in five of these counties. Second, there are three types of authorizations at issue, and the same short comment period applies to all three. Finally, this project involves a number of crossings of Exceptional Value Waters. The Department, under Pa.

Code 93.4c(b)(1)(ii), upon request, is required to hold a public hearing on any proposed new, additional, or increased discharge to Exceptional Value Waters. I am therefore requesting that a public hearing be held in my county, as well as every county impacted by the proposed Transco REAE pipeline project.

In order to be able to review and comment on these three types of authorizations across this significant section of the Delaware River watershed, I respectfully request that the DEP extends the comment period to 90 days. I also request that you hold hearings on these applications so that the DEP can hear directly from impacted communities.

Thank you for your consideration of this request. (2-300, 302-303, 328, 333, 364, 370, 386-387, 392, 395-399, 404-405, 420, 422, 429-436, 458-459, 464-467, 471-473, 476, 479-481, 497, 552, 570, 580)

3. Comment

I am writing to respectfully request that the Department of Environmental Protection extend the comment period for the state water quality certification, water obstructions and encroachments, and erosion and sediment control permit applications your agency is considering for the Transcontinental Gas Pipeline Company's (Transco) Regional Energy Access Extension.

These three categories of DEP approvals were noticed for a 30 day-comment period in the PA Bulletin on September 18, 2021, which would make comments due on October 18, 2021. Thirty days is simply not enough time for the public to adequately review and comment on these significant proposed authorizations, which include highly technical information. I believe a 90- day comment period and public hearings in each affected county are warranted for several reasons, including:

This pipeline would affect a sizable area of Pennsylvania, extending across three DEP regions and seven counties: three counties in the Northeast Region (Luzerne, Monroe, Northampton), three counties in the Southeast Region (Bucks, Chester, Delaware), and one county in the Southcentral Region (York).

The comment period applies to all three authorizations requested by Transco, and effectively encompasses 11 separate permits – 7 (one per county) for Water Obstruction and Encroachment Permits under Chapter 105 of DEP regulations; three (one per DEP region) for Erosion and Sediment Control Permits under Chapter 102; and a general permit for discharge from hydrostatic testing under the NPDES.

Just this week, we have seen the potential pitfalls in granting permits of this scope without due diligence, reflected in the Grand Jury report that resulted in 48 criminal charges against Energy Transfer in connection with the Mariner East 2 project.

The grand jury report noted that "Mariner East 2 was a massive construction project that literally spanned the state. It was thus beyond the scope of previous oversight efforts." In light of these findings, it is vital that DEP's ability to provide adequate oversight be factored into the consideration of the Transco permit requests.

Finally, this project involves a number of crossings of Exceptional Value Waters. The Department is required by law to hold a public hearing on any proposed new, additional, or increased discharge to Exceptional Value Waters.

In order to give the public ample opportunity to meaningfully review and comment on these three types of authorizations across this significant section of the Delaware River watershed, I respectfully request that DEP extend the comment period to 90 days and hold public hearings on these applications in the affected counties.

Thank you for your consideration of this request. (301)

4. Comment

Please extend and announce today the extension of public comment for at least 90 days for greater public review of Transco's proposed Regional Access Expansion ("REAE Project"), a segmented fracked gas pipeline project expansion that proposes to:

- 1) Construct 22.3 miles of 30-inch diameter pipeline in Luzerne County, Pennsylvania;
- 2) construct 13.8 miles of 42-inch-diameter pipeline in Monroe County, Pennsylvania;
- 3) construct the new 11,107 hp Compressor Station 201 in Gloucester County, New Jersey;
- 4) construct an additional 15,800 hp at its existing Compressor Station 505 in Somerset County, New Jersey;
- 5) construct an additional 46,742 hp at its existing Compressor Station 515 in Luzerne County, Pennsylvania;
- 6) increase the certificated station compression by 5,000 hp at its existing Compressor Station 195 in York County, Pennsylvania;
- 7) modify its existing Compressor Station 200 in Chester County, Pennsylvania;
- 8) increase the certificated station compression by 4,100 hp at its existing Compressor Station 207 in Middlesex County, New Jersey; and
- 9) additional modifications to tie-ins, regulators, and delivery meter stations in Pennsylvania, New Jersey, and Maryland.

It's important to note that this Transco REAE Project includes NJ project segments which should be considered in light of recent NJ protections and rejections of pipeline applications and practices. At least a 90-day extension is warranted with a series of public hearings adequately advertised in advance and offered because:

The Transco REAE Project is expansive in scope with abundant proposed waterbody crossings and cuts this pipeline would warrant. On quick review of the 401 application the aquatic resource table alone appears to propose to impact at least 114 Exceptional value (EV) wetlands and 37 High Quality (HQ) streams in Pennsylvania. Yet the Compensatory

Mitigation Plan highlights different waterbody impacts and is conflicting. The public needs time to review and digest and cross check this information to ensure accuracy and it would appear already the applications are not complete or correct in the first place despite the Dept issuing several deficiency letters to Transo throughout this process;

DRN lauds the DEP for not deciding or issuing the Section 401 certification before evaluating and either denying or approving the Chapter 105 and Chapter 102 applications before it. However, because of the extensive nature of all three regulatory applications that involve vast areas of the state with many waterbody encroachments and steep slope disturbances, more time beyond 30 days is sorely needed.

No kmz or shape files appear to be included on the pipeline portal to assist the public in review of these expansive applications despite multiple requests for multiple pipeline projects over the years for the applicant and agency to provide this electronic information to aid thorough public and agency review;

Williams/Transco's Atlantic Sunrise Pipeline (ASP) is yet another north to south 186-mile greenfield pipeline that cut across the state of Pennsylvania west of the proposed line in 2017 and began running natural gas October 6, 2018. In fact, at that time communities opposing this line called it the "shortcut" for the already existing Transco multi-line to the east that is part of the proposed Transco REAE. Already this greenfield ASP pipeline has been expanded and not too many years ago a segment near the proposed REAE was upgraded with the Transco Leidy Line (Franklin Loop). How many more pipeline expansions does Transco really need and how much more harm can Pennsylvania communities afford from the overbuilding of pipelines to possibly export gas to the highest bidder using harmful and climate exacerbating LNG?

There is a long hard ban on fracking in the Delaware River Basin (Basin) by the DRBC that has finally come to fruition after community resistance since 2010 – this ban prohibits slickwater hydraulic fracking wells in the Basin – this ban should also put into question why yet another Transco pipe needs expansion at this time.

To DRN's knowledge, the Transco REAE has not yet developed its EIS or EA for FERC. DRN would argue that an EIS is critical for the FERC process and an EA would not suffice. Again, pushing the PA process and public comment period along when these federal documents are not yet out for comment may be pre-empting a project that may never come on line and waste agency resources. What is the harm in waiting?

Thank you for your time and consideration to reject or delay consideration of this new pipeline project outright or for an extension request of at least 90 days with multiple public hearings with adequate advertisement in advance so the public has time to review the volumes of information included in the Transco applications. Thank you for your time and consideration. (16, 32, 78, 115, 118, 123, 131, 137, 185, 211, 245, 265, 271, 275, 290, 295, 297, 304-327, 329-332, 334-363, 365-369, 371-385, 388-391, 393-394, 397-403, 406-419, 421, 423-428, 437-457, 460-463, 468-470, 472, 474-475, 477-478, 482, 484-496, 563)

5. Comment

Please extend and announce today the extension of public comment for at least 90 days for greater public review of Transco's proposed Regional Access Expansion ("REAE Project"), a segmented fracked gas pipeline project expansion that proposes to:

- 1) Construct 22.3 miles of 30-inch diameter pipeline in Luzerne County, Pennsylvania;
- 2) construct 13.8 miles of 42-inch-diameter pipeline in Monroe County, Pennsylvania;
- 3) construct the new 11,107 hp Compressor Station 201 in Gloucester County, New Jersey;
- 4) construct an additional 15,800 hp at its existing Compressor Station 505 in Somerset County, New Jersey;
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- 6) increase the certificated station compression by 5,000 hp at its existing Compressor Station 195 in York County, Pennsylvania;
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- 9) additional modifications to tie-ins, regulators, and delivery meter stations in Pennsylvania, New Jersey, and Maryland.

It's important to note that this Transco REAE Project includes NJ project segments which should be considered in light of recent NJ protections and rejections of pipeline applications and practices. At least a 90-day extension is warranted with a series of public hearings adequately advertised in advance and offered because:

The Transco REAE Project is expansive in scope with abundant proposed waterbody crossings and cuts this pipeline would warrant. On quick review of the 401 application the aquatic resource table alone appears to propose to impact at least 114 Exceptional value (EV) wetlands and 37 High Quality (HQ) streams in Pennsylvania. Yet the Compensatory Mitigation Plan highlights different waterbody impacts and is conflicting. The public needs time to review and digest and cross check this information to ensure accuracy and it would appear already the applications are not complete or correct in the first place despite the Dept issuing several deficiency letters to Transo throughout this process;

- DRN lauds the DEP for not deciding or issuing the Section 401 certification before evaluating and either denying or approving the Chapter 105 and Chapter 102 applications before it. However, because of the extensive nature of all three regulatory applications that involve vast areas of the state with many waterbody encroachments and steep slope disturbances, more time beyond 30 days is sorely needed.
- No kmz or shape files appear to be included on the pipeline portal to assist the public
 in review of these expansive applications despite multiple requests for multiple
 pipeline projects over the years for the applicant and agency to provide this electronic
 information to aid thorough public and agency review;

- Williams/Transco's Atlantic Sunrise Pipeline (ASP) is yet another north to south 186-mile greenfield pipeline that cut across the state of Pennsylvania west of the proposed line in 2017 and began running natural gas October 6, 2018. In fact, at that time communities opposing this line called it the "shortcut" for the already existing Transco multi-line to the east that is part of the proposed Transco REAE. Already this greenfield ASP pipeline has been expanded and not too many years ago a segment near the proposed REAE was upgraded with the Transco Leidy Line (Franklin Loop). How many more pipeline expansions does Transco really need and how much more harm can Pennsylvania communities afford from the overbuilding of pipelines to possibly export gas to the highest bidder using harmful and climate exacerbating LNG?
- There is a long hard ban on fracking in the Delaware River Basin (Basin) by the DRBC that has finally come to fruition after community resistance since 2010 this ban prohibits slickwater hydraulic fracking wells in the Basin this ban should also put into question why yet another Transco pipe needs expansion at this time.
- To DRN's knowledge, the Transco REAE has not yet developed its EIS or EA for FERC. DRN would argue that an EIS is critical for the FERC process and an EA would not suffice. Again, pushing the PA process and public comment period along when these federal documents are not yet out for comment may be pre-empting a project that may never come on line and waste agency resources. What is the harm in waiting?

DEP request, as natural gas companies extract natural gas using the fracturing process of injecting chemically laced water and sand, does DEP assess and monitor the contamination risks to nearby water tables, does DEP monitor sedimentary shift risks introduced by high pressure injected chemical slurry into the shale? Texas just aborted one project because there was an increase in minor quakes. What is PA's plans to mitigate against inevitable quakes? Does DEP calculate total loss of shale carbon sinks in the Marcellus shale due to natural gas mining?

Thank you for your time and consideration to reject or delay consideration of this new pipeline project outright or for an extension request of at least 90 days with multiple public hearings with adequate advertisement in advance so the public has time to review the volumes of information included in the Transco applications. Thank you for your time and consideration. (417)

6. Comment

I respectfully request an extension of the public comment period for the three water quality permit applications associated with the Transcontinental Pipeline Company's Regional Energy Access Extension (REAE) pipeline and that the Pennsylvania Department of Environmental Protection (DEP) hold public hearings in each county impacted by this project.

The DEP provided notice for a 30-day comment period on these highly-technical applications in the Pennsylvania Bulletin on September 18, 2021, meaning comments are due next week (October 18). These three permit authorizations currently under consideration – erosion and

sediment control (Chapter 102), water obstructions and encroachment (Chapter 105), and state water quality certification under Section 401 of the Clean Water Act – are critical to protecting water quality in Pennsylvania. Thirty days is just not enough time for the public to thoroughly review the applications in detail and offer informed and meaningful feedback on them.

Furthermore, the Transco REAE pipeline project will extend across a sizeable area of the Commonwealth, including three DEP regions and seven counties, including six in the Delaware River watershed. In addition to my home county of Chester, it will impact Delaware, Bucks, Northampton, Monroe, and Luzerne counties, as well as York County in the Susquehanna River basin. In turn, many of the streams and wetlands the proposed pipeline project crosses are subject to special protections as High Quality or Exceptional Value waterways. As you know, these are crucial to the environmental, economic, and public health of our communities.

Given the size and scope of this pipeline project, the number, and type of permit applications being considered, the number of streams crossed, the number of communities and counties impacted, and our recent and ongoing issues with pipeline expansion projects in Chester County and the surrounding region, I respectfully request that the public comment period be extended and that public hearings be held in impacted communities here and across the Commonwealth.

Simply put, the public deserves ample time and opportunity to review, understand, and weigh in on issues potentially impacting water quality. Extending the public comment period and holding hearings in impacted counties and communities will help ensure every voice is heard and every concern is given due consideration.

Thank you for your time and consideration. (483)

7. Comment

Commenters had understood informally that the deadline for these comments was to be extended; however, commenters have not received a formal notice of the extension of this deadline and so submit the comments now. If the requested extension had been granted, Commenters would have had a greater opportunity to specifically review Transco's application materials and make more robust comments. If the comment period is extended after these comments are submitted, Commenters reserve the right to revise or supplement these comments. (134)

8. Comment

The Department Must Hold a Hearing, and the Department Should Hold In-Person Hearings in Each County the Proposed Project Crosses When it is Safe to Do So.

As a preliminary matter, this project involves a number of crossings of Exceptional Value Waters. The Department, under Pa. Code 93.4c(b)(1)(ii), upon request, is required to hold a public hearing on any proposed new, additional, or increased discharge to Exceptional Value Waters. Commenters formally request such a hearing.

Additionally, the Department should hold in-person public hearings on the Project in each county it would cross, at a time and under a procedure by which it is safe to meet. The extensive reach of this Project, and the public interest in it, merit more than a virtual hearing where participants cannot meet each other, cannot present materials, and are limited to three minutes' speaking time. Furthermore, there are many residents who are unable to participate electronically, uncomfortable with that process, or lack the bandwidth to do so reliably. We ask the Department to utilize the conventional means of public hearing in a manner consistent with public safety and protection of the most vulnerable among us. (134)

9. Comment

The Delaware Riverkeeper Network (DRN) is providing the following extension request and would first like to object to the Chapter 102 and Chapter 105 permits being approved due to the impacts and threats that fracked natural gas is causing to the climate, in the shale fields, in Pennsylvania's community and known health impacts where drilling is occurring, in our waterbodies and impacts to Pennsylvania's air, forests, and public lands. More locally, it is especially concerning the number of Exceptional value and high quality streams that would be cut through yet again by this pipeline expansion. On quick review it appears that most proposed waterbody cuts remain open cuts with little or no special consideration by the applicant for these anti-degradation streams and no pre or post monitoring of water quality included that would once again if approved, leave Pennsylvania taxpayers and water resources holding the bag from long term repetitive harms pipelines inflict to the very cleanest of our waterways, forests and wetland habitats.

DRN kindly requests at least a 90-day extension of public comment beyond the October 12, 2022 public comment period window be issued by the Pennsylvania Dept of Environmental Protection (DEP) as it reviews Transco's proposed Regional Access Expansion (Transco REAE) a segmented natural gas pipeline project of the larger Transco line that has already inflicted additional harm from other recent projects like the Transco Leidy Southeast Line (Franklin Loop). DRN requests that based on community concern and the large impacts proposed for 5 counties, additional public hearing time and hearings be added. The current announcement allows for only three hours of virtual public comment (limit of 3 mins per speaker and only one representative per organization) for this pipeline for October 5 from 7-10pm which will not be adequate. With only one hearing date announced DEP is also excluding public who cannot make it on that one particular date. We also raise the point that a pipeline of this magnitude should warrant in person hearings as well (if it is safe to do so with pandemic conditions). Individuals who wish to observe or present testimony at the formal virtual public hearing must contact Colleen Connolly at 570- 826-2035 coconnolly@pa.gov, a minimum of 24 hours in advance of the hearing to reserve time to present testimony. We would argue that it is important that this be revised so that if time remains, people who are listening in and have not officially signed up "24 hours in advance" are allowed to speak. By cutting off the timeframe 24 hours in advance, again DEP is automatically excluding the public from fully participating by the way the announcement reads as is as well as by likely limiting last minute community members to weigh in. DRN

also kindly requests that DEP make it known early in this comment period just announced today, August 26, 2022 if the extension is granted so that the public can adapt and respond accordingly (Note DEP's past fast turn around for extensions granted to the pipeline company – i.e. Transco ext request made on July 27 and DEP grants extension on August 1).

In its application, Transco REAE proposes to:

- 1) Construct 22.3 miles of 30-inch diameter pipeline in Luzerne County, Pennsylvania;
- 2) construct 13.8 miles of 42-inch-diameter pipeline in Monroe County, Pennsylvania;
- 3) construct the new 11,107 hp Compressor Station 201 in Gloucester County, New Jersey;
- 4) construct an additional 15,800 hp at its existing Compressor Station 505 in Somerset County, New Jersey;
- 5) construct an additional 46,742 hp at its existing Compressor Station 515 in Luzerne County, Pennsylvania;
- 6) increase the certificated station compression by 5,000 hp at its existing Compressor Station 195 in York County, Pennsylvania;
- 7) modify its existing Compressor Station 200 in Chester County, Pennsylvania;
- 8) increase the certificated station compression by 4,100 hp at its existing Compressor Station 207 in Middlesex County, New Jersey; and
- 9) additional modifications to tie-ins, regulators, and delivery meter stations in Pennsylvania, New Jersey, and Maryland.

At least a 90-day extension is warranted beyond the October 12th period - with a series of public hearings adequately advertised in advance and offered because:

- First, Transco REAE only finally submitted and addressed its own deficiencies highlighted by the DEP multiple times on August 11, 2022. Transco had requested extensions multiple times during this process the most recent extension request was July 27, 2022. DEP issued a letter granting this extension on August 1 and DEP has also issued multiple deficiency letters over the project timeline due to incomplete application by Transco REAE. The public deserves the same extension now by DEP as Transco seems to be moving on its modifications.
- In its prior correspondence, DEP granted Transco its extension requests and requested that all materials be submitted by Sept 30, 2022. The Transco documents submitted on August 11, 2022 are voluminous in nature and appear to include revised Erosion and Sediment Control General Permit and Chapter 105 applications that span the 5 counties. The public following the process believed Transco may, as indicated in the past, only send documents to DEP by Sept 30 based on past history or perhaps even miss that deadline given by DEP where DEP also stated they may withdraw the application for consideration at that time. Issuing the public notice now over a month and a half early and limiting the comment period to end October 13th is catching the public by surprise and also at a busy time when many may be on vacation in August or sending children back to school in the coming weeks while also juggling typical

- work commitments and daily family requirements. More time is warranted for the public.
- The Transco REAE Project is expansive in scope with abundant proposed waterbody crossings and cuts this pipeline would warrant over 5 counties of impact in PA alone not to mention impacts in New Jersey and climate impacts world wide. On past review of the 401 application the aquatic resource table alone appeared to propose to impact at least 114 Exceptional value (EV) wetlands and 37 High Quality (HQ) streams in Pennsylvania. Because of the extensive nature of all three regulatory applications that involve vast areas of the state with many waterbody encroachments and steep slope disturbances, more time to dig into this information would only benefit the water resources that could be harmed.
- The three submissions just added to the portal (presumably on August 15) are voluminous in nature and include 1) Chapter 102 for 5 counties that when opened includes links to reports and attachments that includes over 52 separate documents and attachments; 2) Chapter 105 for Luzerne County which includes over 51 separate documents including other agency correspondence, modules and wetland reports, drawings, and alternatives analysis documents and mitigation plans among other documents; 3) Chapter 105 for Monroe County which includes 38 separate documents with revised modules, stormwater management analyses, alternatives analysis, color photographs, and drawings and more.
- On July 29, 2022, FERC issued the Final Environmental Impact Statement for Transcontinental Gas Pipe Line Company, LLC's Regional Energy Access Expansion Project under CP21-94. Volumes of information is requiring public review for this EIS at this time. Sadly, there are shocking issues and inadequacies with the Final EIS for this project. For example, FERC compares the GHG emissions of the project with state and national goals in a bare and quantitative manner—claiming that it cannot "determine how individual projects will affect international, national, or statewide GHG emissions reduction targets or whether a project's GHG emissions comply with those goals or laws." By acting as if the GHG emissions calculations are meaningless, FERC is essentially greenlighting projects that could incrementally exceed emissions goals. Transco REAE, for example, will consist of 47.8% of New Jersey's GHG budget in 2050. Nothing is stopping FERC from certificating a second project that would consist of 65% of New Jersey's 2050 GHG budget, thus, FERC would be virtually guaranteeing that New Jersey would not meet its emissions reductions goals. This result is inconsistent with FERC's conclusion that it cannot determine the significance of the project's GHG emissions. Furthermore, FERC has punted and not addressed thermal impacts to waterbodies in the FEIS due to climate change or by the direct cuts of cut riparian forested buffers and pipeline cuts inflict. With these types of federal inadequacies, it is critical and logical that the state of Pennsylvania, that already bares a large burden (and responsibility as a polluter) from the fossil fuel industry and fossil fuel infrastructure and extraction historically and with the present shale buildout, provide more time for the public to adequately and thoroughly review

- these state permits. This additional comment review time and statewide leadership is needed now to provide much needed state leadership and ideally, a denial of the permit and pipeline project when the public process is borne out.
- No kmz or shape files appear to be included on the pipeline portal to assist the public in review of these expansive applications despite multiple requests for this pipeline and for multiple pipeline projects over the years we hope the agency has access to these electronic files for more thorough review by agency personnel and sister agencies; and we urge these files to also be available for the public and placed on the pipeline portal especially in light of the short comment period. The documents exist and they should be shared with the public and posted on the portal.
- The PennEast pipeline which is another fracked gas pipeline project that had been proposed for parts of PA and NJ has been rejected due to its extreme harm and the pipeline project withdrawn. How does the Transco expansion fair with its own approvals that will be required on the New Jersey side of the River? Additional time is warranted and finite DEP strapped staff would also benefit from the additional time for this review.
- Several years ago, Governor Tom Wolf held pipeline meetings to encourage a more thorough evaluation and regional pipeline planning to avoid overbuilding of pipelines and redundant pipeline cuts and paths. It is not clear that cumulative impact review and overall PA build out is being pursued. The debacles of other similar pipelines, like that of Sunoco Mariner East 2 pipeline are also still in process. How is DEP learning from these past mistakes and approvals to ensure the same mistakes are not allowed with this pipeline operator? We must not simply provide fines after the harm is inflicted yet again using similar techniques, but eliminate that harm from happening in the first place.
- Williams/Transco's Atlantic Sunrise Pipeline (ASP) is another north to south 186-mile greenfield pipeline that cut across the state of Pennsylvania west of the proposed line in 2017 and began running natural gas October 6, 2018. In fact, at that time communities opposing this line called it the "shortcut" for the already existing Transco multi-line to the east that is part of the proposed Transco REAE. Already this greenfield ASP pipeline has been expanded and not too many years ago a segment near the proposed REAE was upgraded with the Transco Leidy Line (Franklin Loop). How many more pipeline expansions does Transco really need and how much more harm can Pennsylvania communities afford from the overbuilding of pipelines to possibly export gas to the highest bidder using harmful and climate exacerbating LNG? The war in Ukraine the past six months and Russia's strong arm tactics are making this a critical time for scrutiny so we avoid harms from harmful practices such as LNG export schemes or so called "blue methane" and instead of investing in more pipelines and methane extraction, we should be investing in clean truly green energy instead.
- There is also a long hard ban on fracking in the Delaware River Basin (Basin) by the DRBC that has finally come to fruition during COVID and after community resistance

since 2010– this ban prohibits slickwater hydraulic fracking wells in the Basin – this ban should also put into question why yet another Transco pipe needs expansion at this time to cut more paths through Pennsylvania streams, wetland and steep slopes and forests. Furthermore alarming new studies, for example the Yale School of Public Health Study that found children between 2 and 7 years old are two to three times as likely to be diagnosed with leukemia if they live near unconventional oil and gas facilities – more added proof and harm that PA families are sick from shale pollution http://paenvironmentdaily.blogspot.com/2022/08/yale-school-of-public-health-study.html. Pipelines like this one would only exacerbate and fuel more harmful fracking.

Thank you for your time and consideration to reject at best or at minimum announce an extension request of at least 90 days past the October 12th deadline with multiple public hearings with adequate advertisement in advance for the public to attend and provide thorough public review and comment. (1)

10. Comment

I also urge the DEP to extend the comment period and make the announcement promptly for adequate notice and public review of this lengthy and harmful pipeline project, so that other parents like me can read more on this and provide comments. Thank you for the opportunity to comment and I look forward to providing additional comments in the future if given adequate time. (748)

11. Comment

The Transcontinental Gas Pipe Line Company, LLC (Transco) Regional Energy Access Expansion (REAE) project would inflict irreparable harm to pristine streams, forests, and other natural resources in our Commonwealth. I request that DEP deny the water permits being proposed for this pipeline due to the harm it would cause. I understand that Transco has only recently provided additional materials after multiple deficiency letters and requests by DEP and that Transco had requested its own extension in July for more time which DEP granted within a few days. In the same spirit, the public now deserves more time to digest all of the volumes of revised information made available on line by the pipeline company in late August and an extension of comment of at least 90 days beyond the Oct 12th deadline from the DEP to plan and review the materials accordingly. Additional hearings may also be in order as from the announcement only 60 people would have the ability to comment during the 3-hour virtual hearing. Additional concerns beyond the public comment extension request are shared below for the record as we have yet to begin digging into the volumes of information submitted by the applicant in late August.

 This expansive pipeline 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.
- Some of the wetlands to be cut are Exceptional Value wetlands yet Transco is proposing devastating open trench cuts.
- DEP must ensure that the Project does not degrade the water quality of any Exceptional Value (EV) streams or wetlands. The information Transco has provided makes assertions without sufficient data to meet the antidegradation requirements under Pennsylvania's Clean Streams Law. It does not appear that DEP has undertaken a complete antidegradation analysis for High Quality (HQ) streams and wetlands nor has the pipeline applicant collected data on each proposed stream cut determine existing use or current conditions of those waterbodies.
- Furthermore, where forested buffers are proposed to be cut, thermal impacts downstream are not accounted for. Clearing the forest around these streams exposes them to direct sunlight, raising the water temperature and jeopardizing their suitability as trout waters. Transco is also seeking waivers to avoid to restoring forested buffers, which would mean the impacts are permanent.
- Cutting forests and riparian buffers also creates habitat fragmentation. Transco fails to
 factor in not just the impacts of the fragmentation of the forest for these particular
 pipeline segments, but also by other cuts in the same region, either by Transco on its
 other pipeline pieces or by other pipeline/linear projects both within and outside the
 watershed.
- The removal of healthy forested buffers along the many stream crossings proposed by Transco REAE must be assessed individually and cumulatively. In addition, when the stream crossing includes a cut through a pre-existing mature and healthy forest, the degradation of the forest on either side of the Right-of-Way that results from this forest fragmentation also needs to be considered in terms of both stream impacts, forest impacts and climate change impacts.
- The project is proposed to be constructed within the habitat of several threatened and
 endangered plant and animal species including white-fringed orchid, Indiana bat,
 northern long-eared bat, timber rattlesnake, and bog turtle. Some of the proposed
 wetland mitigation measures actually appear to inflict harm to bog turtle habitat which
 is unacceptable.
- Transco's application asserts that it will protect bat species in the project area through seasonal restrictions on tree felling...but then it defines ground disturbance, which is permitted during those seasonal restrictions, to include tree felling. As a result, Transco would be allowed to cut down the adjacent forest at any time of the year in a mostly forested landscape that has ailing bat species present. This the opposite of protective and flies in the face of threatened and endangered species obligations and laws.
- Transco has simply not done enough to take the sensitive wildlife in the area into account. For example, it did no surveys for wood turtles, even though we know that citizens have reported them in the area and that the federal government is considering

listing the wood turtle as an endangered species. They have also played down the impacts of their 25-foot wide permanent right of way, which is 25 feet of permanently disturbed pipeline land on top of their existing right of way that already cuts across the land, that wildlife would need to cross.

- Transco's plans to compensate for the wetlands it intends to destroy are insufficient. They attempt to define many of their impacts as "temporary," which is not scientifically supported, and results in their calculating their total impact as far less than it likely is. They also propose to "enhance" existing emergent and scrub-shrub exceptional value wetlands, which is entirely inappropriate. The "enhancement" involves planting trees and shrubs in these wetlands, which would exacerbate succession into forested wetlands. The goals of the wetlands mitigation requirements are to create new wetlands to replace those destroyed as a result of the permitted action, not to transform an existing type of wetland into a different type of wetland.
- Transco REAE would be an extreme detriment to regional climate change goals because it will consist of 47.8% of New Jersey's GHG budget in 2050. Nothing is stopping FERC from certificating a second project that would consist of 65% of New Jersey's 2050 GHG budget, thus, FERC would be virtually guaranteeing that New Jersey would not meet its emissions reductions goals, which is a large-scale issue that affects Pennsylvania as well.
- FERC's FEIS also concluded that the REAE Project effects would be reduced to less-than-significant levels. This is despite the fact that FERC admitted that certain project components may be predominately borne by environmental justice communities and that climate change impacts would result in annual operation and downstream emissions of 16.62 million metric tons of carbon dioxide equivalent. These levels would exceed FERC's presumptive significance threshold based on 100 percent utilization. DEP must step up where FERC is failing and deny these state permits today!

For these reasons and other critical issues pertaining to climate change impacts that make this pipeline expansion a dead end leading to climate catastrophe, permits should be denied.

I urge the DEP to extend the comment period and make the announcement promptly for adequate notice and public review of this lengthy and harmful pipeline project. Thank you for the opportunity to comment and I look forward to providing additional comments in the future if given adequate time. (7, 32, 109, 116, 118, 123, 131, 143, 147, 156, 176, 185, 211, 214, 236, 242, 275, 296, 312, 320, 330, 338, 354, 359, 376, 386, 408, 414-415, 419, 426, 437, 469, 484, 492, 619, 640, 643, 646, 649-651, 653, 658, 661, 672, 679, 686, 692, 716, 726, 749-780, 783, 788, 790-791, 794, 797-798, 801-805, 807-813, 815-816, 819, 822, 835-836, 842-843, 849, 860)

Response 1-11:

On September 18, 2021, the Department published a notice in the *Pennsylvania Bulletin* announcing the receipt of Chapter 102 and Chapter 105 Permit Applications for the Project. In accordance with its regulatory requirements, the Department announced

that it would be accepting public comments for a 30-day period, ending on October 18, 2021. However, the Department received numerous requests for an extension of the public comment period. As a result, on October 15, 2021, the Department extended the public comment period until December 6, 2021.

Subsequently, on August 27, 2022, the Department published a Notice of Public Hearing in the *Pennsylvania Bulletin*, reopening the public comment period on the permit applications until October 12, 2022. On October 5, 2022, the Department held a virtual public hearing to provide an opportunity for stakeholders to provide verbal comments. In total, the comment period on the permit applications was open for 125 days.

The Department considered all comments, both written and verbal, including those comments received outside of a comment period, prior to the issuance of the Chapter 102 and Chapter 105 permits. The Department took into account the feedback received from the public before making its final decision on the permit applications.

Request to Hold a Public Hearing and General Public Participation

This section addresses the comments received by the Department, during the public comment period, on the topics of public participation and public hearings. Excerpts of comments received from individual commenters on these topics, as well as the Department's response to these comments, are provide below.

12. Comment

DRN also requests that the DEP hold several public hearings along the route and virtually (due to COVID concerns), to ensure that impacted communities in Pennsylvania have the opportunity to comment on a pipeline that encompasses parts of at least six Pennsylvania counties. It's important to note that this Transco REAE Project also includes NJ project segments which should be considered in light of recent NJ protections and rejections of pipeline applications and practices.

At least a 90-day extension is warranted with a series of public hearings adequately advertised in advance and offered ... (1)

13. Comment

Code 93.4c(b)(1)(ii), upon request, is required to hold a public hearing on any proposed new, additional, or increased discharge to Exceptional Value Waters. I am therefore requesting that a public hearing be held in my county, as well as every county impacted by the proposed Transco REAE pipeline project.

In order to be able to review and comment on these three types of authorizations across this significant section of the Delaware River watershed, I respectfully request that the DEP extends the comment period to 90 days. I also request that you hold hearings on these applications so that the DEP can hear directly from impacted communities. (2-300, 302-303,

328, 333, 364, 370, 386-387, 392, 395-399, 404-405, 420, 422, 429-436, 458-459, 464-467, 471-473, 476, 479-481, 497, 552, 570, 580)

14. Comment

Finally, this project involves a number of crossings of Exceptional Value Waters. The Department is required by law to hold a public hearing on any proposed new, additional, or increased discharge to Exceptional Value Waters.

In order to give the public ample opportunity to meaningfully review and comment on these three types of authorizations across this significant section of the Delaware River watershed, I respectfully request that DEP extend the comment period to 90 days and hold public hearings on these applications in the affected counties. (301)

15. Comment

Thank you for your time and consideration to reject or delay consideration of this new pipeline project outright or for an extension request of at least 90 days with multiple public hearings with adequate advertisement in advance so the public has time to review the volumes of information included in the Transco applications. Thank you for your time and consideration. (16, 32, 78, 115, 118, 123, 131, 137, 185, 211, 245, 265, 271, 275, 290, 295, 297, 304-327, 329-332, 334-363, 365-369, 371-385, 388-391, 393-394, 397-403, 406-419, 421, 423-428, 437-457, 460-463, 468-470, 472, 474-475, 477-478, 482, 484-496, 563)

16. Comment

I respectfully request ... that the Pennsylvania Department of Environmental Protection (DEP) hold public hearings in each county impacted by this project.

...I respectfully request that the public comment period be extended and that public hearings be held in impacted communities here and across the Commonwealth.

Simply put, the public deserves ample time and opportunity to review, understand, and weigh in on issues potentially impacting water quality. Extending the public comment period and holding hearings in impacted counties and communities will help ensure every voice is heard and every concern is given due consideration. (483)

17. Comment

Finally, DEP should hold public hearings in each impacted county to ensure adequate participation from residents who could be impacted. (2, 4, 8-9, 11-12, 14, 16-22, 25, 27-31, 33-37, 40-41, 45, 48-49, 52, 54, 56-59, 61-65, 67, 69, 70-72, 75-76, 79-80, 82-84, 86, 88-89, 91, 93-94, 97-102, 105, 109-111, 113-117, 120, 123-125, 129, 131-133, 136, 138, 142-143, 146-147, 149-152, 155, 163, 168, 172, 174, 177, 184-185, 188, 191, 195, 197, 199, 201, 204, 207-212, 215, 217, 221-222, 225, 232-233, 237, 244-245, 247, 250, 254, 257-258, 262, 272-273, 275, 278, 282, 284-285, 287-288, 293, 296-297, 299, 302, 305, 310, 370, 377, 386, 397-399, 405, 414, 423, 433, 436, 452, 458, 471, 479-480, 498-551, 553-562, 564-579, 581-587, 589-633, 650, 682, 694-718, 720-725, 727, 729-747)

18. Comment

The Department Must Hold a Hearing, and the Department Should Hold In-Person Hearings in Each County the Proposed Project Crosses When it is Safe to Do So.

As a preliminary matter, this project involves a number of crossings of Exceptional Value Waters. The Department, under Pa. Code 93.4c(b)(1)(ii), upon request, is required to hold a public hearing on any proposed new, additional, or increased discharge to Exceptional Value Waters. Commenters formally request such a hearing.

Additionally, the Department should hold in-person public hearings on the Project in each county it would cross, at a time and under a procedure by which it is safe to meet. The extensive reach of this Project, and the public interest in it, merit more than a virtual hearing where participants cannot meet each other, cannot present materials, and are limited to three minutes' speaking time. Furthermore, there are many residents who are unable to participate electronically, uncomfortable with that process, or lack the bandwidth to do so reliably. We ask the Department to utilize the conventional means of public hearing in a manner consistent with public safety and protection of the most vulnerable among us. (134)

19. Comment

I also ask DEP to hold public hearings at suitable locations. (588)

20. Comment

Transco-REAEP sent the required Act 14 notices to municipalities in April 2021. I don't see any subsequent notices to municipalities from Transco-REAEP or DEP. The municipal notices state: For more information about this land use review process, please visit www.depweb.state.pa.us, (keyword: Land Use Reviews).

In the FERC docket CP21-94, there are several submittals by FERC, Transco-REAEP, and concerned persons since April 2021. Do municipal officials know how to or that they should file with FERC docket CP21-94 for intervenor status in order to be notified of updates?

The Pennsylvania Bulleting notice states, More information regarding the permit applications related to this proposed project may be available online (dep.pa.gov/pipelines) or in the Department's Regional Permit Coordination Office. Upon visiting this link and associated links, one sees posts of several documents. However, there is no link to the full file at https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/REAEP/

People don't know about the Pipeline Portal.

When one uses eFACTS, there is no Public Permit link.

https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults singleAuth.aspx?AuthID=1350583

I find the above to be major omissions of public information.

The Pennsylvania Bulletin notes, "The Department may conduct a fact-finding hearing or an informal conference in response to comments if deemed necessary." I recommend that DEP conduct public hearings which, not only describe the project, but inform the public as to

opportunities for public participation. A such hearings, DEP would have the opportunity to hear the public's questions and concerns.

DEP should establish a repository for comments, like it does for regulations, and like FERC does for dockets. Commenters to DEP should have the opportunity to see comments submitted by others. Perhaps DEP could add a folder to the Pipeline Portal.

I have observed, generally, that large projects that span several years lead to project applicants applying for permit "modifications." Whereas these are published in the Pennsylvania Bulleting, they generally go unnoticed by the public. Yet such modifications can be significant and can incrementally expand the harm of a project. Will DEP develop an approach, similar to that of FERC, whereby all persons requesting intervenor status are notified? (588)

21. Comment

If these permits are not denied, I urge the state to provide public hearings for the project well into 2022 and after the holiday season to provide more ability for the community to weigh in on this lengthy and harmful pipeline project. I also encourage the state to keep apprised of the status of the other state and federal applications to ensure we are not wasting time of strapped agency personnel considering a project that will not be ultimately built. Thank you for the opportunity to comment. (32, 115, 128, 131, 137, 176, 180, 211, 236, 242, 245, 271, 275, 312, 339, 354, 367, 386, 388, 408, 412, 414-415, 419, 423, 437, 445-446, 463, 470, 492, 619, 622, 639-658, 660-681, 683-693, 719, 728)

22. Comment

Thank you for the opportunity to comment on the proposed Chapter 102 and 105 applications and DEP's proposed 401 certification. We request again that public hearings on these proposed applications be held after the new year in each affected county and that with the missing information and gaps noted in these comments about the application materials that public comment be extended when Transo has fully updated its applications and all information is provided on the DEP pipeline portal. Please do not hesitate to reach out to us if you have any questions. (1)

23. Comment

DRN requests that based on community concern and the large impacts proposed for 5 counties, additional public hearing time and hearings be added. The current announcement allows for only three hours of virtual public comment (limit of 3 mins per speaker and only one representative per organization) for this pipeline for October 5 from 7-10pm which will not be adequate. With only one hearing date announced DEP is also excluding public who cannot make it on that one particular date. We also raise the point that a pipeline of this magnitude should warrant in person hearings as well (if it is safe to do so with pandemic conditions). Individuals who wish to observe or present testimony at the formal virtual public hearing must contact Colleen Connolly at 570-826-2035 or coconnolly@pa.gov, a minimum of 24 hours in advance of the hearing to reserve time to present testimony. We would argue that it is important that this be revised so that if time remains, people who are listening in and have not

officially signed up "24 hours in advance" are allowed to speak. By cutting off the timeframe 24 hours in advance, again DEP is automatically excluding the public from fully participating by the way the announcement reads as is as well as by likely limiting last minute community members to weigh in. (1)

24. Comment

Additional hearings may also be in order as from the announcement only 60 people would have the ability to comment during the 3-hour virtual hearing. (7, 32, 109, 116, 118, 123, 131, 143, 147, 156, 176, 185, 211, 214, 236, 242, 275, 296, 312, 320, 330, 338, 354, 359, 376, 386, 408, 414-415, 419, 426, 437, 469, 484, 492, 619, 640, 643, 646, 649-651, 653, 658, 661, 672, 679, 686, 692, 716, 726, 749-780, 783, 788, 790-791, 794, 797-798, 801-805, 807-813, 815-816, 819, 822, 835-836, 842-843, 849, 860)

25. Comment

Moreover, with regard to other major public process concerns, DEP's only public hearing was held on the evening of Yom Kippur, the holiest of Jewish holidays. DEP began the hearing at 7 pm, ended the hearing by 8:45pm, and did not appear to stay on the virtual webinar longer to determine if other commenters may sign in. DEP's process of requiring 24-hour advance sign- up for the hearing limits participation in the process. While DEP did appear to circle back for commenters if they were not on the line initially, more must be done to make these hearings more inclusive for the public. This is especially important as the request for another formal extension of the public comment period by Delaware Riverkeeper Network (one of the commenters) was denied shortly after DEP issued the announcement of only one virtual hearing (on Yom Kippur) and a written comment deadline of October 12, 2022. Transco has had extensions granted by the DEP on the record throughout its application, while the public has not received the same courtesy. (134)

26. Comment

First, I would like to note that today is Yom Kippur, the holiest day in Jewish religion which involves fasting and prayer until sundown, which was only moments before this hearing began. The scheduling of this hearing on Yom Kippur has diminished the ability of the Jewish community members to participate. We request that DEP schedule a second hearing and make the audio of this hearing available online for those who had to miss it. (875)

Response 12-26:

The Department opted to conduct a virtual public hearing in lieu of in-person hearings. The choice was made with the belief that the virtual format would provide increased efficiency and convenience for all involved parties. The Department believes the virtual format enhances accessibility to a broader range of individuals and stakeholders, ultimately resulting in greater participation and engagement from a more diverse group of individuals.

On August 27, 2022, the Department published a Notice of Public Hearing in the *Pennsylvania Bulletin*. On October 5, 2022, the Department held a virtual public hearing

to provide an opportunity for stakeholders to provide verbal comments. The Department considered all comments, both written and verbal, including those comments submitted outside of a comment period, prior to the issuance of the Chapter 102 and Chapter 105 permits. The Department took into account the feedback received from the public before making its final decision on the permit applications. The Department regrets the oversight of scheduling the public hearing on Yom Kippur. Those who wished to comment had the opportunity to submit written comments through October 12, 2022.

General Support of the Project

The Department received comments, during the public comment period, showing general support of the project. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

27. Comment

We need pipelines! We've seen what happens when we have a cold winter in the northeast with electrical shortages. We saw what happened in Texas last year.

We need reliable energy, and the least expensive, most reliable, and safest way to transport natural gas is via pipeline. Please issue the permits necessary and stop the green energy fools from shutting down reliable natural gas delivery that will supply us with much needed electricity and heat for homes. Thank you. (659)

28. Comment

I'm writing to urge you to approve all necessary permits for the Transco REAE pipeline.

With the closure of pipelines throughout the US by our current administration, energy costs have skyrocketed throughout the world. (This was occurring far before Putin invaded Ukraine.)

To see the results of a failed green energy agenda, one has to look no further than California, where, on the one hand, the government is decreeing that no gas-powered cars will be sold after 2035, and on the other, it's telling people they can't charge their electric cars due to an electricity shortage.

We need to make the United States energy independent again for our national security. Pipelines play an important part in that, besides the fact that they are the safest way to move oil and gas.

Please approve this and other energy projects that meet the law and environmental standards of our state and country, and end the reign of terror and idiocy placed upon us by irresponsible "green" energy activists. (659)

Thank you for allowing me to express my thoughts concerning the expansion of the pipeline in PA and neighboring states. The pipeline is a safer way to transport energy and more environmentally sound. This is major concern that will be a sound energy decision for now and the of PA residents. It will insure our children and grandchildren to have safe, reliable energy. This is crucial to keep our economy strong and safe place for the future citizens. (782)

30. Comment

This is in regard to the Regional Pipeline Expansion project in NE Pennsylvania

My background is inherently familiar with Gas Pipeline Design and Operation.

I am a retired independent engineering consultant with experience in refinery and power plant design and operation on several continents for nearly five decades.

Designed control system strategies for pipeline operations at Purdue Bay Alaska in the late 70's. I made comments about negligent line pigging to my local US representative after a BP 2006 spill. My comments were used during a US Senate hearing in which BP was fined for their lack of continuous monitoring of the drill and collection site resulting in the spill.

I consulted on construction techniques on an above ground including a unique natural gas line in New Zealand for Exxon Mobil in early 1980s. The plant ultimately provides premium gasoline from a syngas project.

I oversaw installation and commissioning of a high-pressure North Sea pipeline in eastern UK for BP in 2000, oversaw gas line cleaning in Mexico in 2008, and commissioning of a local pipeline from Columbia Gas line to Glatfelter (York County) in late 2016.

Further, adjacent to pipeline concerns, I have contributed to several LNG projects here and abroad and have designed safety systems in keeping with current DOT regulations for such facilities.

I am familiar with the construction company Williams as they provided the pipeline work near Bradford County where I was a controls and environmental startup consultant for the first frack gas power plant in Pennsylvania. (Panda Liberty)

Williams has conservative safety standards for line construction and commissioning procedures which are more conservative than those suggested by the AGA (American Gas Association).

So I ask as an expert in this field with first hand experience, to favorably consider the expansion of the regional energy project. (784)

31. Comment

Thank you for the opportunity to comment on the regional pipeline, from Delaware county, lived in the area for over 15 years; work in the home care industry for over 10 years.

During the course of work over the years, I have seen the how the increasing gas prices have directly affected my work-environment. Most co-workers use their vehicle to go to various homes to help our elderly citizens with the ADL's. It is becoming harder to travel long distances due to the increased cost of transportation. Also, during winter we notice the burden of keeping seniors warm and safe because the price for heating is becoming unaffordable. Before that wasn't an issue, however, it is now.

What does this mean for seniors and caregivers?

- For the elderly, there will be limited care accorded
- Their lifestyle will be affected
- The increased cost of living will make it harder for caregivers to perform their duties

It is difficult now for our elderly citizens, if this expansion goes through it will make it easier for them to have their right to care accessible, which will lift their standard of living, Likewise, the continuation of the project will allow caregivers to reach more citizens without breaking the bank. In contrast, if the expansion doesn't go through it will be more difficult for the elderly to access their rightful care, and as well it will be more difficult to have caregivers to afford their duties. We have seen the direct impact of increased gas prices on our citizens already.

I ask you as a home care worker of this keystone state to allow the expansion of the pipeline which will alleviate the suffering of many citizens but improve their standard of living. (786)

32. Comment

I am urging you to fast track this project.

Our area is growing. Our roads and bridges are worn and out dated. This project would take pressure off the roads.

While a pipeline does disturb the ground when we put it in it gives us years of clean environmentally friendly service. If we don't have this we will haul it on trucks. This will increase our carbon footprint. I also want to remind you of the revenue coming into the local area!

We are looking at 17 million in revenue coming to the state and 6 million coming to the local government not counting the almost 400 million stimulating the local economy...... Just because of this 30+ miles of pipeline if we put it in

Our area is growing. We need this pipeline just to keep up with the growth. Please, for the sake of your people, help make this happen.

Thank you for considering this matter. (787)

33. Comment

First, Thank you for allowing us to express our concern for expansion of the gas pipeline.

Pennsylvania is rich in natural resources where as one of those natural resources is natural gas. I have heard that Pennsylvania; could by itself, supply all of the United States

requirements for natural gas. That in and of itself, is a no brainer to fully utilize and to further enhance the economic state of Pennsylvania and will also aid in making the United States Energy Independent.

Building the pipeline would also create numerous jobs which are also of great benefit to the people residing in Pennsylvania and every effort should be made to ensure those jobs go to Pennsylvania residents. I do think that careful thought should be put into the path of the pipeline so as to not encroach on natural landscapes, parks, forests, and being careful to not disrupt too many homeowners (emanant domain). HOWEVER, I am confident, that this pipeline can be constructed with minimal impact on the above mentioned locations and that it's benefits far outweigh the bad points.

We do NOT want to end up like Europe, dependent on energy from a dictatorial nation like Russia who, at the flip of a switch, can cut them off and freeze them out in the winter and have control over those sovereign nations. It is ALWAYS in the best interest of each nation to be independent on as much as possible. The idea of a "global economy" has failed the citizens of the United States and have put us at the "beckon call" of those who do NOT have our best interests at heart.

I feel the majority of Pennsylvania Citizens support the concept of PA being a supplier of natural gas for the United States and for planet earth as a whole.

In summary, as a hunter, fisherman, and hiker who appreciates the environment I urge PA Department of Environmental Protection to go ahead with the extension of the pipeline. (789)

34. Comment

I am 52 married with an 8 year daughter Catherine who attends Nether Providence Elementary School in Wallingford. I live in the house I grew up in. The increased prices of gasoline and energy in general have made living harder.

Health concerns and getting family to school, work and doctor's appointments have become rather taxing in our lives with the sheer cost. Electric and heating bills mean less food on the table and less things I can offer my daughter as she wants to do a lot of activities. Living is the number one concern.

In my own neighborhood I have witnessed small business closing over cost. A tree cutter down the street closed over rising gas prices, restaurants closed because they couldn't afford to power their business with the high cost of electric and rising food prices. I prefer to spend my money local and keep my neighborhood floating. I occasionally will attend a PTO meeting if I have a good idea that can help them raise funds. I have reached out to my employer to try and offer support for our local people to take some burden off of them going to a grocery store.

I ask that you support the expansion of the transcontinental pipeline to help those in the local communities climb back up to a normalcy; so people can do more for their kids. The money in taxes, and jobs created will provide a well need boost in our local economy. (792)

Topic: Transco/Williams Pipeline expansion and upgrade

Purpose: To Convey Reasoning on why the Department of Environmental Protection Should give its Approval on the Transco/Williams Pipeline expansion and upgrade. Ever Since the Gas Shortage of the 1970's Washington DC (the Politicians) has been saying The USA needs to be energy independent. This project would help the USA Achieve This Goal.

Subject. In the Past 21 Months, the American people Seen and Felt the effects of not being Energy Independent. Record high inflation is a result of the USA not being energy independent. I bet Europe wishes they were not dependent on Russia energy at this time. Germany was warned about being so dependent on Russia Energy Ignored the warning.

I Live in Buck Twp. PA Transco/Williams operates A Compressor Station in the township. There is a point Just outside the Buck Twp. Line in Neighboring Bear Creek Twp. Where the Transco/Williams Gas line And Oil Line Cross, Locals Call it the Cross Roads. I am 55 years old and my family has been living in Buck Twp. since the 1850's there has been no major problems with the pipelines since the where put in.

Transco/Williams Company is also active in the local Communities IE. They put new windows the Buck Twp. Office Building. This only one example of Transco/Williams Co. giving back to the Community.

Transco/Williams Co. are Also Stewart's of the environment. How do I know? This Upgrade and Expansion Project is a prime example. They are reinvesting back into the infrastructure. This is something you do not see many Companies doing today. Just look at Jackson Mississippi the water Co. did not reinvest in its Infrastructure now the people cannot drink the water.

Conclusion: The Transco/Williams Pipeline expansion and upgrade will help the American People In so Many Ways. I will help the USA become Energy independent Help National Security. Some Say we have to move away from fossil Fuels but at this moment in time The USA electrical grid cannot handle everything going electric. I Hope the Department of Environmental Protection will Approve Transco/Williams Pipeline expansion and upgrade. (793)

36. Comment

I reside in Plains, PA, which is located in the center of Luzerne County.

I am of the opinion that in these tough economic times, it is the goal of the Williams company to help lower the burden to the members of luzerne county with lower natural gas prices. As you are aware, winter is rapidly approaching.

The Williams co. has had a long standing relationship with NEPA. Its PA based staff which include employees, contractors and vendors total north of seven hundred and fifty. The economic benefits will be felt throughout the state.

As the Williams company attempts to provide the lowest natural gas prices possible, they will also do this in the most environmentally friendly way. The track record that they have for doing so, speaks for itself. (795)

37. Comment

As an Oil & Gas executive & employer, and previous member to the DEP's CAC and EQB, I urge the DEP to approve the William's Transco Regional Energy Access Pipeline Expansion Project.

This project will safely serve Millions of Natural Gas customers with the Cleanest Energy known to Man, and right under out Feet in Pennsylvania. With the past few years of Covid, a Worldwide Recession, last weeks Hurricane Ivan, and the continuing War on Fossil Fuels, now is not the time to play politics with our Nation's Security, Military Might and America's Energy Needs. T

Thanks to Russia, Energy is now a Weapon, and we must return to American Energy Independence in order to keep the earth safe, and Free. (796)

38. Comment

I am Managing Partner of NMW Industrial, a WBE certified Oilfield consulting company, and Vice President of L and L Pipeline a civil and pipeline construction company. Regional Energy Access is what we consider in the industry a "no brainer". It is a clear opportunity to expand capacity and supply to three states already experiencing price increases and shortages, PA, NJ, and MD. It plans to do so with minimal impact to landowners,; one of the most complex issues when planning a new line or expansion. Utilizing current ROW, the project will have minimal additional environmental impact and disturbance.

Having worked directly with both Williams Transco and Williams, the project will be overseen by some of the best in the industry. In my personal experience they adhere to some of the highest safety, environmental, and operations protocols that we have ever experienced. Keeping this in mind, it will also generate welcome and much needed opportunities for subcontractors such as ourselves in the area. In conclusion, this project must proceed as a win-win; for the end user in need, the operating company, and for contractors like us. (799)

39. Comment

I feel that the extension on the Transco Pipeline in Eastern Pennsylvania would be an incredible idea. The amount of jobs would increase the level of GDP in the area which is a good thing. Beyond that, providing more individuals with the needed natural gas would allow the tri-state area to move away from coal and other detrimental sources of energy. With the expansion of the pipeline, the positives would greatly outweigh the negatives in relation to the expansion. I urge the Pennsylvania Department of Environmental Protection to approve this expansion of the pipeline. (800)

Lackawanna County PA resident and member of Pipeliners Local Union 798. My union members perform welding and fabricating of pipelines to highest quality level in the industry and that quality has taken our members all over this country building our energy infrastructure.

I ask you today to grant these permits to Williams gas and allow these upgrades to be done. PA DEP does a fine job keeping these jobs in line and in accordance to state regulations to conserve our natural resources and as well Williams is doing the same by using the existing right of way from the transco lines. These upgrades will power 3 million homes with clean burning natural gas that the northeast has an abundance of as well as meeting or exceeding emissions goals.

These projects support many of my fellow members lives we travel around the country building our energy infrastructure. These projects will support local businesses not only with clean energy but with support businesses keeping workers housed and fed throughout the project. Our world is constantly changing and more now than ever our citizens need to have access to reliable clean energy these upgrades will provide what we need, for our Pennsylvania families allow Williams Regional Energy Access permits. (817)

41. Comment

I come here today to express my firmest support for the Transco Pipeline's expansion. With the highest gas tax in the country, we all feel the pain at the pump the most. Pennsylvanians deserve cheap, effective energy to foster a more affordable, inclusive Commonwealth.

This expansion will run 30-35 miles across our Eastern border & will provide energy to 3 million people in multiple states. The coal belt will benefit the most from this in terms of both savings & jobs. As our world transitions away from coal it would create 6500 jobs in depressed areas & generate \$375m in GDP without costing the taxpayer a penny.

Growing counties like York & Cumberland (the fastest growing in PA) would directly benefit from this. A growing population requires more energy & with the war in Ukraine continuing & winter fast approaching, Pennsylvanians need this cheap, reliable source.

This project will also improve multiple existing facilities. This will overall come at a price tag of \$800m and will generate a hefty sum of tax revenue for a state in relative decline.

Just today, OPEC its capping of oil production by millions of barrels. This will provide a major problem for the people of Pennsylvania and our neighbor states.

The pipeline costs Pennsylvania \$0. The project will generate thousands of jobs. The GDP will explode with growth in areas formerly designed for coal production. This will be a huge net benefit for all of Pennsylvania and especially the depressed coal belt.

I urge the PA DEP to approve expansion of the Transco Pipeline. (821)

This submission is for the Request for Comments by the Pennsylvania Department of Environmental Protection for the "Regional Energy Access Expansion Project".

On behalf of the Teamsters National Pipeline Labor Management Cooperation Trust (LMCT) representing the Teamsters Union and the Pipe Line Contractors Association (PLCA) we support the building of the "Project" if they utilize Teamster union member pipeline workers and our union contractors.

We have contractors who specialize in pipeline work that involve rivers, wetlands and waterways. (Exhibit A)

Our trained Teamster workforce operates this specialized equipment in a skilled and environmentally friendly manner.

Our Teamster Pipeliners who reside in Pennsylvanis where the Project would be constructed also fish and hunt in this state.

Therefore, they value protecting the environment while doing the construction and restoring the land so they can continue to participate in these recreational activities.

This will only enhance their safety and environmental concerns and awareness during construction and restoration.

Another part of the collective bargaining agreement is a formal "Drug and Alcohol" Policy. A drug and alcohol free work force is less likely to have accidents or damage the environment since they will not work under the influence of drugs or alcohol that can negatively impact their judgment and quality of the work. (Exhibit B)

According to our collective bargaining agreement our workers must be qualified. The contractors demand strict adherence to this language. (Exhibit C)

This ensures a more skilled and trained workforce so it is less likely there will be any environmental issue.

We have certified Training Instructors and a training program specific to the pipeline construction industry stressing quality of work and environmental awareness.

Training not only includes Defensive Driving techniques but often-formal classroom instruction in addition to specific equipment training. (Exhibit D)

Some of our Trainers have been cited by outside Safety Organizations for their expertise and training skills. (Exhibit E)

Many Teamster workers on the "Project" will be Veterans coming out of Veteran Programs we participate in to recruit our former military men and women. (Exhibit F)

These Teamster Veterans are disciplined and taught about being aware of their natural surroundings both while serving in the military and undergoing our training programs.

Our training program, veterans program, high wages and employer paid health insurance and pensions only enhance our Union Contractors ESG score. (Exhibit G)

In closing, based upon the Teamsters Training specific to pipeline work, the contractually mandated safety and pipeline specific qualifications listed in the collective bargaining agreement promoting quality work the Teamsters National Pipeline LMCT supports the building of the "Project".

The above comments should help to mitigate and address the concerns on the Environmental Issues.

Therefore, FERC should mandate that any pipeline projects under their domain should be performed under a Union Project Labor Agreement as a condition for approval. (823)

43. Comment

I am commenting on the installation of the proposed pipeline as described in a "Pocono Record" article dated Monday the third of October 2022. First and foremost, we do need this expansion of the natural gas line in PA to support the growth and conversion to this cleaner form of energy. I encourage the DEP and gas company to open cut as much of the pipeline installation as possible. It has been proven since the early 1900's that open cut installations are faster and the impact is very temporary allowing mother nature to reestablish natural growth of the ROW corridor. Open cut of wetlands, streams, and rivers also fall under the same historical proof that the very temporary impact is minimal. The use of HDD or bore methods on this type of work in the past few years has shown to have a greater impact, because the PA DEP still classifies the bentonite used in drill mud as a hazardous material. Even though the bentonite is commonly used in cosmetic products, water drinking wells, ponds, etc..

I encourage the DEP to work swiftly with the Gas Company on permitting the project via the 102/105 permit process and not listen to the various people claiming that pipelines have everlasting environmental impacts. A 20 to 30 house land development currently being placed by our natural resources has the lasting impact on the foot print of the land. A single snow storm also places more destructive chemicals into the environment than any linear pipeline work which is normally restored before growing season ends back to a grassy corridor. (833)

44. Comment

We are providing these comments on the Regional Energy Access Expansion Project on behalf of the National Federation of Independent Business (NFIB PA). NFIB is the nation's leading small business association, representing members in Washington, D.C., and all 50 state capitals. Founded in 1943 as a nonprofit, nonpartisan organization, NFIB's mission is to promote and protect the right of its members to own, operate, and grow their businesses.

NFIB represents nearly 13,000 small and independent business owners in Pennsylvania, and around 300,000 nationally. Members of our organization represent virtually every sector in Pennsylvania's economy and reside in every corner of the Commonwealth.

NFIB research has found that energy costs are one of the top three business expenditures of small businesses. Every business—large and small—depends on services and materials that are impacted by energy prices.

The proposed regional energy access expansion project would help to control these costs by providing the necessary infrastructure to safely deliver clean, energy efficient, and cost-effective natural gas products to Pennsylvanians. Additionally, this project would provide much needed economic development to the northeast region.

Pennsylvania has not fared well in comparison to other states when it comes to attracting and retaining businesses. Despite being the 6th largest economy in the nation, Pennsylvania ranks 43rd in creating new jobs. Expanded energy infrastructure, will make Pennsylvania more attractive to start as well as maintain a business. Additionally, this project is poised to create over 6,000 new jobs which will assist in our post pandemic economic recovery. Small businesses benefit from a strong economy and lower energy costs which will both be achieved by this project.

On behalf of the small-business men and women of the NFIB we ask for your approval of the regional energy access expansion project, and we thank you for the opportunity to provide comments on this important issue. (834)

45. Comment

Please accept the attached comment on behalf of Pipeliners Local 798 in support of Williams' Regional Energy Access Expansion Project during its comment period for Chapter 102 and Chapter 105 permit applications.

Our members, who are among the nation's most highly skilled and trained industry workers, collected 1,048 signatures on our comment in the American Pipeline Action Network because they recognize the urgent need for reliable, affordable natural gas in the region, as well as the high level of care project developers have taken to ensure environmental safety.

Local 798 craftsmen undergo extensive training and education to ensure the pipeline infrastructure we work on meets the highest standards of quality. We respect that Williams consistently demonstrates this commitment, in addition to engaging with stakeholders and community leaders during the planning process and making appropriate modifications to develop the most responsible project route.

On behalf of the local workforce, residents and all Americans who share a growing need for reliable, cost-effective and domestically sourced energy, I ask that you consider the voices on the following pages when discussing critical permits for the REA Expansion Project. (851)

46. Comment

I am the Business Manager for the Laborers' District Council of Eastern Pennsylvania—which represents highly skilled building tradesmen organized under the Laborer's International Union of North America (LIUNA). As you may know, LIUNA represents highly skilled men

and women throughout the United States and Canada who perform a range of construction work, including specializing in building pipelines and similar infrastructure.

I am writing today on behalf of our local members and their families in support of Williams Regional Energy Access Pipeline.

I can attest to two important factors, and I ask that you closely consider them when reviewing this pipeline.

- First, much of the work on the pipeline will be completed by LIUNA members. It will be completed responsibly and with the utmost regard to the safety of our workers, the public, and the environment. Our members are uniquely qualified to build pipelines, not only because of their high-quality training, but also because they live and work in the affected communities.
- Secondly, work will support thousands of family-sustaining union jobs for workers in Northeastern Pennsylvania.

At LIUNA, safety is our number one priority. All LIUNA members—including members who will build this pipeline—complete a rigorous, multi-year registered apprenticeship program. It includes 3,200 hours of both classroom and on-the-job training in occupational safety and health standards, as well as construction standards, which results in true expertise in their craft. LIUNA members also receive ongoing training on important safety processes throughout the course of their employment. Our training imparts a heavy emphasis on safety to instill the ability to recognize any hazard that may arise on the job—in terms of both safety and environmental hazards—and teaches them to respond with agility. Our learning model is the leader in the industry, because it is designed and continuously honed by our local unions, our international union, and the employers we work for.

Additionally, our organization has a proven record of proficiency and achievement that ensures that work will be completed correctly, and in accordance with Williams plans to mitigate environmental impacts. We maintain a network of long-standing relationships with our employers, and we guarantee supply of skilled labor to keep projects moving forward. Our experience shows that our work can be completed without unnecessary delays or harm to the public or environmental safety.

I represent approximately 4,300 members in the 29 counties of Eastern Pennsylvania, including workers who live, work, and play in all of the counties along the Regional Energy Access route. LIUNA has worked tirelessly to cultivate a higher professional standard for our workers, which is rewarded through competitive pay and benefits. Pipeline work has become a specialized occupation and cornerstone in our effort to provide family-sustaining jobs that offer living wages, health insurance, and retirement benefits. This project is important to our workers and their communities: it guarantees quality income and job security, which in turn supports local spending and payroll tax revenue.

For these reasons, and based on the information set forth in Williams permit applications, I Fully support Williams and their Regional Energy Access Pipeline. (852)

Below is a comment letter regarding the Transcontinental Gas Pipe Line Regional Energy Access Expansion Project and the pending Chapter 102 and Chapter 105 permits.

This comment letter is signed by over 190 supporters of the proposed project.

Many of the signers of this letter live or work in, or near, the project footprint in Pennsylvania.

There is a significant level of support for the proposed project, as residents recognize the urgent need for reliable, affordable natural gas in the region.

Thank you for the opportunity to share letter below regarding Williams' proposed Regional Energy Access Expansion.

We write to provide comments regarding Williams' Transcontinental Gas Pipe Line (Transco) Regional Energy Access Expansion Project.

Natural gas, and the infrastructure that carries it, is critical to achieving a clean energy future and advancing the viable growth of renewable energy.

Regional Energy Access Expansion Project facilities are designed in a manner that will enable natural gas from Pennsylvania to serve baseload needs complimenting the intermittency of currently available renewable alternatives and are adaptable to support future developments involving renewables, including green hydrogen and Renewable Natural Gas blending, providing the necessary and critical infrastructure needed to meet future clean energy demand.

This project will minimize environmental impacts by maximizing the use of existing Transco infrastructure and rights of way. It consists of additional compression and select new loop segments along the existing Transco corridor. The efficient use of existing rights of way minimizes disturbance and environmental impacts, making the Regional Energy Access Expansion Project an optimal project to meet growing energy demand, with minimal impacts. The project is slated to provide cost-effective, clean, and reliable natural gas to regional markets in Pennsylvania, New Jersey and Maryland.

Furthermore, by generating energy in-state, this project will help meet growing regional demand for natural gas, as well as increase reliability and keep costs lower for millions of Pennsylvania homes and businesses. Current demand projections show that the region will reach a supply deficit of natural gas in the near future, and this project is designed to not only meet that demand, but to be adaptable, ensuring the region can meet its growing, changing needs for natural gas.

With Williams' efforts to construct the Regional Energy Access Expansion Project in a manner that reduces environmental impacts, coupled with the fact that natural gas is a natural partner with renewables, empowering their growth to achieve an even cleaner energy future, we support the proposed project and encourage Pennsylvania Department of Environmental Protection to expeditiously issue the Chapter 102 (Erosion Control) and Chapter 105 (Dam Safety and Waterway Management) permits for the Regional Energy Access Expansion Project. (853)

Help Pennsylvania regulators know the value of the Regional Energy Access Expansion Project to the clean energy economy

Natural Gas pipelines are critical to achieving a secure energy future and advancing viable growth in Pennsylvania.

Regional Energy Access Expansion Project facilities are designed to enable natural gas from Pennsylvania to serve baseload energy needs, complementing the intermittency of currently available alternatives. The project is slated to provide cost-effective, and reliable natural gas to regional markets in Pennsylvania, New Jersey, and Maryland and to develop the critical infrastructure needed to meet future energy demand.

Specifically, this project will minimize environmental impacts by maximizing the use of existing pipeline infrastructure and rights-of-way. The efficient use of existing rights-of-way reduces disturbance and environmental impacts, making the Regional Energy Access Expansion Project an optimal project to meet growing energy demand with minimal impacts.

By generating energy in-state, this project will help meet the growing regional demand for natural gas and provide reliable energy for millions of Pennsylvania homes and businesses. Current demand projections show that the region will reach a supply deficit of natural gas in the near future. This project is designed to meet that demand and be adaptable, ensuring the region can meet its growing, changing energy needs.

Because the Regional Energy Access Expansion Project is designed with environmental impacts in mind and makes the most of the inherent flexibility of natural gas, we support the proposed project and encourage Pennsylvania Department of Environmental Protection to expeditiously issue the Chapter 102 (Erosion Control), and Chapter 105 (Dam Safety and Waterway Management) permits for the Regional Energy Access Expansion Project. (857)

49. Comment

I am the president of the Columbia Montour Chamber of Commerce based in Bloomsburg, Pennsylvania.

Representing over 400 organizations throughout Columbia and Montour Counties and beyond in Pennsylvania Columbia Montour Chamber of Commerce works to strengthen the region's economy by supporting existing employers as well as encouraging new business development.

We researched the Regional Energy Access Project which would expand the company's existing pipeline infrastructure to provide greater access to natural gas in the northeast region. Now more than over maximizing our vast energy resources in the United States is critical to the stabilization and growth of our nation's economy.

Construction alone will generate an economic benefit in the region. Williams projects that the project will generate \$295 million in labor compensation, \$357 million in GDP contribution. Approximately 6,396 local union jobs will be supported. Regional Energy Access will inject an expected \$17 million state tax revenue and over \$6.6 million in local tax revenue.

Businesses and other potential users in the region will benefit from improved access to natural gas well into the future.

In support of the expansion of Pennsylvania's natural gas pipeline infrastructure the chamber's board of directors has adopted the following resolution. Whereas Pennsylvania's natural gas industry is a major economic driver in the Commonwealth through job creation directly related to gas extraction and transportation, other utility costs and revenues and whereas Pennsylvania's natural gas reserves are projected to be able to serve current and future demands in the Commonwealth with significant surplus for export for decades.

And whereas the current infrastructure within Pennsylvania is insufficient for the safe and economical transportation and distribution of Pennsylvania's natural gas supply to all markets, including residences and business within the Commonwealth and whereas state and federal regulatory agencies proclaim modern pipelines to be the safest method of transporting natural gas, now therefore, be it resolved that the board of directors of the Columbia Montour Chamber of Commerce supports the expansion of Pennsylvania's natural gas transportation and distribution pipeline infrastructure through a responsible collaboration with the property owners for the benefit of the citizenry and the economy of the Commonwealth.

Additionally, Williams has demonstrated that they can undertake projects safely with concern for property owners, residences and communities during previous projects in our region including the Atlantic Sunrise Project, company-held public outreach sessions and supported dozens of community organizations and conversation projects in our area. Their representatives have been proactive in communicating and responsive to inquiries. We are confident in their ability to responsibly undertake the Regional Energy Access Project.

Thank you for the opportunity to provide comments in this matter. (861)

50. Comment

My name's Kevin Sunday, director of Government Affairs with the Pennsylvania of Chamber. We're the largest broad- based business advocacy organization in the Commonwealth representing more than 9,000 member companies of all sizes and industrial sectors. I want to thank DEP staff and leadership for holding this hearing and considering the views of stakeholders and the public, including our organization.

PA Chamber is proud to support the project, which will be a nearly \$800 million investment into the region and supporting thousands of jobs, many of them in the skill trades, and support millions in additional state and local tax revenue and support important environmental, economic and energy goals. And we encourage DEP to approve these permit applications under Chapters 102 and 105.

This project will help ease supply constraints affecting customers in Pennsylvania, New Jersey and Maryland, providing gas supply to serve about - about three million homes. It will also support additional use to domestic energy in a manner that further lowers emissions in the region. The progress that we've made, in large part thanks to natural gas and private sector

deployments, of billions in capital for low and zero carbon technologies, which has resulted in significant progress in NAAQS emissions, including NOx and VOCs.

And the DEP is aware the I-95 corridor remains a challenge for ambient concentrations of NOx. And further improvements through the use of cleaner burning fuels like gas in homes, businesses and power generation in the Mid-Atlantic will further improve air quality in this region. An increased energy infrastructure done in the manner such as proposed by Transco, including using renewable and distributed energy technologies to power that infrastructure will help ensure fuel security during the winter months.

And as FERC approved in its environmental impact statement for the project, this project will be constructed in the manner with environmental groundwater and air quality impacts that are left insignificant. And we understand this project and the operation of its facilities does not create disproportionately high and adverse impacts including socio and economic impacts on environmental justice communities.

And it's also our understanding this project's been designed in a manner to in the future adapt to renewables and deployment of green hydrogen and renewable and natural gas lending. It's our understanding as well this project's being proposed in a way that maximizes use of existing right-of-ways that meets or exceeds all relevant regulatory criteria under DEP's stringent Chapter 102 and 105 regulations. More broadly, it will support important economic environmental and energy security goals.

So as we will do in written comments submitted to the docket to supplement these remarks, we encourage DEP to grant these permits and again thank Staff for their work in holding this hearing. Thank you. (862)

51. Comment

Very good. Good evening. My name is Stephanie Wissman and I'm the executive director of API Pennsylvania.

API Pennsylvania is a division of the American Petroleum Institute, which represents all segments of America's natural gas and oil industry. Our approximately 600 members produce, process and distribute most of the nation's energy. The industry also supports more than ten million US jobs and is backed by a growing grassroots movement of millions of Americans.

I am here tonight to testify to the importance of pipeline infrastructure construction and expansion in Pennsylvania, the need to continue to develop and utilize American-produced energy safely and to offer our support for the issuance of the Chapter 102 and 105 permit applications for the Transco Regional Energy Access Expansion Project.

Regulatory certainty is needed when applicants meet the regulatory criteria for permit issuance. Pipelines are the safe connection between consumers and America's abundant reliable cleaner energy. Additional infrastructure is needed so that no matter where people live they can be better served, expanding the benefit of domestic energy abundance.

At API we establish and maintain over 700 industry standards and recommended practices and disseminate best practices across the industry. For more than 100 years we have taken the natural gas and oil industries collective wisdom on everything from drill bits to environmental protection to embrace proven sound engineering and operating practices and safe interchangeable equipment and materials. We believe safety and the protection of our communities and the environment go hand-in-hand with industry operations.

Recognizing that we as an industry must continue to be committed to the good stewardship of our environment, we have set our goal at zero incidents. State and federal regulators who have incorporated our standards into their regulatory structures have recognized our balanced approach. We see the same balanced approach reflected in the Regional Energy Access Expansion Project. Williams is committed to maintaining the highest standards of safety. Pipelines are the safest, most reliable and most efficient manner of transporting energy products. They transport the energy that people depend on every day to heat homes, generate electricity, cook food and much more. Pipelines are a vital and efficient part of the United State energy infrastructure.

The Williams Regional Energy Access Project has been designed to minimize environmental impacts by maximizing the use of existing Transco infrastructure and rights-of-way. Williams is putting in place mitigation efforts to offset any long-term or permanent impacts to aquatic resources such wetlands or bodies of water so that the project should not result in a net loss of natural resources, functions and values.

In addition to providing a central energy infrastructure to the region the Regional Energy Access Project will provide valuable economic stimulus generating high quality employment with substantial direct, indirect and induced economic activity. A strong economy, affordable and reliable energy, safe communities and environmental stewardship are not values that are mutually exclusive of each other. For these reasons API supports this project's approval. Thank you. (863)

52. Comment

I was switched from oil to electric in my apartment. My bill went up in price. On my fixed income I was unable to keep up with my bills. Unfortunately I was unable to pay the electric bill for three months and my bill was over \$2,500. So without warning my electric was turned off.

My Social Security just pays my rent with a little left, so I have to work as a companion for people older than I am. It is very rewarding and I able to help people. Everyone I've cared for I've become like a family member. I help with bathing, doing wash and cooking and other personal care items. I take them to their - their appointments like doctors, hairdressers, etcetera. I do go grocery shopping. I try to keep them occupied by doing things they like; saying prayers, talking, watching TV, etcetera.

When my electric was turned off I stayed in my apartment for a week. Food went bad. It started to smell. Trying to clean the refrigerator was hard to do with my COPD. I was having trouble breathing. I had to lay down with a fan blowing on me. I have an electric chair and it

was the back position, so I had to climb in and out and it was - and at 74 it wasn't easy. I've used flashlights and a battery operated fan. It was very stressful. No phone, no lights, no TV, no internet, just darkness.

The rising cost is a large burden to my way of life. My friend, which has been for 71 years, could not reach me and thought I might be dead. She called my godson and had - and they came over to check. I went home with them and was there until the electric was turned on. I am so lucky to have these people in my life. I don't know what I would have done if I hadn't had them.

That is why I am asking DEP to approve all the permits in question. Thank you again for this opportunity. (864)

53. Comment

It shows the importance of the energy infrastructure that we need and the - the truth of the wind and solar that - that actually burns most fossil fuels than we're getting out of it. And then, you know, if we're supposed to just heat these homes with - with wood, how, we have no forests left and there'd be twice as much carbon released into the atmosphere. This natural gas is - we're needed it. And I'm happy to hear a lot of the conversation that's going on here today.

And thanks for having me and we'll be available to - to build and construct. And I strongly the urge the approval of this project and so do a lot of others in my field. Thanks for letting me speak and I'll yield. (865)

54. Comment

My name is Dr. Dan Felix. I am a retired educator who has lived his entire life in Pennsylvania. Thank you for allowing me to speak here today concerning the Transco transmission pipeline permits upgrading.

My reason for speaking today is my concern about expanding the pipeline to help lower the price of natural gas and to help people to survive. Not allowing the pipeline to be upgraded to allow a greater flow of natural gas will make it much more difficult for many people to gain access to natural gas. The prices of energy have risen greatly over the past few years. As winter approaches the need for natural gas and other heating oil products will increase and people on a fixed income will have decided if they want to eat or be warm. The must keep some heat in their homes to keep pipes from freezing which means they must spend some money on heating and thus less on food.

We are not ready to shift to renewable energy sources that quickly. The use of natural gas and other carbon energy sources is needed for several years to allow for a gradual shift to renewable. It is wrong to make this sudden shift of shutting off of all carbon-based fuels with nothing in place to replace those fuels. After 100 years we still have people using horse and buggies. The change to automobile didn't change in one year. The government didn't tell people that they must change to automobiles. Why must the government be making people stop cold turkey off of their use of carbon-based fuels?

Our children are our future. How will they feel about whether a pipeline is approved or not? They won't know and probably won't care. All they know is their parents won't have any extra money for things they want to buy, or it may be worse. They may be cold and/or hungry. This needs to be something they, the children, see as a good - that's good for them. Being cold and hungry won't be seen as good for them if - if that's what happens.

I personally care about helping others, especially the children. My children, my grandchildren, all children will be impacted by higher energy costs. Until the renewable sources are capable of providing the needs of a majority of the people it will harm people than it will help. I want my grandchildren to have a better life than me and not having access to lower cost energy hurts their lives enormously.

Again, thank you for allowing me to share my thoughts and I pray that you will make a decision in the near future to grant these permits allowing the upgrade to these pipelines. Thank you. (866)

55. Comment

Good evening. My name is Charles Thomas representing Local Union 798. First off, I'd like to thank the Pennsylvania Department of Environmental Protection for allowing me to speak on behalf of our members.

Pipeliners Local Union 798 has over 6,000 members including over 900 in the northeast and 320 in Pennsylvania alone. I'm advocating for the Regional Energy Access Project on behalf of our membership.

The REA is a much needed project to address projected future supply deficits for the area. It will lower energy costs for residents and increase grid reliability. The REA sill provide enough natural gas to the region to power over three million homes. Natural gas provides a reliable pathway to lower emissions without sacrificing grid reliability. The REA will maximize existing infrastructure, and in doing so will minimize environmental impact. Regional natural gas demand continue to rise as businesses and power plants convert to cleaner burning gas to help reduced their carbon footprint.

We must take advantage of our abundance of natural gas to lower emissions and carve our pathway to energy independence. Current affairs internationally have shown that energy can essentially be weaponized and energy independence is vital not only to maintain our quality of life but also a matter of national security.

William is committed to utilizing a union workforce of over 6,000 workers during construction. It's projected to produce over \$6 million in local tax revenue and \$17 million in state tax revenue. The local economies will also largely benefit as the workers who travel will need lodging, food and goods for the project's duration. Current estimates project that regionally the GDP contribution to the region could exceed over \$350 million. Taking advantage of the available union workforce will allow the workers to add to their healthcare as well as their pensions, further alleviating taxpayer burdens both short and long-term. 6,000 workers equals 6,000 families having their insurance needs covered.

In closing, I ask that the Pennsylvania Department of Environmental Protection approve relevant permits for the REA. This project is vital to secure the energy our region needs. Thank you for your time. (868)

56. Comment

I own 12 acres, which there is four gas wells under by property. My son is a college graduate, a teaching degree, tried for five years to get a full-time teaching job. He couldn't because of our dwindling population here. And my son now for the past ten years has been a worker in the gas well industry. He never could find that full-time teaching job because as I said earlier the dwindling population in southwestern Pennsylvania. A lost of the steel mills and the other industrial businesses in our area.

Having experienced gas well drilling and pipeline construction on my own property and adjoining properties environmental impact is minimal at best. You wouldn't even know that there are wells on my property or a pipeline down the road a ways. I've watched the whole process since I am retired, and I was impressed for the quality of the work that these companies performed. The royalties I receive is nice. Don't get me wrong, it is nice, but an older lady down my street which I help because she couldn't figure out if she owned her gas rights, wasn't getting any royalties, but in the process we found out she did own it. She saved her house, literally, because she was losing their house not having enough money. It was the lease money for the royalties she receives. She now is still living in that home.

It seems such a waste of resources not to continue to drill for natural gas and oil when the impact of the energy cost is rising. The drilling company, and you'll love this one, even paved a few miles of our country road free of cost to the township which was tremendous. I don't believe that the drilling will stop so I'd much rather see a pipeline being built for the transfer of this natural gas than truck after truck on the highways transporting them.

I realize well natural gas and oil has caused us to look at other countries for energy supplies. I agree that wind and solar are important alternatives. We just don't seem to have the capabilities to supply our energy needs at this time. I believe that a pipeline would be the safest and most economical way to get the natural gas to a population.

Please approve the Transco pipeline. And I'd like to add at the end here. Columbia Natural Gas Company has a right-of-way on my property throughout my woods. You wouldn't even know it was there. It literally - it seems nonexistent. And I just believe that it's time for us to move on and put the pipelines to make us energy independent. And I thank you very much for your time. (869)

57. Comment

I'm an independent consulting engineer with 31 years as - in private practice. I've worked on 31 international projects in 11 countries, not to mention hundreds of domestic projects. My gas work started up in Prudhoe Bay in the late '70s and I was control engineer.

And there was a - you might remember, BP had an oil spill which I wrote to congress implying that the operation was very poorly done. I'm very much a risk-benefit person. I'm a control

system engineer that worked on the orphan - Orphan Well Law here in Pennsylvania as well as safety instrumented systems.

I worked with Williams here in the State of Pennsylvania on some of the Panda projects and I've been very pleased with all their procedures. They meet or exceed the existing codes of APA - API, the EGA and the FEA codes, which I've actually worked on the FEA 54 and 56 codes.

So with that in mind I favor this project. I favor working with - seeing Williams do the project here in this area and stiffening the existing lines and the compressor stations. I'm overseeing line installation routes in - in England with a 26-mile high pressure line that's been in since 2000 and has no problems. But I've also seen other issues in pipelines in other areas of this country and internationally. So I just want to raise my hand in favoring this particular project, to consider the expansion of Regional Energy Project. Thank you very much. (784)

58. Comment

My comments are coming from a farm background. We farmers feed the world. We are the backbone of America. But in my experience when government agencies move in with licensing and regulations everyone is less effective, and we don't do as well for the ultimate goal of caring for the land. In this country we operate under the principle of providing the greatest goods to the greatest number. When we put restrictions on the goods that's coming from the land it makes less people who benefit.

While environmentally friendly practices are important my experience in - in private business - my experience is that private business will do better at caring for the environment if we use the market forces instead of regulations.

Now, speaking of this section of the pipeline I am urging you to help make this happen. If we don't have this piece of pipeline we'll haul it on trucks. This would increase our carbon footprint. It would also be longer before we can get away from coal. We all agree it's time to use natural gas instead of coal and oil. If we have this piece of pipeline there would be more people who have good paying jobs and supporting the local businesses in the local - in the area. It is projected with all the taxes coming in from people working there is potential for \$17 million in revenue coming to the state and \$6 million in revenue coming to the local government, not counting the almost \$400 million stimulating the local economy.

While it does disturb the ground when we put it in, a pipeline is built under the harsh regulations and the strictest state - the standards. It will give us years of service and we won't know it's there. Plus it'll give more capacity than hauling it with trucks. The private sector will do it better and faster than government can.

Again, I urge the PA DEP to approve this project. We need the growth in the area and private business will make it happen cleaner and faster than government can. Thank you for your time. (787)

I'm going to make this quick because I am currently suffering from COVID but I thought this was way too important to miss.

And my name is James Cupit, C-U-P-I-T, and I am from northwestern Pennsylvania. And in northwestern Pennsylvania I serve on a school board. And one of my main talking points is advocating for our students getting trade jobs and trade tools they learn to work on things such as pipelines. And I understand if we approve all the permits and it goes forth there would be an extra 6,500 jobs in northeastern Pennsylvania; 6,500. That would be amazing not just for the current state - state of the economy but for the future of the economy.

So many students who strive to work on projects such as this would have the opportunity to get the good paying job and build a family and live up to the American dream. It's also crucial that we do this to heat the schools where our students go. It's also crucial that we do this so we can help lower gas prices in the eastern part of the state as well as New Jersey and Maryland. It is crucial that the DEP approves every single permit that is out there right now for this project. It is crucial for the current state of our Commonwealth and for the future of this Commonwealth.

Yes, there may be concerns regarding the environment. However, this is clean energy. Let me say that again, clean energy. Yes, there may be some political talking points saying how this will hurt the environment but let me say that again. They are political talking points.

So I encourage the DEP to approve every permit currently out there for this project. It is crucial for our Commonwealth now, for the Commonwealth in the future. Thank you for having me. (870)

60. Comment

Anyway, I know after having seen pipelines put in the ground and having talked to the people who have put them in the ground they are much safer for transporting oil and natural gas than any other method. If you're using truck or a rail you're putting more CO2 in the area and everybody hates it, except they make CO2 generators for people with greenhouses, so CO2 is not necessarily a bad thing.

I know that it will put money into the economy. It's a resource that if you leave it if the ground it's like having money in the bank and you're not doing anything with it and it's not doing anything for you. It will benefit the local economy by those high paying pipe installers have to spend their money on food, hotels, etcetera. There is going to be taxes on the - the natural gas when it's delivered. There's taxes on everything. So the state gains money.

And I know and happen to see this particular company put pipelines through Lancaster County. They do it in such a way that after they are done you cannot tell that they've been there when they - after they have left. So they know that in order to continue their business of being in the pipeline business they have to do it economically, they have to do it environmentally sound because nobody will hire them if they're doing the job right, and that is the following the standards set by the government or not only following them but exceeding

them because they know they have to breathe the air that everybody else has to breathe. So they know that they have to deal with the same things everybody has to as well. So it's to their advantage to do things right and it saves everybody money because trucks on the road with natural gas or rail is a disaster waiting to happen.

There's no CO2 involved in transporting natural gas or oil in pipelines. It's safer. And the only time you have problems is when somebody wasn't paying attention, or you've got bad equipment somewhere that somebody wasn't paying attention to. But for the most part it's much safer.

So therefore, I urge them to continue to put this pipeline into place because without it where are people going to get the natural gas they need to heat their house with so they can be comfortable and not die because of weather? It's just plain and simple for an economic standpoint of view and environmental standpoint of view.

The people who run these companies they are also hunters. They're also fisherman. So they don't want to mess up the environment like so many people claim that they're going to do because they know that if they do they won't be asked to come back. Because look at it look term, there are plenty of pipelines already in the ground. You got to figure out that these people are replacing older pipelines that have seen better days and are prone to leakage. The ones that are new they're putting in do not leak like they used to leak a very, very long time ago. They're just replacing old stuff with new stuff, and it just makes sense.

And like I said as Forrest Gump would say and that's all I've got to say. Well, I thank you for being gracious. Thank you. (871)

61. Comment

Okay. Thanks for giving me this opportunity to express my opinion on this important expansion of the pipelines in our area. My name is Roger Sutton, a retired senior citizen. Being that I am a lifelong PA resident and voter the pipeline expansion will help deep-rooted - will have a deep-rooted impact on the Pennsylvania residents as well as all energy users at this time.

Also as a former operator of a small business, expanding the pipelines will contribute to stabilizing prices for energy. This will help all businesses which will help provide many jobs not only pipeline workers but also for other supporting businesses.

The use of a pipeline will improve the safety of - transporting energy. This will also lower distribution costs which will protect all PA citizens. The lower energy cost will give all citizens more discretionary income which in turn gives everyone a better quality of life and improve the economy.

I'm asking you to make the right decisions and vote to increase expansion of the Transco pipeline permits which will be a great benefit to all residents of PA and neighboring states. Thank you very much. (782)

I want to encourage expansion of the pipeline construction in the northeast. We have seen many advantages through job creation, price reduction for utilities since the beginning of the pipelines in our areas.

Within the last year and a half through halting of construction and cancelling leases we are already seeing increases in prices on cost of fuel, oil and electricity. Gasoline prices are at an all-time high across the nation and feel that the needs for better understanding of the effects on manufacturing for the process of production and products for petroleum very much so in the lines of plastic industry. Let's look at the hardships of winter fuel consumption on so many Americans that don't have income to fill their tanks.

I urge construction of the transcontinental pipeline because one of my family member's bills from the last year increased from \$2.59 per gallon to \$4.39 per gallon for a \$450 increase before the seasonal price changes. I know of one company that is up to \$5.29 a gallon, which equates to \$1,322 for a 250-gallon fill. I believe increasing the pipeline construction would-will help to reduce the increasing the prices and help keep us independent of foreign supplies coming into our country. Also the idea of renewable energy is not viable answer to the available technology since there are no new nuclear power plant permits being issued in trying to shut down existing plants.

As the nuclear submarine veteran, I saw my ability in that source of energy, but gas and oil are a much cheaper and cleaner source. There is a huge effort also to go all electric vehicles that we don't have infrastructure to support. At that time - at this time we don't have the capacity to supply enough electricity for the demand. Also expense of these cars is not middle class affordable whatsoever.

So I ask you as a northeast Pennsylvania resident to give get consideration to increasing the oil and gas pipelines in Pennsylvania to help our economy grow, keep energy costs affordable and reduce chances of environmental deterioration from inefficient electric vehicles. Thank you for your time. Respectfully, John Treska. Thank you. (872)

63. Comment

I'm speaking in support of the Transco pipeline.

We have all seen the consequences of the interruption of pipeline development and the curtailment of oil production. They have been immediate in terms of loss of jobs, soaring gasoline prices and resulting severe inflation. The increase in prices has caused great hardships particularly to the middle class. Trucks are the mainstay of the economy and the high prices of gas affecting trucking are passed along in virtually every economic sector.

How's it affected me - my wife and me personally? Well, we're both on fixed incomes. We follow the news. They say inflation is nearing ten percent, but our electric bills are up around 25 percent. Vitamins for example that cost \$49 two months ago now cost \$71. A family sized box of Cheerios is \$7 up from \$4 in just a month. We've had to make some hard choices. We cut our cable TV completely. We no longer watch it. We've sacrificed trips to our family in

New York. People are having to choose between putting gas in their cars and putting food on the table.

And let me say this, and I didn't have this as part of my prepared comments, but I know that I'm not much over two minutes. My wife and I left New York because she lost a lucrative job and were just about making it and - tax-wise. When we moved to northeast Pennsylvania we said to our self, hey, you know, things are much better here. What were saving in New York taxes and different costs we're living fine. That's all been eaten away by everything that's happened over the last year and a half.

So the approval and expansion of the Transco pipeline will increase jobs, lower inflation and restore prosperity to many. I urge the DEP to support it's continuation of the Transco pipeline. Thank you so much. (873)

64. Comment

My name is Davis. Thank you for the opportunity to comment on the regional pipeline and land expansion. My name is Davis Menya again from Delaware County. I lived in the area for over 15 years and worked in the homecare industry for over ten years.

During the course of work over the years I've seen how the increasing gas prices have directly affected and impacted my work environment. Most co-workers use their vehicles to go to various homes helping our elderly citizens with their ADLs. It's becoming harder to travel long distances due to increased cost of transportation. Also during winter we noticed the cost and burden of keeping seniors warm and that's because the price of heating is becoming unaffordable. Before that wasn't an issue, however, it is now.

What does this mean for our seniors and caregivers? For the elderly there will be limited care afforded. Their lifestyles will be affected to the extent of living under the poverty line. Likewise, the increased cost of living will make it harder for caregivers to perform their duties. Some requiring to stay home instead since there's little benefit to working.

Indeed, it's difficult now for our elderly citizens and caregivers. However, if the expansion of the pipeline goes through it will be easier for the elderly citizens to have their - their right to care accessible, which will lift their standard of living. Likewise, the continuation of the project will allow caregivers to reach more citizens without breaking their bank. In contrast if the proposed expansion doesn't go through it will be more difficult for the elderly to access their rightful care. And as well it will be more challenging to have caregivers to afford their duty - their duties.

We are seeing the direct impact of increased gas prices on our citizens already. Therefore, I ask you as a care worker, I ask you as a caregiver, I ask you as a frontline worker of the state and of this country to allow the expansion of the pipeline which will alleviate the suffering of many citizens and thus improve their standard of living. This uncommon supply of natural resources should be welcomed as a gift. It benefits us all and stems from God's prosperity of all. Thank you. (786)

I opened up a nonprofit and I do a food distribution which serves over 500 people, 700 on a good month, and up to 2,000 people come through our lines to ask for food. And sometimes the difficult choices are made do I pay my medical bills, do I pay my gas bills, or do I pay for food? And when those seniors are making those choices I'd like to see them be able to make the right choices and not have to spend their money on gas bills and high energy costs because it - it's so hard to see people pull up to a food distribution and you realize they're living out their vehicle because they can't afford a home and they can't afford gas and heat and - you know, all the things that we take for granted when we own a home.

These people are struggling and this pipeline and the transportation of, you know, fuels will-will help everybody. The more money coming into the system the more people who are able to benefit from, you know, lower costs of these fuels. People should be able to do much better in this area on so many levels. And I just hope that everybody realizes that supporting the transportation of this fuel and getting this to be done the right way and - and cleanly is the most important thing in our area. You know, and if we don't have to choose between food and fuel and medicine, if we are able to pay all our bills and get things done so much can be - we can benefit so much by having our seniors survive and not struggle quietly. And so many seniors don't come forward and say I need or I - can I get help? They just suffer in silence.

And so I think that, you know, some of us realize we need to be the voice for those people. And when I have those people coming through my lines and I have to try and give them milk or - or cheese or meat or bread and I realize that they're choosing forgo food so that they can pay that gas bill or they can pay that - you know, sometimes they can't even get their medicine.

And some things - some of these things are just too costly. So I just want to see those people, you know, struggle less on things that seem to have, you know, so - and we could solve this. We could solve this by getting, you know, the - the pipelines to work and - and efficiently bring in the fuels at a lower cost and then we don't have to put that direction. We can put it towards the things that matter and the things that make us feel better.

And I just think that the - the pipeline is a good way to make our economy in our area better and I support everything that they're going to do to try and make it a strong solution. Okay. I don't know. (874)

66. Comment

I'm 42-year teamster. All a hundred percent of the 42 years has been in the construction and pipeline industry. And part of that time I worked as a building teamster of Department of Energy, 28 years. So I know a little bit about the safety and - and environmental safety.

Several have talked on here about the environmental impact not the monetary impact, economic impact that it's going to bring in front of these seven counties. I will - I just thank brother Charles Thomas of 798 for his comments. Very well thought out, Charlie, and all those that spoke. As stated we have six local unions that cover those seven counties, six teamster locals. They all men and women, brothers and sisters, that raised their families in those

counties, educate their children in those counties, play on the ball field and fish and hunt the wetlands and the woodlands and have a vested interest in doing this job right the first time and doing it safe; physically safe and environmentally safe.

Over my career I've been blessed to start up no less than ten training centers with the teamsters. Our emphasize is always on the environmental safety as well as physical safety. And sending our brothers and sisters home healthy, safe the same way they came to work. They need these jobs to feed their families in a time, especially this year, where the industry has disappointed them and their families.

I - I don't speak for the other three trades that's a part of the - this - for the project labor agreement that's already in place, the build design. I don't speak for the other three trades, but I can say I know the gentle - presidents of all four of these unions personally. I know their families; I know their wives. I've know them a long time. And I can absolutely attest to their emphasize and their commitment to safety and again, also environmental safety. Because without doing that we would not have the work for our members to work on.

I have visited training centers from all of the trades, multiple training centers with the other three crafts. And I can tell you absolute confidence and certainty that the emphasize put on the safety of these brothers and sisters that perform this work is 100 percent and then some. I - I've been in counties of Pennsylvania. I have serviced jobs through my previous employment with the teamsters. Incidentally I now work for our teamsters' Labor Management Cooperation Trust Fund. And my assignment, my job is community relations, public relations and relations with the indigenous group. We have a - you know, a commitment to provide work and provide opportunities for all of God's people, all of them.

So our - our commitment is - is not black. We have signatory contractors through the Pipeline Contract Association that are committed to this industry. That's all they do. They do specialty work. (876)

67. Comment

I'd like to start by thanking the Pennsylvania Department of Environmental Protection for allowing me the time to speak. I'm a lifetime resident of Luzerne County where I've worked on and around natural gas pipelines for the last 15-plus years. I've on every crew of the pipeline from the start of clearing the trees from the right-of-way all the way to the end of the project where the final cleanup restores the land back to its original landscape and every crew in between.

I'm a member and a business representative for the International Union of Operating Engineers Local 542. We are the men and women that operate the heavy equipment on most of these projects in eastern Pennsylvania. These men and women are highly skilled and trained to run these machines safely and proficiently. You can ask any member of Local 542 who has worked on a pipeline and I'm sure they'd be happy to tell about the strict sometimes over the top safety procedures and environmental take - taken on these pipeline projects. I've personally seen over the years that safety and environmental protections are the number one priority of Transco and the contractors building these projects.

I'd like to emphasize the positive impacts that these projects have on the communities as they're building built. They are sometimes overlooked with all the negative publicity they get. Let's talk about the increase in the revenue that these businesses will see during construction to the restaurants, hotels, gas stations, grocery stores, auto part stores, banks, etcetera. They'll all see economic growth directly from these projects. This will create thousands of good paying union jobs with family sustaining wages and benefits and not to mention affordable clean natural gas for homes and businesses. These are just some of the examples how the communities could financially benefit from the Regional Energy Access Expansion Project under construction and going forward.

Pennsylvania needs this project. On behalf of the International Operating - Operating Engineers Local 542 and its members I ask the Pennsylvania Department of Environmental Protection to grant Transco its permit and get Pennsylvania back to where it can reap the benefits of clean affordable natural gas. Thank you. (877)

68. Comment

We need this pipeline more than anything so it can boost the economy, reduce the taxes, reduce the bills of the petrol, we feed the people. A dozen of eggs now costs you almost \$4 and some cent when you used - could get a dozen of eggs for a dollar and a quarter, \$1.34. And that's small eggs. This is ridiculous.

If the fuel and the - and - even me as a human worker - and I have one other comment. I work for the water department and I'm telling you scientist might have it right, but when you see it physically, I clean water every day, and we pollute the water so badly on just not policing our self. So oil going into the water would not hurt you as much as we hurt it as human beings because we pollute our own water.

But we can also have water - we have the ability to clean it up better with oil than we can when we trash and anything else and hazardous waste into the water. So there's no way this line can hurt you as much as much as man hurts his own environment. So I disagree with the scientists because they don't see it every day. They don't work in it every day. They don't see people sick and dying that works in this water every day. And we work very hard in the water department. And - and Philadelphia we're considered one of the cleanest waters in the country.

And I just encourage you to take a disabled vet and hear what he says because he's been all around the world. And thank you and have a blessed day. (879)

69. Comment

I'm for the pipeline and feel the best to stay within the country, it will help boost our economy and help more people and stay off employment. There are many policies that put me out of business and many others that I knew of every day. And more businesses are closing. But we need to come together or - and change the policies or we'll become Venezuela. And I'm about done.

I urge you reinstatement the Transco pipeline for our future and our future grandchildren. Thank you. Have a good day. (880)

Prior to natural gas exploration Susquehanna County was one of the three poorest counties in the state until gas exploration and pipeline. Since the moratorium on pipeline and drilling we, my wife and I, have been seriously financially impacted. These hardships have caused us and along with many residents to realign our life. We have been forced to decrease our comfort, we have been - such as cutting back on food and heat, also cutting back on our visits to our children who live various parts of the state.

I stated I'm a volunteer with the American Legion. Increase in lodging, meals and necessities along with food have prevented me from traveling and helping needing veterans. Daily life essentials have reduced our ability to socialize and help our children and grandchildren who are likewise affected. There's been an increase in school tuition, clothing, food and transportation. Prior to the moratorium our county and community began to thrive. Long lines at stores, food establishments and gas stations. Small businesses thrived and even expanded. Many new careers were open to our people including but not limiting to well-paying jobs in truck drivers, drillers and technicians. Now, once again these individuals are forced into laboring at stone quarries and menial tasks with a severe drop in income. This has impacted family structure and welfare. Families have returned to or under the poverty level. Parents can only once again provide basic life essentials.

Please, I implore you. I have two wells around me in my neighborhood. I have not seen any pollution, any problems with water, any decrease in the ecosystem. Grant the necessary permits to allow Trans' pipeline expansion and improvement to proceed. Thank you and thank you once again for allowing me to speak. (881)

Response 27-70:

Comments both for and against the REAE Project were received by DEP. The Department acknowledges the support expressed by the commenters regarding the proposed pipeline project.

General Opposition to the Project

This section addresses the comments received by the Department during the public comment period on the topic of general opposition of the project. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

71. Comment

The PennEast pipeline which is another fracked gas pipeline project that is proposed has been experiencing many delays, community resistance, and rejected water quality permits in New Jersey. Despite a Supreme court decision in June 2021 against New Jersey that was standing up to protect its public preserved lands from threats like pipelines, the PennEast pipeline announced just today that it was withdrawing requests to seize NJ public lands to build its pipeline after all. Would it not be prudent for the DEP to hold off in starting this review of the

PA portions of the project and wasting finite staff time, resources and tax payer dollars until this other pipeline process plays out with the PennEast pipeline? Several years ago the Governor held pipeline meetings to encourage a more thorough evaluation and regional pipeline planning to avoid overbuilding of pipelines and redundant pipeline cuts and paths. Holding off until more is known about the fate of the PennEast pipeline would also assist in not wasting finite agency staff time reviewing projects that may never come to fruition.

Williams/Transco's Atlantic Sunrise Pipeline (ASP) is yet another north to south 186-mile greenfield pipeline that cut across the state of Pennsylvania west of the proposed line in 2017 and began running natural gas October 6, 2018. In fact, at that time communities opposing this line called it the "shortcut" for the already existing Transco multi-line to the east that is part of the proposed Transco REAE. Already this greenfield ASP pipeline has been expanded and not too many years ago a segment near the proposed REAE was upgraded with the Transco Leidy Line (Franklin Loop). How many more pipeline expansions does Transco really need and how much more harm can Pennsylvania communities afford from the overbuilding of pipelines to possibly export gas to the highest bidder using harmful and climate exacerbating LNG?

There is also a long hard ban on fracking in the Delaware River Basin (Basin) by the DRBC that has finally come to fruition after community resistance since 2010 – this ban prohibits slickwater hydraulic fracking wells in the Basin – this ban should also put into question why yet another Transco pipe needs expansion at this time. (1)

72. Comment

Williams/Transco's Atlantic Sunrise Pipeline (ASP) is yet another north to south 186-mile greenfield pipeline that cut across the state of Pennsylvania west of the proposed line in 2017 and began running natural gas October 6, 2018. In fact, at that time communities opposing this line called it the "shortcut" for the already existing Transco multi-line to the east that is part of the proposed Transco REAE. Already this greenfield ASP pipeline has been expanded and not too many years ago a segment near the proposed REAE was upgraded with the Transco Leidy Line (Franklin Loop). How many more pipeline expansions does Transco really need and how much more harm can Pennsylvania communities afford from the overbuilding of pipelines to possibly export gas to the highest bidder using harmful and climate exacerbating LNG?

There is a long hard ban on fracking in the Delaware River Basin (Basin) by the DRBC that has finally come to fruition after community resistance since 2010 – this ban prohibits slickwater hydraulic fracking wells in the Basin – this ban should also put into question why yet another Transco pipe needs expansion at this time. (16, 32, 78, 115, 118, 123, 131, 137, 185, 211, 245, 265, 271, 275, 290, 295, 297, 304-327, 329-332, 334-363, 365-369, 371-385, 388-391, 393-394, 397-403, 406-419, 421, 423-428, 437-457, 460-463, 468-470, 472, 474-475, 477-478, 482, 484-496, 563)

DEP request, as natural gas companies extract natural gas using the fracturing process of injecting chemically laced water and sand, does DEP assess and monitor the contamination risks to nearby water tables, does DEP monitor sedimentary shift risks introduced by high pressure injected chemical slurry into the shale? Texas just aborted one project because there was an increase in minor quakes. What is PA's plans to mitigate against inevitable quakes? Does DEP calculate total loss of shale carbon sinks in the Marcellus shale due to natural gas mining? (417)

74. Comment

I urge the Pennsylvania Department of Environmental Protection (DEP) to deny the Chapter 102 Permits (Erosion and Sediment Control), Chapter 105 Permits (Dam Safety and Waterway Management), and Clean Water Act Section 401 Water Quality Certification for the proposed Transcontinental Pipeline Company (Transco) "Regional Energy Access Extension" pipeline project (Project.) Allowing the Project to be constructed as proposed would contribute to the death by a thousand cuts of our most critical headwaters and special protection waters.

. . .

Additionally, there is no basis for DEP's proposed approval of the Water Quality Certification under Section 401 of the Clean Water Act. The Clean Water Act requires that any conditions included in this certification be site specific and simply saying that the agency will issue permits cannot ensure that the water quality standards will be met. As discussed above, not only does DEP not have the facts or analysis to support its certification, especially for EV and HQ waters and wetlands, but its reliance on its own permitting to ensure water quality standards is an inappropriate condition given the recent history of severe damage of numerous waterways and wetlands by pipeline companies across the Commonwealth. (2, 4, 8-9, 11-12, 14, 16-22, 25, 27-31, 33-37, 40-41, 45, 48-49, 52, 54, 56-59, 61-65, 67, 69, 70-72, 75-76, 79-80, 82-84, 86, 88-89, 91, 93-94, 97-102, 105, 109-111, 113-117, 120, 123-125, 129, 131-133, 136, 138, 142-143, 146-147, 149-152, 155, 163, 168, 172, 174, 177, 184-185, 188, 191, 195, 197, 199, 201, 204, 207-212, 215, 217, 221-222, 225, 232-233, 237, 244-245, 247, 250, 254, 257-258, 262, 272-273, 275, 278, 282, 284-285, 287-288, 293, 296-297, 299, 302, 305, 310, 370, 377, 386, 397-399, 405, 414, 423, 433, 436, 452, 458, 471, 479-480, 498-551, 553-562, 564-579, 581-587, 589-633, 650, 682, 694-718, 720-725, 727, 729-747)

75. Comment

The Department should be particularly wary about granting any permits that would authorize construction to commence before the remainder of the applicable permits associated with the entire project are issued, given its recent experiences with the Constitution Pipeline and the now-abandoned PennEast Pipeline. In the case of the Constitution Pipeline, the Department issued Permit No. ESG0011514002(1) and Permit No. E58-300A to Williams for the Constitution Pipeline on February 24, 2016. The company immediately began felling trees and causing other environmental impacts. It violated the permits multiple times, required a

series of modifications, and then ultimately closed out the permits without building the project in April of 2020. The reason Williams scrapped the project is because it lacked key approvals in New York State. In the case of PennEast, while the Department was evaluating PennEast's applications for its Chapter 102 and 105 permits, similar to what it is doing here with regard to Transco's Chapter 102 and 105 applications, PennEast decided not to go ahead with the project, which it indicated was the result of permitting delays in New Jersey. Fortunately, the Department had not yet issued the requested Chapter 102 and 105 permits, so the waste of natural resources as well as taxpayer resources that occurred along the Constitution Pipeline did not occur. The Department should not issue any permits for this project until the federal requirements, including the preparation of an EIS, as detailed above, and the remaining state permitting issues in the other adjoining states, are satisfactorily addressed. (134)

76. Comment

- 1. DEP permit review is premature. Several other permits are needed. DEP must not open the door to harmful activities for a project that might not receive a FERC certificate, New Jersey permits, or DEP air quality permits. If Transco-REAEP construction commences, forest, earth and stream disturbance will be permanent.
- Transco-REAEP has an open docket at FERC, CP21-94-000. Per documents received by DEP, Transco-REAEP itself acknowledges that FERC is the "designated lead agency" for the project. On October 19, 2021, FERC issued a Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Regional Energy Access Expansion Project. Document Accession #: 20211019-3045.
- Transco-REAEP is subject to approval in New Jersey.
- Transco-REAEP involves compressor stations with DEP air quality permits.
- 2. Transco-REAEP serves no defined need for domestic gas

As a close observer of energy trends, I believe that Transco-REAEP is another speculative and self- dealing project, in the manner of the recent PennEast and Constitution pipelines. Transco-REAEP's ability to provide an incremental 829,400 dekatherms per day (Dth/d) of year-round firm transportation capacity is not the same as domestic demand by power plants, industrial users, or LDCs for 829,400 dekatherms per day in the near future or over the life of the pipeline. Documents from the open season have not been made public in the FERC docket. There is no evidence that power plants, industry, or LDCs ordered this capacity. Please see Attachment 1, at the end of this document, which has information I submitted to FERC, CP21-94-000, detailing Transco-REAEP's speculative Purpose and Need.

FERC not likely to approve a self-dealing project, as we recently saw in the case of Spire. Transco- REAEP is 18% self-dealing.

https://news.bloomberglaw.com/environment-and-energy/court-decision-chills-development-of-new- natural-gas-pipelines (588)

I have limited my comments to the subject of need, in the context of FERC's historical approach to determining need, i.e., precedent agreements.

In my opinion, the facts that I will highlight below show that this project is tentative, speculative, redundant, and has a sizable self-dealing component.

I am aware that FERC is entertaining a different approach to the Certificate Process, under docket PL18- 1-000. This is a positive step on the part of FERC.

There are several reasons why more gas infrastructure is unnecessary and dangerous. FERC has heard about those from several other commenters and I will not go into them here.

1. The project likely overstates true regional need for gas, thus creating unnecessary short-term and long-term harmful impacts.

I see in Document Accession #: 20210405-5731, Filed Date: 04/05/2021, page 155, that New Jersey Natural Gas Company (NJNG) is subscribed at 353,000 Dth/d.

Table 1.1-1, Transco's Customers and Transportation Capacity Subscribed to the Project

Transportation Contract Quantity PECO Energy Company 100,000 Dth/d

Elizabethtown Gas Company 30,000 Dth/d

Baltimore Gas and Electric Company 40,000 Dth/d

South Jersey Gas Company 25,000 Dth/d

PSEG Power, LLC 60.000 Dth/d

South Jersey Resources Group, LLC 71,400 Dth/d

New Jersey Natural Gas Company 353,000 Dth/d

Williams Energy Resources 150,000 Dth/d

Will New Jersey Natural Gas (NJNG) actually need 353,000 Dth/d more gas than its present arrangements by December 2023??

NJNG has not predicted a future reliance on 353,000 Dth/d from this project. Rather, NJNG subscribes to all major pipelines and supports expansions of all, in order to ensure redundancy, as described in its annual review for F/Y 2021. Those several arrangements and planned redundancy are described in its F/Y 2021 report. For example, NJNG has also entered into precedent agreements with the PennEast pipeline. I encourage FERC to recognize that redundancy is not the same as required need.

A fundamental part of the Company's strategy is to maintain sufficient flexibility to be prepared to react to changes in customer requirements and changes in market conditions. The New Jersey Natural Gas Company for the annual review and revision of its basic gas supply service (BGSS) and conservation incentive program (CIP) rates for fiscal year 2021

• https://www.njng.com/regulatory/filings.aspx

https://www.njng.com/regulatory/pdf/NJNG-2021-Annual-BGSS-and-CIP-Filing-transmittal.pdf

Transco, itself, admits that they are simply offering diversification of supply, i.e., redundancy of pipelines.

• p. 154-155 of Document Accession #: 20210405-5731 Filed Date: 04/05/2021

The Project will provide Transco's customers and the markets they serve with greatly enhanced access to Marcellus Shale supply, therefore, further diversifying fuel supply access.

Furthermore, it appears that the project's regional need is speculative. The word "incremental" transportation capacity is tellingly speculative:

• p. 154-155 of Document Accession #: 20210405-5731 Filed Date: 04/05/2021

Transco proposes to construct and operate the Project facilities to provide an incremental 829,400 Dth/d of year-round firm transportation capacity...

However, Project volumes, paths and facilities for this Project will remain unchanged as the shipper has agreed to reallocate volumes if other parties bid via the open season.

In Document Accession #: 20210511-5123 Filed Date: 05/11/2021, Transco informed FERC that it had conducted a supplemental open season and there were no new bidders.

The argument Transco presents for need to address limited takeaway capacity is weak.

With 18% of the gas being allocated to Williams itself (Williams Energy Resources) as discussed below in point #2, how can there be a takeaway problem for regional gas customers when there is this extra 150,000 Dth/d?

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Currently, access to the Marcellus Shale production area is constrained on peak days by limited pipeline take-away capacity.

Efforts to move to renewable energy sources are likely to reduce future demand for gas.

One can find several examples of the state of New Jersey promoting wind and solar power. New Jersey BPU is promoting solar and wind.

https://njcleanenergy.com/renewable-energy/technologies/wind/jersey-atlantic-wind

One can find examples of opposition to pipeline expansion, including the Transco-associated Southern Reliability Link.

https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/regulator-pulls-permit-for-new-jersey-natural-gas-southern-reliability-link-59387322

2. Self-dealing is 18% or more of the proposed capacity.

In Document Accession #: 20210405-5731, Filed Date: 04/05/2021, Williams Energy Resources represents 150,000 Dth/d of the project.

Table 1.1-1, Transco's Customers and Transportation Capacity Subscribed to the Project

Transportation Contract Quantity PECO Energy Company 100,000 Dth/d

Elizabethtown Gas Company 30,000 Dth/d

Baltimore Gas and Electric Company 40,000 Dth/d

South Jersey Gas Company 25,000 Dth/d

PSEG Power, LLC 60,000 Dth/d

South Jersey Resources Group, LLC 71,400 Dth/d

New Jersey Natural Gas Company 353,000 Dth/d

Williams Energy Resources 150,000 Dth/d

My calculation shows that the 150,000 contracted to Williams Energy Resources is 18% of the total 829,400 Dth/d. The percentage going to Williams Energy Resources over the life of this project might be greater than 18%, if one of the other precedent agreements is overstated, such as the 353,000 for NJNG, discussed above in point #1.

Who is the self-dealing entity, Williams Energy Resources?

The entity has the same CEO as Williams. https://www.dnb.com/business-directory/company-

profiles.williams_energy_resources_llc.dc0a0b1ecda9d7844ee714e43c322a63.html

Let's explore where the Williams Energy Resources' 150,000 component of the 829,000 Dth/d might go.

p. 154-155 of Document Accession #: 20210405-5731 Filed Date: 04/05/2021, emphasis added. Transco proposes to construct and operate the Project facilities to provide an incremental 829,400 Dth/d of year-round firm transportation capacity from the Marcellus Shale production areas in northeastern PA to Transco's mainline at the Station 210 Zone 6 Pooling Point in Mercer County, NJ, and multiple delivery points along Transco's mainline and Marcus Hook and Trenton Woodbury Laterals in NJ, PA, and MD.

Station 210 Zone 6 pooling point is the first-mentioned delivery point. Information readily available on the internet shows that Zone 6 connects to Zone 5 which connects to Zone 4 which connects to Zone 3 and 2 in the Gulf regions of Louisiana and Texas. Transportation of Marcellus gas to export regions has been a significant part of the Williams business plan for years. Williams currently supplies gas to the Corpus Christie and Sabine Pass liquefaction terminals, from where gas-as-LNG is exported.

Transco maps:

https://www.williams.com/pipeline/transco/

https://www3.dps.ny.gov/W/PSCWeb.nsf/ca7cd46b41e6d01f0525685800545955/e8a66d19 1e5d466 485257cda00436cc8/\$FILE/Panel%202-5%20Truxell%20-%20Transco%20-%20NYPSC_Technical_Conference051514.pdf

Delivery to liquefaction terminals:

https://www.williams.com/2017/02/02/williams-expands-pipeline-capacity-to-deliver-natural-gas- to-lng-export-facility-at-sabine-pass/

See Index of Customers, then search "liquefaction"

https://www.1line.williams.com/Transco/index.html

https://seekingalpha.com/article/2554655-natural-gas-marcellus-pipeline-boom-sets-stage-for-a-30- bcf-a-day-tsunami

Contrary to Williams' assertion, U.S. gas consumption is not expected to increase.

Transco makes the assertion that the Energy Information Administration (EIA)predicts that natural gas consumption will rise.

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A review of the Annual Energy Outlook 2021 (Energy Information Administration 2021) reference case indicates that natural gas consumption will rise from 33.43 trillion cubic feet (Tcf) in 2020 to 39.75 Tcf in 2040 and will continue to grow to 42.79 Tcf in 2050.

But here is current information, as of April 20, 2021:

EIA expects U.S. natural gas consumption to continue decreasing in 2021 and 2022. EIA Annual Energy Outlook with projections to 2050 https://www.eia.gov/outlooks/aeo/pdf/AEO Narrative_2021.pdf

With Williams positioning itself as one of the entities contracting for gas transportation, it appears to be building in the ability to move gas anywhere, in league with shippers' desire to get gas to market.

It acknowledges this flexible approach in the application.

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However, Project volumes, paths and facilities for this Project will remain unchanged as the shipper has agreed to reallocate volumes if other parties bid via the open season.

Where might Williams move gas for its shippers? LNG terminals for export

Natural gas demand to serve LNG export facilities along the Transco pipeline is expected to grow by approximately 11,000 MDth/d by 2025.

https://www.williams.com/2017/02/02/williams-expands-pipeline-capacity-to-deliver-natural- gas-to-lng-export-facility-at-sabine-pass/

Note: 11,000 MDth/d equals 11,000,000 Dth/d. http://www.kylesconverter.com/energy,-work,-and-heat/thousand-dekatherms-(ec)-to- dekatherms-(ec)

My conclusion is that the Transco Regional Energy Access Expansion Project proposal does not qualify for a certificate of public convenience and necessity from FERC.

The large component attributable to NJNG is likely redundant.

The growth of U.S. gas demand is not based in fact – the opposite is the current prediction.

The project's self-dealing component (Williams Energy Resources) should not be allowed by FERC as a precedent agreement. I suspect that this circular arrangement serves the purpose of enabling Williams to have an expandable fail-safe plan in order to expand gas transportation to export terminals, in view of declining domestic demand for gas.

At a time when the world must decrease fossil fuel production, a speculative project that encourages more gas use worldwide must be not proceed. (588)

78. Comment

The air quality impacts associated with methane leakage, the stormwater runoff and loss of groundwater recharge associated with vegetation loss and soil compaction, the impacts of forest fragmentation and invasive species are also enduring.

There are reports that farmers have reduced crop yields in the areas where their properties are crossed by pipelines – the cause and size of the food and economic impact of this affect must be thoroughly assessed. In public meetings regarding other pipeline applications one farmer said an existing pipeline crossing on his farm reduced his crop yield by 30% with measurements and data to support his assertion.

Conclusion

In evaluating Transco's applications DEP must analyze the extensive and egregious impacts the Project threatens on climate, water resources, forest ecosystems, habitats, air quality, and parks and open space. Given the dramatic growth of natural gas development in the Marcellus Shale, and the significant environmental degradation resulting from that development, DEP has an obligation to consider the cumulative impacts of this Project across the length of the project itself but also in conjunction with other known and planned projects advertised for this region and the state in its projected fossil fuel footprint expansions. Furthermore, the alternatives analysis must include alternative construction practices that can greatly avoid and minimize community, water quality, and environmental harm. (1)

79. Comment

• The PennEast pipeline which is another fracked gas pipeline project that had been proposed for parts of PA and NJ has been rejected due to its extreme harm and the pipeline project withdrawn. How does the Transco expansion fair with its own approvals that will be required on the New Jersey side of the River? Additional time is warranted and finite DEP strapped staff would also benefit from the additional time for this review.

¹ Leslie Sauers, "Achieving Higher Quality Restoration Along Pipeline Rights-of-Way: An Overview of Pipeline Construction Impacts with Recommendations for Reducing Environmental Damage

- Several years ago, Governor Tom Wolf held pipeline meetings to encourage a more thorough evaluation and regional pipeline planning to avoid overbuilding of pipelines and redundant pipeline cuts and paths. It is not clear that cumulative impact review and overall PA build out is being pursued. The debacles of other similar pipelines, like that of Sunoco Mariner East 2 pipeline are also still in process. How is DEP learning from these past mistakes and approvals to ensure the same mistakes are not allowed with this pipeline operator? We must not simply provide fines after the harm is inflicted yet again using similar techniques, but eliminate that harm from happening in the first place.
- Williams/Transco's Atlantic Sunrise Pipeline (ASP) is another north to south 186- mile greenfield pipeline that cut across the state of Pennsylvania west of the proposed line in 2017 and began running natural gas October 6, 2018. In fact, at that time communities opposing this line called it the "shortcut" for the already existing Transco multi-line to the east that is part of the proposed Transco REAE. Already this greenfield ASP pipeline has been expanded and not too many years ago a segment near the proposed REAE was upgraded with the Transco Leidy Line (Franklin Loop). How many more pipeline expansions does Transco really need and how much more harm can Pennsylvania communities afford from the overbuilding of pipelines to possibly export gas to the highest bidder using harmful and climate exacerbating LNG? The war in Ukraine the past six months and Russia's strong arm tactics are making this a critical time for scrutiny so we avoid harms from harmful practices such as LNG export schemes or so called "blue methane" and instead of investing in more pipelines and methane extraction, we should be investing in clean truly green energy instead.
- There is also a long hard ban on fracking in the Delaware River Basin (Basin) by the DRBC that has finally come to fruition during COVID and after community resistance since 2010—this ban prohibits slickwater hydraulic fracking wells in the Basin this ban should also put into question why yet another Transco pipe needs expansion at this time to cut more paths through Pennsylvania streams, wetland and steep slopes and forests. Furthermore alarming new studies, for example the Yale School of Public Health Study that found children between 2 and 7 years old are two to three times as likely to be diagnosed with leukemia if they live near unconventional oil and gas facilities more added proof and harm that PA families are sick from shale pollution http://paenvironmentdaily.blogspot.com/2022/08/yale-school-of-public-health-study.html. Pipelines like this one would only exacerbate and fuel more harmful fracking.(1)

80. Comment

Today I write to you on behalf of my 2 year old son who is amazed everyday by the beauty of his home state Pennsylvania, when he walks on the trails through giant verdant forested lands and plays with rocks by the streams and creeks.

I, as a mother, am worried that much of the natural beauty that my son and other children alike love including exceptional value wetlands, high quality streams and forested woodlands in our state are under threat from the Transcontinental Gas PipeLine Company, LLC (Transco) Regional Energy Access Expansion (REAE) project. I request that DEP deny the water

permits being proposed for this pipeline due to the harm it would cause to the natural environment that our children will inherit.

• Transco REAE would be an extreme detriment to regional climate change goals and what about the pollution to our water bodies in case of a leak or accident?

For the above implications to the environment and biodiversity and more importantly for saving the future of our children to have a clean and pollution free environment, permits should be denied. (748)

81. Comment

Simply put, how are we still building new pipelines? What world are we handing down to our kids and grand-kids? Surely we've all been reading the same headlines this summer about heatwaves and floods and fires all around the world. Please deny the REAE pipeline. Not only is it going to damage ecosystems during its construction, which we should be preserving & protecting, it's going to contribute to the release of methane into the atmosphere. Methane, in the short-term, is a much more potent GHG than CO2. And also fracking is a travesty. (781)

82. Comment

Please deny permits for Transco's REAE Pipeline Project. It will have unacceptable widespread environmental impacts. (785)

83. Comment

Poison, pollution and cancer all from one source. Why would anyone want this? No amount of jobs are worth the pain & anguish this will unleash on our community. We drink, shower, cook w/ well water. Don't be stupid, short sigthed and greedy, deny the pipeline. (814)

84. Comment

NO PIPELINES PLEASE. They leak and pollute the air, soil and water. We don't want gas or other fossil fuels polluting and causing environmental problems. Protect our planet! (824)

85. Comment

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.

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://pgjonline.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&S ubjectID=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, 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. (588)

86. Comment

We ask you to deny the Chapter 102 and 105 permits for Williams Transco's Regional Energy Access Expansion (REAE) project. We have serious concerns about the safety, climate impacts, and market need for this project.

In addition to climate and environmental impacts, we have serious safety concerns for the people and resources along the proposed route. In 2013, at the same New Jersey Transco compressor station proposed for expansion in this project, a flash fire injured 13 people, sending two workers to the hospital. New Jersey communities along the route should not have to bear the cost for emergency response and preparedness.

The state of New Jersey itself has concerns about the market need for this project. The New Jersey Board of Public Utilities recently commissioned a study which concluded New Jersey already has enough gas supply to meet demand through 2030, even during peak demand in extremely cold weather events. New Jersey ratepayers should not shoulder the cost for expanding gas infrastructure when the state's own studies demonstrate that more than enough capacity exists today. Both NJBPU and the New Jersey ratepayer advocate filed a motion to intervene with FERC on this project, lodging those concerns. (844)

87. Comment

This public comment concerns the proposed Regional Access Pipeline Project. Having listened to the public comments on the virtual DEP public hearing on October 5, 2022, those in favor of the pipeline posit it will create jobs and improve the economy. No one is opposed to stimulating the economy or increasing employment opportunities in PA, especially the PA residents. However, previous pipeline projects have only created few, temporary, local jobs to boost the PA economy, to the disadvantage of PA residents.

As with all recent PA pipeline projects, pipeline jobs are temporary and are filled primarily by non-PA residents. As for the economy, including the newly completed PA pipeline projects such as Energy Transfer's Mariner East pipeline, the only real winners are the Oil and Gas industry CEO's, not the PA residents. Pennsylvania residents have been subjected to the degradation of our waterbodies including aquifers, air quality and all other natural resources for corporate profits only.

When PA is 2nd in shale production in the US, why have our utility rates in PA increased as much as 154 percent over the past year? The answer is simple and straightforward, PA shale production does not benefit PA residents. And, international markets establish the cost of oil and gas, not what is happening on the ground in PA. Most of the fracking byproducts are shipped overseas, while we suffer the consequential pollution and deforestation of our land and destruction of our environment. Building more pipelines simply promotes more fossil fuel production and the resulting environment destruction with no lasting economic benefit to PA residents and PA gas/oil consumers.

The oil and gas pipeline industry has had over 70 million in penalties for environmental, health and safety violations since 2016 by the PA DEP and PA PUC. Despite these massive

violations, the major theme in PA continues to be a Pay To Pollute business model. I ask the PA DEP to deny this permit based on past violations on pipeline projects that have utilized the same construction techniques, such as the Mariner East Pipeline.

The Transco pipeline will impact 114 exceptional value wetlands, cross 77 waterbodies supporting cold water fisheries, 39 high quality streams a, 2 exceptional value streams, 17 Class A Wild Trout Streams and 57 water bodies with naturally reproducing trout. The expansion of compressor stations will add more toxic VOC petrochemicals to our already compromised air quality. This pipeline project will also impact approximately just under 300 acres of forested woodlands, clear cutting forests and destroying riparian buffers. When will we realize the PA residents' health, safety and environment is more important than temporary, short term jobs and profits for the Oil and Gas Corporate CEO's?

The international need for fracked gas by the oil and gas industry is questionable as well. It appears to be greenwashing by the industry. We have seen more and more PA fracking exporting ships sitting overseas without any buyers for days and weeks at end. There appears to be no real shortage for fracked gas and even a surplus of product at times. Only the watchdogs on the ground researching and tracking these exports are documenting this phenomena.

I ask the DEP to please protect our aquifers, streams, waterways, air and environment and to not approve this Regional Energy Access Expansion project. Our streams, waterways and aquifers are already contaminated with radioactivity and petrochemicals from the fracking industry, when will we say enough is enough, and now is the time to protect the PA resident from further harm?

Thank you for the ability to provide public comment on this pipeline project. (496)

88. Comment

I am writing to encourage the Pennsylvania Department of Environmental Protection (DEP) to fully evaluate and carefully consider concerns regarding Transcontinental Gas Pipeline Company's (Transco) Chapter 102 (Erosion Control) permit application and Chapter 105 (Dam Safety and Waterway Management) permit applications for the Regional Energy Access Expansion (REAE) pipeline project.

As you know, this is an expansive project with a route traversing a sizeable area of the Commonwealth including seven counties, six of which are located in the Delaware River watershed. In addition to my home county of Chester, the REAE project will impact Delaware, Bucks, Northampton, Monroe, Luzerne, and York County in the Susquehanna River basin.

Along the way, the pipeline would impact more than 100 Exceptional Value wetlands and nearly 40 Exceptional Value streams.

Given the size and scope of this project, as well as the fact that it calls for the use of open trench cuts and removing riparian buffers, it is safe to say that its potential for negative impacts on residents, communities, wildlife, and natural resources is sizeable. In turn, I strongly encourage DEP to give weight to the following factors in considering the permits:

. . .

That said, such goals should be pursued in line with, rather than at the detriment of, our Constitutional obligation to protect and provide for the peoples' right to "a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment."

I strongly and respectfully request that DEP consider the aforementioned points in considering Transco's Chapter 102 and Chapter 105 applications for the Regional Energy Access Expansion (REAE) pipeline project.

Given the stakes that we all face from a growing reliance on fossil fuels, a warming climate, and air and water pollution, DEP should consider the overall and far-reaching environmental impacts this project poses regarding additional greenhouse gas emissions, water resources, natural resources, and environmental justice communities.

Thank you for your time and consideration. (483)

89. Comment

On behalf of the Sierra Club Pennsylvania Chapter's nearly 140,000 members and supporters across the Commonwealth, we, the undersigned, are calling on you to deny Transcontinental Gas PipeLine Company, LLC's Chapter 102 (Erosion and Sediment Control) and Chapter 105 (Dam Safety and Waterway Management) permits for the proposed Regional Energy Access Expansion (REAE) Project.

The most pressing concern for this project is that it is unneeded. Currently, the New Jersey Board of Public Utilities wants federal energy regulators to look at a study that shows the state doesn't need the additional gas pipeline capacity that the proposed project would facilitate.

This expansion project is unnecessary and a waste of Pennsylvania time and resources, in addition to a detriment to our lands and our climate.

If these permits are granted, the 36 miles of pipeline and compressor station modifications would impact 114 Exceptional Value (EV) wetlands, 37 High Quality (37) streams, and around 297 acres of forested lands.

. . .

Not only is this project dangerous for Pennsylvanians' health and the environment, Transco's proposed REAE project would be an extreme detriment to our region's climate goals. Now is the time to reduce the impact of climate pollution and reduce our dependence on fossil fuels.

Too much is at stake for a pipeline that is not necessary. (858)

90. Comment

On behalf of the Pennsylvania Campaign for Clean Water's Exceptional Value Workgroup (CCWEV), we are writing to express our concern with the Chapter 102 and 105 Transco pipeline application to build and expand yet another pipeline adjacent the Transco corridor which would largely widen and cut across 114 Exceptional Value wetlands, 77 bodies of water

supporting cold water fisheries, 39 High Quality streams, 2 Exceptional Value streams, 17 Class A Wild Trout Streams, 57 waterbodies with naturally reproducing trout, and 297 acres of forests. As a recent report from Our Pocono Waters states, our rivers and streams provide value for our communities — environmental, social, and economic benefits to our communities. Long term thinking must be employed as we see the repeated cuts proposed by the fracked gas industry. DEP is in its duty has the power with this application to simply say no to these proposed expansions and anti-degradation standards require it.

Our work group attended the one and only hearing that was held on Yom Kippur (the holiest of Jewish holidays) and also understand that an extension request by Delaware Riverkeeper Network was denied by DEP. This request was denied despite multiple extensions and deficiency letters to the pipeline applicant over the last two years. Our coalition members have submitted substantive comment on the harms this pipeline would inflict from recent application materials submitted and we urge you now to use the power and obligation you have to protect Pennsylvania's freshwater resources to deny the Chapter 102 and 105 application. Please see joint comment submitted by Pennfuture, Delaware Riverkeeper Network, Clean Air Council, Brodhead Watershed Association, Aquashicola/Pohopoca Watershed Conservancy, and Tobyhanna Tunkhannock Watershed Association for more details on just some of the discrepancies and deficiencies in the current Transco application that were open for expedited comment. DEP should not be eager to approve these deficient applications as they stand and a denial is really the only option we can possibly see with the proposed materials we have reviewed and the history of pipeline damage we have seen since the frack boom has begun, especially as it relates thru HQ and EV watersheds and the climate change impacts to water resources the expansion will inflict into perpetuity.

The Pennsylvania Campaign for Clean Water (Campaign) is a coalition of over 180 environmental, conservation, sporting, and religious groups from all corners of the state that speaks in one voice in support of federal and state policies to protect and restore Pennsylvania's water resources. The Exceptional Value workgroup focuses on protection of the Commonwealth's highest quality streams. (1)

91. Comment

There are many other reasons why I oppose this pipeline expansion. I have not even touched on economic and property value impacts since the focus here is on permits under Chapter 102 and 105. DEP must hold Transco to its legal obligations under Chapter 102 and Chapter 105 of the Clean Water Act, which are designed to protect and conserve our vital water resources. There are many of us in this area who rely on private wells for our drinking water. As a member of a local watershed conservancy whose motto is to "Protect your Drinking Water-Protect your Watershed" I strongly urge DEP to deny the Transco REAE permit applications! (120)

92. Comment

Additionally, Penn Future continues to call attention to the abhorrent record of pipeline construction in the Commonwealth. This industry has betrayed the public trust with problem

after problem in how it constructs and operates its web of frack gas transport. We can look to the statewide grand jury's report on the fracking industry as well as the Attorney General's action filed against Sunoco in connection with Mariner East pipeline as problems that are endemic to the industry as a whole and not limited to particular actors.

Moreover, the Department has not demonstrated that it can protect our environment from this industry either through punitive measures like fines or through permitting processes like this one that do not provide sufficient protective safeguards or accountability mechanisms. (134)

93. Comment

All right. So I would like to actually address one thing. That I am going to speak right now to the Department of Environmental Protection Staff. I am a scientist as well and I understand what this hearing is about, which is specifically about what your purview is as the DEP, and that is to speak to the permits that you are allowing for encroachment upon water and erosion and sediment control. Specifically we need to talk about what everybody else - I'm - I'm going to address everybody else that has been talking here.

I hear everybody's concerns. Everybody's concerns are valid. And it is not the place - to - to those people who are speaking concerns that are not within your purview as the DEP Staff you need to go to the proper entity and speak your concerns to them instead of putting your pressure on these people who are trying to do the best they can to actually serve this state and this community. The job of the DEP is exactly stated as to what we are speaking to here which is about water and about protection of the water and the environmental aspects and the resources that we have in Pennsylvania. That is their job. All of the other things are not to be considered. It is not within the purview of the DEP to consider those things. Whether or not - we don't need to be playing the fiddle about it. If you haven't done your due diligence within the other entities then you don't.

I am running for governor of Pennsylvania at this point and I'm going to tell you as a scientist I'm also doing it because I have recognized the pressures that are placed upon the DEP, which is unreasonable. And am I going to speak exactly to the DEP right now. You have a due diligence to do exactly what you are supposed to do, which is to look solely at the things that people are complaining about within the purview you have. I am speaking as a resident of Chester County, Pennsylvania who has gone to the Mariner East, and this pipeline's going through my county as well. And that has to do with - what I am concerned about is the water impacts, the groundwater impacts which is the stormwater and everything, taking into consideration the climate change and how our water is more impact - like the storms are so much worse. Our groundwater is not absorbing the same.

So when you are disturbing the earth that is - the federal government may have like terrible legislation, however, our state has the ability to do better. You have the ability to go above and beyond, and you can do that. And I'm asking you to consider a groundwater impact study before you allow any of these projects so that the harm that is done isn't like put upon the people of Pennsylvania who you are supposed to be serving.

We have got to start looking at the truth in this. I love all - everybody's concerns are valid but what we're talking about here is about how this project is literally going to impact the residents of Pennsylvania and the environment, the water. How do you know that this will not harm us ten years down the road if you don't have any idea about the impacts unless you do these groundwater impact studies? Then you don't have any idea and you cannot say that you're actually protecting us within your purview. Like this is about what you are asking us to comment on, which is the permits. So let's just be clear, all of the other things that are said tonight, love it, however, you guys have a duty to look at what's actually the truth. You're supposed to protect our water, our environment. That is your duty and I just - I'm just - as a scientist I'm with you guys. Please do what you do best and - and don't let this stuff - all these other things impact you. It's unfair that they put that on you. (878)

94. Comment

Okay. First, I want to thank Kacy Manahan and Allison McLeod for their comments. I think that they are addressing water and the environmental issues. And I want to thank Christine Digiulio for focusing on what should be the work of DEP.

I agree we have heard some terrible stories from people and I have elderly friends who are suffering the same things as you were referring, but don't think that putting in one more pipeline is going to solve those problems. Look to the government of Pennsylvania that has been taking our tax dollars the petrochemical industry and the government of United States that is giving away money to more petrochemical industries. Look to how that industry interacts with the banks. So no more about that, but it's a huge problem and it's - it's difficult to address and that's what's impacting our finances as family members.

. . . .

And if the people that had drilled the Mariner East pipeline or dug the Mariner East pipeline and the Flacon pipeline had consulted that library and modified their plans according the explosion on Falcon and the water contamination around Mariner East could have been prevented. So I really want to know that this pipeline request - these permits are using that information even though they're not actually required to. Because what we most can be concerned with is preserving resources, the water resources for future generations. Once they are in danger they're not going to get better.

And we know that with the increased heat there's going to be more rains, more flooding, more infringements of our aquifers and we need to be very conservative about granting permits for any - any kind of industrial activity, any activity that does not take into account preservation of our water resources. Thank you all for your comments. They're all important. I hear your pain and let's keep working together. Thank you very much for allowing me to comment. My name is Barbara Brandom. Brandom, B-R-A-N-D-O-M. I'm a retired physician. Thank you. (323)

95. Comment

And I hear so much banter during this meeting about economics and money, supply, domestic energy, progress, capital, zero emissions, cleaner burning fuels, but I do not hear realistic talk about how much damage is being done to our environment. The pollutants and emissions that result from the start of the process for fracking for NLGs to the end of the transport and how much irreparable damage is happening in the communities through which these pipelines travel.

I live in one of these communities. Fresh water is polluted and fouled in the fracking process and cannot be cleaned. I think they can only use the water used in fracking twice before it has so much oil and detergent mixed in that it cannot be used again. Do we see the drought that's happening in the west? Why are we not preserving our water resources? Not knowing what to do with this wastewater somebody decided that we should use this poisonous byproduct to desalt our roads in the winters. Where do you think that poison goes? Into our fields, into our crops.

I live across the street from a compressor station which is being built. It would take me an hour to tell you all of the lies that were told to us by the company and all of the damage that they are doing in our town, which is zoned agricultural residential. These pipelines do not create jobs for the citizens. A group comes in. They build what they need to build, and they leave. If we are trying to supply our own energy need then why did our government sign a contract with Poland to supply their country with 15 percent of their daily consumption? Must of this gas is for export.

The scientists have been screaming about climate change since the 1970s. Because our predecessors did not act for our future, which is the now, we must act now if we expect this planet to continue to sustain us. Let me be plain when I say the planet will be fine, but we might not be around to see the damage we imparted to all the species who once populated the biosphere in which we all abide.

I just do not understand this madness when the science tells us that we are just a few years from tipping point that will result in irreversible climate breakdown. You are moving forward with business as usual as if your only concern in the economics of gas. Have you even read the IPCC report in which the international scientific experts summarize the remaining CO2 budget for the planet? The climate is not warming, it's hearing up and our children will never forgive us.

I am asking you to please, please consider the permits and deny them for this pipeline. We need to preserve our water resources that are becoming scarce as the climate and the planet are heating up. We are going to need this fresh water and if we pollute it, God help us, our children will not forgive us. I thank you for listening to my comments and taking them into consideration. (846)

Response 71-95:

Comments both for and against the REAE Project were received by DEP. The Department acknowledges the comments opposing this proposed pipeline project.

The Department has determined that Transco has satisfied the applicable Commonwealth statutory and regulatory requirements for obtaining Chapter 102 and Chapter 105 permits associated with this project. The Permit Application materials have addressed the technical deficiencies and demonstrated compliance with all applicable regulatory requirements.

With regard to comments concerning hydraulic fracturing, while this pipeline may transport natural gas extracted through that process, there are no specific hydraulic fracturing or extraction processes associated with the construction of the pipeline or that are proposed under the Chapter 102 and 105 applications that were reviewed by the Department.

FERC has jurisdiction over interstate natural gas pipelines, including siting, under the Natural Gas Act, 15 U.S.C. § 717b(e)(1). FERC has issued a certificate of public convenience and necessity ("CPCN") for the project. The Department has evaluated the purpose and need in the context of the Chapter 105 permitting process and determined that authorization is appropriate.

Section 401 of the Clean Water Act requires applicants for Federal permits or licenses, such as an applicant seeking approval of an interstate natural gas pipeline from the FERC under the Natural Gas Act, to obtain a certification from the state(s) in which the project is located that the federally authorized activity will comply with the State's water quality standards and other applicable provisions of the Clean Water Act. In response to a request for state water quality certification, the Department issued a conditional Section 401 water quality certification for this project in a manner consistent with its regulations, policies, and procedures as they relate to this and similar projects. The state water quality certification contains conditions designed to ensure that the Project will comply with Pennsylvania's water quality standards and applicable provisions of the Clean Water Act. The conditions included the requirement to obtain and comply with Chapter 102 and Chapter 105 Permits. The water quality certification conditions, unless indicated otherwise, also constitute mandatory conditions of FERC's CPCN. Construction of the project may not commence until all necessary permits, authorizations, and approvals are obtained.

The Department reviewed the Chapter 102 and 105 Permit Applications and revisions submitted in response to technical deficiencies in accordance with the 25 Pa. Code Chapter 102 and 105 regulations. Based on that review, the Department has determined that Transco has satisfactorily demonstrated compliance with the regulatory requirements in Chapters 102 and 105, including those pertaining to resource identification, cumulative impacts, alternatives analysis, antidegradation, mitigation, thermal impacts, and impacts to streams and wetland resources.

Chapter 105 Impacts

This section addresses the comments received by the Department during the public comment period on the topic of Chapter 105 Impacts. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

96. Comment

We appreciate your consideration of these comments and hope they are helpful as you continue your review of application materials. The waterways that this pipeline will cut across are among the highest quality streams in the Commonwealth and are entitled under the law to the highest protections. Even allegedly temporary impacts to these waters are still significant impacts to these resources - to the water quality, to the trout and other aquatic life that live there, and to the people who rely on these waters. This is especially true when temporary impacts from construction are repeated over time, such as when new pipeline loops are added in similar locations. Such impacts tend to become more like permanent impacts but fall through the cracks when it comes to oversight. The Department must prevent multiple small cuts to special protection waters that add up to impacts that substantially degrade these valuable resources. (134)

97. Comment

We strongly recommend immediate re-analysis of the proposed project in this critical watershed acreage, and consider an alternative pathway. At the very minimum, a full hydrological study of any and all impacts to this specific sensitive wetland should be required.

According to the Monroe County NAI (Reference 1 above). Lake Mineola Marsh in Brodheadsville), Chestnut Hill Township. Lake Mineola Marsh is a robust emergent marsh formed in a shallow kettle lake to the south of Lake Mineola. The occurrence of these species of special concern in the marsh probably relates to the unique hydrological setting of the shallow kettle lake. This is the most important ecological site in the entire Brodheadsville Quadrangle. The protection of the lake's naturally fluctuating water table is of critical importance. The loss of the globally-rare bulrush from Lake Mineola Marsh would be an ecological tragedy at the state, national, and international levels.

Furthermore, Transco denotes the UNT to McMichael's Creek improperly as HQ-CWF, MF in its J-2 PA DEP Aquatic Resource Impact Table (April, 2021) for the Chapter 105 application accessed from the DEP pipeline portal on December 6, 2021. Commenters have only conducted spot checks but it appears that many of the maps and tables and drawings in the application posted on the DEP pipeline portal have inaccurate, missing, and outdated maps, drawings, and tables that do not denote actual existing uses nor does it appear that DEP requests for completeness earlier this summer have been fully implemented by the applicant (see prior joint comment submitted to the record by these commenters on October 18, 2021 regarding incorrect water quality use designations). (1)

98. Comment

The DEP must fully consider impacts to water resources (including surface water and groundwater) and wetlands, and provide a full accounting of the number of waterways and wetlands to be crossed and irreparably altered.

Per Transco's Section 401 Aquatic Resource Impact Table (dated 2/27/21) for the Effort Loop construction alone (13.8 miles of 42" pipeline loop thru Monroe County), Transco has identified in its summary table 2.33 acres of permanent impacts to streams, floodway, and wetlands and 1.94 acres of temporary impacts to streams, floodway, and wetlands along the Effort Loop. Yet the breakdown of each waterbody and wetland to be cut, often using an open trench method, does not take into account downstream sedimentation impacts that may occur, nor does the summary table list the total number of proposed cuts.

Any potential channel relocations that occur due to construction must be studied as an impact. Installing the Project will require stream diversions that will also impact wetland areas. These areas of stream channel modification must be identified so that the impacts on wildlife resources can be fully examined with the coordination of NPS, Fish and Wildlife Service, and New Jersey and Pennsylvania environmental agencies.

Adverse impacts to the multiple wetlands to be crossed need greater due care, attention and assessment than we have seen with previous pipeline environmental reviews

Despite their tremendous value, more than half of America's original wetlands have been lost to development, agriculture, mining, hydrology alterations and pollution. And, each year we continue to decimate nearly 500,000 additional acres of wetlands.

Loss of wetlands increases soil erosion, damages water quality and allows increased sedimentation and polluted runoff into streams. Increased stormwater flows can upset the "dynamic equilibrium" that exists between wetlands and the surrounding watershed. Changes in volume or quality of runoff to wetlands can affect the biological community and ecological functions of a wetland. Generally, wetlands work as an integrated system with other wetlands in a watershed. When assessing the value, or lost value, of wetlands, it is important to recognize this critical interrelationship. Below are just some of the benefits of wetlands that FERC must fully assess in its review. (1)

99. Comment

Transco's plans to compensate for wetlands destruction are insufficient. Transco attempts to define many of the impacts as "temporary," which is not scientifically supported, and results in calculating the total impact as far less than it would likely be. Transco also proposes to "enhance" existing emergent and scrub-shrub exceptional value wetlands, which is entirely inappropriate. The "enhancement" involves planting trees and shrubs in these wetlands, which would lead to premature succession into forested wetlands. The goals of the wetlands mitigation requirements are to create new wetlands to replace those destroyed as a result of the permitted action, not to transform an existing type of wetland into a different type of wetland. (16, 53, 56, 103, 112, 120, 131, 133, 136, 147, 174, 197, 216, 238, 290, 298, 433,

501, 510-511, 515, 546, 590, 617, 619, 623, 661, 702, 715, 745, 818, 825-832, 837-841, 845-848, 850, 854-856, 859)

100. Comment

Transco asserts that approximately 78% of the proposed pipelines will be collocated with existing and/or certified ROWs. However, co-location comes with it just as many stream cuts as greenfield pipeline. Additionally, Commenters' review of the drawings and figures for the Effort Loop alone illustrates that Transco has, in multiple situations, disregarded even proposing to work WITHIN its existing expansive corridor. (134)

101. Comment

Transco's response to DEP's deficiency letter regarding access road use for MP 2.9 to MP 4.9 is inadequate and insufficient. Transco claims that "because the bridge does not require instream supports it will not impact Meadow Run." However past experience with timber crossings provide evidence that impacts do occur, both in terms of negative impacts to water quality (sedimentation, thermal impacts, smothering of habitats, vernal pool declines, etc.) as well as to possible water hydrology changes over time. (134)

102. Comment

Next, AR-MO-006 (near MP 45.4) is a proposed access road, coming off Dairy Lane, to access the pipeline. It appears to cut across S2-T5 and W2-T5 (palustrine emergent wetland, or PEM). It is unclear why this road is necessary, and why the existing pipeline corridor already present is not being used for construction and restoration traffic. The culvert drawing also appears to show that the road may be expanding in width. Transco should justify why this expansion of road may be necessary. This access road is denoted on the drawings as 21' to 30' wide. There is also an adjacent W3-T5 PEM south of the AR; this wetland could also see damage due to its close proximity to the proposed road. (134)

103. Comment

W1-T5 is listed as palustrine emergent wetland. This may indeed be the case where the old pipeline ROW is present, but the cut to the south that is now being proposed would cut mature forest (PFO) and trees according to the aerial photograph supplied in the application (see picture below). Transco should not be permitted to continue to come back time and time again to extend the ROW into the adjacent forest and call each cut minor or temporary or change the classification of the wetland to fit the already harmed area. The Aquatic Resource Impact Table also reflects how this particular wetland area is large in extent – with over 1,795 sq ft of wetland listed as permanent impact and 144 sq. ft as being temporary impact. Cutting mature forest is never temporary, and PFO is likely the correct designation for this wetland crossing. The photograph provided includes an "eastern view of W1-T5 at crossing EL-1". However, it appears that this photograph is deceiving, because the ROW and pipe will be located to the southwest area of this location; the photograph only documents a partial vantage point of the portion of the site already harmed with the existing expansive ROW rather than the more unfragmented, forested and less-impacted area to the south of the existing ROW.

The photograph was also taken early in the spring (March 26, 2020) before leaf-out of deciduous trees. Moreover, the photograph shows sedimentation and apparent tracks in the existing expansive ROW area. As noted in previous comments, pipelines often bring with them ATV traffic and other access harms, making even clearer that the impacts associated with construction cannot be considered temporary. (134)

104. Comment

Next, W2-T5 (wetland) along a proposed aquatic resource is missing from the Aquatic Resource Impact Table but it is included as S2-T5 (Dairy Lane area). Transco marks this crossing as ephemeral and a temporary impact for a HQ-CWF UNT to McMichael Creek. Excavation is also proposed for this aquatic resource, which indicates to Commenters that Transco plans to widen the access road. It is unclear why Transco is not staying within the existing driveway for this access. There appear to be two large ponds and wetland complexes for this UNT as well as cattail (Typha latifolia) (outlined in the on the ground photos by Transco's consultant—not shown here) which is an obligate wetland species. These ponds and the species present suggest that the stream is not ephemeral in nature, and Transco's delineation as ephemeral may be in error. Also note the date of photos and the need to ensure current conditions at the time, such as drought conditions and potential extreme weather events. Delineation at dry times or drought times may change the perimeter mapping. (134)

105. Comment

Transco defines many actions that will have outside impacts as temporary. A temporary but significant sedimentation and habitat disruption to a stream can impact the macroinvertebrates and therefore the trout who rely on those macroinvertebrates for multiple seasons, not just the one season defined here. These were talking about such sensitive organisms.

This is why exceptional value and high quality streams need to have extra protections to protect their water quality. This is especially true when temporary impacts from construction are repeated over time, such as when new pipeline loops are added in similar locations to old ones, which is what we see with the applications here. Such impacts tend to become more like permanent impacts but can fall through the cracks when it comes to oversight. These multiple small cuts to special protection waters can add up to impacts that substantially degrade these valuable resources.

Moreover, there will be admitted impacts from their 25-foot wide permanent right-of-way, which is 25 feet of permanently disturbed land on top of their existing right-of-way that already cuts across the land.(134)

106. Comment

Scour hole development proximal to pipelines is well-documented in both stream and seabed settings². Federal regulations require that pipelines crossing rivers be buried at least four feet

² Fogg, J. and Hadley, H., 2007, Hydraulic Considerations for Pipelines Crossing Stream Channels. Technical Note 423. BLM/ST/ST-07/007+2880. U.S. Department of the Interior, Bureau of Land Management, National Science and Technology Center, Denver, CO. 20 pp. http://www.blm.gov/nstc/library/techno2.htm.

underneath most riverbeds³. 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. The potential for scour⁴, pipeline exposure, pipeline rupture and resulting impacts must be fully considered, especially given the high number of stream crossings slated for this project. (1)

Response 96-106:

The Department acknowledges the comments regarding impacts from the proposed pipeline project. The Department reviewed the Water Obstruction and Encroachment permit applications and Erosion and Sediment Control Permit Application in accordance with established laws, including the Clean Streams Law, 35 P. S. §§ 691.1 – 691.1001, the Dam Safety and Encroachments Act, 32 P.S. §§ 693.1-693.27 and Pennsylvania regulations, including Title 25 Pa. Code Chapters 93, 96, 102 and 105, and made determinations of the proposed project's impact on health, safety and the environment in accordance with those laws, as well as prevailing practices in the engineering profession, and in accordance with current environmental science. The Department concluded that Transco has satisfied applicable regulatory requirements for the Department to issue the Chapter 105 permits. The Department has included special conditions in the permits to complement its review and to ensure Pennsylvania's water resources are adequately protected.

Transco demonstrated that it minimized impacts associated with the Project by colocation with existing linear infrastructure to the extent practicable, including overlapping existing ROWs where possible, and that the construction corridors are consistent with FERC guidelines. Although co-location in this instance requires open cut construction and surface water crossings similar to a greenfield pipeline, the overlap minimizes new disturbance and generally reduces the operational footprint. For areas crossing surface waters, Transco demonstrated that it minimized the width of the permanent pipeline ROW to the minimum required for the O&M of the pipeline. Use of appropriate BMPs and/or restoration of the project areas to pre-development conditions or meadow in good condition complies with the regulatory performance standard for post construction stormwater management.

The Department verified the Chapter 93 designated and existing use classifications of the aquatic resources impacted by this project during its review of the permit applications. The Department informed Transco about any errors or inconsistencies within the permit applications in the Department's January 22, 2022 technical deficiency letter. Transco corrected all errors or inconsistences in Transco's March 7, 2022 resubmittal of application materials.

³ Billings Gazette, July 21, 2011: http://billingsgazette.com/news/state-and- regional/montana/article_c8d20d9e-b391-11e0-941f-001cc4c002e0.html

⁴ Expert Report from HydroQuest.

The assertion of no impacts to Meadow Run in response to the DEP technical deficiency letter was directed towards stream bed impacts associated with the installation of instream supports.

AR-MO-006 is an existing access road to be utilized during construction. S2-T5 is a culverted stream crossing within the extents of the existing access road. The LOD along this portion of roadway has been expanded to account for potential temporary road maintenance activities during construction. The existing culvert is not proposed to be expanded and the roadway will be returned to its pre-existing width post construction. BMPs will help to protect the resources that are located outside of the LOD.

Transco accounted for impacts to wetlands located within the Project LOD as required in the DEP Environmental Assessment Form Instructions. Although the functional conversion of some PFO or PSS wetlands is proposed and accounted for as permanent impact, there is no proposed permanent loss of wetlands associated with the Project. As required by DEP, Transco proposes the use of ABACT BMPs on the Project.

The E&S Plan shows that the stream bed and banks will be restored to existing conditions. Should the banks be susceptible to scour, Transco proposes to reinforce the stream bank with erosion control matting and/or riprap for protection. The pipeline will be buried a minimum of 3 feet below streambed elevation to prevent the pipeline from exposure in accordance with 25 Pa. Code § 105.313.

Stream and Wetland Degradation, Water Quality, and Special Protection Waters Existing & Designated

This section addresses the comments received by the Department during the public comment period on the topics of stream and wetland degradation, water quality, and special protection waters, including existing and designated uses. Excerpts of comments received from individual commenters on these topics, as well as the Department's response to these comments, are provided below.

107. Comment

The information contained in the Chapter 102 and 105 applications and DEP's proposed 401 Water Quality Certification does not ensure that the streams and wetlands, especially the Special Protection Waters in Luzerne and Monroe Counties, will be protected from degradation of water quality. First, Transco and DEP need to correctly identify the aquatic life uses of the streams since there are some streams that will be impacted that have a higher existing use than their designated use. Second, DEP must ensure that the Project does not degrade the water quality of any Exceptional Value (EV) streams or wetlands. The information provided to date seems conclusory and insufficient to meet the antidegradation requirements under Pennsylvania's Clean Streams Law. Along those lines, it does not appear that DEP has undertaken the full and appropriate antidegradation analysis for High Quality (HQ) streams and wetlands. Because of these failures DEP cannot issue the Chapter 102 and

105 permits. (2, 4, 8-9, 11-12, 14, 16-22, 25, 27-31, 33-37, 40-41, 45, 48-49, 52, 54, 56-59, 61-65, 67, 69, 70-72, 75-76, 79-80, 82-84, 86, 88-89, 91, 93-94, 97-102, 105, 109-111, 113-117, 120, 123-125, 129, 131-133, 136, 138, 142-143, 146-147, 149-152, 155, 163, 168, 172, 174, 177, 184-185, 188, 191, 195, 197, 199, 201, 204, 207-212, 215, 217, 221-222, 225, 232-233, 237, 244-245, 247, 250, 254, 257-258, 262, 272-273, 275, 278, 282, 284-285, 287-288, 293, 296-297, 299, 302, 305, 310, 370, 377, 386, 397-399, 405, 414, 423, 433, 436, 452, 458, 471, 479-480, 498-551, 553-562, 564-579, 581-587, 589-633, 650, 682, 694-718, 720-725, 727, 729-747)

108. Comment

The Chapter 102 and 105 authorizations as noticed in the Bulletin do not reflect the correct status of some of these waters. The Bulletin seems to only include the designated aquatic life uses for the streams as is specified in Chapter 93. But in some cases, the aquatic life use listed in the Bulletin does not accurately reflect the High Quality (HQ) or Exceptional Value (EV) existing use of the stream or segment. Because existing uses must be protected when an activity which may affect surface water quality and which requires a DEP permit or approval is proposed, DEP must protect the higher of the existing or designated use. 25 Pa. Code § 93.4a(b); DEP Antidegradation Manual, at 8-9. This is the reason that the Department maintains a publicly accessible list of surface water segments where data has been evaluated which indicates an existing use classification for a stream that is more protective than the designated use. DEP's "Existing Use Classification" summary table is used by permitting staff in reviewing requests for permits and approvals. DEP Antidegradation Manual, at 7-8.

According to the DEP's Existing Use Classification summary table last revised on July 30, 2021, the following waterbodies, watersheds (e.g., basin), or waterbody segments appear to have a more protective existing use classification (bold below) than the designated use listed in the Bulletin notice:

- Luzerne County
 - o Tributaries to Mill Creek (CWF-MF), (HQ-CWF, MF)
 - o Mill Creek (CWF, MF), (HQ-CWF, MF)
- Monroe County
 - o Tributary to Pohopoco Creek (CWF, MF), (EV, MF)
 - o Sugar Hollow Creek (CWF, MF), (HQ-CWF, MF)
 - o Tributaries to Tunkhannock Creek (HQ-CWF, MF), (EV, MF)

The antidegradation provisions of the Clean Streams Law require that these existing uses be protected and that the Department not permit any discharges that would have the effect of harming the existing use. Because of these discrepancies, the Department must go back and verify each stream against the Existing Use Classification summary table (available at https://www.dep.pa.gov/Business/Water/CleanWater/WaterQuality/StreamRedesignations/P ages/Statewide-Existing-Use-Classifications.aspx) to ensure that it is properly categorizing and protecting the existing uses of each waterway impacted by the proposed project.

Along those same lines, and with these errors regarding the aquatic uses, the Fish and Boat Commission (FBC) designations also need to be cross checked to ensure that proper and accurate Wild Trout and Class A Trout streams are identified. Furthermore, in addition to simply cross checking to ensure all uses including FBC classifications are correct, the (134)

109. Comment

The Authorizations Do Not Demonstrate that the Requirements for Special Protection Waters Have Been Met.

After correcting the errors in the aquatic life use categorization of these waters, the Department must ensure that the project does not harm these special protection waters. Waters are classified for "special protection" under Pennsylvania law where the water quality is such that it meets certain criteria set forth in the Chapter 93 regulations. Critically, classification as a special protection water - either HQ or EV - brings about additional water quality and antidegradation protections.

For the EV streams that may be impacted by the Project, DEP must ensure, prior to issuing the permit or approval, that the water quality of the stream will not be degraded. 25 Pa. Code § 93.4a(c). There can be no lowering of water quality. As Commenters discuss below, this is a high burden for Transco and the Department to prove, especially for pipelines associated with open trenching, disturbance of riparian areas, and a state-wide history of leaks and water pollution. We are not convinced that Transco or the Department has met this high burden either through its Chapter 102 or 105 permits, or through the proposed certification that water quality standards will be protected under CWA Section 401.

For HQ streams, the water quality shall be maintained and protected, with one exception: where a person seeking a permit or approval that affects water quality is able to successfully demonstrate that a lower water quality is necessary to accommodate an important economic or social development. 25 Pa. Code § 93.4a(c). Thus, there is a litany of requirements that Transco must meet in order to be allowed to degrade the water quality of the stream. The Department has a duty to review these requirements and ensure, prior to issuing a permit or approval, that the Project conforms with the antidegradation protections for HQ streams. For those seeking permits to discharge to HQ waters, this means that prospective dischargers must do the following:

- Evaluate nondischarge alternatives to the proposed discharge. Examples of nondischarge alternatives would be the reuse or recycling of wastewater, infiltration of stormwater, or alternative site locations.
- Where no "environmentally sound or cost-effective" nondischarge alternatives are available:
 - Use the "best available combination of cost-effective treatment, land disposal, pollution prevention and wastewater reuse technologies" (ABACT requirement); and

- Prove that the discharge will "maintain and protect the existing quality of receiving surface waters." This is often referred to as the "non-degrading discharge" requirement.
- Where neither nondischarge alternatives nor non-degrading discharges are found to be feasible, successfully demonstrate to DEP that "allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located" (the "SEJ" requirement). 25 Pa. Code § 93.4c(b).

If Transco is unable to demonstrate a "nondischarge" alternative, is unable to show that using ABACT will protect and maintain water quality, is unable to show that the proposed discharge will maintain and protect existing water quality, and is unable to provide an SEJ for its discharge, DEP must deny the requested permit or approval. Again, Commenters are not convinced that Transco or the Department have met the requirements that allow for the Project to be permitted or certified in HQ waters. The water-related considerations must include, but are not limited to: sensitivity of water use, including recreational water uses or drinking water uses; nature of the proposed discharge pollutants and their potential impact; the proposed degree of change in water quality; the proximity to wetlands or floodplains; discharge characteristics, such as long-term potential impacts; reliability of the proposed discharge treatment technology; additional positive or negative environmental impacts; and the applicant's prior compliance record. DEP Antidegradation Manual, at 76-77. The social and economic considerations must include, but are not limited to: the effect on public need or social services; the effect on public health or safety; the effect on quality on life; any potential employment opportunities; effect on tax revenues; and impacts on tourism. DEP Antidegradation Manual, at 78-79. These SEJ factors are limited "to the area in which the waters are located," 25 Pa. Code § 93.4c(b), PADEP requires "[s]ite-specific cost calculations and documentation" to support a social and economic justification application.⁵

There is no indication that the Department has considered these antidegradation criteria for the HQ waters which may be impacted by the project. Moreover, a review of Transco's application materials shows that Transco has failed to consider the unique, site-specific conditions at each individual proposed stream and wetland crossing, and the corresponding potential adverse water quality impacts associated with stream crossings, including open cut crossings. The application fails to comprehensively evaluate each stream crossing with regards to conditions such as water quality, erosive soils, existing land use and forested areas, existing slopes, riparian buffers, and the potential need for in-stream blasting. Lacking consideration of the site-specific conditions at each crossing, the application fails to require adequate location and construction recommendations to protect water quality, as well as construction techniques specific to conditions at each crossing. The proposed stream and wetland crossing locations, methods of construction, and long-term land use conditions appear to be based on the needs and preferences of Transco and not informed by site specific

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⁵ Social or Economic Justification Request Review, PADEP, SOP No. BMP-007 (Oct. 23, 2017), available at: http://files.dep.state.pa.us/ProgramIntegration/PermitDecisionGuaranteePortalFiles/SOPs/AAMO/BMP-007%20SEJ.pdf.

conditions. With respect to antidegradation requirements, it is unclear how the Department would ensure that benthic macroinvertebrate communities for these special protection waters will be evaluated and will not be degraded due to potential project impacts. There appear to be no more requirements than Transco stating that it would return the site to previous conditions. Ensuring that the benthic community will not be degraded should require strict monitoring requirements for each stream cut proposed, both pre- and post- construction. Past evidence and monitoring of other similar pipeline projects using similar engineering techniques with similar characteristics has shown changes in benthic community, changes in hydrology, changes in water quality chemistry such as thermal impacts/increased temperatures from deforestation to existing forested riparian buffers, sedimentation and smothering of benthic community habitat, and changes in vegetative quality and cover (where often invasive species move in). These detrimental impacts can cause cascading impacts to water quality further downstream, especially in sensitive headwater areas and small streams that are so critical to the larger watershed - this is the death by a thousand cuts that the rules for special protection waters are supposed to prevent. (134)

110. Comment

Transco-REAEP's analyses of streambed harms are inadequate; Transco-REAEP's, ability to restore original conditions are impossible.

- Both Exceptional Value (EV) and High Quality (HQ) streams are known as special protection waters in PA. EV streams are entitled to the highest level of projection. The streams are a regional asset that should be protected forever. They should not be sacrificed to new speculative gas transportation infrastructure. The second highest stream classification, High Quality or HQ, allows for some degradation of the water quality if there is "social or economic justification" justification that is hard to find. https://www.pennfuture.org/Files/Admin/EV-one-pager-FINAL-7.26.18.pdf
- DEP maintains a Surface Waters Classification. It was last updated in July 2021, subsequent to the April 2021 Transco-REAEP application. DEP must require that the Transco-REAEP application be revised accordingly. This is important because DEP must ensure protections of the higher of potential designations. https://www.dep.pa.gov/Business/Water/CleanWater/WaterQuality/StreamRedesignations/Pages/ Statewide-Existing-Use-Classifications.aspx (588)

111. Comment

The Transcontinental Gas Pipe Line Company, LLC (Transco) Regional Energy Access Expansion (REAE) project would inflict irreparable harm to pristine streams, forests, and other natural resources in our Commonwealth. I request that DEP deny the permits being proposed for this pipeline for the following reasons.

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. Some of the wetlands to be cut are Exceptional Value wetlands yet Transco is proposing devastating open trench cuts.

DEP must ensure that the Project does not degrade the water quality of any Exceptional Value (EV) streams or wetlands. The information Transco has provided to date makes assertions without sufficient data to meet the antidegradation requirements under Pennsylvania's Clean Streams Law. In addition, it does not appear that DEP has undertaken a complete antidegradation analysis for High Quality (HQ) streams and wetlands nor has the pipeline applicant collected data on each proposed stream cut determine existing use. (32, 115, 128, 131, 137, 176, 180, 211, 236, 242, 245, 271, 275, 312, 339, 354, 367, 386, 388, 408, 412, 414-415, 419, 423, 437, 445-446, 463, 470, 492, 619, 622, 639-658, 660-681, 683-693, 719, 728)

112. Comment

It is obvious that Transco's project will degrade stream habitat and therefore does not comply with Pennsylvania's Clean Streams Law. It is DEP's duty to protect our High Quality streams and wetlands for current and future generations. (726)

113. Comment

As part of our spot check review, we reviewed Transco's chart and cross referenced several EV wetland listings with the wetland buffer restoration drawings provided by Transco. DEP had requested in its incompleteness response that EV wetlands should be identified on the drawings. In the April 2021 restoration plan (L-5-Restoration Module S-4 – Mitigation Plan) the WMH drawings do not denote EV wetlands and include maps and drawings dated 3/21/21. These plans were accessed on the pipeline portal on 12/5/2021. All maps should be updated as requested by DEP back in August. Updated restoration maps are especially important as these will assist with long term monitoring well after the project would be constructed. Chapter 105 Impact drawings for Monroe County accessed on the pipeline portal on 12/5/2021 and dated as 3/5/21 on the drawings denote acreage impacts in the legend to assist with review and lat long of the wetlands but do not include the classification of the wetlands that are EV. It's important all of these drawings and maps are updated and also posted up on the pipeline portal for public review during the public review process otherwise the pipeline portal is not giving the public up-to-date information to provide thorough review. Actual stream names would also be beneficial to reviewers on the drawings.

DEP in its own incompleteness response requested Transco a) identify EV wetlands on drawings b) conduct EV wetlands anti-degradation analysis for any discharges to EV wetlands from the project c) The analysis should be performed by a wetland biologist and should comment on the project's effect and potential impacts on the type of wetland present, the hydrology, soils, and vegetation of the wetland. The analysis should consider the following:

b.i. How the wetlands obtain their hydrology and how this project impacts it. b. ii. What type of wetland is present and will the proposed project impact the vegetation and function of the wetland. b.iii. Any primary and secondary impacts to the wetlands as a result of this Project. Commenters believe that Transco has yet to adequately and thoroughly outline these requests and conduct these analyses fully. (1)

114. Comment

Antidegradation Requirements Are Not Met to Approve the Applications. Transco's short ABACT analysis for meeting the state antidegradation requirements contained in Chapters 93, 95, 102 and 105 through various measures provided in the Project design, are inadequate and not protective to ensure no or minimal degradation of special protection streams. BMPs outlined in the erosion and sediment control and site restoration plans will not adequately protect sensitive habitats. Transco evaluated the feasibility of non-discharge alternatives that would be located outside of exceptional value(EV) or high-quality (HQ) watersheds and states that during construction, excavated trenches will be kept to the minimum width and depth necessary to safely complete construction activities. However, evidence provided shows how pipeline ROWs can be minimized to much smaller widths than what Transco is proposing and that other crossingmethods likely can also be employed to limit degradation to HQ and EV waterbodies. (1)

115. Comment

Furthermore, when DRN tallied the stream and wetland cuts from the aquatic resource summary table overall there are 114 EV wetlands and 37 HQ streams to be impacted. For these special protection streams, DEP must require a thorough analysis that ensures there is no degradation of these streams and wetlands. What monitoring will be required both upstream and downstream of cuts to ensure no degradation? Will temperature probes be installed for monitoring for example? Annual mitigation and restoration monitoring by the pipeline companies alone is not sufficient. Taking the word of the pipeline company that much of these are "temporary impacts" and that the "hydrology will be restored" is not good enough nor is it prudent being the track record of altered conditions for waterbodies cut by other pipeline projects.

Among the watersheds to be cut for the Effort Loop alone proposed to cut across 13.8 miles of Monroe County - often with multiple watershed cuts: Tunkhannock Creek, Pohopoco Creek, McMichael Creek, and Mud Run - all of which have special protection designations. Take note too of Transco's discrepancies of designated uses outlined in October 18, 2021 joint comment by Pennfuture, Clean Air Council, and DRN to the PADEP. (1)

116. Comment

Some of the serious implications of Transco's intended REAE project based on information I gathered from environmental organizations include:

 This expansive pipeline project would impact 114 Exceptional Value (EV) wetlands and 37 High Quality 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. • Some of the wetlands to be cut are Exceptional Value wetlands yet Transco is proposing devastating open trench cuts. (748)

117. Comment

- This expansive pipeline 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.
- Some of the wetlands to be cut are Exceptional Value wetlands yet Transco is proposing devastating open trench cuts.
- DEP must ensure that the Project does not degrade the water quality of any Exceptional Value (EV) streams or wetlands. The information Transco has provided makes assertions without sufficient data to meet the antidegradation requirements under Pennsylvania's Clean Streams Law. It does not appear that DEP has undertaken a complete antidegradation analysis for High Quality (HQ) streams and wetlands nor has the pipeline applicant collected data on each proposed stream cut determine existing use or current conditions of those waterbodies. (7, 32, 109, 116, 118, 123, 131, 143, 147, 156, 176, 185, 211, 214, 236, 242, 275, 296, 312, 320, 330, 338, 354, 359, 376, 386, 408, 414-415, 419, 426, 437, 469, 484, 492, 619, 640, 643, 646, 649-651, 653, 658, 661, 672, 679, 686, 692, 716, 726, 749-780, 783, 788, 790-791, 794, 797-798, 801-805, 807-813, 815-816, 819, 822, 835-836, 842-843, 849, 860)

118. Comment

A considerable number of exceptional value and high quality streams will be cut through yet again by this pipeline expansion. It appears that most proposed waterbody cuts remain open cuts with little or no special consideration by TRANSCO for these streams. There is no preor post-monitoring of water quality included that would once again, if approved, leave Pennsylvania taxpayers holding the bag from long term repetitive harms that pipelines inflict on our state's pristine waterways, forests and wetland habitats. (806)

119. Comment

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_2 022/State WaterQualityCertification/SECTION-4.0---RECEIVING-WATERS-AND-CH.-93-DESIGNATIONS--- REV1.PDF.pdf (588)

120. Comment

Chapter 102 and 105 are designed to protect our precious water resources. This project would cross exceptional value wetlands, waterbodies that support cold water fisheries, high quality and exceptional value streams, and trout reproduction waters. Clearing forest around these waterways will further impact water quality and local habitat. Any leaks or accidents would run the risk of catastrophically and permanently impacting these resources. (844)

121. Comment

DEP must take specific steps and enact protections, including monitoring and enforcement to ensure that the project does not degrade the water quality of any Exceptional Value (EV) streams or wetlands. That includes collecting sufficient data ahead of time, including samples from potentially impacted waterways, to determine existing use or current conditions of those waterways.

In addition, 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. DEP should require a complete antidegradation analysis as part of any permit consideration. (483)

122. Comment

Among our concerns are the following impacts:

- Sinkholes, spills, property damage, and noise from the drilling process similar to the destruction caused by Mariner East II
- Damage to riparian areas and streams from open-cut crossings
- Forest fragmentation, soil compaction, stormwater runoff, and flooding
- Public health impacts like air quality degradation from compressor stations and industry equipment along the route
- Drinking water contamination and water quality degradation
- Habitat destruction, impacts on threatened and endangered species, and loss of wetlands (858)

123. Comment

Commenters appreciate your consideration of these comments and hope they are helpful as you continue your review of application materials. The waterways that this pipeline would cut across are among the highest quality streams in the Commonwealth and are entitled under the law to the highest protections. Even allegedly temporary impacts to these waters still do significant damage to these resources: to the water quality, to the trout and other aquatic life that live there, and to the people who rely on these waters. This is especially true when temporary impacts from construction are repeated over time, such as when new pipeline loops

are added in similar locations. Such impacts tend to become more like permanent impacts but fall through the cracks when it comes to oversight. The Department must prevent multiple small cuts to special protection waters that add up to impacts that substantially degrade these valuable resources. Commenters request DEP incorporate their previous comments on Transco's previous applications (sent to the Department on October 18, 2021 and December 6, 2021) and we urge the DEP to use its authority and duties to deny these water permits for the irreparable harm it would cause to Pennsylvania water resources, the climate and the environmental harm to water resources this pipeline project would cause.(134)

124. Comment

Next, the Department must ensure that the project does not harm these special protection waters. Waters are classified for "special protection" under Pennsylvania law where the water quality is such that it meets certain criteria set forth in the Chapter 93 regulations. Critically, classification as a special protection water - either HQ or EV - brings about additional water quality and antidegradation protections.

For the EV streams that may be impacted by the Project, DEP must ensure, prior to issuing the permit or approval, that the water quality of the stream will not be degraded. 25 Pa. Code § 93.4a(c). There can be no lowering of water quality. As Commenters discuss below, this is a high burden for Transco and the Department to prove, especially for pipelines causing open trenching, disturbance and limited "restoration" of riparian areas, and a state-wide history of leaks and water pollution. We are not convinced that Transco or the Department has met this high burden through its Chapter 102 or 105 permits.

For HQ streams, the water quality shall be maintained and protected, with one exception: where a person seeking a permit or approval that affects water quality is able to successfully demonstrate that a lower water quality is necessary to accommodate an important economic or social development. 25 Pa. Code § 93.4a(c). Thus, there is a litany of requirements that Transco must meet in order to be allowed to degrade the water quality of the stream. The Department has a duty to review these requirements and ensure, prior to issuing a permit or approval, that the Project conforms with the antidegradation protections for HQ streams. For those seeking permits to discharge to HQ waters, this means that prospective dischargers must do the following:

- Evaluate nondischarge alternatives to the proposed discharge. Examples of nondischarge alternatives would be the reuse or recycling of wastewater, infiltration of stormwater, or alternative site locations.
- Where no "environmentally sound or cost-effective" nondischarge alternatives are available:
 - Use the "best available combination of cost-effective treatment, land disposal, pollution prevention and wastewater reuse technologies" (ABACT requirement); and

- Prove that the discharge will "maintain and protect the existing quality of receiving surface waters." This is often referred to as the "non-degrading discharge" requirement.
- Where neither nondischarge alternatives nor non-degrading discharges are found to be feasible, successfully demonstrate to DEP that "allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located" (the "SEJ" requirement). 25 Pa. Code § 93.4c(b).

If Transco is unable to demonstrate a "nondischarge" alternative, is unable to show that using ABACT will protect and maintain water quality, is unable to show that the proposed discharge will maintain and protect existing water quality, and is unable to provide an SEJ for its discharge, DEP must deny the requested permit or approval. Again, Commenters are not convinced that Transco or the Department have met the requirements that allow for the Project to be permitted or certified in HQ waters. The water-related considerations must include, but are not limited to: sensitivity of water use, including recreational water uses or drinking water uses; nature of the proposed discharge pollutants and their potential impact; the proposed degree of change in water quality; the proximity to wetlands or floodplains; discharge characteristics, such as long-term potential impacts; reliability of the proposed discharge treatment technology; additional positive or negative environmental impacts; and the applicant's prior compliance record. DEP Antidegradation Manual, at 76-77. The social and economic considerations must include, but are not limited to: the effect on public need or social services; the effect on public health or safety; the effect on quality on life; any potential employment opportunities; effect on tax revenues; and impacts on tourism. DEP Antidegradation Manual, at 78-79. These SEJ factors are limited "to the area in which the waters are located," 25 Pa. Code § 93.4c(b), PADEP requires "[s]ite-specific cost calculations and documentation" to support a social and economic justification application. ⁶

There is no indication that the Department has considered these antidegradation criteria for the HQ waters which may be impacted by the project. Moreover, a review of Transco's application materials shows that Transco has failed to consider the unique, site-specific conditions at each individual proposed stream and wetland crossing, and the corresponding potential adverse water quality impacts associated with stream crossings, including open-cut crossings. The application fails to comprehensively evaluate each stream crossing with regards to conditions such as water quality, erosive soils, existing land use and forested areas, existing slopes, riparian buffers, and the potential need for in-stream blasting. Lacking consideration of the site-specific conditions at each crossing, the application fails to require adequate location and construction recommendations to protect water quality, as well as construction techniques specific to conditions at each crossing. The proposed stream and wetland crossing locations, methods of construction, and long-term land use conditions appear

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⁶ Social or Economic Justification Request Review, PADEP, SOP No. BMP-007 (Oct. 23, 2017), available at: http://files.dep.state.pa.us/ProgramIntegration/PermitDecisionGuaranteePortalFiles/SOPs/AAMO/BMP-007%20SEJ.pdf.

to be based on the needs and preferences of Transco and not informed by site-specific conditions.

With respect to antidegradation requirements, it is unclear how the Department would ensure that benthic macroinvertebrate communities for these special protection waters will be evaluated and will not be degraded due to potential project impacts. There appear to be no more requirements than Transco stating that it would return the site to "previous conditions" but that has no connection to the diverse aquatic life that may be present at all of these stream cuts that are proposed – its only lip service. Ensuring that the benthic community will not be degraded should require strict monitoring requirements for each stream cut proposed, both pre- and post- construction. Past evidence and monitoring of other similar pipeline projects using similar engineering techniques with similar characteristics has shown changes in benthic community, changes in hydrology, changes in water quality chemistry such as thermal impacts/increased temperatures from deforestation to existing forested riparian buffers, sedimentation and smothering of benthic community habitat, and changes in vegetative quality and cover (where often invasive species move in). These detrimental impacts can cause cascading impacts to water quality further downstream, especially in sensitive headwater areas and small streams that are so critical to the larger watershed. This is the death by a thousand cuts that the rules for special protection waters are supposed to prevent. DEP should deny these permits. (134)

125. Comment

The waterways and surrounding habitats that this pipeline would cut across are among the highest quality streams and wetlands in the Commonwealth. As such they are entitled under by law to the highest protections. Vast areas of our watershed will be negatively impacted by both the construction and maintenance of the pipeline. Trees will have to be cut, heavy equipment and support vehicles will be needed to install and maintain the line. New roads will be needed to facilitate the entire process. All of this will create an enormous earth disturbance, particularly on the steep slopes where runoff will be greatest. Even allegedly temporary impacts to these waters still do significant damage to the water quality and habitat in the area of disturbance.

I am seriously concerned that the applications and plans do not provide for adequate oversight by the DEP, nor for accountability by Transco. The applicant is seeking to cut across multiple High Quality (HQ) and Exceptional Value (EV) streams and wetlands, along with forested areas, yet there is still no requirement or oversight in way of water quality monitoring for these cuts. Without pre and post water quality monitoring data, how is DEP ensuring the public that degradation of these special protections waters is not occurring? Transco asserts: "Disturbed wetland, streams and floodways within the ROW will be returned to preconstruction grade and contour upon completion of construction." What monitoring and documentation is DEP requiring of Transco to ensure that pre and post conditions remain the same? What stream monitoring is being conducted by Transco or the agency to ensure there are no harms or declines in water quality? Past records and monitoring data submitted by Commenters on other similar pipeline cuts in Pennsylvania demonstrate that declines in water

quality occur as a result of pipeline construction, and yet there appears to be no additional measures or new BMP measures being taken by Transco to minimize harm that will come if this pipeline expansion is approved. (120)

126. Comment

I urge the Department to deny the permits for Transco's Regional Energy Access Expansion Project. First, it is not my understanding that this proposed pipeline would be completed and bring frack gas online in upcoming months. Over recent decades the rich abundance of exceptional value wetlands and high quality streams in the Pocono region, some of the most pristine in the Commonwealth, have been compromised, much because of the failure to adequately require the state protections requiring avoidance of unnecessary fills and destruction. The resulting effects include the undermining of water quality, the lost of flood water absorption and retention and the elimination of habitat for sensitive species. (867)

Response 107-126:

The Department verified the Chapter 93 designated and existing use classifications of the aquatic resources impacted by this project during its review of the permit applications. The Department also conferred with the PFBC during review of the application. The PFBC verified the designations of all Wild Trout and Class A Trout streams. The Department informed Transco about any errors or inconsistencies within the permit applications in the Department's January 22, 2022 technical deficiency letter. Transco corrected all errors or inconsistences in Transco's March 7, 2022 resubmittal of application materials.

The Department evaluated whether the project activities would cause or contribute to a violation of any applicable state water quality standard and whether the project will cause or contribute to pollution of groundwater or surface water resources or diminution of the resources sufficient to interfere with their uses during its review of the applications. As part of the Chapter 102 and Chapter 105 applications, the Department required Transco to provide sufficient information, such as a comparison of resources pre-construction and post-construction, potential impacts, and other relative environmental factors to demonstrate that the project is consistent with the antidegradation requirements including those contained in 25 Pa. Code Chapter 93, Sections 93.4a through 93.4c; 25 Pa. Code Chapter 102, Sections 102.2, 102.4(b)(6), and 102.8(h); 25 Pa. Code Chapter 105, Sections 105.16(c), 105.18a(a)(6) - related to EV wetlands, 105.18a(b)(6) - related to Other wetlands, and 25 Pa. Code Chapter 96, when applicable.

The application shows that the antidegradation analysis (Requirement L-4, Module S3.F of the Chapter 105 permit application) has been met for Chapter 105 application in concert with the antidegradation analysis of the Chapter 102 E&S Permit Application. While excavation of the trench and construction of the pipeline have the potential to contribute to pollution during construction activities, an E&S / SR Plan has been

developed and will be implemented to minimize accelerated erosion and the potential for the discharge of construction-related sediment during construction.

The E&S / SR Plans and PCSM Plans were developed by utilizing the PADEP E&S Manual, PA Stormwater Best Management Practices Manual, and includes ABACT BMPs. Following construction, aquatic resources will be restored to their preconstruction grade, and the project area will be seeded and stabilized, to minimize the potential for future erosion and to facilitate the re-establishment of pre-construction conditions in accordance with the PCSM and site restoration requirements in 25 Pa Code § 102.8(n). Furthermore, site restoration will be to meadow in good condition as described in the E&S/SR Plan and related permit condition(s).

The Chapter 102 E&S Permit Application demonstrated to the Department that any facility that required a point source discharge, metering station, regulation station, etc., provided hydrologic and hydraulic calculations showing that the proposed condition will not degrade water quality, increase water volume, or increase flow rate from the site. The Department reviewed and approved the calculations and PCSM Plan which demonstrated that the project satisfies 25 Pa. Code § 102.8. The Chapter 102 E&S Permit Application and companion plans also appropriately address potential thermal impacts and sedimentation to water bodies on the Project.

In terms of a comprehensive evaluation of each individual stream crossing, the Department required Transco to demonstrate the unavailability of alternative locations, routes, or designs and to use locations, routes, or designs to avoid or minimize the adverse impact of the project upon the environment (see Requirement S Alternatives Analysis of the Chapter 105 permit application). Moreover, Transco proposes the construction ROWs to provide for safe and efficient construction of large diameter pipeline facilities in accordance with OSHA regulations (29 CFR 1926.650-1926.652, Subpart P) and Interstate Natural Gas Association of America's (INGAA's) workspace guidelines (INGAA 1999). Transco made reductions or "neck-downs" of the construction ROW at resource crossings to avoid and minimize resource impacts.

With regards to project oversight, Transco will employ at least one EI per construction spread. The EIs will be responsible for monitoring and ensuring compliance with all erosion and sediment controls and mitigation measures required. Pursuant to the permits, Transco will be required to comply with visual site inspections and standard monitoring events. Post construction, Transco will supply post construction and monitoring reports for restored resources for five years. Post construction monitoring of hydrology and of tree/shrub plantings is required as part of DEP's permit conditions for a minimum of five years. The Department can request additional monitoring if parameters are not met.

The Department considered the requirements of Chapter 93 and the information presented with the application materials and determined that if the project is constructed as planned, all antidegradation criteria will be met. Through the review of

the permit applications as well as all resubmitted documentation, the Department found the project to be designed in accordance with Chapter 102 and Chapter 105 rules and regulations.

Wetland Delineation

This section addresses the comments received by the Department during the public comment period on the topic of wetland delineation. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

127. Comment

F. Accurate Wetland Jurisdictional Determinations Are Required.

In Pennsylvania, the Army Corps of Engineers provides, in response to landowner requests, formal written Jurisdictional Determinations (JDs) that confirm, and accurately map, the extent of wetlands and other bodies of surface water eligible for regulation at the federal, state, and municipal level on specific tracts of land. Absent the issuance of a valid JD, landowners and public are generally unable to accurately ascertain the limits of a regulated wetland. Topographic maps, National Wetland Inventory maps, floodplain maps, soil survey maps, and planning maps of many kinds can provide useful technical information, but do not identify in detail the limits of regulated wetlands (or streams) that need to be considered by the sponsors of construction projects. Consultants typically document sites on behalf of landowners and prepare paperwork for agency review. Careful documentation of wetlands whose proffered boundaries are superimposed onto a land ownership survey is required as part of a request for a JD, and Corps staff typically inspect each property in the field prior to approving a JD.

JDs remain valid for five years, in recognition of the fact that wetland boundaries can change over time through natural changes as well as through unregulated human activities nearby. Only the Natural Resources Conservation Service (NRCS), an arm of the US Department of Agriculture, issues permanent wetland identifications for purposes of eligibility for federal programs that support crop production. Such NRCS determinations apply only to farming, not to general construction activities. Therefore, it is important for Transco to have updated JDs for all wetlands as opposed to relying on old ones. Applicant-proffered wetland boundaries are often inaccurate and continue to warrant detailed scrutiny by the Army Corps of Engineers and other regulators. In one 2010 mining application in Greene County, National Wetland Inventory maps disclosed four wetlands on a 642-acre site. The applicant's consultant submitted a proposed delineation to PADEP showing ten wetlands. After field inspection by the Corps, the JD drawing of the same tract of land showed 27 wetlands. Wetland classifications from consultants can also be inaccurate (for example PSS wetland labeled as a PFO wetland, etc.) further underlining the importance of up-to-date JDs. (134)

128. Comment

A thorough check and JD by the Army Corps are desperately needed to ensure accurate delineations. (1)

129. Comment

The Applications Undercount the Amount of Wetland Acreage for Which Compensation is Required and the Proposed Mitigation Plan is Fundamentally Flawed.

As an initial matter, the wetland delineation in Transco's applications must be independently verified by the Department or through a jurisdictional determination by the U.S. Army Corps of Engineers. Inadvertent or purposeful mischaracterization of wetlands can result in the permanent loss of wetland acreage and functions without the appropriate oversight. While field-truthing by community members and environmental organizations can provide an important check on inaccuracies, the duty remains with the Department as trustee to account for the public natural resources impacted by any proposed action subject to the Department's review. Thus, an undercounting of wetland acreage and functions can be prevented by appropriate verification and oversight. Army Corps field visits during prior Transco cuts during prior Transco Franklin Loop expansions helped document forested wetlands that had not been accounted for. The Department should also investigate fully the timing of delineations in way of drought conditions that may have been affecting surveys when they were conducted by Transco's consultants. (134)

130. Comment

Furthermore, it is very common that National Wetlands Inventory (NWI) maps significantly undermap the number and extent of regulated wetlands in Pennsylvania. The extent of forested wetlands often is not readily determined from high-altitude aerial photographs. Furthermore, NWI maps were never intended to be accurate enough to be used for project site- specific regulatory purposes. Discrepancies regarding the location, extent, and nature of wetlands at various places along the proposed pipeline route may be due to sloppy recording, incompetent field delineation, inconsistency among field delineators, or some combination of those factors. There is no excuse for inaccurate identification of wetlands on any project site, yet it happens more often than necessary, even where the wetland consultants have the "appropriate" credentials and claim to have followed the relevant criteria and guidelines for wetland delineation. The Army Corps of Engineers has an established, straightforward, no-fee process/procedure (known as a jurisdictional determination, or JD) for checking the accuracy of wetland delineations for federal regulatory purposes.

PADEP uses the same methodology (25 Pa. Code § 105.451). The importance of Corps of Engineers review was highlighted recently when a proposed coal mine application was undergoing PADEP permit review. In the 1,867-acre surface facilities area for the proposed mine in southwestern Pennsylvania, the applicant's wetland consultant identified 16 wetlands where the National Wetlands Inventory (NWI) had mapped only 2, a result which would seem to be more comprehensive. Following the Corps' JD field inspections, however, a total of 44 wetlands were confirmed at the mine site. If the Corps had not examined the consultant's

wetland delineations, and if any of those additional 28 wetlands had been adversely affected by the mining project, those impacts would not have been recognized or mitigated. For the Transco project, it is important that the Corps of Engineers field inspect and confirm the accuracy of the proposed delineation of all wetlands after the limits of the wetlands and Study Area have been clearly flagged. (134)

131. Comment

Although we will be submitting written comment by October 12th we would like to emphasize at this hearing the project's impact wetlands and riparian buffers. Transco's wetlands delineation must be independently verified by DEP or the - or the Army Corp of Engineers in order to ensure adequate accounting of and protection of the public natural resources that would be affected by the project. (875)

Response 127-131:

Under 25 Pa. Code § 105.451, project applicants must verify the presence and boundaries of wetlands, watercourses, and other bodies of water through on-the-ground investigation and incorporate use of the 1987 United States Army Corps of Engineers (USACE) wetlands delineation manual and regional supplements. In addition, the applicant is required to sign the Chapter 105 Permit Application certifying the information submitted is true and accurate. This includes the identification and delineation of wetlands under 25 Pa. Code § 105.13(e)(1)(i)(A) as well as proposed project impacts to aquatic resources under 25 Pa. Code § 105.13(e)(1)(x).

The Philadelphia and Baltimore Districts of the USACE districts performed a Preliminary Pre-Jurisdictional Determination (PJD) in August and September of 2020 to field verify wetland boundaries and Cowardin classifications recorded by the Project biologist, and to determine the jurisdictional status of the wetlands and streams.

Regarding the concerns with NWI mapping, NWI mapping was used during initial desktop review as a tool to understand potential preliminary site characteristics prior to wetland delineations in the field.

Environmental Assessment Function and Values

This section addresses the comments received by the Department during the public comment period on the topic of Environmental Assessment function and values. Excerpts of comments received from individual commenters on these topics, as well as the Department's response to these comments, are provided below.

132. Comment

Wetlands provide productive and diverse ecosystems for both aquatic and terrestrial wildlife ⁷ and they produce biomass for the base of the food chain. ⁸ Wetlands of all sizes, both large and small, have been demonstrated to provide important habitat for a wide variety of plants and animals, many of which could not survive without them ⁹. Forty-two percent of the "total U.S. threatened and endangered species depend upon wetlands for survival." ¹⁰ Wetlands provide a diverse and complex set of ecosystems -- niches that function as an irreplaceable ecological unit. ¹¹

Wetlands act as a natural pollution filter thereby providing irreplaceable water quality benefits. The dense vegetation found in wetlands filters out sediment, nutrients and other pollutants¹². Wetlands can also filter pesticides and heavy metals and can reduce water-borne bacterial contamination through microbial action.¹³

Wetlands provide flood control, erosion control and groundwater recharge. Wetlands are part of nature's sponge, holding water, feeding plants, and slowly recharging aquifers. Wetlands effectively absorb and hold floodwaters thereby protecting adjacent and downstream properties from flood damage¹⁴. Depending on the soil type, wetlands can contain 1 to 1.5 million gallons of water per acre, thereby alleviating flooding by holding excess water like a sponge¹⁵. At the same time, wetland vegetation helps to slow the speed of floodwaters - this in combination with the storage capabilities of wetlands can both lower flood heights and reduce the erosive potential of floodwaters¹⁶. Wetlands can also desynchronize flood peak flows and velocities during small runoff events.¹⁷

Wetland delineations and assessment of values and functions of wetlands impacted by the Project directly or indirectly are needed. As part of this analysis, hydrology, vegetation, and soils must be examined. Assessment of function and value should consider all ecosystem services being provided that are listed above, such as groundwater recharge, water quality and sedimentation, wildlife habitat, flood protection, biological diversity, recreation, and

⁷ National Wildlife Federation Fact Sheet -- nwf.org/wetlands/facts/benefits.html

⁸ Michael J. Caduto, <u>Pond and Brook, A Guide to Nature in Freshwater Environments</u>, University Press of New England, 1985, p. 29

⁹ National Wildlife Federation, "Status Report of Our Nation's Wetlands", October 1987.

¹⁰ DNREC and Brandywine Conservancy, <u>Conservation Design for Stormwater Management: A Design Approach to Reduce Stormwater Impacts from Land Development and Achieve Multiple Objectives Related to Land Use</u>, September, 1997, p. 2-11.

¹¹ *Ibid*. 21

¹² Clean Water Network and NRDC, "Wetlands for Clean Water, How Wetlands Protect Rivers, Lakes and Coastal Waters from Pollution", April 1997

¹³ *Id*.

¹⁴ *Ibid*. 15, p. 4

¹⁵ Bob Schildgen, "Unnatural Disasters", Sierra, June 1999

¹⁶ *Ibid.* 15, p. 4

¹⁷ *Ibid*. 22

aesthetics, so that potential impacts, alternatives, and avoidance of wetlands and their important natural buffers can be properly assessed.¹⁸

The DEP must fully assess impacts to wetlands including, but not limited to changes in water levels, flow characteristics, and circulation patterns, the impacts of temporary and permanent alteration of vegetation in and around wetlands, altered temperatures, changed light, altered humidity, altered groundwater or surface water flows, and/or altered flooding frequencies due to the Project. Changes in substrate conditions may affect the ability of the wetland to sustain vegetation and wildlife populations including sensitive amphibian populations. For example, repeated maintenance and lagging restoration practices that span over multiple seasons/years could impact important amphibian and fish migrations and critical reproduction periods if biological windows are not considered.

It has been observed and documented by DRN and Conservation District staff around prior pipeline projects that once the pipeline is moving gas, the final restoration phases by the operator are often not a priority leading to inflicted or unnecessary additional harm to sensitive species, due to improper timing or unnecessary delays. Increased run-off as addressed above may introduce contaminants or more sedimentation to the ecosystem. Increased nutrient loading could produce algal blooms and reduce available oxygen in the water. Any impacts to the physical characteristics of wetlands resulting from the construction and operation of the Project and any associated appurtenances of land, water, air or light transformations must be included in any analysis. (1)

133. Comment

Impacts including to recreation, aesthetics, art and the resulting economics

In studying impacts to water quality, wetlands, parklands, forest land, naturally vegetated areas, and/or any of the landscapes, water resources, open space areas, conserved lands or parklands impacted by Transco REAE the ramifications for the beauty of the region and the recreational use and value of the region must also be considered. For example, consideration of the direct and indirect impacts must also be given to how diminished water quality would affect recreational and visitor uses to state and county parklands (e.g., boating, canoeing, aesthetic qualities, and degradation of fisheries), tributaries valued for their birding, boating and fishing. The market value of homes, the success of recreational ventures, the economic success of the many recreationally and aesthetically dependent businesses of the region will all be impacted by the land, water, landscape, aquatic life and wildlife impacts of the Transco REAE project. All of these issues must be considered.

When considering alternative routes the short and long-term implications of disturbing and fragmenting natural areas must be given greater weight than consideration of manicured lawn and active recreation areas.

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¹⁸ See Schmid and Company Inc. (2014). The effects of converting forest or scrub wetlands to herbaceous wetlands in Pennsylvania. Prepared for the Delaware Riverkeeper Network, Bristol, Pennsylvania. (Attachment 17).

Additionally, these Pocono region watersheds of Monroe County are highly favored and utilized by artists because of its beauty, its unparalleled ecological values and visuals, and the community it has attracted and supported. The ramifications for art, artists and art related businesses and nonprofits must also be given due consideration and valuation. (1)

Response 132-133:

The Chapter 105 Permit Application Environmental Assessment includes a discussion on the condition of existing resources located within the workspace and a description of impacts to the functions. The proposed wetland encroachments have been determined to have no adverse impacts. The function and value of the existing wetlands are not unique to the area nor will the project impair the wetland systems from providing their functions and values once restoration is complete. The encroachments have been minimized to the maximum amount practicable as described in the alternatives analysis. Streams will be restored to similar conditions and are expected to recover similar preexisting functions and values. Two small streams will be altered to direct flow off the ROW, but the streams are expected to maintain similar functions once restored. All proposed wetland encroachments will be restored to wetland conditions at original contours with native soils by the completion of the construction. As a result, there will not be any net loss of wetland area. The permittee will conduct mitigation in accordance with the approved mitigation plan for PFO and PSS wetland crossing locations where wetland vegetative cover will be converted to PEM vegetative conditions. Resources will be monitored as part of DEP's permit conditions for a minimum of five years. Required tree and shrub plantings within riparian areas and previously forested or scrub shrub wetland are required to meet an 85% survival rate.

In addition, Transco's E&S/SR Plan identifies restoration practices to be implemented. A notice of termination will only be granted by the Department after meeting successful herbaceous revegetation.

Noting the amount of co-location of this Project with other utility lines (including full co-location in Monroe County), the completed project is not expected to have significant adverse impacts on aesthetics or recreation. Transco has coordinated with parks and game lands to limit impacts to those features.

Cumulative Impacts

This section addresses the comments received by the Department during the public comment period on the topic of cumulative impacts. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

134. Comment

The Applications and Authorizations Do Not Show The Proper Consideration of Cumulative Impacts on Different Ecological Systems.

Cumulative impacts of the pipeline construction, operation, and maintenance on impacted ecological systems must also be considered. The Department should evaluate the cumulative impacts to key ecological systems such as forests and wetlands, over the lifetime of the pipeline, from construction through operation and including maintenance activities. For example, forest ecological systems would experience enduring but also fresh impacts throughout the operational life of the pipeline and even afterwards.

The initial impact would include the removal of the forest and understory vegetation, coupled with the changes in light, moisture, wind, etc. impacting 300 feet into the forest on either side of the ROW footprint. There will be enduring compacted soils, and dramatically altered vegetative composition along the ROW and along the forest edge that will increase volume and alter the timing of stormwater runoff, reduce groundwater recharge, change/take habitats for species of all kinds. There will be an influx of invasive plant and animal species that will have cascading impacts on the forest ecosystem. This influx additionally could spread along the ROW and back into the core of the adjacent forest and may introduce invasives into a region that could spread to other intact forest systems in the area but not directly on the Transco pipeline route. Additionally, it is important to factor in not just the impacts of the fragmentation of the forest by Transco for these particular pipeline segments but also by other cuts in the same region, either by Transco on its other pipeline pieces or by other pipeline/linear projects.

Over the life of the pipeline, it is expected that there will be the maintenance of the ROW, which will include the prevention of tree growth and maintenance of low growing vegetation only – this will be accomplished by periodic mowing and the use of herbicides. The mowing will disturb the vegetation, habitats, and species along and nearby the ROW. The herbicides will include impacts for non-target species and could have implications for soil microbes and nearby wetland, vernal pool and stream ecosystems. Maintenance activities will involve periodic trimming, pruning, cutting back and removal of trees and woody vegetation growing along the perimeter of the ROW. "The inspection and maintenance of the ROW means the repetitive access and traverse of the ROW by inspection vehicles and maintenance equipment. This increases overall soil compaction and because there are no stabilized access- ways, it also creates repeated opportunity for soil erosion." Transco will only be required to "ensure that the soils are stable and is under no regulatory obligation to restore soil to pre-construction conditions." "[T]hese changes in the properties of the soils along the pipeline and within the pipeline ROW will contribute to the predicted increases in the volume and rate of runoff." Along the entire length of the proposed pipeline, these changes in the post-construction hydrology of the affected lands (especially the steeper sloped areas) will invariably alter runoff properties. The end result will be impacts to the streams, wetlands and riparian areas traversed by the pipeline and pipeline ROW and increased opportunity for erosion along the steeper segments of the pipeline and pipeline ROW. Because Transco is not required to implement any of the conventionally utilized best management measures to collect, treat and control ROW runoff, there is no way to mitigate for these changes other than to revegetate.

In addition to these known and anticipated impacts along the ROW, Transco proposes many cuts to the streams its pipeline will transect that are wider than is standard. The justifications given for these wider stream crossings are minimal. Many are justified because of "steep terrain" and "rocky soils." Again, given the special protection status of these waters, the Department should look very closely at these extra-wide proposed cuts, from which stream health recovery, if there is any, will be even more difficult and take even longer. (134)

135. Comment

The DEP should fully consider impacts to and avoidance of preserved open space.

The variety of harms that would result from the proposed cuts through preserved open space must be fully and fairly considered – whether the open space is preserved by purchase or conservation easement (publicly or privately held).

DEP should require the applicant to consider alternative routes that do not impact public open space. Companies routinely site pipeline routes that impact public open space because these lands are valued at a lower rate when compared to non-preserved lands. FERC must not permit this "savings" to the applicant to drive the siting process. Public and preserved lands must be priced according to their value. DEP must deter this strategy for siting the pipeline and consider the distorted pricing of open space as it evaluates alternative routes for this Project and as it considers the cumulative environmental harms of the proposed pipeline expansion. DEP's approach to evaluating cumulative impacts gives inadequate consideration to the distorted incentives for pipeline companies to target protected open space – whether protected through purchase or conservation easements.

The protection of open space is necessary to preserve the remarkable resources of the Delaware River watershed. Natural areas are critical for water quality, have more stable soils, provide habitat for plants and animal species, and help maintain the value of historical sites. Loss of open space adversely impacts water quality, aquatic habitat, and the intact ecological health that is otherwise benefitted by the preserved open space. Pipeline passage through open space significantly reduces scenic character and recreational opportunities thereby adversely impacting jobs and economic benefits associated with recreation, vacation and other related industries.

Realtors in the region have asserted at public meetings that the presence, or even the potential presence, of an interstate transmission pipeline of the size proposed by Transco REAE adversely impacts the marketability of nearby homes. FERC must fully and fairly consider these harms and require quantifiable and documented data to support any assertions/findings. Potential impact blast zones and the environmental and property harm it would cause along the entire pipeline corridor if an accident were to happen must also be considered in the analysis.

The impacts to the market value and marketability of homes that will result from the removal of mature vegetation to make way for this additional pipeline loop (both permanent ROW and temporary construction areas that will not be fully restored) must also be fully and fairly considered. Healthy, mature, vegetated buffers along waterways are known to enhance

property market values. For example, "Pennypack Park in Philadelphia is credited with a 38% increase in the value of a nearby property." In addition, "[t]wo regional economic surveys documented that conserving forests on residential and commercial sites enhanced property values by an average of 6 to 15% and increased the rate at which units were sold or leased." And in a survey conducted by the National Association of Home Builders, 43% of home buyers paid a premium of up to \$3,000, 30% paid premiums of \$3,000 to \$5,000, and 27% paid premiums of over \$5,000 for homes with trees. To the extent the Transco REAE will be cutting down forests and buffers to expand its ROW and replacing them with low growing grasslands, and to the extent that the forest fragmentation caused by pipeline construction and maintenance will result in additional forest degradation as far as 300 feet back on either side of the ROW, the impacts to home market values and marketability must be accounted for. (1)

136. Comment

The Delaware River's health and the health of its tributary streams are threatened by loss of its floodplain's function and the resulting increase in stormwater and floodwater. Adverse impacts to beneficial floodplain values must be considered. These include the accelerated runoff produced along the ROW that will result in more erosion and deposition within streams, increased transport and loading of contaminants, increase in flood peaks due to accelerated runoff (in turn reducing the amount of water entering the ground), decrease in groundwater recharge, blocked or diverted groundwater flow, soil compaction, and the removal of habitat and food sources for wildlife and aquatic life. These impacts can also produce a "ripple" effect by upsetting the balanced ecosystem of the landscape through construction activities. The DEP should consider the short term, long-term, and cumulative impacts of these alterations.

Unnatural flood levels and flood damages are experienced by communities living along the Delaware River and tributary streams. In addition, removal of vegetation along water systems removes the natural armoring that helps prevent accelerated erosion from unnaturally high flood flows. The ramifications, individually and cumulatively, of the multitude of proposed stream crossings for flooding, flood peaks, flood damages and erosion must be considered. (1)

137. Comment

The Department must also ensure that "temporary" impacts do not become permanent through future construction within the same wetlands. While collocation of pipelines may provide some convenience for the applicant, the Department must have a realistic understanding of what it means to continually upgrade and expand the devastating footprint of additional expansions to the same adjacent ROW from the perspective of the resources in and around the ROW. There are not many examples on the alignment sheets where Transco is working between its existing pipes and within the existing footprint – instead Transco acknowledges it is cutting additional (often forest) habitat adjacent to the already impacted expansive ROW. Denying the permits would prevent further degradation of these resources in an ever-expanding ROW scheme. Should the Department consider granting the permits requested in

Transco's applications, conditions should be imposed to restrict future work and expansion of work in and beyond the ROW except in the case of an emergency. (134)

138. Comment

We - here in this - this DEP hearing we need to focus on protecting our water and I'm particularly interested in cumulative impacts because there been a study of this. I read through what was posted on the PA environmental news website and I didn't see anything directly relating to cumulative impacts, and I think that's a significant problem. Also I realize that the pipe companies - pipeline placement companies not always used the best - the large resources of the Department of Natural - Department of Natural Resources in the State of Pennsylvania because they have a lot of - a large library on the quality of the earth. (323)

Response 134-138:

DEP's review of these applications for the REAE Project is only one part of a more comprehensive review and regulatory oversight for the proposed pipeline. DEP's environmental review is coordinated with various local, state, and federal entities where necessary. Other state and/or federal agency concurrence (particularly through the FERC process) is necessary prior to permitting of the project. Consideration of the cumulative impact of projects is integrated into that comprehensive regulation and oversight. The limitations established in both the regulations and permits issued by the Department under them are evaluated to ensure compliance with regulatory standards which are protective of the environment, health, safety, and welfare of the community.

The Department evaluates cumulative impacts during its review of a permit application in accordance with Pennsylvania regulations including Title 25 Pa. Code Chapters 93, 96, 102, and 105. As part of the Department's review of a permit application, permanent wetland impacts from other existing or potential projects are taken into consideration. The Department conducted a comprehensive environmental evaluation of the project, which included consideration of cumulative impacts. The Department's review of cumulative impacts associated with this project was undertaken as outlined in Technical Guidance No. 310-2137-006, Comprehensive Environmental Assessment of Proposed Project Impacts for Chapter 105 Water Obstruction and Encroachment Permit Applications.

For overall project impacts, which cannot be avoided or minimized, an applicant has to describe in detail specific measures undertaken or that will be taken to mitigate for the overall project impacts in accordance with 25 Pa. Code §§ 105.1, 105.13(e)(1)(ix) and 105.20a. The Department has required compensatory mitigation for the acreage of wetland resources impacted, as well as the altered functions and values of the wetland resources as a result of routine vegetation maintenance on the ROW.

Use of appropriate BMPs and/or restoration of the project areas to pre-development conditions or meadow in good condition complies with the regulatory performance standard for post construction stormwater function. Additionally, the onsite Wetland and Riparian Reforestation Plan will assure replanting of woody vegetation within

resources, where applicable. The permittee will also use decompaction methods to restore the ROW. Through these efforts, long term and cumulative impacts to sites will be minimized to the extent practicable.

FERC has jurisdiction over the siting of interstate natural gas pipelines under the Natural Gas Act, 15 U.S.C. § 717b(e)(1). The Commission, intervenors, or any commenter may also suggest alternatives and modifications to the proposed routing or siting of the project to reduce the effects of the proposed pipeline project.

The Alternative Analysis (Requirement S, Appendix S-2 of the Chapter 105 permit application) details the Project's co-location to other utilities. Co-location was one of the recommendations in the Pipeline Infrastructure Task Force Report. Transco demonstrated that it minimized impacts associated with the Project by co-location with existing linear infrastructure to the extent practicable, including overlapping existing ROWs where possible, and that the construction corridors are consistent with FERC guidelines. Although co-location in this instance requires open cut construction and surface water crossings similar to a greenfield pipeline, the overlap minimizes new disturbance and generally reduces the operational footprint. For areas crossing surface waters, Transco demonstrated that it minimized the width of the permanent pipeline ROW to the minimum required for the O&M of the pipeline. Transco noted site-specific justification for exceeding the requested nominal workspace in streams and floodways in Table 5.1-1 within the Alternative Analysis (Requirement S). These exceptions were reviewed and found acceptable by the Department.

Certain impacts, such as those related to property values, are addressed in the EIS. FERC provided the final EIS on July 29, 2022, which may be viewed on FERC's website at www.ferc.gov (search eLibrary; Docket Search; CP21-94-000).

DEP has considered the environmental impacts of this project. DEP has coordinated internally, and with other trustees. All project impacts have been sufficiently minimized, many of the impacts are temporary in nature, and all impacts of the project are being mitigated for or addressed through onsite restoration. After a thorough and iterative evaluation of the proposed project, DEP has determined that per the approved applications, including the special conditions included in the permits, this project will not cause unreasonable degradation, diminution, depletion or deterioration of the environment.

Alternative Analysis

This section addresses the comments received by the Department during the public comment period on the topic of alternative analysis. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

139. Comment

Proposed Alternatives Analyses Are Deficient and Flawed.

Transco's Alternatives Analyses appears flawed on multiple fronts and deserve significant scrutiny by the Department.

Transco states that the compression intensive alternative over the proposed Effort looping project is not the feasible option. Yet its own Table 3.2-1, on quick review, shows significant harmful impacts for the looping project over the compressor intensive option. (It may also be possible for Transco to add compression at existing stations rather than build an entirely new compressor station.) According to Transco's own info, the Effort loop alone would lead to significant forest, stream and wetland impacts with significant impact to 224 landowners that would have yet another pipe added to the already expanded ROW running on their properties.

Transco states in the narrative how the Effort Loop would be collocated, yet Table 3.2-1 lists 162.6 acres for construction ROW would be needed as compared to 54.4 acres for a new compressor alternative. Furthermore, 71.8 acres of forest, 1.9 acres of wetlands, and 4 streams would be impacted by the Effort Loop alone (not including the other proposed expansion pipeline in Luzerne County). Transco then goes on to assert that the permanent ROW would only impact 31 acres over the long term during operation of the pipeline. However, the Department must consider the history and evidence readily available from past pipeline projects. Temporary work spaces, especially if built by cutting mature forests over a significant area—as is proposed here—cause long term harms to the land and the water. Compacted soils and clear cut swaths of forests take decades to recover, if ever, causing changes in hydrology, increased runoff, thermal impacts, sediment impacts, invasive species colonization, loss of habitat and native plant diversity and more. In short, these so-called "temporary work spaces" located in mature forests and other habitats are not at all temporary and cause long term impacts.

The Department is currently undergoing a long-anticipated review of its Chapter 105 program as well as a specific issuance of guidance for the alternatives analysis process. These program revisions and revised guidance result in part from the egregious water pollution impacts from other pipelines being constructed in the Commonwealth that were permitted under current regulations. The Department, in the Chapter 105 revisions, as well as the stakeholders involved in the Alternatives Analysis guidance, have provided many suggestions regarding these issues.

The Department should take into consideration the thoughtful improvements that will be implemented through those revised processes. (134)

140. Comment

8. The Alternatives Analysis and No-Action Alternative follows industry boilerplate. I am aware that FERC is currently looking at its processes for awarding certificates (PL18-1). However, as used currently, "alternatives analysis" is useless.

Transco-REAEP's alternatives analysis looks for "alternative locations, routings or designs to avoid or minimize adverse environmental impacts." But, we know that adjusting the path of a pipeline simply moves the harms elsewhere.

Transco-REAEP's No-Action Alternative simply states the obvious, that you don't build it you don't have increased takeaway capacity to transport an additional 829,400 Dth/d of natural gas it. The analysis provides no insight into who would be worse off if this capacity were not built.

The U.S. EPA states (Document Accession #: 20211119-5147 Filed Date: 11/19/2021), Purpose and Need: EPA recommends the project need and alternatives analysis consider whether existing and reasonably foreseeable regional infrastructure, including gas and nongas resources, can or will serve the public convenience and necessity, factoring in energy market and policy trends, including greenhouse gases (GHG) emission reduction policies. EPA encourages FERC to review the application considering alternative options outside of the increase in fossil fuel related infrastructure that might also meet national needs. (588)

141. Comment

Next, Figure 9 provides an example of where Transco is proposing yet more expansion of the pipeline route. First it cuts to the north of existing ROW, but then at mile 52.6 it proposes cutting back over into the existing ROW to cut the new 42-inch line within the existing corridor. True collocation (within its already expansive corridor) would be much less detrimental if Transco proposed to work more in its existing corridor for larger parts of the project rather than grab wider and wider swaths of open landscapes adjacent to the existing expansive ROW that already scars the region. The applications demonstrate that Transco can operate within its existing ROW for parts of this alignment; DEP should consider requiring this at S2-T1 as well. S2-T1 is listed as an EV stream and an UNT to Poplar Run, yet Transco is proposing to widen the ROW clearing to the north, which appears from the map to be mature forest. Additionally, the photograph provided for this cut (P10) again is deceiving as it does not adequately show the adjacent forested area that will be cut.

Figure 10 depicts again an attempt to delineate different wetland types in an apparent attempt to limit responsibility for mitigation. This figure labels both palustrine forested wetland as well as palustrine emergent wetland along the existing ROW. These are EV wetlands and UNT to Mud Run, an HQ stream. Moreover, Transco must recognize that its "emergent wetland conditions" are due to its own repeated harm. Again, DEP should consider requiring Transco to run any new pipeline in the existing impacted corridor rather than damaging additional forest to the north and explain any pipeline abandonment anticipated in the future by the company.

Similarly, Figure 13 again shows the new pipeline route proposed to the north of the existing three pipelines, despite palustrine forested wetland complexes that would be damaged. Photograph P17 is also facing in the direction of the existing damaged ROW presently maintained by Transco rather than capturing the conditions to the adjacent northern forest edge where Transco proposes to cut its new line. Again, there is no indication why Transco

does not propose to work between and within its already expansive corridor, nor is there any indication as to the lifespan and fate of the existing three pipelines.

In Figure 16, again Transco is proposing to cut north of the existing ROW which would increase the ROW footprint and harm to S4-T1, an UNT to Tunkhannock Creek that is designated HQ-CWF. Near MP 57.4-57.5, the new proposed pipeline would also cut across W10-T1, which consists of EV wetlands. Again, it is not clear why Transco does not propose to work within its existing ROW in this stretch of the pipeline to avoid water resource harms and stay within the boundaries it has already harmed. Photograph P20 also shows more of the existing ROW, instead of showing the forest in the backdrop that would be cut to expand the pipeline. These photographs are deceiving, and DEP should require Transco to operate in its existing ROW where possible. (134)

Response 139–141:

As part of the Chapter 105 applications, Transco submitted an Alternatives Analysis (Requirement S) that included site-specific analyses of practicable alternatives to avoid or minimize Project environmental impacts. The Alternatives Analysis demonstrated that the Project is designed with practicable alternative locations, routings, and designs to avoid and minimize adverse environmental impacts.

The compression-intensive alternative was not chosen in part because it would have impacted air quality, required more energy resources long-term, had a greater impact on air quality long-term, provided less consistent products for customers long-term, and resulted in significant greater fuel consumption. Per 25 Pa. Code § 105.18a(a)(3), "other significant adverse effects on the environment" and "consideration [of] construction cost" may be considered as part of an Alternative Analysis beyond the Chapter 105 impacts.

Factors associated with public convenience and necessity, including energy market and policy trends and greenhouse gases emissions are addressed by FERC. FERC has issued a certificate of public convenience and necessity for the project. FERC provided the final EIS on July 29, 2022, which may be viewed on FERC's website at www.ferc.gov (search eLibrary; Docket Search; CP21-94-000).

Regarding temporary work spaces and width of stream crossings, Transco proposed the construction ROWs to provide for safe and efficient construction of large diameter pipeline facilities in accordance with OSHA regulations (29 CFR 1926.650-1926.652, Subpart P) and Interstate Natural Gas Association of America's (INGAA's) workspace guidelines (INGAA 1999). Transco plans provided reductions or "neck-downs" of the construction ROW at resource crossings to avoid and minimize resource impacts.

FERC has jurisdiction over interstate natural gas pipelines, including siting, under the Natural Gas Act, 15 U.S.C. § 717b(e)(1). The siting (or routing) of an interstate natural gas transmission pipeline is determined between the company and FERC prior to the submission of Chapter 102 and Chapter 105 permit applications. The Department's role is to review the applications in accordance with applicable regulations. The alternatives

analysis process may result in route deviations which stay within the FERC-approved ROW in certain circumstances, if necessary. Here, the Department has determined that Transco has satisfactorily demonstrated compliance with the regulatory requirements in Chapters 102 and 105, including requirements pertaining to alternatives analysis.

Trenchless Construction

This section addresses the comments received by the Department during the public comment period on the topic of trenchless construction. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

142. Comment

Transco should explain and elaborate on this assertion: "At locations where it was impossible to avoid riparian impacts due to safety issues, Transco will implement BMPs to minimize the impacts." Does this mean HDD or boring was not feasible for the particular crossing even if it is an EV or HQ wetland or forested buffer? What were the calculations if HDD is not feasible – why? Was it due to cost? Were mature trees that are proposed to be cut and the ecosystem services they provide (carbon sequestration, shade, water quality filtration, etc.) inventoried fully in this analysis? Where is the analysis for each crossing to ensure the agency has the information to understand how Transco concluded its only option is to propose and open cut? How can DEP permit the same BMPs that have been utilized and failed to protect existing uses along other pipelines for this proposed pipeline? (1)

143. Comment

According to Transco's Section 2-1, Table 5 of its ESCGP Permit Application Narrative (dated April 2021 – revised July, 2021), there are 41 Exceptional Value (EV) wetlands to be impacted by this project. Of these 41 EV Wetlands, 24 consist of wetland habitats that are PFO/PSS combinations with species highlighted including red maple, high bush blueberry, black willow, alder, and dogwood. Despite these sensitive resources and EV streams and wetlands, for the Effort Loop alone, Transco's narrative states that all waterbodies will be cut by dry open-cut construction methods for all but one resource crossing. A conventional bore is being proposed at one location due to the location of an adjacent roadway. If borings can occur under roads, they can likely also occur under sensitive EV wetlands and DEP should require hydrologic analyses for all of these crossings at a minimum if more protective measures are not required. This method of crossing is not protective and will cause thermal impacts and sedimentation impacts both of which have cascading effects, especially for EV wetlands or wetlands that are PFO or PSS. In addition, for the Luzerne County Regional Energy Lateral pipeline segment, Transco's narrative states that most of the receiving waterbodies to be cut are naturally reproducing trout streams which means that any wetlands hydrologically connected to these trout streams have EV designation. Commenters did not have the time to cross check if indeed these classifications are correct in the applications at this time but again our spot checks found discrepancies. Furthermore, Transco needs to justify

and share the analysis why the open trench method is the only alternative for each of its proposed crossings. (1)

144. Comment

In such exceptional value (EV) waters, and hydrologically connected tributaries, trenchless crossing methods should be considered as an alternative to open cutting or reroutes should be considered. The 75 foot area of disturbance on EL-4 in particular, will disturb a large section of the to-be afflicted wetland. Wetland earth disturbances increase the potential for sedimentation, and thermal pollution. Again, Transco's rationale provided in its application of how an open cut through these and other sensitive HQ and EV waterbodies and wetlands will not cause long term harm or anti-degradation is not supported by the science or experience we have observed along similar pipeline cuts.

Transco notes that construction of the Effort Loop would impact a total of 27 acres of habitat within the Long Pond Preserve Important Bird Area (IBA), of which 8.8 acres would be permanently impacted (i.e., forest converted to herbaceous cover). This geographic area is referred to by the Monroe County Natural Area Inventory (NAI) as the "Long Pond Microsite". This is the geographic area directly impacted by the Effort Loop.

The Long Pond Macrosite, covers nearly a third of the Pocono Pines quadrangle and includes part of the end moraine and the broad area south of the end moraine drained by Tunkhannock Creek. This Long Pond Macrosite is one of the most unique ecosystems in the Northeastern US. Numerous plant and animal species of special concern inhabit the community. Long Pond Macrosite is the most important site in PA for the preservation of biodiversity and one of the top sites in eastern US because of the concentration of rare species.

The Monroe County NAI on Page 77 – conclusions about the Long Pond Macrosite:

"In conclusion, the Long Pond Macrosite Preserve is the jewel in the crown that is the Poconos. It is one of the last remaining areas of substantial size in the Poconos that is fairly undisturbed by human activity... The acid geology and cool mountain climate combine to produce a flora that is distinctly northern in character. All should strive to preserve this national treasure."

On the existing pipeline right of way, Page 71 of the Monroe County NAI indicates the following:

"SP504, located near the Pocono International Raceway entrance, marks a fair population of a state-endangered grass species. This population, currently recovering from recent construction along the gas pipeline, should be checked annually to monitor its viability... Halting herbicide use near the site and mowing the pipeline right-of-way in the early spring or late fall of each year are two management strategies that would promote the grass species".

The ELs associated with the Pocono International Raceway are EL-13 through EL 16, and EL AR 2 – all should be surveyed during the growing (warm season), preferably during the flowering period, for the presence of the grass species referenced above prior to the easement construction and expansion.

It's noted that in EL16 and EL-AR-2, EL14, and EL15, EL14, EL13, EL12, EL11, and EL10 occur within the Long Pond Macrosite. The EL's associated with Tunkhannock Creek are designated EV or HQ. EL9 occurs in the Poplar Gap Gorge (poplar Creek) (Exceptional Value) (EV), on steep terrain, increasing the potential for sedimentation. In this particular crossing, Transco should strongly consider using trenchless crossings – as the very steep terrain, and quality of the water represent unique circumstances for potential negative impacts on water quality.

For EL10 (Mud Run) (High quality) (HQ), Transco should also strongly consider using trenchless methods. This creek flows year-round, and the expansion of the easement by clearing existing forest will increase the likelihood of thermal pollution and sedimentation. (1)

145. Comment

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_2 022/Chapt er%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.

 $https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/REAEP/March_2022/Chapt~er%20102%20ESCGP-3/SECTION%201-$

10%20CONSTRUCTION%20SPILL%20PLAN.pdf (588)

Response 142-145:

Each crossing was evaluated with a risk assessment to determine if trenchless technology could be utilized. The Trenchless Analysis Flowchart, as seen in the Alternative Analysis (Requirement S, Appendix S-2 of the Chapter 105 permit application), shows how Transco determined which resources would be constructed using a trenchless technology and which resources would be constructed using conventional methods. All proposed crossings were reviewed and found to meet applicable regulatory requirements.

Transco has provided detailed geotechnical report, titled Geological Hazard Assessment and Mitigation Plan (Attachment B of the Chapter 102 permit application) and for the Direct Pipe construction method and the Department has approved the proposed construction plan (see Appendix S-7 within Requirement S of the Chapter 105 permit application). Transco has also provided a Construction Spill Plan in the event that any

inadvertent returns or spills occur during construction of the pipeline (see Direct Pipe® Monitoring, Inadvertent Return Response, and Contingency Plan within Appendix S3-4 in Requirement L-4 of the Chapter 105 permit application). Transco has done extensive ground testing for several other key stream crossings as shown in Alternative Analysis Requirement S of the Chapter 105 permit application.

Definitions of Temporary and Permanent

This section addresses the comments received by the Department during the public comment period on the definition of permanent and temporary. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

146. Comment

Transco's plans to compensate for the wetlands it intends to destroy are insufficient. They attempt to define many of their impacts as "temporary," which is not scientifically supported, and results in their calculating their total impact as far less than it likely is. They also propose to "enhance" existing emergent and scrub-shrub exceptional value wetlands, which is entirely inappropriate. The "enhancement" involves planting trees and shrubs in these wetlands, which would exacerbate succession into forested wetlands. The goals of the wetlands mitigation requirements are to create new wetlands to replace those destroyed as a result of the permitted action, not to transform an existing type of wetland into a different type of wetland. (7, 32, 109, 116, 118, 123, 131, 143, 147, 156, 176, 185, 211, 214, 236, 242, 275, 296, 312, 320, 330, 338, 354, 359, 376, 386, 408, 414-415, 419, 426, 437, 469, 484, 492, 619, 640, 643, 646, 649-651, 653, 658, 661, 672, 679, 686, 692, 716, 726, 749-780, 783, 788, 790-791, 794, 797-798, 801-805, 807-813, 815-816, 819, 822, 835-836, 842-843, 849, 860)

147. Comment

Wetland impacts are also minimized throughout the applications by characterizing them as "temporary." Transco's definition of "temporary" is not clear - "restored upon completion of construction" could mean any point in the future. The critical question is, why isn't there a temporal limit on the definition of temporary? Under the definition included in Transco's applications, "temporary" impacts could include the entire time active installation of the pipeline is taking place, plus the time needed for restoration to be documented as successful—which could be up to five years, even if completely successful. Again, there is no guarantee or enforcement mechanism to ensure that these temporary impacts do not become permanent through failure to adequately restore water resources, or through future applications for construction or maintenance within the right-of-way. Because of this flexible definition of "temporary," acreage of permanent impacts to wetlands is undercounted. To be clear and as discussed by Commenters in past comments, cutting forested wetland trees (PFO wetlands) to expand a pipeline is not a temporary impact with regard ecosystem functions – this is especially important as many of the wetlands to be cut are designated Exceptional Value (EV), where no degradation is allowed. (134)

148. Comment

Throughout the application Transco's definition of temporary is not clear. Restored upon the completion of construction could mean any point in the future. The million dollar question is why isn't there a temporal limit on the definition of temporary? Under the definition included in Transco's application temporary impacts could include the entire time active installation of the pipeline is taking place plus the time needed for restoration to be documented as successful. Again, there is no guarantee or enforcement mechanism to ensure that these temporary impacts do not become permanent through failure to adequately restore water resources or through future applications for construction or maintenance within the right-of-way. (875)

Response 146-148:

Transco used the definitions of temporary and permanent within the instructions to the Joint Permit (150-PM-BWEW0036) and Environmental Assessment (3150-PM-BWEW0017). Wetland impacts in the ROW are considered permanent impacts due to long term operation and maintenance (O&M) which may occur in the future in the ROW. Restoration is required following future impacts to all wetlands in the ROW due to future O&M, which includes PSS and PEM wetlands. No wetlands will be filled or lost to permanent direct impacts during the construction, operation, and maintenance of this project and all wetlands will be restored to wetland conditions and replanted according to the onsite Wetland and Riparian Reforestation Plan post-construction. However, there will be functional conversion of wetland cover types (from PFO and PSS wetlands to PEM wetlands) through the clearing of vegetation. Therefore, the goal of the mitigation site is not to provide new wetlands, but rather enhance current wetland functions to make up for the loss of functions which occur as a result of the conversion of certain PFO and PSS wetlands to PEM wetlands. This conversion did not result in a loss of wetland area. Permit conditions and monitoring will assure resources are returned to pre-existing conditions and that adaptive management strategies are employed if the need arises. PEM wetlands will be restored following construction and no significant changes to wetland values and functions are anticipated. Onsite restoration of all impacted PEM wetlands fulfills the requirements of 25 Pa. Code § 105.20a.

Mitigation

This section addresses the comments received by the Department during the public comment period on the topic of mitigation. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

149. Comment

• The Transco REAE Project is expansive in scope with abundant proposed waterbody crossings and cuts this pipeline would warrant. On quick review of the 401 application the

aquatic resource table alone appears to propose to impact at least 114 Exceptional value (EV) wetlands and 37 High Quality (HQ) streams in Pennsylvania. Yet the Compensatory Mitigation Plan highlights different waterbody impacts and is conflicting. For example, the Plan notes, "Construction of the Project will result in temporary impacts to one hundred and eight PEM, PSS and PFO wetlands. Permanent functional conversion impacts (PFO/PSS to PEM) wetlands located within the proposed maintained pipeline ROW will occur to 39 wetlands, for a total of 1.67 acres. Temporary functional conversion impacts of wetlands located within the temporary workspace will occur to 47 wetlands, for a total of 3.47 acres." The public needs time to review and digest and cross check this information to ensure a complete application and it would appear already the applications are not complete or correct in the first place despite the Dept issuing several deficiency letters to Transo throughout this process. (1)

150. Comment

Restoration of Forested and Scrub Shrub Wetlands Need Stronger Protections

Transco states "Restoration of temporarily impacted wetlands associated with PFO and PSS wetlands will involve onsite replanting. After the completion of construction, wetland areas within the ROW will be restored to pre-construction contours and seeded with Ernst FACW Meadow Mix (ERNMX-122), as outlined in Attachment A, or an alternative wetland seed mix that contains similar species. After seeding, impacted PSS and PFO wetlands outside the permanent maintained ROW will be replanted with native live stakes, bare root or container tree and shrub species up to 5 feet from the pipeline centerline. A ten-foot-wide herbaceous corridor will remain over the pipeline and in between existing pipelines to allow for pipeline maintenance and to maintain the integrity of the pipe. In PFO impacted wetlands, only shrub species shall be planted from 5 to 15 feet of the pipeline centerline. Outside 15 feet, both tree and shrub species may be planted. A summary table outlining proposed PFO and PSS impacted wetlands, their location, and proposed restoration is outlined in Attachment C – Onsite Wetland and Riparian Buffer Replanting Table. In addition, replanting areas for each pipeline facility are outlined on the provided figures. The vegetative design of the PFO and PSS impacted wetlands outlines a combination of specific native tree and shrub species selected for different hydrologic regimes and different vegetative cover types throughout the Project. Trees and shrubs selected for the replanting were based on species identified during wetland delineations and area outlined in Table 2-1.

Comment: How does Transco ensure pre-construction contours of wetlands and streambanks are restored to original contours? We recommend 5-foot clearance from pipeline and pipelines in an effort to ensure some planting of native shrubs can occur between pipes to limit the amount of open areas not replanted. (1)

151. Comment

Finally, bog turtle (Glyptemys muhlenbergii) field surveys were completed in April and July 2020, and one potential site was found. As a result, further consultation with the USFWS regarding the potential site took place. Since disturbance is located adjacent to the wetland at

the one location, and there will be no disturbance or hydrologic impacts to the potential bog turtle habitat, the USFWS concluded that Phase 2 surveys did not need to be conducted at the location. However, Transco is proposing wetland mitigation at an off-site location in Northampton County. The mitigation site, known as the Perin Mitigation Site, is located southeast of Pen Argyl eight miles away from the project area. The PNDI review indicated a potential occurrence of the bog turtle at the Perin Mitigation Site. 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 presence/absence survey was proposed in the spring of 2021, but again the results are unclear as they are not publicly available.

In addition to being potentially suitable bog turtle habitat, the wetlands at the Perin Mitigation Site are hydrologically connected to Waltz Creek, a naturally reproducing trout stream. Therefore, these wetlands are considered Exceptional Value (EV) regardless of bog turtle presence. Approximately 8.7 acres of the site are Palustrine-emergent wetlands (PEM), the preferred wetland type of the bog turtle. According to the DCNR, emergent wetlands are the least abundant wetland type in Pennsylvania, being one-third as abundant as forested wetlands and only one-half as common as the scrub-shrub types. About 14 percent of Pennsylvania's wetlands are emergent wetlands.

Transco's wetland enhancement plan for the Perin Mitigation Site involves planting several species of trees, including pin oak (Quercus palustris) and silver maple (Acer saccharinum). Planting trees within an emergent wetland may accelerate succession into a scrub-shrub or forested wetland and eventually degrade its suitability as bog turtle habitat. Given that the wetlands at the site are EV and suitable bog turtle habitat, it is inappropriate to utilize it as a mitigation site. Attempting to enhance it may actually do more harm than good and leaving it in a natural state would be the most beneficial for its ecological function. (1)

152. Comment

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 (HQCWF, 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 (HQCWF, 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. (588)

153. Comment

The wetlands mitigation plan included in Transco's applications is also insufficiently protective of the public natural resources. It fails to include any enforceable contingency plan in the event of mitigation failure. There must be a time limit for successful mitigation, after which other mitigation sites must be explored.

Transco's compensatory mitigation proposal also misses the point of the compensatory mitigation requirements. The Perin mitigation site is 8 miles from the Effort Loop in a completely different county (Northampton) that is not affected by the pipeline. It is in the floodplain of Waltz Creek, which is a naturally reproducing trout stream. Therefore, wetlands that are hydrologically connected are considered Exceptional Value (EV). There is also a Bald Eagle nest located approximately 300 feet from the proposed mitigation site. The proposed mitigation includes an overall 5.23-acre wetland "enhancement area" with 4.23 acres of PFO

planting and 1.00 acres of PSS planting. These existing EV wetlands are PEM and PSS wetlands, and modifying them to count as mitigation is entirely inappropriate. The "enhancement" involves planting trees and shrubs in these wetlands, which would exacerbate succession into forested wetlands. The goals of the wetlands mitigation requirements are to create new wetlands to replace those destroyed as a result of the permitted action, not to transform an existing type of wetland into a different type of wetland. The emergent wetlands were deemed suitable habitat for the federally threatened bog turtle. Although Phase 2 and Phase 3 bog turtle surveys were conducted and no bog turtles were found, the conversion of these emergent wetlands would destroy their suitability for this species permanently. Allowing Transco to "enhance" preexisting wetlands to replace lost wetlands functions is only appropriate if the acreage and functions of the preexisting wetlands are also replaced. While "enhancing" an existing wetland may be easier for Transco than creating a new wetland with all of the necessary functions, those existing wetlands do serve an ecological purpose that must be replaced with new acreage if permitted to be altered. Transco could provide construction BMPs to avoid cutting PFO wetlands in the first place (such as operating in its already expansive existing footprint, employing more protective waterbody crossing technologies, replanting and protecting native shallow rooted shrub species near the center line, and replanting native trees and shrubs to be harmed). The Department could require these BMPs as part of the permit, and if the permit is to be granted then these protective BMPs should be included. (134)

154. Comment

Next, Photo 3 for EL-2 again appears to be taken facing the existing ROW rather than the southerly direction where the new 42-inch line is proposed. The Aquatic Resource Impact Table lists this wetland as PSS. This is an EV wetland to be permanently or temporarily disturbed based on the table. Commenters urge that, if the permits are grant, that at a minimum DEP require replanting of native shrubs within this wetland as part of the restoration. (As discussed further below, using invasive exotic herbaceous species like barnyard grass or other exotic species should not be allowed for E&S measures.) Shallow rooted native shrubs have been planted on and nearby other pipeline corridors after past pipeline construction, and at a minimum this type of replanting should be required here. (134)

155. Comment

Transco's plans to compensate for wetlands destruction are insufficient. Transco attempts to define many of the impacts as "temporary," which is not scientifically supported, and results in calculating the total impact as far less than it would likely be. Transco also proposes to "enhance" existing emergent and scrub-shrub exceptional value wetlands, which is entirely inappropriate. The "enhancement" involves planting trees and shrubs in these wetlands, which would lead to premature succession into forested wetlands. The goals of the wetlands mitigation requirements are to create new wetlands to replace those destroyed as a result of the permitted action, not to transform an existing type of wetland into a different type of wetland. (120)

156. Comment

Enhancement of existing wetlands to replace functional losses is not appropriate without also replacing the area and functions lost through execution of any enhancement project. The post-construction wetland and water course monitoring plan must require action by Transco in the event of onsite or offsite mitigation failure including the potential creation of additional mitigation acreage. (875)

Response 149-156:

The regulatory requirements in Chapter 105 are to avoid, minimize, and otherwise provide mitigation for the project impacts to waters of the Commonwealth. Where permanent impacts to waters of the Commonwealth could not be avoided or minimized by Transco, the Department has required compensatory mitigation for the acreage impacted, as well as the altered functions and values of the wetland resources. Transco discusses their avoidance and minimization of impacts in their Alternative Analysis and Mitigation Plan (within Requirement S and Requirement L-5 of the Chapter 105 permit application, respectively). Permit conditions, plans, and monitoring will assure resources are returned to pre-existing conditions and that adaptive management strategies are employed if the need arises. No wetlands will be filled or lost to permanent direct impacts during the construction, operation, and maintenance of this project and all wetlands will be restored to wetland conditions post construction. However, there will be functional conversion of wetland cover types (from PFO or PSS wetlands to PEM wetlands) through the clearing of vegetation. Therefore, the goal of the mitigation site is not to provide new wetlands, but rather enhance current wetland functions to make up for the loss of functions which will occur as a result of the conversion of certain PFO and PSS wetlands to PEM wetlands. This conversion did not result in a loss of wetland area.

Wetland impacts in the ROW are considered permanent impacts due to long term operation and maintenance (O&M) which may occur in the future in the ROW. Restoration is required following future impacts to all wetlands in the ROW due to future O&M, which includes PSS and PEM wetlands. Some impacts to PEM wetlands are considered permanent impacts due to future O&M, however all PEM wetlands will be restored following construction and no significant changes to wetland values and functions are anticipated. Onsite restoration of all impacted PEM wetlands, including restoration of future O&M impacts, fulfills the requirements of 25 Pa. Code § 105.20a.

Due to the scope of the Project, Transco required multiple locations to fulfill mitigation requirements. After discussions with Transco, the Department agreed that the Mitigation Sites were acceptable for compensatory mitigation measures despite their distance from the pipeline, particularly since this compensatory mitigation is in addition to Transco fulfilling their onsite Wetland and Riparian Reforestation Plan (see Requirement L-5, Appendix S4-2 of the Chapter 105 permit application).

Replanting wetlands and floodways will minimize any erosion and sediment runoff as a result of clearing. Transco proposes to maintain a 10-foot wide herbaceous permanent

ROW, which will include a wetland seed mix or riparian seed mix with a nurse crop as shown in Requirement L-5 of the Chapter 105 permit application. Woody vegetation will not be planted within 5 feet of the pipeline center to facilitate routine inspections required by the PHMSA. Additionally, PHMSA has a minimum distance from the pipeline to the edge of the permanent ROW that is required to be cleared of all woody vegetation. This permanent ROW needs to be maintained to ensure pipeline safety and integrity. In general, high-pressure large-diameter pipelines are offset 25 feet from existing pipelines to safely accommodate construction of the new pipeline and ongoing maintenance of all pipelines within a shared corridor.

As noted in the onsite Wetland and Riparian Reforestation Plan, Transco will replant shrubs between 5 and 15 feet of the pipeline, with periodic maintenance of the woody vegetation being allowed, and both trees and shrubs may be planted beyond 15 feet from the pipeline.

Mitigation plans include monitoring and an Adaptive Management Plan section, which outlines options to consider should performance standards not be met during the post-construction monitoring period. Trees and shrub shelters will be installed for those plants suitable for shelter. Weed and rodent pressures will be addressed as necessary to assure the success of the plantings. The Department can request additional monitoring if parameters are not met.

Transco is proposing to restore the wetlands and streambanks to original contours. Els will oversee restoration of contours, topsoil, and restoration efforts.

Regarding Bog turtle habitat at the Perin Mitigation Site, a letter from USFWS on October 6, 2021 stated Phase 1, 2, and 3 surveys were received and no bog turtles were found, and the project was determined not likely to adversely affect the bog turtles.

Riparian Buffers

This section addresses the comments received by the Department during the public comment period on the topic of riparian buffers. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

157. Comment

Furthermore, where forested buffers are proposed to be cut, thermal impacts downstream are not accounted for. Clearing the forest around these streams exposes them to direct sunlight, raising the water temperature and jeopardizing their suitability as trout waters. Cutting forests and riparian buffers also creates habitat fragmentation. Transco fails to factor in not just the impacts of the fragmentation of the forest for these particular pipeline segments, but also by other cuts in the same region, either by Transco on its other pipeline pieces or by other pipeline/linear projects both within and outside the watershed. The removal of healthy forested buffers along the many stream crossings proposed by Transco REAE must be

assessed – individually and cumulatively. In addition, when the stream crossing includes a cut through a pre-existing mature and healthy forest, the degradation of the forest on either side of the Right-of-Way that results from this forest fragmentation also needs to be considered in terms of both stream impacts and forest impacts. (32, 115, 128, 131, 137, 176, 180, 211, 236, 242, 245, 271, 275, 312, 339, 354, 367, 386, 388, 408, 412, 414-415, 419, 423, 437, 445-446, 463, 470, 492, 619, 622, 639-658, 660-681, 683-693, 719, 728)

158. Comment

It is very important that the permits be denied for the Transcontinental Gas Pipe Line Company, LLC (Transco) Regional Energy Access Expansion (REAE) project.

As a freshwater ecologist, I know how very detrimental it is to remove forested buffer from high quality streams. The loss of trees will raise water temperatures and increase sedimentation in the streams. This will negatively affect both fish, such as trout, and aquatic insects, such as stonefly larvae. The proposed pipeline projects would remove forest in areas with pristine streams and wetlands, causing irreparable harm to the the organisms that depend on these habitats. Some of the impacted streams include Tunkhannock Creek, Pohopoco Creek, McMichael Creek, and Mud Run. All of these streams have special protection designations. Some of the wetlands to be cut are Exceptional Value wetlands yet Transco is proposing devastating open trench cuts. The project has even proposed construction within the habitat of several threatened and endangered plant and animal species including white-fringed orchid, Indiana bat, northern long-eared bat, timber rattlesnake, and bog turtle. Some of the proposed wetland mitigation measures actually appear to inflict harm to bog turtle habitat! Such horrendous damage to fragile habitats and species must not be allowed.

Cutting forests, wetlands, and riparian buffer areas will also cause fragmentation of all these habitats. Habitat fragmentation isolates populations of small organisms such as salamanders, insects, reptiles and others. Since wildlife is already under great stress due to habitat loss, the fragmenting of remaining habitat in high value areas is unconscionable. (726)

159. Comment

Riparian Buffer Waivers Should Not be Granted and Forested Buffers Require Better Protection

Section 2-1 E&SC/SR Plan Narrative and Drawings and Riparian Buffers

It appears that Transco is continuing to request a riparian buffer waiver under 25 PA

Code §102.14(d)(2)(ii) if riparian buffers are undisturbed to the "extent practicable." In Section 2-1 E&SC/SR Plan Narrative and Drawings Transco claims BMPs are being implemented to limit disturbance to riparian buffers and as such, a Riparian Buffer Waiver has been requested by Transco along with this ESCP application (Section 1-7). Or where required, a riparian forest buffer management plan when required under § 102.14 (relating to riparian buffer requirements)"

Comment: Commenters request that this waiver not be allowed especially for existing forested and scrub shrub stream crossings and associated buffers and that all temporary and additional temporary work spaces and non-active ROWs are reforested using native trees and shrubs. The preservation of forested buffers along EV and HQ streams or impaired streams is especially important but in general all forested buffers lost by these linear pipeline cuts should be preserved by consideration of HDD or boring to avoid impact to the vegetation that comes with open cuts which are what Transco is proposing. Forest matting and other innovative approaches could be employed to cause less disruption to soils. A thorough analysis of HDD and alternative crossing methods especially where forests are present with forested riparian buffers should be provided by the applicant with evidence that involves more than just the applicant stating HDD is not feasible. A BMP of a narrowed ROW at stream crossings is not ample to protect HQ, EV or impaired streams.

In other application sections, including Transco's Appendix Transco states "it will replant native tree and shrubs within the impacted forested riparian buffers, as outlined in Appendix S4-2 Onsite Wetland and Riparian Reforestation Plan" and "An onsite Wetland and Riparian Reforestation Plan has been provided in Requirement L-5, Module S4 and Compensatory Offsite Mitigation Plan has been provided in Requirement L-5, Module S4 of the Environmental Assessment." Transco states "the impacted riparian zone will be restored for a minimum of 15 feet landward of the top of bank. If the pre-impact riparian buffer of native herbaceous and shrub vegetation exceeds 15 feet beyond the top of bank, the area to be seeded should be as follows: 150 feet in High-Quality waters, 100 feet in other waters, or existing width of the riparian zone if it is less than the minimum requirements. Ernst Seed Mix 178 (Riparian Buffer Mix) or similar shall be applied on restored banks and riparian zones. In addition, where existing forested buffers are impacted these shall be replanted outside of the existing maintained ROW, as indicated in forest replanting plans for the Project outlined in the Chapter 105 permit."

Transco had stated in their Chapter 102 application (that was deemed incomplete by the DEP) in Section 1-7 Riparian Buffer Waiver Request, "Linear projects including pipelines are eligible for the Riparian Buffer Waiver under Riparian Buffers Pipeline installation and will take place within an existing cleared and maintained pipeline ROW. Due to the linear nature of the project, temporary impacts within riparian buffers are unavoidable. At locations where it was impossible to avoid riparian impacts due to safety issues, Transco will implement BMPs to minimize the impacts. After completing the construction activities, areas used for pipeline installation and as contractor yards/staging areas will be restored back to pre-existing contours and reseeded with a riparian seed mix in areas where slopes are less than 10%. The MLV-515RA20, MLV-515RA30, Carverton Tie-in, Lower Demunds REL Tie-in, and Hildebrandt Tie-in/MLV-515RA40 sites, where permanent increase in impervious area is proposed, were examined for riparian buffers. Riparian buffers were identified at MLV-515REL20 and BMPs were designed to minimize the impacts to this area. Tree and shrub plantings will occur in forested riparian buffers outside of the maintained ROW as outlined in riparian reforestation plans outlined in the Chapter 105 permit."(1)

160. Comment

It appears Transco is stating clearly it will only conduct the bare minimum required by regulations (for remediation or required under § 102.14) of replanting forested riparian buffer plantings. Open cuts and clear cuts are commonplace proposals even in HQ and EV waterbodies and buffer restoration "to mitigate" appears to be considered only what the agency requires. It would be refreshing to see better practices

and restoration proposed for a pipeline that will continue to operate for decades with likely similar segmented pipeline projects. For example, if an existing Transco pipeline crossing in its original ROW has from past pipeline construction harm had minimal regrowth or even maintenance to keep regrowth down of woody vegetation (so therefore it is currently a herbaceous area), it would go a long way for Transco to not simply replace with just herbaceous and what is currently present post this REAE expansion but instead widen the riparian buffers with native tree and shrub species as it is proposing for the REAE section. This would improve water quality over time, increase the riparian buffer widths, and would also likely help shade out invasive species that often come with these pipeline harms and repetitive cuts. Pennsylvanians cannot continue to bear the brunt of these fossil fuel sacrifice zones.(1)

161. Comment

In tables, narratives, and in documents, Transco should be clear on where it is requesting a waiver and where it is not so the DEP and the public can review. Drawings depict "bubbles" of riparian buffer zones but because each waterbody and wetland to be crossed is specific, more specific detail would lead to better remediation at each crossing.

DEP should not allow any waivers based on the linear and complex nature and multitude of cuts these pipelines inflict to a number of waterbodies. That guidance is in keeping with the revised Chapter 105 technical alternatives analysis wetlands guidance that was created through a stakeholder process and out for public comment (Sept, 2021). Transco should also voluntarily expand the riparian area if it is possible, especially with the nature and concern of invasive plants that often move into these linear transportation areas. Transco states 150 foot seeding in High Quality waters but does not mention Exceptional Value waters – Exceptional Value waters need to be specified clearly. The science is clear, a wider riparian area is always more protective and forested buffers are the best for water quality health (being sure to consider endangered species like bog turtle habitat – each wetland and waterbody crossing is specific with its own specific natural characteristics). As indicated in the updated technical guidance, native seed mixes are best and no invasive exotic plants should be used, whether officially on the PA Noxious Weed list or those invasive plants not yet on the list (and there are many) should not be planted in these mixes. Attention to high pollinator habitat plants for herbaceous mixes is also beneficial.(1)

162. Comment

Transco states it will replant tree and shrub species in required buffer areas either as cuttings, bare roots or containers. There is a big difference between these three types of native plant

stock (container stock being more expensive and ball and burlap trees are not even mentioned). To ensure faster restoration of forested buffers, commenters suggest requiring Transco to use container stock in combination with bare root and cuttings (cuttings along degrading stream banks and cut sloped banks) to speed up canopy cover. Using cuttings alone with seed mix along the streambank cuts is not adequate to achieving restoration especially of woody plants and also because the monitoring period is limited to only 5 years. Incorporating bigger native woody stock with smaller woody stock would be more in keeping with standard riparian restoration practices and assist in reducing thermal impacts from clear cuts.

Circular mulch mats secured with a staple can replace or reduce the need for the practice of spraying herbicide around the base of the tree shelters which is noted as a possible practice in Transco's restoration plan. The mulch mats also assist with protecting the roots and soil and help with moisture retention. Tree shelters that are at least 5 feet tall or wider deer exclosures and fencing for multi stemmed shrubs are necessary in most areas of Pennsylvania to increase survival of trees and shrubs from deer browse impacts. These details should be explicitly included in restoration plans as part of the individual waterbody crossing design. TreeVitalize is a public/private Pennsylvania program that has good specifications as well as DCNR documents on buffer plantings (https://extension.psu.edu/treevitalize-a-green-partnership-to-restore-tree-cover).

Though native tree species are listed in the mitigation plan for riparian buffers, it does not provide detail or planting specifications on plant stock size for each crossing or more detailed planting design for each crossing. More specifications and specific planting designs-especially where buffers are required--would better ensure a more successful stream buffer restoration over time and ensure long term impacts from thermal pollution or erosion are minimized. This is especially important as it will take longer than 5 years (pipeline monitoring requirement) to reach a mature canopy from impacts of this pipeline which is why avoidance of disturbance to mature forests and PFO and PSS wetlands would be more appropriate.

A tree inventory of existing number of trees that are proposed to be cut and then a requirement to replace those trees with a higher ratio of young trees could also add better protections to forests that often are proposed to be cut by pipeline applicants (due to cost savings for the operator – trees are not valued as they should be for all of their ecosystem services or their true value). Some private landowners or land trusts with eased lands faced with pipeline projects have conducted tree inventories for their own properties to ensure adequate restoration, reforestation, and compensation by the pipeline operators. The DEP, in its obligation to protect the environment under Article 1 Section 27 of the Pennsylvania Constitution Environmental Rights amendment, could do the same to achieve higher quality restoration of these sensitive areas while also providing incentive for operators to do less harm in sensitive natural areas and forests and to stay more within the existing ROW if one exists (for this application there is an existing ROW).(1)

163. Comment

Adverse Impacts to Floodplains, Including Their Permanent Alteration, Must Be Given Full Consideration

Floodplains vegetated with trees and shrubs can be four times as effective at retarding flood flows as grassy areas ¹⁹. In addition, naturally vegetated floodplains provide breeding and feeding grounds for both fish and wildlife, they "create and enhance waterfowl habitat", and they "protect habitat for rare and endangered species." Naturally vegetated floodplains are generally layered with leaf and organic matter which result in organic soils with high porosity and a greater capacity for holding water. ²¹ The floodplain, in this natural state, is a riparian ecosystem that needs the overbank flows that the natural watershed's hydrology provides in order to remain healthy and in balance. ²²

According to the U.S. Environmental Protection Agency, the number one source of pollution to our nation's waterways is from nonpoint sources, including pollution from floodwaters, washed from the land in stormwater runoff²³. About 40% of the nation's waterways are polluted as a result.²⁴ Floodplains play a key role in reducing stormwater flows and containing floods, filtering out nonpoint source pollution, thereby reducing pollutant loading and protecting water quality.

The benefits of naturally vegetated and healthy floodplains:

- Stores and slows floodwaters;
- Intercepts overland flows, capturing sediment;
- Stabilizes streambanks, preventing erosion;
- Protects wetlands and other critical habitats;
- Replenishes groundwater aquifer;
- Filters out and/or transforms pollution;
- Provides recreation and education:
- Trees and other riparian vegetation: provide wildlife habitat; process nutrients and other would-be pollutants; shade and cool waterways; provide food for wildlife and stream insects (detritus); provide beauty and refuge.

The Destruction of Naturally Vegetated and Forested Buffers Along All Wetlands and Waterways Must Be Given Full Consideration

²¹ Ibid 22.

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¹⁹ Schmid and Company Inc. (2014). The effects of converting forest or scrub wetlands to herbaceouswetlands in Pennsylvania. Prepared for the Delaware Riverkeeper Network, Bristol, Pennsylvania ²⁰ *Ibid* 22.

²¹ Ibid 22

²² Poff, Allan, Bain, Karr, Prestergaard, Richter, Sparks, and Stromberg, "The Natural Flow Regime",

²³ Chester L. Arnold Jr., and C. James Gibbons, "Impervious Surface Coverage, the Emergence of a Key Environmental Indicator", APA Journal, Spring 1996, p. 245
²⁴ *Id.*

Healthy and vegetated streamside buffers serve our communities by:

- Providing flood storage²⁵, reducing flood peaks²⁶, and slowing the velocity of floodwaters²⁷, thereby reducing flooding and damaging flows in downstream and nearby communities;
- Protecting and enhancing water quality by preventing and filtering pollution²⁸ and enhancing the ability of the neighboring stream to process pollutants,²⁹ thereby protecting drinking water supplies, recreational uses of our waterways, commercial and recreational fisheries, ecotourism, and business operations that need clean water;
- Recharging aquifers that supply drinking water and base flow to streams;³⁰
- Providing and enhancing birding, fishing, hiking and other recreational opportunities that are so critical to our region's aesthetic beauty and community quality of life;
- Providing and enhancing the quantity and quality of habitat³¹ to aquatic life, animals, birds and plants that are important to our watershed ecologically, economically, recreationally and psychologically;
- Providing organic matter critical for supporting aquatic organisms; 32
- Providing shading and thereby providing water temperature control³³ important for the quality of the stream including the health of the habitats and aquatic organisms present;
- Reducing flood damages by ensuring structure-free zones devoid of structures to be harmed;
- Protecting public and private lands from erosion and helping streambanks maintain their integrity in order to prevent/minimize the costs and harms of sedimentation and restoration³⁴;
- Increasing the market value and marketability of nearby homes and communities;³⁵

²⁸ NJAC 7:8 NJDEP Agency Proposal Document at NJAC 7:8-5.5(h), USEPA, "Pesticide Tolerance Reassessment and Re-registration, Terbufos IRED Facts", EPA 738-F-01-015, October 2001; Id.

²⁵ Tourbier, J. Toby "Open Space Through Stormwater Management, Helping to Structure Growth on the Urban Fringe"

²⁶ Army Corps of Engineers WRAP, "Technical and Scientific Considerations for Upland and Riparian Buffers Strips in the Section 404 Permit Process", ERDC-WRAP-01-6, May 2002, citing DeBano and Schmidt 1990; O'Laughlin and Belt 1995" *Id*.

²⁷ *Id*.

²⁹ Sweeney & Blaine, "Resurrecting the In-Stream Side of Riparian Forests", Journal of Contemporary Water Research & Education, Issue 136, June 2007.

³⁰ Castelle, Johnson, Conolly, "Wetland and Stream Buffer Size Requirements – A Review", J. Environ. Qual. 23:878-882 (1994); NJAC 7:8 NJDEP Agency Proposal Document at NJAC 7:8-5.5(h), page 77; Ibid.

³¹ Ibid. 38, citing DeBano and Schmidt 1990; O'Laughlin and Belt 1995".

³² Ibid. 38, citing DeBano and Schmidt 1990; O'Laughlin and Belt 1995".

³³ *Ibid.* 38, citing DeBano and Schmidt 1990; O'Laughlin and Belt 1995"...

³⁴ Water, Science, and Technology Board, Board of Environmental Studies and Technology, "Riparian Areas: Functions and Strategies for Management", 2002, citing Swanson, et al; Center for Watershed Protection, "Impacts of Impervious Cover on Aquatic Systems", Watershed Protection Research Monograph No. 1, March 2003; *Ibid*.

³⁵ Center for Watershed Protection, Better Site Design: A Handbook for Changing Development Rules in Your Community, August, 1998, Pg. 134, Lutzenhiser, M. and N.R. Netusil. "The Effect of Open Spaces on a Home's Sale Price." Contemporary Economic Policy 19.3 (2001): 291-298.

- Increasing the opportunity for and success of ecotourism businesses dependent on the aesthetic beauty of the river and its ecological health; and
- Maintaining the unique ecological and historical qualities of our River and region that are an international draw.³⁶

Vegetated buffers and floodplain areas are an important food source for aquatic microorganisms, invertebrates and fish.³⁷ In small headwater streams, as much as 60 to 90 percent of the organic food base comes from surrounding forests.³⁸ The life cycles of the aquatic invertebrates and in turn the fish are closely tied to these organic inputs from the forest.³⁹ In the larger waterbodies the vegetation provides refuge as well as havens where the smaller fish can find food.⁴⁰ The roots, fallen logs, pools, overhanging branches and other habitats that vegetation along the banks creates provides important habitat for fish young to old.⁴¹

Multiple studies have documented that waterways surrounded by mature woodlands provide a greater variety of important aquatic habitat, support a greater diversity of fish species, and support fish in healthier physical condition than waterways where the forest cover has been removed. Forested streams also provide temperature protections important for aquatic life. The overhead cover provided by forested streamside lands provides shading and temperature control – this directly affects the amount of oxygen the water can support. Increased temperatures have been found to alter the release rate of nutrients from suspended sediments. Instrumentally small increases in temperature can increase substantially the amount of phosphorus released into water.

Shading from buffers reduces overall temperatures but also reduces the daily and seasonal fluctuations in stream temperature. Moderation of stream temperatures is important for healthy habitat. Studies have concluded that removal of streamside vegetation can result in a stream temperature increase of 6 to 9 degrees Centigrade. Just a 9-degree increase can cause heavy growth of filamentous algae. Growth of parasitic bacteria is also encouraged by

³⁹ *Id*.

³⁶ For example, "Pennypack Park in Philadelphia is credited with a 38% increase in the value of a nearby property." Center for Watershed Protection, <u>Better Site Design: A Handbook for Changing Development Rules in Your Community</u>, August, 1998, p. 134

³⁷ J.C. Klapproth & J.E. Johnson, Virginia Cooperative Extension, Understanding the Scence Behind Riparian Forest Buffers: Effectson Plan and Animal Communities, October 2000, Publication number 420-152.

³⁸ *Id*.

⁴⁰ *Id*.

⁴¹ *Id*.

⁴² *Id*.

⁴³ *Id*.

⁴⁴ *Id*.
⁴⁵ *Id*.

⁴⁶ *Id*.

⁴⁷ Leavitt, J. 1998. The Functions of Riparian Buffers in Urban Watersheds", page 4, Master of Science Degree Report, University of Washington, Seattle, WA *Ibid*. 49

warmer temperatures.⁴⁹ And some species simply cannot survive in warmer water so even seemingly slight temperature changes (the 6 to 9 degree range) can shift the structure of the aquatic community.⁵⁰

Removal of forests and vegetation results in polluted runoff, which because of the lack of a vegetated buffer, will enter directly the neighboring stream or river. This kind of polluted runoff includes sediment, nutrients, pesticides, animal waste and more. Too many nutrients in a waterbody, including both phosphorus and nitrogen, encourages an overgrowth of algae and other aquatic plants. Buffers are beneficial also for protecting waterways and communities from other pollutants such as herbicides and pesticides.

Vegetation on stream banks can help filter sediment-laden runoff that would otherwise enter a stream and can reduce and prevent non-natural erosion resulting from increasing stormwater runoff levels upstream and introducing more sediment into the water column. Sediment can block the penetration of light in water, affecting the growth and reproduction of aquatic plants.⁵¹ When sediment settles it can cover stream bottom habitats interfering with the feeding or reproduction of fish and aquatic insects dependent upon them.⁵² Too much sediment can clog the gills of fish and, if at high enough levels, result in fish death.⁵³

When reaches of a stream with natural function are intersected with dysfunctional reaches there is a net loss in the ability of the stream to provide their water cleaning and protection benefits including processing of nutrients, pesticides, and organic matter.⁵⁴

Vegetated buffers prevent erosion of stream banks and adjacent lands – including both public lands and private lands. Root systems of woody shrubs and trees do a better job of anchoring these soils — this is a function that turf grass, or low growing vegetation as is often found at pipeline stream crossings, simply cannot do effectively. Stream reaches that are forested "exhibit 20 - 33% slower channel migration and lower floodplain accretion rates of sediment and thereby provide more stability than deforested channels." ⁵⁶

Research has concluded that forested buffer systems, as opposed to grassed systems or other herbaceous plants, provide an enhanced ability to sequester contaminants instream and to degrade them; this is primarily due to increased biological activity. Increased nitrogen

⁴⁹ *Ibid*. 49

⁵⁰ *Ibid*. 49

David Welsch, <u>Riparian Forest Buffers</u>, US Dept of Agriculture Forest Service, NA-PR-07-91, http://www.na.fs.fed.us/spfo/pubs/n%5Fresource/riparianforests/

⁵³ *Id*.

⁵⁴ B.W. Sweeney, Bott, Jackson, Kaplan, Newbold, Standley, Hession and Horwitz, Riparian deforestation, stream narrowing, and loss of stream ecosystem services, Proceedings of the National Academy of Sciences of the United States of American, Vol 101, No. 39, Sept 28, 2004.

⁵⁵ National Research Council. 2002. Riparian Areas: Functions and Strategies for Management. Water, Science, and Technology Board, Board of Environmental Studies and Technology, National Academy Press, Washington, DC. Also see Stroud Water Research Center, Protecting Headwaters: The Scientific Basis for Safeguarding Stream and River Ecosystems, 2008.

⁵⁶ Sweeney, et al, Riparian deforestation, stream narrowing, and loss of stream ecosystem services. 2003.

attenuation and pesticide degradation are particularly associated with forested stream buffers. 57

The removal of healthy forested buffers along the many stream crossings proposed by Transco REAE must be assessed – individually and cumulatively. In addition, when the stream crossing includes a cut through a pre-existing mature and healthy forest the degradation of the forest on either side of the Right of Way that results from this forest fragmentation needs also to be considered, both in terms of stream impacts and forest impacts.(1)

164. Comment

The removal of forested buffers can have extensive impacts on waterways, including exposing them to runoff and raising downstream water temperature through exposure to direct sunlight. Cutting forests and riparian buffers also can led to forest and habitat fragmentation, which must be considered both individually and cumulatively. In some cases, Transco appears to propose restoring or enhancing impacted wetlands by simply planting trees and shrubs, which would potentially turn them into forests. In others, Transco is seeking waivers to avoid restoring forested buffers entirely, making the impacts permanent. (183)

165. Comment

Among our concerns are the following impacts:

- Sinkholes, spills, property damage, and noise from the drilling process similar to the destruction caused by Mariner East II
- Damage to riparian areas and streams from open-cut crossings
- Forest fragmentation, soil compaction, stormwater runoff, and flooding
- Public health impacts like air quality degradation from compressor stations and industry equipment along the route
- Drinking water contamination and water quality degradation
- Habitat destruction, impacts on threatened and endangered species, and loss of wetlands (858)

166. Comment

The Applications Do Not Demonstrate that the Requirements for Waiver of the Riparian Buffer Rules Have Been Met.

While Transco makes a claim for waiver of the riparian buffer rules due to being a linear project, it also seeks additional waiver due to the project being "necessary to abate a substantial threat to public health or safety." See Section 1-1, last page. This waiver is not supported, as reference to the more fulsome Riparian Buffer Waiver Request in Section 1-7 shows.

⁵⁷ Sweeney, B. W., et al. 2004. Riparian deforestation, stream narrowing, and loss of stream ecosystem services. PNAS, September 2004; 101: 14132–14137.

The purpose of this pipeline project is for the profit of the shareholders of the publicly traded Williams Companies, Transco's ultimate corporate parent. There is no threat to public health or safety that Transco cutting down riparian buffers is intended to abate. In Section 2.0 of 1-7, Transco explains that "Grading and tree clearing is proposed along Sugar Hollow Road outside of the 100' buffer, but within the 150' buffer on the opposite side of Sugar Hollow Road to improve the sight distance from the driveway, as a public health or safety issue, and to install the driveway and associated stormwater pipe work." In other words, Transco intends to create a traffic hazard in the construction and design of its private driveway and then bootstrap a riparian buffer waiver request by claiming that it then needs to mow down riparian streamside forest to abate the hazard it created. Abating its own hazard does not fit within cited exception. That exception is for where "The project is necessary to abate a substantial threat to the public health or safety." 25 Pa. Code § 102.14(d)(2)(i). The project is to install a pipeline, not to abate a hazard.

Transco's narrative makes clear that it just did not want to change the plans for its workspace to accommodate the change in the protection status of Sugar Hollow Creek: "Since the original submission of the permit application the existing use of Sugar Hollow Creek changed from CWF, MF to HQ-CWF, MF with the designated use remaining CWF, MF." See Section 1-7 at Section 2.0. Because Transco does not qualify for this riparian buffer rule exception, it needs to change that design.(134)

167. Comment

Finally, the riparian buffer waiver for the temporary contractor yard at Compressor Station 515 is not justified, as Transco does not explain why an alternative site outside of the riparian buffer cannot be utilized. (134)

168. Comment

Transco also asserts that thermal impacts to riparian buffers will be "negligible and localized." Yet there is no indication for a plan to monitor thermal impacts. Thermal degradation causes decline of trout populations, including and especially our native Brook Trout, the PA State Fish. I urge the Department to require specific, enforceable monitoring and reporting by Transco during and after construction, and to hold the company to any restoration obligations which it has incurred. (120)

169. Comment

Thermal impacts to streams and wetlands are also minimized by describing vegetation clearing as temporary even though it takes decades for trees to grow to a size that provides adequate shading to water resources. Furthermore, there is no assurance that the applicant will not seek to work again in the same riparian buffers thus potentially indefinitely delaying the full re-growth of the riparian buffer. In addition, requests for several of the riparian buffer waivers for additional workspace are insufficiently supported and seems to be for the applicant's convenience. (875)

Response 157-169:

The Department acknowledges the environmental importance of riparian buffers and riparian forest buffers. As per 25 Pa Code §102.14(d)(2)(ii) this project qualifies for a waiver and per 25 Pa Code §102.14(f)(2)(ii) the construction activities also constitute an allowable activity in the riparian buffer so long as any existing riparian buffer is undisturbed to the extent practicable and that the activity will otherwise meet the requirements of Chapter 102. The riparian buffer waiver request was included within the Erosion and Sediment Control Permit (E&S) Application. The Department reviewed Transco's waiver request and found that Transco has met the regulatory requirements. The Department has the authority to modify permits and require repairs, when and if necessary, should an issue arise.

Transco has demonstrated within the application that the impacts to the riparian buffer have been minimized with respect to the permanent ROW being the only area that will be maintained as a vegetated cover, as meadow in good condition. Transco indicated that it designed the Project workspaces to be the minimum width necessary required for construction including overlap with existing ROWs where possible, and that the construction corridors are consistent with FERC guidelines.

Transco qualified for exceptions and/or waivers of the Chapter 102 riparian buffer requirements but is replanting the riparian forest buffers in accordance with the onsite Wetland and Riparian Reforestation Plan which shows the location of all forested riparian buffers plantings, in both special protection (High Quality and EV) streams and non-special protection (Warm Water Fisheries, Cold Water Fisheries) streams.

Transco's E&S/SR Plan identifies the erosion and sedimentation control and restoration practices to be implemented. Accelerated erosion and stormwater runoff from earth disturbance activities and the discharge of construction-related sediment will be managed in accordance with the regulatory requirements. Transco's E&S Plan complies with DEP's Chapter 102 regulations which ensure that it will not cause or contribute to violations of water quality standards. The DEP will require Transco to ensure that visual site inspections are conducted weekly and within 24 hours after each stormwater event throughout the duration of the earth disturbance activity. Transco's E&S Plan includes a maintenance program which provides for the O&M of BMPs and the inspection of BMPs on a weekly basis and after each stormwater event, including the repair and replacement of BMPs, to ensure effective and efficient operation in accordance with narrative performance-based effluent limitations identified in Transco's E&S Plan and other application materials. The Department is able to follow the project through completion via inspection reports conducted by both the Department and conservation districts. The Notice of Termination will only be granted by the Department after meeting successful herbaceous revegetation. Post construction monitoring of tree and shrub plantings and performance standards will be required as part of DEP's permit conditions for a minimum of five years. Required tree and shrub plantings within

riparian areas and previously forested or scrub shrub wetland are required to meet an 85% survival rate.

Transco reduced the temporary construction ROW width to 50-feet when feasible at stream crossings and 75-feet at floodway crossings, depending on site-specific conditions. In total, Transco proposes to replant 19.30 acres of riparian lands with various shrub and tree species trees. Riparian plantings will extend 100' for non-special protection streams and 150' for special protection watersheds from each watercourse. Shrubs will be planted between 5 and 15 feet of the pipeline, with periodic maintenance of the woody vegetation being allowed, and both trees and shrubs may be planted beyond 15 feet from the pipeline. Transco proposes to maintain a 10-foot wide, mowed permanent ROW. Replanting will minimize any erosion and sediment runoff as a result of clearing in riparian areas. The onsite Wetland and Riparian Reforestation Plan contains adequate Replanting Details and plant species lists. The plan also includes an Adaptive Management Plan section, which outlines options to consider should performance standards not be met during the post-construction monitoring period (see Requirement L-5, Appendix S4-2 of the Chapter 105 permit application). Trees and shrub shelters will be installed for those plants suitable for shelter. Weed and rodent pressures will be addressed as necessary to assure the success of the plantings. The Department can request additional monitoring if parameters are not met.

Installation of driveway and storm pipe work are considered an allowable activity in accordance with 102.14 (f)(2)(i) if these activities are located within the buffer.

Regarding the contractor yard at Compressor Station 515, it is temporary and will be returned to pre-construction conditions. Transco provided justification for the location of the yard within the riparian buffer waiver. The Department reviewed the proposed restoration of the riparian buffer and found that Transco satisfied the Department's rules and regulations.

Thermal Impacts and Forest Fragmentation

This section addresses the comments received by the Department during the public comment period on the topics of thermal impacts and forest fragmentation. Excerpts of comments received from individual commenters on these topics, as well as the Department's response to these comments, are provided below.

170. Comment

Department must ensure that thermal impacts (from increased light reaching the water column), sedimentation from disturbance of the streambed itself with open cuts and disturbed raw riparian buffer banks (often along steep slopes), increased eutrophic conditions, and changes in the benthic community, for example, do not impact trout populations both for the short and long term. Such safeguards need to be addressed in any application and in any permit issued in order to protect these vital trout streams.(134)

171. Comment

Past evidence and monitoring of other similar pipeline projects using similar engineering techniques with similar characteristics has shown changes in benthic community, changes in hydrology, changes in water quality chemistry such as thermal impacts/increased temperatures from deforestation to existing forested riparian buffers, sedimentation and smothering of benthic community habitat, and changes in vegetative quality and cover (where often invasive species move in). These detrimental impacts can cause cascading impacts to water quality further downstream, especially in sensitive headwater areas and small streams that are so critical to the larger watershed - this is the death by a thousand cuts that the rules for special protection waters are supposed to prevent. (134)

172. Comment

Thermal Impacts and Sedimentation to Waterbodies Due to Proposed Open Trench Crossings in Anti-Degradation Waters Should Not be Permitted

Transco states in their application the following:

"Due to the overall nature of the Project, thermal impacts to surface waters are not anticipated. The pipeline installation activities will primarily take place within an existing cleared and maintained pipeline right-of-way. There will be no increase in stormwater discharge. The primary means to address thermal impacts on this Project is to limit the size and duration of exposed earth. Revegetation procedures and the Sequence of Construction outline disturbed areas being immediately revegetated. Stormwater runoff associated with the installation of the MLVs and Tie-ins will be routed through the stormwater BMP's designed to retain and infiltrate the first surge of water from the site. The first surge of water will be the warmest water for the duration of the storm event and will quickly cool as the storm event progresses. The BMPs are designed to capture and infiltrate this warmest surge of stormwater. Based on routing calculations, stormwater is not discharged from the BMPs for the first 12 hours during a 100-year/24-hour storm event. The retention period is longer for less intense storms. Therefore, as a result of these measures, no significant thermal impact to the receiving waters is anticipated."

Comment: With forest clearing being proposed near streams and existing forested buffers in PFO and PSS wetlands and along HQ or EV streams, it is unclear how the above explanation by Transco is accurate. Is Transco planning temperature monitoring pre and post project to document their assertion? Transco also asserts that the work will be done in an already cleared ROW, yet we understand that co-location will often be requiring more land and forest clearing which will mean a bigger wider open ROW. See section on non- collocated areas as well especially along the Luzerne portion of the pipeline. Native shrub and tree planting is a step in the right direction to reduce thermal impacts but to grow shade to replace mature canopy that will be lost by open cuts proposed will take many years to accomplish. Sedimentation impacts are also not addressed by Transco which ultimately come during pipeline construction and subsequent steep slope E&S issues that can and often do arise (sediment warms the water

column). DRN and Princeton Hydro⁵⁸ have documented elevated wetland temperatures along similar pipeline cut projects in the Delaware River Basin using automatic temperature probes.⁵⁹ Furthermore, soil compaction especially from ATWS, and TWS cut outs proposed near waterbody crossings has been documented on similar pipeline routes in the Delaware River Basin by DRN. This compaction can ultimately lead to increased stormwater runoff impacts.⁶⁰(1)

173. Comment

In addition, where forested buffers are cut, thermal impacts downstream are not accounted for. These cascading downstream watershed impacts are required for a thorough EIS analysis. On the face of it, despite the extremely large number of wetlands and watercourses, Transco claims very little impact. Furthermore, on review, numbers seem to vary from Transco's aquatic resource impact tables and the compensatory mitigation plans. Transco states in the mitigation plans the following:

- "Construction of the Regional Energy Lateral Loop and Existing Compressor Station 515 will result in seventy- seven pipeline associated watercourses and/or floodway crossings (fourteen floodway only)."
- "Construction of the Project will result in temporary impacts to one hundred and eight PEM, PSS and PFO wetlands. Permanent functional conversion impacts (PFO/PSS to PEM) wetlands located within the proposed maintained pipeline ROW will occur to 39 wetlands, for a total of 1.67 acres. Temporary functional conversion impacts of wetlands located within the temporary workspace will occur to 47 wetlands, for a total of 3.47 acres."(1)

174. Comment

The Applications must fully catalogue, consider, and review impacts to forested and scrub shrub habitats and dependent species as well as forest and soil carbon sinks.

The Project, as proposed, requires the removal of vegetation from the ROW. This will have a multitude of direct and secondary effects including increased runoff and soil erosion, encroachment and establishment of invasive species, and destruction of wildlife habitat, loss of biodiversity, loss of forest cover and forest edge impacts to the remaining forest, and increased use of herbicides along the ROW that will impact the surrounding ecosystem. The impacts of modifying the various vegetative ecosystems along the length of the project must be assessed, including both direct and indirect effects of project construction and operation. Among the vegetative and ecosystem impacts in need of careful consideration is the impact of forest ecosystems. These impacts must all be identified and accounted for.

⁵⁸ The Short and Long-Term Consequences of the Construction of the PennEast Pipeline– A White Paper, Princeton Hydro, LLC, July 2015.

⁵⁹ White Paper: Pipelines A Significant Source of Harm, Delaware Riverkeeper Network,

⁶⁰ Meliora technical memo – TGP Pipeline Compaction Study of Temporary Work Spaces, 2013

Pipeline construction results in the loss of riparian (streamside) vegetation. For each of the pipeline construction techniques, 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 and 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 forested vegetation that are a minimum 100 feet wide, are instrumental in providing numerous ecological and socioeconomic benefits. Simply put, riparian corridors protect and restore the functionality and integrity of streams. A reduction in streamside healthy and mature streamside vegetation reduces stream shading, increases stream temperature and reduces its suitability for incubation, rearing, foraging and escape habitat. 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.⁶⁴(1)

175. Comment

• Furthermore, where forested buffers are proposed to be cut, thermal impacts downstream are not accounted for. Clearing the forest around these streams exposes them to direct sunlight, raising the water temperature and jeopardizing their suitability as trout waters.

Cutting forests and riparian buffers also creates habitat fragmentation. Transco fails to factor in not just the impacts of the fragmentation of the forest for these particular pipeline segments, but also by other cuts in the same region, either by Transco on its other pipeline pieces or by other pipeline/linear projects both within and outside the watershed.(748)

176. Comment

- Furthermore, where forested buffers are proposed to be cut, thermal impacts downstream are not accounted for. Clearing the forest around these streams exposes them to direct sunlight, raising the water temperature and jeopardizing their suitability as trout waters. Transco is also seeking waivers to avoid to restoring forested buffers, which would mean the impacts are permanent.
- Cutting forests and riparian buffers also creates habitat fragmentation. Transco fails to factor in not just the impacts of the fragmentation of the forest for these particular

⁶¹ James Norman, et al., Utility Stream Crossing Policy, ETOWAH AQUATIC HABITAT CONSERVATION PLAN, July 13, 2008

⁶² See e.g. Newbold et al. 1980, Welsch 1991, Sweeney 1992, Sweeney and Newbold 2014

⁶³ Canadian Association of Petroleum Producers, Canadian Energy Pipeline Association, and Canadian Gas Association, Pipeline Associated Water Crossings, 1-4 (2005).
⁶⁴ Ibid 1.

pipeline segments, but also by other cuts in the same region, either by Transco on its other pipeline pieces or by other pipeline/linear projects both within and outside the watershed.

• The removal of healthy forested buffers along the many stream crossings proposed by Transco REAE must be assessed – individually and cumulatively. In addition, when the stream crossing includes a cut through a pre-existing mature and healthy forest, the degradation of the forest on either side of the Right-of-Way that results from this forest fragmentation also needs to be considered in terms of both stream impacts, forest impacts and climate change impacts. (7, 32, 109, 116, 118, 123, 131, 143, 147, 156, 176, 185, 211, 214, 236, 242, 275, 296, 312, 320, 330, 338, 354, 359, 376, 386, 408, 414-415, 419, 426, 437, 469, 484, 492, 619, 640, 643, 646, 649-651, 653, 658, 661, 672, 679, 686, 692, 716, 726, 749-780, 783, 788, 790-791, 794, 797-798, 801-805, 807-813, 815-816, 819, 822, 835-836, 842-843, 849, 860)

177. Comment

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_2 022/Chapt er%20105%20Luzerne/L-5---MODULE-S4-REV1.PDF.pdf (588)

178. Comment

Thermal impacts from clearing adjacent forest along the already expansive ROW that Transco impacts, will degrade water quality yet again with this pipeline expansion. No waivers should be granted and native shrub plantings near the center line should be required if DEP does not deny these applications outright. (134)

179. Comment

• The Department should require that only native plant species are used to stabilize soils, particularly given the linear nature of the pipeline. The applications indicate a plan to use Japanese millet and barnyard grass to stabilize wetlands temporarily. Barnyard grass has been observed outcompeting native pollinator plants and indigenous wetland and important native grasses in rain gardens and other areas of Pennsylvania and is a super seed producer. It should not be used to stabilize wetlands. Introducing invasive

nonnative plant species like barnyard grass into EV wetlands biologically would impermissibly degrade the wetland. The use of only native seed mixes is especially important in wetland and stream complexes because water can carry invasive seeds for miles, which impacts and degrades hydrology, biodiversity and riparian buffer health in the long term. Commenters also suggest working with Ernst Seed and the ERNMX-181 to include more early and late blooming flowering species. For example, aster species are limited to only 0.2 percent of the seed mix, whereas Indian grass is 31.1%. By increasing flowering late fall native plants, the herbaceous ROW will be more valuable for struggling and endangered pollinator species.

• The reforestation plan includes an indication that shrubs "may" be planted in the pipeline area. Shrubs should be required, rather than optional, in addition to the native tree plantings. This shrub requirement would lessen impacts to the ROW and create important habitat for birds and other wildlife. Additionally, shrubs hugging the pipeline center line can also help avoid ATV use, thermal impacts, and other expansive impacts for an already very large ROW with over three existing lines.(134)

180. Comment

Transco also asserts that thermal impacts to riparian buffers will be "negligible and localized." Yet there is no indication for a plan to monitor thermal impacts. Thermal degradation causes decline of trout populations, including and especially our native Brook Trout, the PA State Fish. I urge the Department to require specific, enforceable monitoring and reporting by Transco during and after construction, and to hold the company to any restoration obligations which it has incurred. (120)

Response 170-180:

The Chapter 102 Permit Application and the E&S/SR Plan appropriately address potential thermal impacts and sedimentation to water bodies on the Project.

Transco included adequate measures to minimize thermal impacts through preservation of tree/canopy cover to the maximum extent practicable, consistent with the riparian buffer requirements. Transco reduced workspaces in environmentally sensitive areas such as streams, floodways, and wetlands to limit impacts and will replant riparian buffers within 5 feet of the pipeline. Further riparian buffer restoration is discussed in Section 8 of the Erosion and Sediment Control/SR Plan Narrative and in the onsite Wetland and Riparian Reforestation Plan within Requirement L-5 of the Chapter 105 permit application.

Transco has also developed the onsite Wetland and Riparian Reforestation Plan which shows the location of all forested riparian buffers plantings, in both special protection (High Quality and EV) streams and non-special protection (Warm Water Fisheries, Cold Water Fisheries) streams. Native seed mixes and shrub plantings are proposed (Requirement L-5 of the Chapter 105 permit application); however, no shrub plantings will occur within 5 feet of the pipeline centerline as a 10-foot swath of vegetation, directly over the pipeline, will be maintained during operation to facilitate routine inspections.

Impacts from O&M

This section addresses the comments received by the Department during the public comment period on the topic of impacts from Operation and Maintenance (O&M). Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

181. Comment

The Commission must consider the presence of exposed pipelines and associated risk of rupture.

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. Flooding rivers can scour river bottoms and expose pipelines to powerful water currents and damaging debris. Additionally, unusually heavy rains possibly associated with climate change, threaten to increase overall stream degradation and channel migration – thereby exposing shallowly buried pipelines. Exposure of the pipeline raises a greater risk of pipeline damage, breakage and pollution; with pipeline breakage resulting in the catastrophic discharge of its contents into the natural stream system. Soil erosion and channel migration reduces the soil cover over a pipeline, resulting in the formation of a scour hole which makes the pipeline vulnerable to rupture. Lateral migration of stream channels can also heighten the risk of pipeline exposure. (1)

182. Comment

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_2 022/Chapt er%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. (588)

183. Comment

Commenters urge DEP to require additional monitoring of rain events and soil conditions. Rain gauges should be placed on site throughout the pipeline area and monitored regularly by the applicant and agencies to document weather conditions. This is important as in the past pipeline operators have cited flooding and blow outs of E&S practices on "unusual weather and catastrophic rain events". With catastrophic climate destabilization, Pennsylvania is already facing more extreme weather events and extreme weather on a more routine basis.

Operators must be prepared for deluges of rain and other phenomenon that were not common a decade ago but are now routine weather events.(134)

Response 181-183:

Transco has provided long term O&M procedures that comply with the rules and regulations and which will protect waters of the Commonwealth. The E&S/SR Plan shows that the stream bed and banks will be restored to pre-construction conditions. Should the banks be susceptible to scour, Transco proposes to reinforce the stream bank with erosion control matting and/or riprap for protection. The pipeline will be buried a minimum of 3 feet below streambed elevation, as per the Department's rules and regulations (25 Pa. Code § 105.313), to prevent the pipeline from exposure.

Transco will comply with visual site inspections and standard monitoring events, as required by issued DEP permits. The construction sequence at stream crossings includes evaluation of predicted weather forecast for anticipated inclement weather which may result in flow conditions unsuitable for construction. If inclement weather is anticipated a contingency plan will be in place to avoid the stream crossing during the potentially unsuitable conditions.

The Department has the authority to modify permits and require solutions, when and if necessary, should a pipeline become exposed due to erosion. Transco would also have to comply with other applicable federal and state regulations pertaining to pipeline exposure.

Impacts from Earth Disturbance Activities

This section addresses the comments received by the Department during the public comment period on the topic of impacts from earth disturbance activities. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

184. Comment

Construction activities will also necessitate the removal and disposal of material. Transco should address where the removal will be conducted and where the material will be disposed, whether digging to install the pipeline is likely to intercept the water table, and what effects the resultant pumping will have.(1)

185. Comment

With regard to erosion, Commentators have seen multiple violations where steep slopes voided of mature forests through pipeline construction cause erosion issues and blowouts that lead to sediment discharges into waterbodies and wetlands. These sediment violations smother the diverse benthic and aquatic life, especially in special protection and anti-degradation waters, that live there year round. For this pipeline, Transco notes 55 soil mapping units located within the LOD. Eleven of the 55 are designated as easily erodible and 18 of the 55

are designated as landslide prone/low strength. Preserving forests and soil profiles in these sensitive conditions and or ensuring forests are replanted would help avoid future problems and sedimentation to waterbodies. 25 of the 55 soil types are also noted to be corrosive to concrete/and/or steel. 22 of the 55 soil types are a poor source of topsoil, which means that once these soils are disturbed along with the soil profiles and the natural mycorrhizae of the soils and herbaceous, shrub and tree layers, there will be irreparable harm to those soils. Past pipeline comments have pointed to scientific reports from Meliora and other experts documenting these problems. Commenters believe that the provisions outlined by Transco in section 4.1 will not prevent irreparable harm and the long-lasting impacts due to soil disturbance. Avoidance of disturbance of the soil layers thru HDD where appropriate and where forests exist could go a long way to avoiding many of these permanent impacts, especially if Transco does not work within its existing expansive ROW.(134)

186. Comment

Commenters also suggest that DEP require specific BMPs to prevent runoff, sedimentation, and soil damage. Transco notes (p10) broad based dips "may be used in HQ/EV watersheds" for access road runoff control and sump with filter sock "should be utilized". Commenters suggest DEP require these measures rather than leave them at Transco's discretion. DEP should also require a schedule of monitoring and maintenance for sediment traps. Erosion control blankets to be used should not contain plastic; plastic E&S blankets can and have trapped wildlife and they are made from fossil fuels. Natural fiber E&S blankets should be required. (134)

187. Comment

"Temporary" storing of timber mats or for parking and supplies for wetland crossings should be located on the already harmed pipeline ROW space in existence, not on newly cut mature forest areas deemed temporary or additional temporary work spaces. (134)

188. Comment

Safety fencing used and E&S barriers should not be allowed to impede vernal pool species migrations during early spring and late summer as species return to or from their breeding grounds. In the past we have documented lagging mitigation practices by pipeline operators at the expense of the animals and aquatic life that call these regions home. In special protection watersheds, this type of disregard for sensitive species should not be allowed. Additional measures such as siltron pollution prevention fence and other recognized BMPs should be deployed in all special protection waterways and EV wetland regions. (134)

189. Comment

• In Monroe County E&S Plan Sheets 3 through 5 of 52, the contractor yard is proposed to be absurdly large—taking up most of one large farm field and part of another—with no apparent reason for the need to disturb so much land. (134)

190. Comment

• In Monroe County E&S Plan Sheets 23 and 24 of 52, there are pre-existing waterbars from earlier pipeline construction, and then new waterbars that seem to be acting at cross-purposes to the pre-existing waterbars in terms of the direction they are sending the water. This does not seem to make hydrological sense. (134)

191. Comment

• In Section 1-4 of the Chapter 102 application, internal Section 1.3.3.5 notes that topsoil will be separated from subsoil in agricultural lands. That should also be the case in natural lands such as forests and meadows, as well as the gardens and lawns of residential areas. In almost every ecologically productive location, different soil layers perform different ecological functions. Mixing biologically active topsoil with subsoil makes the ground surface less fertile for the vegetation and worsens animal habitat. Transco has ignored past information and expert reports provided to it regarding the use of other measures to preserve soil and herbaceous integrity (Leslie Sauers Report). (134)

Response 184-191:

Transco's E&S/SR Plan and the terms and conditions of the Erosion and Sediment Control Permit for Earth Disturbance Associated with Oil and Gas Exploration, Production, Processing, or Treatment Operations or Transmission Facilities identifies the E&S controls, stormwater management, and restoration practices to be implemented during and after project construction for all earth disturbance activities associated with the project, including the pipeline right-of-way, ancillary facilities, temporary storage and staging areas, as well as the temporary and permanent access roads and work in areas with steep slopes. Transco has also provided ABACT E&S BMPs in all special protection watersheds. Accelerated erosion and stormwater runoff from earth disturbance activities will be minimized and the discharge of construction-related sediment will be managed by adherence to the plans which comply with DEP's Chapter 102 regulations. Chapter 102 regulations are in place to ensure that stormwater discharge from construction activities will not cause, or contribute to, violations of water quality standards.

The DEP will require Transco to ensure that visual site inspections are conducted weekly and within 24 hours after each stormwater event throughout the duration of the earth disturbance activity. Transco's E&S Plan includes a maintenance program which provides for the O&M of BMPs and the inspection of BMPs on a weekly basis and after each stormwater event, including the repair and replacement of BMPs, to ensure effective operation in accordance with narrative performance-based effluent limitations identified in Transco's E&S Plan and other application materials.

Transco is required to dispose any waste material to a DEP approved site in accordance with the permit terms and conditions and Pennsylvania law. The E&S/SR Plan also details the steps to be taken should water be encountered during construction of the pipeline. All E&S BMPs proposed on the project have been designed according to the

Erosion & Sediment Pollution Control Program Manual and Chapter 102 requirements. Biodegradable erosion control blankets are proposed. As per 25 Pa Code §102.22(a)(2)(I) there must be a uniform 70% perennial vegetative cover, with a density capable of resisting accelerated erosion and sedimentation, on the project site prior to any erosion and sediment control devices being removed.

Workspace developed for the project was designed to minimize impacts to the extent possible. Transco determined the size of the proposed contractor yard. The Department reviewed the proposed contractor yards, and staging areas, and determined that they meet all regulatory requirements.

An evaluation of the existing waterbars on the pipeline ROW was conducted prior to the development of the E&S Plan. In accordance with DEP requirements Transco proposed waterbars at the appropriate spacing and in accordance with the existing waterbars as practical. Pre-existing water bars within the LOD will be removed and replaced with the proposed waterbars depicted on the E&S Plan. The proposed waterbars will direct the flow of stormwater and will tie into existing waterbars located outside of the LOD at appropriate locations.

Regarding topsoil separation, topsoil will be separated along the entire right-of-way, including agricultural lands, as detailed within Transco's E&S Plan.

Restoration, Invasive Species, and Herbicides

This section addresses the comments received by the Department during the public comment period on the topics of restoration, invasive species, and herbicides. Excerpts of comments received from individual commenters on these topics, as well as the Department's response to these comments, are provided below.

192. Comment

The clearing of forest for pipelines can also result in the introduction and linear and outward spread of invasive plant species (such as Japanese knotweed, Japanese stiltgrass, multiflora rose, Phragmites, oriental bittersweet, Japanese hops, porcelainberry, and garlic mustard) resulting in further decline and loss of native wildlife species diversity, and the creation of microclimates that degrade forest health through sunscald and increased wind-throw. For example, the pipeline corridor becomes a path for ATVs, and seeds of invasives can spread along the corridor in vehicular tires. These invasive plants, if tolerant to shade, can also then colonize surrounding forests and natural habitats, decreasing habitat and diversity within the adjacent forest habitat (1).

193. Comment

It is common sense that you cannot build a pipeline without fundamentally and permanently changing the landscape.

- Areas of tree removal, including the path through state game lands will never be
 restored to original condition. Documents mention a 300-ft impact on either side of
 the right-of-way. Flora is fundamentally changed when shade becomes sun and new
 invasive species invade.
- Any pipeline application that claims to "return site to previous condition" strains credulity. There is no ability to return a natural site, once disturbed, to its previous condition. You can rebuild a man-made structure and possibly restore farmland to its previous condition; but you cannot go backwards in time on a natural site. Just look at other pipeline paths through forests: Do any of them look like the previous condition?
- The maintenance of a pipeline site introduces machinery (mowers, vehicles, drones) with associated noise and emissions.
- The project impacts a number of EV and HQ waters. Having had the opportunity through a local nonprofit to tour EV streams in Monroe County, I picture nothing but irreversible damage to such streams from a project such as Transco-REAEP.
- Transco-REAP, itself, states:

EROSION AND SEDIMENT CONTROL, GENERAL PERMIT (ESCGP-3) PERMIT APPLICATION

Regional Energy Access Expansion Project

Luzerne, Monroe, Northampton, Chester and Bucks. Unavoidable impacts to wetlands, streams and floodways are necessary to construct the proposed Regional Energy Lateral. Dry open-cut construction methodology will be utilized at all resource crossings but four. The Susquehanna River will be crossed using direct pipe.

Three streams and adjacent resources will be conventionally bored. Disturbed wetland, streams and floodways will be returned to pre-construction grade and contour upon completion of construction, except for those areas identified within the permit application that have site specific restoration measures. Due to the linear nature of this 22.3-mile Federal Energy Regulatory Commission (FERC) regulated interstate pipeline project, the route unavoidably crosses wetlands, streams and floodways; therefore, PADEP would be justified in determining pursuant to its regulations that the Project is water dependent. In total, these Project components will cross/impact seventy-seven streams and associated floodways (fourteen floodway only) and one hundred and eight wetlands. (588)

194. Comment

The application indicates existing invasive plants that are already at some of the wetland sites, likely due to disturbance of the original Transco pipelines – this speaks to how continued segmentation and repeated cuts over time change and irreversibly degrade the habitat. Innovative approaches like forest mats that protect the original buffers and cause less disruption to soils have been accomplished elsewhere and shared with DEP and pipeline applicants since as early as 2013 by DRN and can help avoid colonization of invasive plants in additional areas (see diagram below). Actualizing these more innovative construction practices here in Pennsylvania, rather than proposing the same type of construction practices

(narrow ROW crossing only with open cuts) as has been done since 2010 and at the inception of the shale boom; and that we have a record of water quality harms and clean water act violations is needed now, and long overdue; especially in light of the build out and repetitive cuts these gas infrastructure projects plan to inflict.

If geofabric material is being used for stabilization of streambanks, please note the importance of using products that do not trap sensitive species like rattlesnakes (see Dec 1, 2021 FERC comment pertaining to this concern). Products should also be naturally decomposing (coconut fibers for example) and limit any sort of plastic coatings and plastic mesh that are harmful to the environment or may entrap animals, including amphibians. (1)

195. Comment

Transco states, "Selected trees may be preserved along the edge of the pipeline corridor to help minimize impacts, if possible. Stumps and root systems will be left intact when feasible by cutting them at or slightly above ground level. Preserving tree/shrub stumps and root systems will facilitate re-sprouting during the restoration period."

Comment: Pruning limbs from mature trees along the edge of the ROW is a practice that agencies have requested and pipeline companies have implemented in other states to decrease the number of mature trees that have to be cut (see diagram below of pruning practice – height of 18' to allow construction equipment to operate and mature trees to survive). Root Sprouting can occur depending on species of trees but in Pennsylvania deer browse is a common threat, so stump sprouting should not be considered a very viable option nor take the place of trimming limbs. It is not clear to commenters why mature trees would need to be cut down but stumps can remain where tree limbs could not simply be cut along the ROW side leaving the tree standing. Transco does not state if this root stump practice is for ATWS, TWS but as indicated often, any mature tree cutting for scalloped out TWS and ATWS should be avoided as much as possible. Transco should use the existing expansive ROW or nearby upland herbaceous areas and already impacted ROW areas as much as possible for staging, parking equipment, and storing E&S materials and storing wetland crossing matting. The diagram below illustrates how mulch wood chip layers and sub soil from the trench are used under construction equipment to minimize ROW width and cushion the existing ROW to allow construction over existing infrastructure to avoid continued forest clearing on the outside of the ROW. Forest and vegetation on steep slopes adjacent wetlands and waterbodies should be preserved by using innovative techniques. Note construction fencing is also used to ensure better enforcement and tracking in the field once construction practices are begun which would help construction workers stay in the narrower ROW and help with agency oversight and inspections. (1)

196. Comment

It's important that native shrubs are now being incorporated to plant 5-15 feet from the pipeline centerline to ensure better restoration as on many past pipeline projects in Pennsylvania there was little planting of woody vegetation. We would suggest with the diverse types of native shrubs available (considering roots) Transco could plant 5 feet from the

centerline. We would suggest adding Clethra alnifolia (sweet pepperbush) (narrow spread and FAC+) and Sambucas canadensis (American elderberry) (intermediate spread and FACW) for example, as terrific small understory shrubs that are shade tolerant, have high wildlife value, and have shallow rooting systems. As indicated before, including these additional attributes in the planting design and on the plant lists at a glance will ensure better overall success, less long-term thermal pollution, diverse restoration and proper planting.

The list of native trees and shrubs for wetlands looks diverse and healthy and planting these PFOs and PSS wetlands will go a long way to speeding up restoration. Because in some cases it may be harder to shelter trees and shrubs in wetlands from deer, adding deer preferences to the tables and planting design specifically would be beneficial. For example, we know that in some instances northern spicebush is not preferred by deer (if they have other native vegetation to eat) while dogwood species may be a favorite. This research should be included in the design and tables to ensure proper review and overall restoration success which will lead to less thermal impacts over time. In some cases there likely will be sacrifice plants that are not fenced; this might be outlined in the planting density plans but if not it should be. Commenters suggest adding Cephalanthus occidentalis/button bush (OBL) to the possible planting list as it appears to be deer resistant based on field observations where deer browse is heavy and it also is extremely beneficial to native pollinators. There are various nurseries and sources to check deer herbivory scores to update the planting lists and plans. In upland areas, of course tree and shrub sheltering can be much simpler than in dynamic or wet floodways, streambanks, or wetlands.

It is important to also note that any type of fencing or sheltering, as well as construction fencing for shorter term, should not trap amphibians or other water species that may be using these wetlands. Vernal pool migration should be specifically addressed in these plans as well to ensure entrapment does not happen inadvertently. (1)

197. Comment

Transco notes in its mitigation plan, "in certain situations where meadow vole population is extensive, meadow vole bait stations including rodenticide may be utilized to control the local population. Transco also notes Repellex tablets may be applied or reapplied to deter herbivory.

It is critical that rodenticide is not used as a method for rodent control as it has cascading impacts to the environment, the food chain, and raptors that may feed on dead poisoned carcasses. Rodenticides should be explicitly prohibited; there are various mechanical maintenance methods that can limit vole damage or more plantings can be conducted to account for vole damage. More explanation on "Repellex tablets" is needed to understand if this is a non-lethal nontoxic formula for all species and water quality. (1)

198. Comment

There is also potential for chemical contamination of water resources. Current practices call for the ROW to be clear of vegetative matter. Herbicides are frequently used to accomplish this task. Creating and maintaining the ROW could result in increased and repeated herbicide use on the federal, state, and county parklands along the ROW and, as run-off capacity will

be intensified in the ROW due to lack of vegetation and forest cover and due to increased soil compaction resulting from pipeline construction, there will be an increased level of herbicides discharging directly (or through stormwater systems) into tributary streams, wetlands and the downstream Delaware River.

In addition, the removal of vegetation and increased soil compaction will create a direct route for stormwater runoff from neighboring lands which may be treated by other property owners with herbicides, pesticides, fertilizers and/or other chemicals that could/would then be transported and discharged into nearby water bodies either directly or through stormwater collection systems. The EIS must consider and question the necessity of the proposed width of permanent clearance considering the harms it poses to the environment. The ease of aerial inspection of the pipeline should not, and cannot, trump the resulting environmental harms associated with gratuitously wide ROW permanent clearings.

Beyond chemical contamination, water quality impacts will also result from an increase in suspended solids in the water due to erosion resulting from the increased volume of stormwater runoff that will result from removal of vegetation and increased soil compaction and from the removal of streamside vegetation thus depriving streams of the natural armoring of vegetative root systems. Upon entering the stream ecosystem, this increase in suspended solids will result in a reduction to the streams' water bearing capacity, in turn reducing oxygen availability and impacting aquatic plant and animal species, including habitat for fish reproduction and macroinvertebrate diversity. Each of these factors must be individually reviewed at all water crossings. (1)

199. Comment

The applicant must give due attention to impacts associated with invasive species.

Invasive vegetation out-competes native vegetation and spreads rapidly through forest openings. The entire Project would create edge impacts on forest communities that will be disturbed or re-disturbed by the project. The newly-created forest edge will be a direct impact of the Project and will be a prime spot for invasive species infestation on the newly-created edge. Moreover, the Project's disturbance of vegetation in the ROW, access roads, and temporary workspaces will require re-vegetation following construction, which will itself introduce new invasive species. The damaged and/or changed habitat ecosystems will also be an invitation for invasive wildlife species that can also have near term and long term impacts on the region, all of which must be fully considered.

The spread of invasive species, whether already established and able to find new favorable habitats due to the Project, or resulting from project construction, would have a major impact on the biodiversity of ecosystems through widespread loss of native vegetation and/or native species. The loss of biodiversity is a tragedy in its own right, but it will also affect visitor experience and may result in less utilization of the affected areas by flora enthusiasts, birders, wildlife viewers, hikers, hunters and/or boaters in favor of more biologically diverse sites elsewhere. The reestablishment of native vegetation, especially considering the effects of deer

herbivory, will take many years, and until reestablishment is achieved the area will be susceptible to further invasive species infestation. DEP must consider these impacts.

Moreover, DEP should also consider the impacts of invasive species on groundwater recharge. Invasive species often have shallower root systems than native plants, which allow the soil to erode more readily and to degrade the quality of watersheds by adding to "suspended sediment loads and turbidity."

The Transco REAE Project is likely to result in new and additional encroachment of undesirable invasive vegetation and animal species into forests, park lands, and other publicly or privately preserved areas destroying biodiversity, reducing the effectiveness of groundwater recharge, and driving away recreational visitors. This will in turn result in a loss of the economic values that accompany high recreational and aesthetic values of the Pocono region and beyond. (1)

200. Comment

DEP must consider ongoing impacts caused by pipelines.

The ongoing impacts of the pipeline ROW and operation of the pipeline for transporting natural gas must be assessed. As proposed, the ROW will be kept clear of vegetation. This ongoing absence of healthy vegetation and the methods used for maintenance, including the use of herbicides, has ongoing adverse impacts on the community and ecosystem. (1)

201. Comment

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. (588)

Response 192-201:

The Chapter 102 Permit Application proposes to restore the temporary and permanent ROW to, at a minimum, meadow in good condition, and includes decompaction methods.

Transco proposes to restore streams and wetlands to pre-construction conditions. The restoration of streambeds will include placing natural streambed material at a minimum of 6-inches. The stream banks will also be graded to match the upstream and downstream slopes and have the vegetation restored to pre-construction conditions. Wetlands will be restored using native wetland seed mix.

Transco proposes to minimize the spread of invasive species by including air or wash stations in the areas where invasive species were documented, as outlined in the Invasive Species Management Plan within Requirement L-5 Module 4 of the Chapter 105 Permit Application. Transco is proposing to use biodegradable netting, as outlined in the erosion control blanket (ECB) detail in the Permit Application. Native seed mixes and pollinator mixes are proposed to restore disturbed areas.

Transco indicated pruning limbs is not practicable due to construction of the new collocated ROWs, which is required to safely construct the Project. New pipelines require a new cleared ROW due to PHMSA guidelines. Stumps will be left in place in accordance with FERC Procedures, which are also discussed in the Procedures attachment in Requirement L-5 Module 4 of the Chapter 105 Permit Application.

Regarding native plantings, Transco has included Sambucas canadensis (American elderberry) to the onsite Wetland and Riparian Reforestation Plan. The United States Department of Agriculture (USDA) database does not identify Clethra alnifolia (sweet pepperbush) as native to Luzerne County, therefore this species was not added. Spice bush and button bush are included within the plan. The plan also includes an Adaptive Management Plan section, which outlines options to consider should performance standards not be met during the post-construction monitoring period. Trees and shrub shelters will be installed for those plants suitable for shelter, as stated in the onsite Wetland and Riparian Reforestation Plan.

Wetland areas crossed by the Project will not be fenced or blocked such that amphibians or other water species could become excluded from migration within or beyond the construction ROW. Transco will use compost filter sock (CFS) as a perimeter control during construction and site restoration to prevent erosion and sedimentation impacts from affecting undisturbed and restored wetland areas. CFS is not proposed as a continuous barrier along the Project's construction ROW, rather it has gaps and segments that are installed at different contour/topographic intervals. Each segment is typically staggered and offset such that runoff cannot by-pass segments of CFS while also not creating a continuous barrier. This sectioning and non-continuous placement of CFS on the Project would allow amphibians or other water species to migrate to and from the construction ROW.

Repellex tablets systemically provide the plant with Capsaicin to deter browse. Rodenticides would not be expected to be used widely, but rather "[i]n certain situations, where the meadow vole population is extensive, meadow vole bait stations including rodenticide may be utilized to control the local population" as part of the Adaptive Management assessment.

Transco does not propose to use herbicides during construction of the pipeline. Transco proposes to use approved erosion and sedimentation control BMPs. The E&S/SR Plan identifies the erosion and sedimentation control and restoration practices to be implemented. The E&S/SR Plan complies with DEP's Chapter 102 rules regulations

which are in place to ensure that stormwater discharge from construction activities it will not cause, or contribute to, violations of water quality standards. The DEP will require Transco to ensure that visual site inspections are conducted weekly and within 24 hours after each stormwater event throughout the duration of the earth disturbance activity. Transco's E&S Plan includes a maintenance program which provides for the O&M of BMPs and the inspection of BMPs on a weekly basis and after each stormwater event, including the repair and replacement of BMPs, to ensure effective and efficient operation in accordance with narrative performance-based effluent limitations identified in Transco's E&S Plan and other application materials.

Transco's Chapter 105 Permit Application includes repairs to the current pipeline ROW between MP 3.8 and 5.9 which has existing ATV impacts. Although trespassing can be an issue with ATV use, landowners still have access to their land to use as seen fit within the parameters of their easement agreements.

PPC Plans

This section addresses the comments received by the Department during the public comment period on PPC Plans. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

202. Comment

Another 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. 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). Clean up associated with pipeline breaks can be extremely expensive.(1)

Response 202:

Transco has a Construction Spill Prevention and Response Procedures Plan that details what the contractor will do in the event of a spill during construction of the pipeline and what clean-up efforts and remediation will be completed. Once construction is complete and the Chapter 102 permit terminated, FERC will have regulatory authority over the operation and maintenance of the pipeline.

DEP Capacity to Oversee Project

This section addresses the comments received by the Department, during the public comment period, on the topic of DEP's capacity to oversee the Project. Excerpts of comments received

from individual commenters on these topics, as well as the Department's response to these comments, are provide below.

203. Comment

The grand jury report noted that "Mariner East 2 was a massive construction project that literally spanned the state. It was thus beyond the scope of previous oversight efforts." In light of these findings, it is vital that DEP's ability to provide adequate oversight be factored into the consideration of the Transco permit requests. (301)

204. Comment

DEP may not be staffed with sufficient human resources to monitor the wetlands plan. https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/REAEP/March_2 022/Chapt er%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.

 $\underline{https://www.bizjournals.com/pittsburgh/news/2021/03/25/chesapeake-energy-consent-agreement.html}$

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."(588)

205. Comment

The Applications and Plans Do Not Provide for Adequate Oversight by the Department or for Adequate Accountability by Transco.

Despite Transco looking to cut across over multiple high-quality streams, there is still no requirement for oversight by way of water quality monitoring for these cuts. Without water quality monitoring data from before and after the permitted work, how is DEP ensuring degradation of these special protections waters is not occurring? This is especially important in light of the repeated and expanded cuts and impacts these pipelines inflict over time with multiple expansions.

Transco asserts: "Disturbed wetland, streams and floodways within the ROW will be returned to pre-construction grade and contour upon completion of construction." What monitoring and documentation is DEP requiring of Transco to ensure that before and after conditions remain the same? What in-stream monitoring is being conducted by Transco or the agency to ensure there are no harms or declines in water quality? Past records and monitoring data submitted by Commenters on other similar pipeline cuts in Pennsylvania demonstrate that declines in water quality occur as a result of pipeline construction, and yet there appears to be no additional measures or new BMP measures being taken by Transco to minimize harm that will come if this pipeline expansion is approved. Transco also asserts that thermal impacts to riparian buffers will be "negligible and localized." There is no indication for an adequate plan to monitor thermal impacts.

Commenters urge the Department, if this application is not denied, to at a minimum require specific, enforceable monitoring and reporting by Transco during and after construction, and we urge the Department to hold Transco to any and all replanting obligations. (1)

206. Comment

Moreover, the Department has not demonstrated that it can protect our environment from this industry either through punitive measures like fines or through permitting processes like this one that do not provide sufficient protective safeguards or accountability mechanisms. (134)

Response 202-206:

DEP, in coordination with delegated county conservation staff, is capable of properly monitoring the construction that will be conducted by Transco under REAE Project permits. Transco itself has many self-monitoring requirements under its permits, while DEP monitors compliance closely. DEP delegated county conservation staff are on site, at a minimum, within the first 30 days of construction and once every other month during construction. Inspections will occur more frequently in sensitive resources or in areas with a high pollution risk. The site visits include visual inspection of the right-of-way and the erosion and sediment control BMPs.

DEP oversees and monitors the pipeline's construction and can take appropriate measures to require the permittee to correct issues should they arise. Regular inspections of the pipeline construction is one of the critical aspects of DEP's oversight.

As seen with corrective actions taken against pipeline companies in recent years, the DEP will enforce and take action as necessary. Moreover, Transco will employ at least one EI per construction spread. The EIs will be responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other permits,

certificates, or authorizing documents for the Project. EIs will be empowered to order correction of acts that violate the environmental permits. The EI will have stop work authority during construction.

Transco's E&S/SR Plan includes a maintenance program which provides for the O&M of BMPs. This includes the inspection of BMPs on a weekly basis and within 24 hours after each stormwater event throughout the duration of the earth disturbance activity. BMPs will be repaired and replaced to ensure effective operation in accordance with narrative performance-based effluent limitations identified in Transco's E&S/SR Plan and other application materials. The Department is able to follow the project through completion via inspection reports conducted by both the Department and conservation districts. Earth disturbance must be stabilized before the Chapter 102 Permit can be terminated, and Transco will supply post construction and monitoring reports for restored resources for five years, and has responsibility through the life of the pipeline to ensure it is adequately maintained such that waters of the Commonwealth are protected from pollution associated with operation of the pipeline.

Compliance/Violations

This section addresses the comments received by the Department during the public comment period on the topic of compliance and violations. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

207. Comment

6. The Transco compliance record is reason enough for DEP to deny permits.

With the history from 2017-2021 of "Failure to comply with permit conditions," why is DEP entertaining more permits? "Failure to use Special Protection Best Management Practices for discharges to High

Quality or EV waters" shows that Transco-REAEP cannot be trusted with additional permits that endanger HQ or EV waters. These violations also beg the question of whose responsibility is it if there is a "Failure to implement Best Management Practices." And, why did the permit allow use of a site where "conditions present a potential for pollution to waters of the Commonwealth." DEP does not have the staff or budgeted resources to monitor methane, soil quality, stream health, or invasive species.

Violations:

https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleClient.aspx?ClientID=16332

- Failure to use Special Protection Best Management Practices for discharges to High Quality or Exceptional Value Waters. 3/27/18
- Failure to implement effective Best Management Practices. 8/19/21, 10/25/17

- Failure to maintain effective Best Management Practices. 3/27/18
- Site conditions present a potential for pollution to waters of the Commonwealth. 12/1/17
- Failure to comply with permit conditions. 8/19/21, 12/1/17
- Failure to permanently stabilize the earth disturbance site. 11/15/17 (588)

208. Comment

Transco fails to acknowledge its outstanding violations with the DEP, doesn't say that it has other pending permit applications, and doesn't acknowledge that REAE will increase emissions and exacerbate the climate crisis. (16, 53, 56, 103, 112, 120, 131, 133, 136, 147, 174, 197, 216, 238, 290, 298, 433, 501, 510-511, 515, 546, 590, 617, 619, 623, 661, 702, 715, 745, 818, 825-832, 837-841, 845-848, 850, 854-856, 859)

209. Comment

Commenters are concerned about the inaccuracies and material omissions in the Applications.

In both the Luzerne and Monroe County Chapter 105 applications, the same problem appears in the Compliance Review section of the Joint Permit Application Form. Transco checked "No" to the question "Is the applicant (owner and/or operator) currently in violation of any permits issued by the Department?" This form was dated March 3, 2022. As of March 31, 2022, the Department issued Transco an air pollution violation for Compressor Station 515.

https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleViol.aspx?InspectionID=334 0423. The enforcement status of that violation is currently unlisted. Until that violation is resolved, the Department should not issue additional permits to Transco. (134)

210. Comment

Transco fails to acknowledge its outstanding violations with the DEP, doesn't say that it has other pending permit applications. (120)

Response 207-210:

DEP staff reviewed the compliance history of the applicant and relevant parties with the laws that DEP administers. These compliance history reviews are authorized by The Clean Streams Law under 35 P.S.§§ 691.1–1001. Compliance history reviews, conducted as part of the permit review process, are an important component of DEP's overall compliance assurance program. In some cases, DEP is mandated by statute to withhold or deny a permit when the applicant fails to comply with existing legal requirements or has a demonstrated a lack of ability or intent to comply with applicable laws.

The conclusion of the compliance history review is that based on this compliance history review, the Department has determined that the applicant is not in continuing noncompliance with applicable laws not being addressed to the satisfaction of the Department and that the applicant has not shown a lack of ability or intention to comply with such laws as indicated by past or continuing violations. With the provided information and the results of this review, it has been determined that an appropriate

compliance review has been completed and the application(s) are therefore recommended for approval.

DEP's compliance history review conducted here is further explained below:

As part of the Department's review of Transco's Permit Application, the Department conducted a review of Transco's compliance history. First, the Department reviewed the information Transco submitted in its application materials and consulted the eFacts system to verify the information provided. Then, the Department compiled a compliance history for Transco and its parent and subsidiary corporations using information from the eFacts database. The Department confirmed information related to parent and subsidiary corporations with Transco during this process. Then, the Department coordinated internally with regional office compliance staff to determine whether any outstanding compliance issues existed that were not captured in eFacts. During this process the Department identified unresolved Notices of Violation and enforcement actions. The Department discussed these compliance matters with the applicable regional staff and found that they were either being addressed to the satisfaction of the Department or were closed and not updated in eFacts. Additionally, the Department reviewed all of Transco's open and closed violation for the past 5 years for all Department offices and all DEP programs. The Department did not observe a pattern of violations nor a lack of intention or ability to comply with the provisions of the law.

Finally, on the date the Department issued the permits, the Department conducted a final compliance check to determine whether any compliance issues occurred since the date of the initial eFacts search. The Department did not identify any new compliance issues during this search.

After this review, the Department determined that Transco has no continuing noncompliance with the laws administered by the Department that are not being addressed to the satisfaction of the Department and that Transco has not shown a lack of ability or intention to comply with the applicable law as indicated by past or continuing violations.

As noted by the commenters, Transco submitted the Joint Permit Application form on March 3, 2022. This predated Transco's receipt of the Department's Notice of Violation dated March 31, 2022 alleging failure to complete volatile organic compound (VOC) stack testing at Compressor Station 515. As noted in Transco's response to DEP on April 6, 2022, the testing was completed, and all sources were in compliance with the applicable emission limits.

Species Protection, Agency Reviews, and PNDI

This section addresses the comments received by the Department during the public comment period on the topics of species protection, agency reviews, and PNDI. Excerpts of comments

received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

211. Comment

E. The Proposed Project Will Impact Threatened and Endangered Species.

The Transco REAE project is proposed to be constructed within the habitat of several threatened and endangered plant and animal species. Many of the surveys detailed in the permit application were incomplete and scheduled to be conducted in 2021. However, most of the 2021 field survey results provided as supplemental information in September 2021 were marked "privileged and confidential information" so we are unable to comment at this time.

Furthermore, Transco has previously changed the route of the pipeline without communicating this to the agencies involved in the PNDI coordination process. An email from the PGC to WHM Consulting (the consultant retained by Transco) dated September 8, 2020 states that, "...it appears that the pipeline route has changed while the study area remained the same." The email also states that Transco never specified whether blasting would be required, when in fact it would be required. While this information was later clarified, it is unclear why Transco did not initially communicate this vital information that substantially affects the potential impacts of the project to the proper agencies.

Completed surveys have revealed the presence of several threatened and endangered plant and animal species. Two DCNR listed plants, blunt-manna grass (Glyceria obtusa) and white-fringed orchid (Platanthera blephariglottis), were found within the project area. It is important that these plants are not removed or disturbed and that the hydrology and sunlight exposure in their habitat are not altered. Acoustic surveys determined the probable presence of the federally and state endangered Indiana bat (Myotis sodalis) at one location, as well as the probable presence of the northern long-eared bat (Myotis septentrionalis) at two survey sites associated with the Effort Loop and three survey sites associated with the Regional Energy Lateral. In addition, the autoclassifier used to conduct the acoustic surveys determined the probable presence of two Pennsylvania state endangered bat species, the little brown bat (Myotis lucifugus) and the tri-colored bat (Perimyotis subflavus). Finally, acoustic sampling also determined the probable presence of the state-threatened eastern small-footed bat (Myotis leibii) at eight locations.

To minimize direct human contact with bats, the PGC imposed a temporary moratorium on the 2019-2020 bat mist net survey season to minimize potential disease transmission to bat populations. It is unclear if this moratorium was lifted in 2021, but mist net surveys (provided that equipment is properly sanitized to avoid disease spread) would be beneficial given the number of sensitive bat species detected by acoustic sampling. While acoustic sampling is effective, it does not account for bats that are not vocalizing during the sampling window and therefore many individual bats can potentially remain undetected. Approximately 250 acres of trees are proposed for removal during construction of the project. Land clearing, especially of forested areas, may adversely affect these bat species by killing, injuring or disturbing roosting bats, and by removing or reducing the quality of foraging and roosting habitat. With

the number of state and federally listed bat species documented, tree clearing can significantly harm local populations.

According to correspondence with the PFBC, the portion of the Regional Energy Lateral east of I-476 is in close proximity to known critical timber rattlesnake (Crotalus horridus) habitat. Potential denning and gestational habitat were identified in the study area during Phase I Habitat Assessment surveys. A Phase II presence/absence survey was scheduled in 2021 in habitat areas where potential denning habitat was identified, but as previously stated the results of this survey have not been revealed to the public. Transco proposes to re-construct rock habitat identified as gestation habitat during the project construction restoration. Timber rattlesnakes do not breed every year and surveys conducted during non-breeding years may not detect gestation habitat as a result. Furthermore, timber rattlesnakes utilize many rock outcroppings throughout the year, many of which are significantly far from their winter denning habitat. It would be beneficial for timber rattlesnakes confirmed in the project area to be radio tracked in order to document their spatial ecology and the exact areas they utilize throughout the year. Blasting and rock removal could kill any timber rattlesnake hiding within the rocks at the time. Re- constructing the rock habitat after the fact would not be beneficial to dead snakes.

Finally, bog turtle (Glyptemys muhlenbergii) field surveys were completed in April and July 2020, and one potential site was found. As a result, further consultation with the USFWS regarding the potential site took place. Since disturbance is located adjacent to the wetland at the one location, and there will be no disturbance or hydrologic impacts to the potential bog turtle habitat, the USFWS concluded that Phase 2 surveys did not need to be conducted at the location. However, Transco is proposing wetland mitigation at an off-site location in Northampton County. The mitigation site, known as the Perin Mitigation Site, is located southeast of Pen Argyl eight miles away from the project area. The PNDI review indicated a potential occurrence of the bog turtle at the Perin Mitigation Site. 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 presence/absence survey was proposed in the spring of 2021, but again the results are unclear as they are not publically available.

In addition to being potentially suitable bog turtle habitat, the wetlands at the Perin Mitigation Site are hydrologically connected to Waltz Creek, a naturally reproducing trout stream. Therefore, these wetlands are considered Exceptional Value (EV) regardless of bog turtle presence. Approximately 8.7 acres of the site are Palustrine-emergent wetlands (PEM), the preferred wetland type of the bog turtle. According to the DCNR, emergent wetlands are the least abundant wetland type in Pennsylvania, being one-third as abundant as forested wetlands and only one-half as common as the scrub-shrub types. About 14 percent of Pennsylvania's wetlands are emergent wetlands. The wetland enhancement plan for the Perin Mitigation Site involves planting several species of trees, including pin oak (Quercus palustris) and silver maple (Acer saccharinum). Planting trees within an emergent wetland may accelerate succession into a scrub-shrub or forested wetland and eventually degrade its suitability as bog turtle habitat. Given that the wetlands at the site are EV and suitable bog turtle habitat, it is

inappropriate to utilize it as a mitigation site. Attempting to enhance it may actually do more harm than good and leaving it in a natural state would be the most beneficial for its ecological function. (134)

212. Comment

The project is also proposed to be constructed within the habitat of several threatened and endangered plant and animal species including white-fringed orchid, Indiana bat, northern long-eared bat, timber rattlesnake, and bog turtle. Some of the proposed wetland mitigation measures actually appear to inflict harm to bog turtle habitat which is unacceptable. (32, 115, 128, 131, 137, 176, 180, 211, 236, 242, 245, 271, 275, 312, 339, 354, 367, 386, 388, 408, 412, 414-415, 419, 423, 437, 445-446, 463, 470, 492, 619, 622, 639-658, 660-681, 683-693, 719, 728)

213. Comment

Considering the documented presence of state endangered plants and animals throughout the Long Pond Macrosite, there's less room for error in this project. One collateral risk is that nearby landowners may opportunistically mow or use herbicide near right-of-ways that were previously not accessible, due to the clearing of trees along their property adjacent to the easement. An expanded pipeline may also attract the attention of ATV and UTV users who live in nearby residential areas with direct access to the expanded easement. Such activity puts at risk the state endangered plants and animals present in the existing easement. Transco should explore methods to restore and expand existing barriers to entry for such activity throughout this sensitive geographic region of the project. (1)

214. Comment

EL-4 and EL-5 are associated with the hydrology of Lake Mineola, and the shallow kettle lake which directly influence lake Mineola marsh. Lake Mineola marsh is one of the most important wetlands in the entire state of Pennsylvania, and contains a population of federally endangered bulrush plant species. (1)

215. Comment

The DEP must fully consider impacts to fisheries and benthic invertebrates.

Transco REAE proposes to cut across multiple Class A Wild trout streams and naturally producing wild trout streams, which will also impact associated exceptional value (EV) wetlands. Exceptional value wetlands shall not be degraded. Transco must explain how these trout streams and EV wetlands will be monitored and not degraded by pipeline cuts and what Transco shares in its application is woefully inadequate. Correspondence from the PAFBC (October 6, 2020) lists three species of rare mussels that are known to be present in the vicinity of the Susquehanna River pipeline crossing - Elktoe (Alasmidonta marginata, Rare - S4); Green Floater (Lasmigona subviridis, Imperiled – S2); and Triangle Floater (Alasmidonta undulata, Rare) and notes that additional surveys are needed.

One in ten of North America's freshwater mussel species has gone extinct in this century. Meanwhile, 75% of the remaining species are either rare or imperiled. This alarming decline is directly tied to the degradation and loss of essential habitat, and the invasion of exotic species such as the Asian clam. Exotic species compete for space and food with native mussels. Destruction of freshwater mussel habitat has ranged from dam construction, channelization, and dredging to siltation and contaminants. Open pipeline cuts cause siltation that can imperil these species that are already struggling. PAFBC notes if an HDD is conducted across the Susquehanna these mussel surveys, which should be conducted between May 15 to October 1, may be avoided. These surveys should be conducted regardless of the type of crossing. Protection of these vulnerable species and the benefits mussels provide to water quality health by filtration must be considered. We would also note here as above, that Transco maps include a northern crossing to the Susquehanna River that is not collocated with the original pipeline ROW – Transco should provide more details as to why collocation is not being pursued for this major River crossing of the Susquehanna River.

Benthic invertebrates are impacted during the construction phase of a pipeline whenever any of the open trench cut methods are used. Changes in downstream diversity and structure of benthic invertebrate communities can result both in the short and the long term. During the time of construction, direct damage and habitat destruction occurs including cascading effects to other ecosystem services otherwise provided by the invertebrates – including as food for other dependent species, the water quality benefits provided by invertebrates helping with nutrient breakdown, and the breakdown of instream detritus creating food for other species. These impacts must be thoroughly considered.

Using the open trench cut method of crossing can affect fish, including direct harm but also by reducing the suitability of habitat including for eggs, juveniles and overwintering. Inadvertent returns of HDD fluid can also cause harm. Fish exposed to elevated suspended solids levels can experience reduced feeding rates, physical discomfort or damage from the abrasive materials on their gills, decreased instream visibility, reduced food supply, and increased competition as fish attempt to move to cleaner waters. For example, the filling of riffles not only can have adverse impacts for invertebrates and fish, in terms of taking important habitat, but it can also diminish the ability of the riffles to help create oxygen important for aquatic life.

Over time, these impacts can depress the immune system of fish, result in lower growth rates, result in increased stress on individuals and populations, cause damage to the gills – all of which can result in a decline in fish and population health and survival rates. This of course all gets compounded by adverse effects to the suitability of habitat for eggs and juveniles necessary to support the overall community and population. Additionally, downstream sedimentation and also disruption of flows during crossing activities can result in areas of the stream that are shallower or dewatered, thereby taking preferred habitat. These impacts must be thoroughly considered – including both short term and long term impacts.

All of the aquatic, fish, amphibian and invertebrate species located in and/or around the streams, rivers and/or wetlands to be crossed or impacted by the project must be thoroughly

catalogued, their population status considered, and the ramifications of the Transco REAE pipeline construction and operation on aquatic individuals and communities must be analyzed. This is especially important for anti-degradation streams as well as impaired streams on the 303(d) list. For example, the headwater streams impacted by the Project should be surveyed for native brook trout. The crossing of multiple streams, including trout waters, will have a large impact on the trout populations and spawning in the region, especially during construction, and will degrade the waterways long after the Project is completed.

Not only must the impact on present species be assessed, but the impact on habitat potential for species that once inhabited the area, or could inhabit it in the future if properly protected must also be considered. Among the impacts resulting from construction of the Project, the Department should also examine impacts to all aquatic ecosystems caused by the channelization of groundwater and surface water to new areas as it runs parallel to the new pipeline. For example, a gas pipeline installation that crossed the Musconetcong River in Asbury, New Jersey resulted in an alteration in the channelization of groundwater towards running parallel with the pipeline and away from the river, decreasing water levels in the river and negatively impacting trout spawning and macroinvertebrate populations.(1)

216. Comment

Forest fragmentation and habitat loss is a serious consequence of pipeline construction. Damage to a forest ecosystem includes the direct and actual location of the foot print of the ROW, roadways, construction areas, and above ground aperture locations. An additional 300 feet of forest on either side of the ROW is also impacted. "[F]orest clearing creates an associated edge effect" whereby "increased light and wind exposure creates different vegetation dynamics".

The Nature Conservancy has determined that "[t]he expanding pipeline network could eliminate habitat conditions needed by "interior" forest species between 360,000 and 900,000 acres as new forest edges are created by pipeline right-of-ways." Maps of some of the interior forested areas to be cut are included in the Transco REAE Migratory Bird Plan; DRN would recommend that the acreages of forest interior to be crossed should also be outlined in the overall summary and impact tables for the EIS. (1)

217. Comment

The DEP and sister agencies must fully assess impacts to wildlife.

All animal species located on or that utilize habitats for any portion of the year and their life cycle in, around and/or impacted by the proposed ROW, construction areas and/or project apertures (such as compressors and valve stations) must be thoroughly catalogued, their population status considered, and the ramifications of the Transco REAE pipeline construction and operation analyzed. Not only must the impact on present species be assessed, but the impact on habitat potential for species that once inhabited the area, or could inhabit it in the future if properly protected and preserved, must also be considered.

Among the impacts to be considered is the impact to interior forest species, such as black-throated blue warblers, salamanders, and many woodland flowers, that require shade, humidity, and tree canopy protection that only deep forest environments can provide.

A pipeline ROW corridor "inhibits the movement of some species, such as forest interior nesting birds, which are reluctant to cross openings where they are more exposed to predators." While some species may be inhibited from travelling up or across an open pipeline ROW, others will readily travel up and over, increasing the level of harm – this includes all terrain vehicles (ATVs) that continue to impact areas. DRN has observed sensitive amphibian species attempting to cross old and "remediated" pipeline ROWs that once built, cut off and endanger these migratory pathways to seasonal vernal pools. The clearing of forest for pipelines can also result in the introduction and linear and outward spread of invasive plant species (such as Japanese knotweed, Japanese stiltgrass, multiflora rose, Phragmites, oriental bittersweet, Japanese hops, porcelainberry, and garlic mustard) resulting in further decline and loss of native wildlife species diversity, and the creation of microclimates that degrade forest health through sunscald and increased wind-throw. For example, the pipeline corridor becomes a path for ATVs, and seeds of invasives can spread along the corridor in vehicular tires. These invasive plants, if tolerant to shade, can also then colonize surrounding forests and natural habitats, decreasing habitat and diversity within the adjacent forest habitat.

. . .

DEP should use the best available science to ensure protection of wildlife and avoid jeopardy to wildlife habitat.

The scope of study for impacts to species cannot be limited to the ROW. The ROW forest buffer, access roads, construction areas, staging areas, areas of aperture placement and operation, and buffers must be examined for species and habitat. The effects of increased forest edge and habitat degradation due to the impacts of construction and permanent impairment of resources on these species must be analyzed as well. The ramifications of noise, light, air and heat impacts from operation of the pipeline and associated apertures such as compressor stations must be fully considered. DEP should also not allow Transco to count cutting mature forests as "temporary impacts" since it will take decades for a mature forest to regrow, especially with impacted soils from pipeline construction where Transco proposes to have temporary work spaces (TWS) and additional temporary work spaces (ATWS). Again, as noted above, cutting across already disturbed and compacted manicured lawns in subdivisions is much less detrimental to the watershed and ecosystem services than cutting across a forest or scrub shrub habitat that is natural. Lawns have little ecosystem value and can be replanted much easier than restoring a natural forest.

The DEP must thoroughly catalogue and consider impacts to endangered, threatened, and vulnerable plant and animal species.

The Transco REAE project is proposed to be constructed within the habitat of several threatened and endangered plant and animal species. Many of the surveys detailed in the permit application were incomplete and scheduled to be conducted in 2021. However, most

of the 2021 field survey results provided as supplemental information in September 2021 were marked "privileged and confidential information" so we are unable to comment at this time. Furthermore, Transco has previously changed the route of the pipeline without communicating this to the agencies involved in the PNDI coordination process. An email from the PGC to WHM Consulting (the consultant retained by Transco) dated September 8, 2020 states that, "...it appears that the pipeline route has changed while the study area remained the same." The email also states that Transco never specified whether blasting would be required, when in fact it would be required. While this information was later clarified, it is unclear why Transco did not initially communicate this vital information that substantially affects the potential impacts of the project to the proper agencies.

Completed surveys have revealed the presence of several threatened and endangered plant and animal species. Two DCNR listed plants, blunt-manna grass (Glyceria obtusa) and white-fringed orchid (Platanthera blephariglottis), were found within the project area. It is important that these plants are not removed or disturbed and that the hydrology and sunlight exposure in their habitat are not altered. Acoustic surveys determined the probable presence of the federally and state endangered Indiana bat (Myotis sodalis) at one location, as well as the probable presence of the northern long-eared bat (Myotis septentrionalis) at two survey sites associated with the Effort Loop and three survey sites associated with the Regional Energy Lateral. In addition, the autoclassifier used to conduct the acoustic surveys determined the probable presence of two Pennsylvania state endangered bat species, the little brown bat (Myotis lucifugus) and the tri-colored bat (Perimyotis subflavus). Finally, acoustic sampling also determined the probable presence of the state-threatened eastern small-footed bat (Myotis leibii) at eight locations. As mentioned in greater detail above, endangered mussels were also found. Please also note the comments above regarding the federally endangered bulrush species in Mineola marsh.

According to correspondence with the PFBC, the portion of the Regional Energy Lateral east of I-476 is in close proximity to known critical timber rattlesnake (Crotalus horridus) habitat. Potential denning and gestational habitat were identified in the study area during Phase I Habitat Assessment surveys. A Phase II presence/absence survey was scheduled in 2021 in habitat areas where potential denning habitat was identified, but as previously stated the results of this survey have not been revealed to the public. Transco proposes to re-construct rock habitat identified as gestation habitat during the project construction restoration. Timber rattlesnakes do not breed every year and surveys conducted during non-breeding years may not detect gestation habitat as a result. Furthermore, timber rattlesnakes utilize many rock outcroppings throughout the year, many of which are significantly far from their winter denning habitat. It would be beneficial for timber rattlesnakes confirmed in the project area to be radio tracked in order to document their spatial ecology and the exact areas they utilize throughout the year. Blasting and rock removal could kill any timber rattlesnake hiding within the rocks at the time. Re- constructing the rock habitat after the fact would not be beneficial to dead snakes.

. . .

DEP must assess how the project would affect these species including impacts on habitats, vegetation, reproduction, water quality and other ecological impacts such as increased sedimentation of waterways, increased water temperatures, increased soil temperatures, multiple disturbances over time, mortality due to increased traffic, and impacts to groundwater recharge. All possible impacts to these species resulting from the Project must be studied.

Species monitoring is an extensive process and the timeframe for conducting these studies must not be cut short simply to satisfy the applicant's desired in-service date. More time may be needed to study the true impacts to these threatened, rare, and endangered species if this Project moves forward. DEP must carefully assess whether this Project can proceed without disrupting this habitat or resulting in the taking of any federal or state protected species. Furthermore, DEP should require Transco REAE to mitigate for the loss of habitat. DEP should clarify that any disturbed areas that will result in compensation, will involve resources that have substantially the same values and functions as those impacted.

The scope of study for impacts to threatened, endangered, and rare species cannot be limited to the ROW. The ROW forest buffer, access roads, construction areas, staging areas, areas of aperture placement and operation, and buffers must be examined for species and habitat. The effects of increased forest edge and habitat degradation due to the impacts of construction and permanent impairment of resources on these species must be analyzed as well. The ramifications of noise, light, air and heat impacts from operation of the pipeline and associated apertures such as compressor stations must be fully considered. (1)

218. Comment

The applicant must fully consider landscape connectivity impacts.

The ROW will create fragmentation of the forest, allowing edge species, including white-tail deer and cowbirds, to encroach deeper into the core forest. These edge effects can negatively impact plant and animal species at least 300 feet within the forest boundary. These impacts must be examined to ensure plant and animal species, including but not limited to rare, threatened, and endangered plant species populations can be maintained in the ecosystem surrounding the ROW. Among the issues to be considered is whether any portions of the planned ROW are an essential functional portion of a species' overall habitat requirements, such as nesting or feeding, and therefore could not or would be very difficult to replace. Furthermore, species requiring large integral home ranges will be negatively impacted and coordination with NPS and the U.S. Fish and Wildlife Service is necessary to identify whether such species will be impacted by further forest fragmentation. As stated above, Transco's Migratory Bird Plan that outlines the interior forest impacts must be analyzed for completeness. (1)

219. Comment

The project is proposed to be constructed within the habitat of several threatened and endangered plant and animal species including white-fringed orchid, Indiana bat, northern long-eared bat, timber rattlesnake, and bog turtle. Some of the proposed wetland mitigation measures actually appear to inflict harm to bog turtle habitat which is unacceptable. (748)

220. Comment

The project is proposed to be constructed within the habitat of several threatened and endangered plant and animal species including white-fringed orchid, Indiana bat, northern long-eared bat, timber rattlesnake, and bog turtle. Some of the proposed wetland mitigation measures actually appear to inflict harm to bog turtle habitat which is unacceptable.

Transco's application asserts that it will protect bat species in the project area through seasonal restrictions on tree felling...but then it defines ground disturbance, which is permitted during those seasonal restrictions, to include tree felling. As a result, Transco would be allowed to cut down the adjacent forest at any time of the year in a mostly forested landscape that has ailing bat species present. This the opposite of protective and flies in the face of threatened and endangered species obligations and laws.

Transco has simply not done enough to take the sensitive wildlife in the area into account. For example, it did no surveys for wood turtles, even though we know that citizens have reported them in the area and that the federal government is considering listing the wood turtle as an endangered species. They have also played down the impacts of their 25-foot wide permanent right of way, which is 25 feet of permanently disturbed pipeline land on top of their existing right of way that already cuts across the land, that wildlife would need to cross. (7, 32, 109, 116, 118, 123, 131, 143, 147, 156, 176, 185, 211, 214, 236, 242, 275, 296, 312, 320, 330, 338, 354, 359, 376, 386, 408, 414-415, 419, 426, 437, 469, 484, 492, 619, 640, 643, 646, 649-651, 653, 658, 661, 672, 679, 686, 692, 716, 726, 749-780, 783, 788, 790-791, 794, 797-798, 801-805, 807-813, 815-816, 819, 822, 835-836, 842-843, 849, 860)

221. Comment

Transco hasn't done enough to account for sensitive wildlife in the area. Transco's application incorrectly claims protection of bat species through seasonal restrictions on tree felling. But Transco also defines ground disturbance, which is permitted during seasonal restrictions, to include tree felling. As a result, Transco would be allowed to cut down the adjacent forest at any time of the year in a mostly forested landscape that has vulnerable bat species present. In addition, Transco did not survey for wood turtles, currently under federal consideration as an endangered species, despite citizen reports of wood turtles in the area. Transco has also played down the impacts of its 25-foot wide permanent right of way, which is 25 feet of permanently disturbed pipeline land on top of their existing right of way that already cuts across land that wildlife would need to cross. (16, 53, 56, 103, 112, 120, 131, 133, 136, 147, 174, 197, 216, 238, 290, 298, 433, 501, 510-511, 515, 546, 590, 617, 619, 623, 661, 702, 715, 745, 818, 825-832, 837-841, 845-848, 850, 854-856, 859)

222. Comment

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. (588)

223. Comment

Regarding the permits for this hearing, we attest that Transco needs to better account for sensitive wildlife along the Pennsylvania route, including local bat populations and wood turtles; address the lack of restoration for proposed wetland impacts; and address the concern of landslides during construction. (844)

224. Comment

Wildlife: The project is proposed to be constructed within the habitat of several threatened and endangered plant and animal species including white-fringed orchid, Indiana bat, northern long-eared bat, timber rattlesnake, and bog turtle. In addition, environmental advocates note that Transco hasn't taken enough care to protect the wildlife in the area, highlighting that detailed wildlife surveys have not been conducted even though the federal government is considering listing several of the potentially impacted species endangered. (483)

225. Comment

Among our concerns are the following impacts:

- Sinkholes, spills, property damage, and noise from the drilling process similar to the destruction caused by Mariner East II
- Damage to riparian areas and streams from open-cut crossings
- Forest fragmentation, soil compaction, stormwater runoff, and flooding
- Public health impacts like air quality degradation from compressor stations and industry equipment along the route
- Drinking water contamination and water quality degradation

• Habitat destruction, impacts on threatened and endangered species, and loss of wetlands (858)

226. Comment

The Applications Do Not Adequately Account for the Needs of Wildlife, Including Threatened and Endangered Species.

There are significant bat species in the proposed project area, and the Transco applications do not sufficiently protect these species. Northern long-eared bats, Indiana bats, tri-colored bats, and little brown bats were documented in the project area. Indiana bats are federally endangered, while Northern long-eared bats are federally threatened. Tri-colored bats and little brown bats are proposed to be federally listed in the near future.

Transco's proposed seasonal timing restrictions near hibernacula and summer roosting habitat are also insufficient. According to the applications, trees may only be cleared using non-mechanical equipment between November 16 and March 31; ground disturbance may only occur between April 1 and November 15. However, the term "ground disturbance" includes mechanized tree felling, which defeats the purpose of a seasonal timing restriction, since the entire calendar year is therefore technically open to tree felling.

The effects of tree felling can be permanent to wildlife. Transco asserts that, "During operation, previously forested habitat (including forested wetlands) would not reestablish within the permanent right-of-way for the pipelines. The principal impact would be a shift in species use from those favoring forest habitat to those using either edge habitat or areas that are more open. It is not likely that the relatively small widening (generally an additional 25 feet) of existing permanently cleared rights-of-way would impede the movement of most forest interior species."

Although 25 feet may seem inconsequential, it is a significant distance to small animals such as salamanders, particularly when considered cumulatively with the amount of forest that was previously cut. Transco also states that, "Long-term impacts on fishery resources could occur if the adjacent riparian vegetation does not recover." However, there are no provisions to mitigate these impacts on fishery resources in the event that the vegetation does not grow back. Furthermore, Transco's plan to have stump sprouting be a major part of its "restoration plans" flies in the face of mitigating thermal impacts which is a requirement of anti-degradation. Additionally, construction of the Effort Loop would impact a total of 27 acres of habitat within the Long Pond Preserve IBA, of which 8.8 acres would be permanently impacted (i.e., forest converted to herbaceous cover). The conversion of one habitat type to another is significant, and no amount of mitigation can compensate for this habitat loss (see past comments for more detail on the significance of Long Pond Preserve area).

In addition, several vernal pools were documented in the project area, but no avoidance or mitigation measures are mentioned. Wetland W4-T3 in the Effort Loop has a vernal pool that contained two types of amphibian egg masses in it, but the surveyors did not identify which species they belong to. Furthermore, a timber rattlesnake den was confirmed within the project

area. Proposed mitigation includes exclusion fencing, reconstructing rock habitat, and having an on-site biologist remove timber rattlesnakes away from the area. According to scientific literature, timber rattlesnakes often exhibit strong fidelity to their dens. Efforts to impede these animals from reaching their destination may stress or exhaust them to the point of death. Transco's plans do not adequately account for the needs of these struggling species.

Finally, wood turtles are not included in the PNDI consultation because they are not threatened or endangered, but are a species of special concern in PA. It is claimed that mitigation measures included to protect other wildlife would universally protect wood turtles, but this is not accurate. Wood turtles are currently under review for federal listing by the U.S. Fish and Wildlife Service. Wood turtles have been documented on iNaturalist (a citizen science website/app) in some of the streams directly affected by the project and potential impacts to them should be considered and thoroughly reviewed. (134)

227. Comment

Safety fencing used and E&S barriers should not be allowed to impede vernal pool species migrations during early spring and late summer as species return to or from their breeding grounds. In the past we have documented lagging mitigation practices by pipeline operators at the expense of the animals and aquatic life that call these regions home. In special protection watersheds, this type of disregard for sensitive species should not be allowed. Additional measures such as siltron pollution prevention fence and other recognized BMPs should be deployed in all special protection waterways and EV wetland regions.

First, Commenters note that there have been extensive and recent updates to Fish and Boat Commission's Class A and naturally reproducing wild trout waters the last few months, some as recent as August 22, 2022. Transco and DEP must cross reference its list of impacted streams with FBC to ensure its lists outlined on Table 1 in E&S Narrative are accurate and up to date; presently the narrative is dated "revised as of July 2022." Its critical these tables with existing uses and trout designations are accurate to ensure anti-degradation practices are required (134).

228. Comment

Transco hasn't done enough to account for other sensitive wildlife in the area. Many of these areas are home to Federally listed Threatened and Endangered species of both plants and animals. For example, Transco claims protection of bat species through seasonal restrictions on tree felling. But Transco also defines ground disturbance (which is permitted during seasonal restrictions) to include tree felling. As a result, Transco would be allowed to cut down the adjacent forest at any time of the year in a mostly forested landscape that has vulnerable bat species present. In addition, Transco did not survey for wood turtles, currently under federal consideration as an endangered species, despite citizen reports of wood turtles in the area. (120)

229. Comment

Next, with regard to wildlife, Transco's Chapter 105 applications assert that it will protect bat species in the project area through seasonal restrictions on tree felling, but then they define ground disturbance which is permitted during those seasonal restrictions to include tree felling. As a result, if the application is granted as it was written Transco would be allowed to cut down adjacent forests at any time of year in a mostly forested landscape that has bat species present. This is the opposite of protected and should be revised. (134)

Response 211-229:

Transco consulted with the PFBC, PGC, DCNR, and USFWS individually, beginning coordination in 2020. Project updates were submitted as the project evolved. Each agency reviewed the complete project and determined potential impacts for threatened and endangered species and species of special concern under their jurisdiction, resulting in ongoing coordination, target species surveys, and avoidance and mitigation measures, as needed. Transco received the necessary concurrences and/or clearances from the agencies related to possible species impacts. Concurrences can be found on the Department's Pipeline Portal. Please note specific materials within the Requirement G Attachments of the Chapter 105 Permit Application have been redacted to protect locational information of threatened and endangered species. In addition to its review, the Department has included special conditions in the permits regarding time of year restrictions on tree cutting, per consulting agency reviews, to reiterate restrictions already noted in the application by Transco.

Regarding specific topics addressed above:

As a reviewing agency, the PFBC, the Department, and Transco have reviewed the permit applications since the August update and confirmed that there have been no updates to the PFBC trout classifications or the Department Chapter 93 designated and existing use lists for the streams along the Project according to the latest lists.

PFBC stated impacts to mussels will be avoided through the use of the Direct Pipe crossing. Transco is following time of year restrictions related to the Class A and Naturally Reproducing Trout waters crossed by the Project.

Transco has completed Timber Rattlesnake Studies as requested by the PFBC with areas suggested for survey. The PFBC reviewed Transco's submittal regarding construction and mitigation, included within the survey reports, and the PFBC indicated the proposed measures will minimize potential impacts to the species.

Following the Technical Deficiency Response received March 27, 2022, Transco included discussion on the Long Pond Reserve and Long Pond Preserve Important Bird Area in the Environmental Assessment Module S3.D.2(iv) of the Chapter 105 permit application. Avoidance of permanent forest habitat was not achievable within the Long Pond Preserve Important Bird Area (IBA); however, co-location with the existing Leidy system minimizes potential impacts to the IBA to the extent practicable. While

permanent impacts to forest within the Long Pond IBA are proposed, these are edge habitats and no fragmentation of large, undisturbed forested areas is proposed. Additionally, Transco will avoid clearing activities in the Long Pond Preserve IBA from April 1 through July 31.

To protect bat species, special conditions have been applied to the permit regarding time of year restrictions on tree cutting, per consulting agency reviews, to reiterate restrictions already noted in the application by Transco. As noted in Requirement G of the Chapter 105 permit applications, the PGC has determined that no impacts are likely and no further coordination is required for project activities associated with the Little Brown Bat and Tri-Colored Bat. Transco also received a not likely to adversely affect determination for both the northern long-eared and Indiana bat from the USFWS that was filed with DEP on September 1, 2022 and can be found on the Pipeline Portal.

Regarding Bog turtle habitat at the Perin Mitigation Site, a letter from USFWS on October 6, 2021 stated Phase 1, 2, and 3 surveys were received, finding no bog turtles and determining the project was not likely to adversely affect the bog turtles.

The wood turtle is not listed in Pennsylvania nor is a species of concern according to the Pennsylvania Natural Heritage Program. Although the species is not listed, in Pennsylvania the wood turtle is incorporated into the PGC and PFBC's Wildlife Action Plan Coordination with all relevant agencies in Pennsylvania did not identify any action needed for the wood turtle.

Likewise, Agencies did not identify any action needed for the eastern hellbender. Proper implementation of the permits and their conditions will limit impacts to this species.

Transco's Chapter 105 Permit Application includes repairs to the current pipeline ROW between MP 3.8 and 5.9 which has existing ATV impacts. Although trespassing can be an issue with ATV use, landowners still have access to their land to use as seen fit within the parameters of their easement agreements.

Please also note that Tranco's E&S Permit, in condition B.XII.C, specifies that Transco has a continuing obligation to ensure compliance with applicable federal and state laws pertaining to the protection of federal or state threatened and endangered species.

Geology and Geologic Hazards

This section addresses the comments received by the Department during the public comment period on the topic of geology and geologic hazards. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

230. Comment

The agencies must consider geology and soil impacts, which could be significant.

The applications should include a full examination of the geological formations that will be impacted by construction activities, such as groundwater aquifers and water table depth, sinkholes, and springs. Transco must disclose how this Project will avoid all negative impacts to these features.

Blasting for stream crossings with bedrock can be proposed by pipeline operators. Instream blasting causes direct mortality to fish and aquatic organisms. Trenching and blasting result in short term increases in sediment and turbidity levels that are higher than allowed by most regulatory agencies. Pipeline water crossings have been shown to greatly decrease available fish cover and habitat complexity in the ROW in the longer term. The elimination of pools, riffles, and other stream characteristics caused by pipeline construction can have serious impacts on fish populations by reducing the available area for feeding, breeding, rearing and resting. DRN has also observed and documented short term well water impacts to homeowners located near blasting and trenching operations of a pipeline ROW when turbidity and sediment in the well has made the water unpotable without treatment.

Areas of steep slopes will be traversed by the Project. Steep topography maximizes the potential for erosion, rock slides and even avalanches caused by construction of the Project. Significant permanent scarring of the geological resources could occur, with geologic impacts far more severe than would occur in level topography. Therefore, the feasibility of erosion control mechanisms in these areas must be evaluated taking into account local topography.

The digging of trenches for the Project will involve excavating tons of soil and requires that soil surveys be conducted in relation to the Project. Construction and re- establishment of vegetation along the ROW provides an opportunity for run-off and the loss of productive soil. Construction activities will change the drainage patterns along the ROW and necessitate detailed studies of impacts to water resources.

Expansion of the ROW has the potential to affect the physical properties of the soil along and adjacent to the ROW by clearing land cover, thus changing the sunlight exposure and moisture content of the soil. Reduction in soil moisture increases the risk of wind erosion. ROW expansion will also result in increased use of herbicides for ROW maintenance, which will chemically alter soil composition. Spillage of fuel oil and the creation of trench breakers during construction activities may also result in the chemical alteration of soil. (1)

231. Comment

For Chapter 102 applications, a desktop analysis completed for the Transco REAE Effort Loop portion in Monroe County revealed that the Effort Loop Pipeline does not cross any known, mapped, or inferred faults. No mines or Karst formations were identified in the site vicinity. However, the analysis outlined that Effort Loop Pipeline lies within a zone of moderate to high landslide incidence and susceptibility. For the REAE Regional Energy Lateral portion in Luzerne County, Transco's 102 application states the same conditions for this western portion of the pipeline as well (no karst from desk top analysis but moderate to high landslide incidence and susceptibility). The Luzerne Co. Chapter 102 soil mapping also

notes for the AOI for the Luzerne portion of the pipeline consists of 20.9 acres of strip mines, 22 acres of coal refuse, and 2.7 acres of mine wash, all with their own hazards.

The ramifications for this geology, legacy impacts, sinkholes and other resulting impacts, including the increased potential for a pipeline break or increased contamination, must all be considered. (1)

232. Comment

Finally, Transco's geologic hazard report provides no assurances that any hazards will be mitigated, avoided, or frankly even discovered before it is too late. The company identifies multiple miles of hazards, including high susceptibility to landslides, but presumes its routes are fixed rather than considering rerouting options as a method of hazard mitigation. Moreover, rather than do the analysis before starting pipeline construction, Transco does not intend to do further investigation until during pipeline installation, potentially creating the need for changes during construction that would not be subject to meaningful public scrutiny. (16, 53, 56, 103, 112, 120, 131, 133, 136, 147, 174, 197, 216, 238, 290, 298, 433, 501, 510-511, 515, 546, 590, 617, 619, 623, 661, 702, 715, 745, 818, 825-832, 837-841, 845-848, 850, 854-856, 859)

233. Comment

Regarding the permits for this hearing, we attest that Transco needs to better account for sensitive wildlife along the Pennsylvania route, including local bat populations and wood turtles; address the lack of restoration for proposed wetland impacts; and address the concern of landslides during construction. (844)

234. Comment

Geology: DEP should require that any geologic hazards resulting from pipeline construction and operation be immediately reported and mitigated. Despite identifying potential hazards in its geologic report, Transco assumes that its routes are fixed and without considering rerouting as a hazard mitigation technique. Complete and extensive geologic investigations should be conducted before pipeline construction and installation to determine that Transco has selected an optimal route in terms of environmental impacts. In addition, Transco should be required to work with the Pennsylvania Department of Conservation and Natural Resources to utilize its extensive data on geology, including mapping and core samples, in determining the safest pipeline route and siting. (183)

235. Comment

V. The Applications Do Not Reasonably Address and Plan to Mitigate Geologic Hazards.

Commenters have serious concerns about Transco's approach to geologic hazards. As background, Attachment B to the Chapter 102 application discusses geologic hazards. Section 2.3 indicates that more than ten miles of the Regional Energy Lateral are categorized as having a high susceptibility to landslides, and more than five miles of the Effort Loop are categorized the same. This presents a major risk.

Rather than considering safer locations for installation of the project, the applicant presumes the route is immutable and continues the analysis from there. Specifically, Transco commissions a preliminary geohazard evaluation by its vendor CEC, which proposes that: "Based on the conclusions presented, the following geohazards warrant, in our opinion, supplemental investigations and potential site specific geohazard mitigation measures during and/or prior to pipeline installation:" See Section 4.1. This is in a report revised June 16, 2022, so it is current.

This approach presumes first that the route is fixed rather than including rerouting options as a method of hazard mitigation. This is irresponsible, given the significant hazards projected along the existing course. Moreover, rather than do the analysis before starting pipeline construction, CEC recommends—and it appears Transco intends to move forward with—a plan for further investigation potentially not until during pipeline installation. This sets Transco up for the need for changes to construction plans during construction—changes which would not be subject to meaningful public scrutiny.

Furthermore, one of the major hazards is the high risk of subsidence in areas with depth of cover less than 100 feet over mined areas. See Section 3.3. That is the case for a portion of the about two miles of pipe proposed for over the Lance (Checker) coal seam. In Section 4.3, rather than recommending or even discussing routing around areas of potential mine subsidence, CEC recommends moving ahead with construction and dealing with sinkholes "on an as-needed basis." This is unwise and could lead to pipe rupture and explosion. (134)

236. Comment

Among our concerns are the following impacts:

- Sinkholes, spills, property damage, and noise from the drilling process similar to the destruction caused by Mariner East II
- Damage to riparian areas and streams from open-cut crossings
- Forest fragmentation, soil compaction, stormwater runoff, and flooding
- Public health impacts like air quality degradation from compressor stations and industry equipment along the route
- Drinking water contamination and water quality degradation
- Habitat destruction, impacts on threatened and endangered species, and loss of wetlands (858)

237. Comment

Transco's geologic hazard report provides no assurances that any hazards will be mitigated, avoided, or frankly even discovered before it is too late. The company identifies multiple miles of hazards, including high susceptibility to landslides, but presumes its routes are fixed rather than considering rerouting options as a method of hazard mitigation. Moreover, rather than do the analysis before starting pipeline construction, Transco does not intend to do further investigation until during pipeline installation, potentially creating the need for changes during construction that would not be subject to meaningful public scrutiny. (120)

Response 230–237:

Regarding erosion and sediment controls in areas of steep terrain, Transco is required to implement the E&S Plan submitted and approved by DEP which controls the volume, rate, and quality of stormwater runoff and associated pollutants from being discharges into surface waters, and which replication pre-construction infiltration and runoff condition to the extent practicable. Transco's E&S Plan complies with DEP's Chapter 102 regulations which ensure that it will not cause or contribute to violations of water quality standards.

In accordance with Chapter 102 and Transco's E&S Permit, in condition III.C, Transco is required to visually inspect the project site weekly, at a minimum, and within 24 hours of each stormwater event throughout the duration of construction and until the receipt and acknowledgement of the NOT.

Transco's E&S Plan includes a maintenance program which provides for the O&M of BMPs and the inspection of BMPs on a weekly basis and after each stormwater event, including the repair and replacement of BMPs, to ensure effective and efficient operation in accordance with narrative performance-based effluent limitations identified in Transco's E&S Plan and other application materials. The Department is able to follow the project through completion via inspection reports conducted by both the Department and conservation districts. Earth disturbance must be stabilized before the Chapter 102 permit can be terminated, and Transco will supply post construction and monitoring reports for restored resources for five years.

Moreover, Transco will employ at least one EI per construction spread. The EIs will be responsible for monitoring and ensuring compliance with all mitigation measures required by the Order and other permits, certificates, or authorizing documents for the Project. EIs will be empowered to order correction of acts that violate the environmental conditions of the Order, and other environmental permits. The EI will have stop work authority during construction.

Regarding geologic hazards, a desktop analysis and field assessment of geologic hazards were completed. In instances where geologic hazards were unavoidable, Transco developed a Geological Hazard Assessment and Mitigation Plan (Attachment B of the Chapter 102) that will be implemented during construction. The Plan includes oversight by a field representative, under the direction of a professional geotechnical engineer, and the implementation of BMPs during construction. Additionally, in accordance with Transco's E&S Permit in condition C.XVII, Transco is required to notify DEP or the conservation district immediately by phone if a geologic formation or soil condition develops on the project site that has the potential to cause pollution, and within 5 days following this notice, Transco must submit a plan drawing showing the location of that geologic formation or soil condition, photographs, the method of repair, and how E&S and/or PCSM BMPs will be modified as a result.

As part of the permitting process Transco conducted a thorough review of historic abandoned mine data in the vicinity of the project and compared the data to the history of subsidence along their existing A-line, which has been in service continuously since 1959. Based on this analysis Transco does not anticipate that any subsidence will occur within the abandoned mine areas. The proposed pipeline alignment passes through abandoned mine strip pits. When crossing these features, Transco is proposing to fill in the previously strip-mined areas, as identified on the Chapter 102 plans, with the existing spoil piles located adjacent to the pits, to minimize risk associated with crossing those features.

The Department evaluated whether the project activities would cause or contribute to a violation of an applicable state water quality standard and whether the project will cause or contribute to pollution of groundwater or surface water resources or diminution of the resources sufficient to interfere with their uses during its review of the applications. While excavation of the trench and construction of the pipeline have the potential to contribute to pollution during construction activities, an E&S Plan has been developed and will be implemented to minimize the potential for discharge during construction. Following construction, aquatic resources will be restored to their pre-construction grade, and the project area will be seeded and stabilized, to minimize the potential for future erosion and to facilitate the re-establishment of existing conditions.

Groundwater Impacts

This section addresses the comments received by the Department, during the public comment period, on the topics of groundwater impacts. Excerpts of comments received from individual commenters on these topics, as well as the Department's response to these comments, are provide below.

238. Comment

Commenters in the FERC proceeding raised several issues pertaining to water quality that must be addressed in an EIS. For example, the United States Environmental Protection Agency recommended "evaluation of water quality issues including surface water, groundwater, drinking water, stormwater management, wastewater management, wetlands and watersheds." (134)

239. Comment

Groundwater Impacts Are Not Fully Accounted For and Can Cause Wetland Damage As indicated in a Princeton Hydro expert report, an "often overlooked impact caused by pipelines (whether wastewater, stormwater or gas/oil) is that their construction can actually alter the movement of groundwater. Essentially, when the pipe and pipe trench intercept the shallow aquifer, groundwater flows can be prevented from flowing normally leading to changes in

⁶⁵ Comments of the U.S. Environmental Protection Agency, Doc. Accession No. 20210430-5433, Transcontinental Gas Pipe Line Company LLC, FERC Docket No. CP21-94-000 (Apr. 30, 2021).

base flow conditions or the hydrologic properties of adjacent wetlands. The pipeline and pipeline trench can function as a subsurface diversion forcing groundwater away from vital stream and wetland resources."⁶⁶ (1)

240. Comment

The proposed Transco REAE project, as demonstrated by the installation of other pipeline projects in our region and nation, will create new pathways for water flow, thereby altering the hydrologic pattern of the watershed and adversely impacting (in both quantity, quality and seasonal timing) streams, wetlands and drinking water sources.

According to expert observation, pipeline trenches can divert groundwater and as a result "permanently alter the hydrologic cycle in the vicinity of the pipeline right-of-way. This alteration will decrease the water resources available to support wetland hydrology and stream base flow in the summer and fall dry season." The compacted soils resulting from pipeline construction increase rainfall runoff and reduce groundwater infiltration. This can cause further negative impacts on wetland hydrology and stream baseflow in the area of the pipeline. "Increased runoff as a result of compacted soils, and increased drainage of shallow ground water" around a pipeline, due to previous and proposed construction practices, can increase "surface water flow and groundwater discharge in the wet winter and spring seasons and decrease summer and fall groundwater discharge which supports wetland hydrology and stream base flow." The result of reduced groundwater discharge during the dry summer and fall months can decrease the size of supported wetlands. So the result is too much or too little depending on the time of year. Another result of the altered flows can be to decrease stream baseflow that supports aquatic life and trout habitat in headwater streams in the dry summer and fall period.

Furthermore, the installation of the Project will involve drilling and digging into the bedrock, the potential effects of this must be considered. If these activities result in interception of the water table, dewatering activities would result in the localized drawdowns of water table elevation and could impact local wells. Construction activities may also result in contamination of groundwater by creating a direct flow of contaminants, including herbicides, into local aquifers. DEP must determine whether any of the aquifers along the ROW are solesource as this would magnify any negative impacts of construction. Protection of groundwater is a crucial concern for residents being impacted by the gas pipeline, and therefore, the negative impacts to groundwater quality and quantity must be heavily weighted in FERC's review of the public necessity of this Project. This review must also take into account any costs that would be borne by these municipalities if the Project depleted the quality of the water supply and groundwater to a point that water treatment facilities become necessary.

⁶⁶ The Short and Long-Term Consequences of the Construction of the PennEast Pipeline– A White Paper, Princeton Hydro, LLC, July 2015.

⁶⁷ Affidavit of Peter M. Demicco, DRN v. PA DEP an TGP NEUP, 2012.

⁶⁸ *Id*.

⁶⁹ *Id*.

Furthermore, increasing the runoff potential of soils due to compaction will negatively impact groundwater recharge areas surrounding the ROW. By removing the topsoil layer and associated forest litter and humus, runoff will decrease the soil porosity and moisture retention capacity. This will induce even greater levels of runoff and will damage the groundwater recharge capabilities of the ecosystem. The decreased ability to absorb water resulting in runoff and sedimentation severely decreases water quality. Previous FERC jurisdictional projects have resulted in significant soil compaction issues. The EIS must identify ways in which previous soil compaction problems can be avoided or properly remediated. A restatement of previous practices would be unacceptable.

To determine current water quality, the EIS must include a survey of the established benthic community in potentially impacted streams. This should include the composition, quantity, and diversity of the community using standardized sampling protocols consistent with the state's assessments. Anti-degradation streams that have special designations warrant special attention and protection, especially when a tributary has Category 1, Exceptional Value or High Quality designation.(1)

241. Comment

The applications should include a full examination of the geological formations that will be impacted by construction activities, such as groundwater aquifers and water table depth, sinkholes, and springs. Transco must disclose how this Project will avoid all negative impacts to these features.(1)

242. Comment

Please do not approve this proposed pipeline. The risk to our precious groundwater is far too great, especially in light of current climate change. I am a resident of Monroe County's West End and beg you to deny the permit. (820)

243. Comment

What I am concerned about is the water impacts, the groundwater impacts which is the stormwater and everything, taking into consideration the climate change and how our water is more impact - like the storms are so much worse. Our groundwater is not absorbing the same.

So when you are disturbing the earth that is - the federal government may have like terrible legislation, however, our state has the ability to do better. You have the ability to go above and beyond, and you can do that. And I'm asking you to consider a groundwater impact study before you allow any of these projects so that the harm that is done isn't like put upon the people of Pennsylvania who you are supposed to be serving.

We have got to start looking at the truth in this. I love all - everybody's concerns are valid but what we're talking about here is about how this project is literally going to impact the residents of Pennsylvania and the environment, the water. How do you know that this will not harm us ten years down the road if you don't have any idea about the impacts unless you do these groundwater impact studies? Then you don't have any idea and you cannot say that you're

actually protecting us within your purview. Like this is about what you are asking us to comment on, which is the permits. So let's just be clear, all of the other things that are said tonight, love it, however, you guys have a duty to look at what's actually the truth. You're supposed to protect our water, our environment. That is your duty and I just - I'm just - as a scientist I'm with you guys. Please do what you do best and - and don't let this stuff - all these other things impact you. It's unfair that they put that on you. (878)

Response 238-243:

The Department evaluated whether the project activities would cause or contribute to a violation of an applicable state water quality standard and whether the project will cause or contribute to pollution of groundwater or surface water resources or diminution of the resources sufficient to interfere with their uses during its review of the applications. While excavation of the trench and construction of the pipeline have the potential to contribute to pollution during construction activities, an E&S Plan has been developed and will be implemented to minimize the potential for discharge during construction. Following construction, aquatic resources will be restored to their pre-construction grade, and the project area will be seeded and stabilized, to minimize the potential for future erosion and to facilitate the re-establishment of existing conditions.

No impacts to public water supplies or groundwater are expected or authorized by the Department permits. If the Department determines that the project adversely affects a public or private water supply, a special condition in the Chapter 105 permits requires the permittee to restore or replace the affected water supply with an alternate source of water adequate in quantity or quality for the purposes served by the water supply.

Regarding water supply testing, if landowners provide permission, then wells within 150 feet of the workspace and within 450 feet of the proposed trenchless crossings will be tested before construction. If the Project temporarily or permanently impairs the water supplies, Transco has committed to repair, replace, or provide alternative sources of potable water. Transco has investigated the depth to groundwater in the vicinity of the Direct Pipe crossing and several other key stream crossings as detailed in Alternative Analysis Requirement S of the Chapter 105 permit application.

Regarding movement of groundwater, the potential for the proposed pipeline to alter groundwater movement was considered. The E&S Plan calls for trench plugs to be included in upland areas at spacing outlined by the Department and at the edges of streams and wetlands, and within wetlands, at specific distances to prevent hydrology changes.

Requests for Digital Mapping Files

This section addresses the comments received by the Department during the public comment period regarding the availability of digital mapping files. Excerpts of comments received from

individual commenters on this topic, as well as the Department's response to these comments, are provided below.

244. Comment

No kmz or shape files appear to be included on the pipeline portal to assist the public in review of these expansive applications despite multiple requests for multiple pipeline projects over the years for the applicant and agency to provide this electronic information to aid thorough public and agency review. (1, 16, 32, 78, 115, 118, 123, 131, 137, 185, 211, 245, 265, 271, 275, 290, 295, 297, 304-327, 329-332, 334-363, 365-369, 371-385, 388-391, 393-394, 397-403, 406-419, 421, 423-428, 437-457, 460-463, 468-470, 472, 474-475, 477-478, 482, 484-496, 563)

245. Comment

Finally, it is a disservice to not provide available alignment maps and GIS and kmz layers for the pipeline route and resources to be impacted as part of the pipeline portal and for public review. Transco should be required to submit these layers to the agencies for proper agency review and oversight and as such they should also be made available to the public. (1)

246. Comment

No kmz or shape files appear to be included on the pipeline portal to assist the public in review of these expansive applications despite multiple requests for this pipeline and for multiple pipeline projects over the years — we hope the agency has access to these electronic files for more thorough review by agency personnel and sister agencies; and we urge these files to also be available for the public and placed on the pipeline portal especially in light of the short comment period. The documents exist and they should be shared with the public and posted on the portal. (1)

247. Comment

Finally, DEP has not provided shape files or kmz layers on the pipeline portal to assist with public review and ease of public desk top review. Because the layers are given to DEP and sister agencies, these layers should be provided at a minimum in kmz file format so the public can review maps with ease, especially in this age where virtual mapping is common. (134)

Response 244-247:

The submission of digital mapping is not a mandatory requirement for obtaining a permit under Chapter 102 or Chapter 105 of the Department's regulations. The release of digital locations of FERC regulated natural gas pipelines may raise concerns regarding security risks, such as the potential for acts of sabotage or malicious activities. The Public Utility Confidential Security Information (CSI) Disclosure Protection Act, 35 P. S. §§ 2141.1—2141.6, was passed to safeguard confidential information that could compromise the public utility against criminal or terrorist acts (See also 52 Pa. Code Chapter 102). GIS data and representations are evaluated for CSI treatment on a case-by-case basis. In many cases the data may be made available to the public in a printed

or PDF version in an overview map format. In certain cases, locational information may be subject to state or federal statutes that prohibit its release in the interest of protecting national security. At the request of the permittee, in order to protect privacy and safeguard against these risks, digital mapping files containing detailed information about the location of the pipelines were not made available to the public.

The Department has however made the Permit Application materials submitted by Transco, the Department's technical deficiency letters, and Transco's responses to these letters publicly accessible on its website:

(https://www.dep.pa.gov/Business/ProgramIntegration/Pennsylvania-Pipeline-Portal/Pages/Regional-Energy-Access-Expansion-Project.aspx).

Article I, Section 27

This section addresses the comments received by the Department during the public comment period on the topic of Pennsylvania Constitution Article I, Section 27. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

248. Comment

Under Article I, Section 27 of our Constitution I have the right to clean water and DEP has a fiduciary duty to protect and conserve our public natural resources, including these waters from the impacts from the Transco Project. I urge DEP to deny the Chapter 102 Permits, Chapter 105 Permits, and Clean Water Act Section 401 Water Quality Certification for the proposed Transco pipeline Project at this time. Finally, DEP should hold public hearings in each impacted county to ensure adequate participation from residents who could be impacted. (2, 4, 8-9, 11-12, 14, 16-22, 25, 27-31, 33-37, 40-41, 45, 48-49, 52, 54, 56-59, 61-65, 67, 69, 70-72, 75-76, 79-80, 82-84, 86, 88-89, 91, 93-94, 97-102, 105, 109-111, 113-117, 120, 123-125, 129, 131-133, 136, 138, 142-143, 146-147, 149-152, 155, 163, 168, 172, 174, 177, 184-185, 188, 191, 195, 197, 199, 201, 204, 207-212, 215, 217, 221-222, 225, 232-233, 237, 244-245, 247, 250, 254, 257-258, 262, 272-273, 275, 278, 282, 284-285, 287-288, 293, 296-297, 299, 302, 305, 310, 370, 377, 386, 397-399, 405, 414, 423, 433, 436, 452, 458, 471, 479-480, 498-551, 553-562, 564-579, 581-587, 589-633, 650, 682, 694-718, 720-725, 727, 729-747)

249. Comment

The Department Should Deny These Authorizations Because Permitting Additional Fossil Fuel Infrastructure, Given the Escalating Climate Crisis, Violates the Environmental Rights Amendment.

Pennsylvania's constitution provides that the Commonwealth's natural resources are held in a public trust. The Commonwealth, as the trustee caring for this trust, "shall conserve and maintain them for the benefit of all the people." Art. 1 Sec. 27 (1971). As trustee, the Commonwealth "is a fiduciary obligated to comply with the terms of the trust and with standards governing a fiduciary's conduct." Robinson Twp. v. Commonwealth, 623 Pa. 564,

655, 83 A.3d 901, 957 (2013). A trustee has a fiduciary obligation, to manage the trust prudently, including maintaining and conserving the corpus of the trust. A trustee is required to exercise "common skill, common prudence and common caution" in managing trust resources. In re Mendenhall, 484 Pa. 77, 81, 398 A.2d 951, 953 (1979). A prudent trustee would not waste the trust, diminishing the corpus of the trust without any accompanying benefit for the beneficiaries. (134)

250. Comment

DEP approval of Transco-REAP is unsupported by and in opposition to the Pennsylvania Constitution. Williams transports approximately 30% of methane gas in the United States (williams.com). Marcellus gas transported via Transco makes its way to LNG export locations in Maryland, Georgia, and the Gulf. The Pennsylvania Constitution protects Pennsylvania; it does not give protection to anonymous shareholders of gas-to-export enterprises. If DEP gives approvals to Transco-REAEP, it will be perpetuating Pennsylvania having been turned into an export colony for the benefit of gas interests, contrary to the interests of Pennsylvanians.

PA. Const. Art. I, Sect. 27, 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 trustees of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.(588)

251. Comment

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%20E nvironme ntal%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. (588)

The DEP, in its obligation to protect the environment under Article 1 Section 27 of the Pennsylvania Constitution Environmental Rights amendment, could do the same to achieve higher quality restoration of these sensitive areas while also providing incentive for operators to do less harm in sensitive natural areas and forests and to stay more within the existing ROW if one exists (for this application there is an existing ROW). (1)

253. Comment

Our pleas for environmental justice as our Constitutional rights are sacrificed for the benefit of the gas/oil industry are being not just ignored, but they are handing over the Commons which belong TO THE PEOPLE, not to this industry! Our PA Constitution states:

"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."

The mountains of this Commonwealth belong to each of us, and the DEP is supposed to protect us!! (846)

Response 248-253:

DEP has considered the environmental impacts of this project in accordance with the agency's statutory authority and constitutional responsibilities. During the review, DEP has coordinated internally, and with other trustees and thoroughly evaluated Transco's compliance history. The Department's review of the applications and issuance of the permits for the Regional Energy Access Expansion Project is consistent with applicable statutory and regulatory requirements. All project impacts have been sufficiently minimized, many of the impacts are temporary in nature, and all impacts of the project are being mitigated for or addressed through onsite restoration. After a thorough and iterative evaluation of the proposed project, DEP has determined that per the approved applications, including the special conditions included in the permits, this project will not cause unreasonable degradation, diminution, depletion or deterioration of the environment.

Climate Change

This section addresses the comments received by the Department during the public comment period on the topic of climate change. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

While we acknowledge that Transco indicates that it has tried to collocate new pipeline where possible in existing right of ways, collocation usually still cuts a new path adjacent to the old. This is especially important in the forested areas where much of this pipeline will be constructed. In these scenarios, minimizing the impacts by creating the smallest possible disturbance and using the best management practices are critical. Additionally, regardless of any attempts to minimize the environmental impacts of this project on the water resources of the Commonwealth, it is undisputed that the gas flowing through the proposed pipeline, when used, will add substantial amounts of carbon dioxide into the atmosphere.

Transco proposes to provide an incremental 829,400 Dth/d of year-round firm transportation capacity. The cumulative greenhouse emissions resulting from the construction and operation of the proposed project, of other connected projects, and of upstream and downstream development that would be spurred by the approval of the Project, would be even greater. According to the Resource Reports Transco created, reviewed as part of the scoping process, Transco estimates operational greenhouse gas (GHG) emissions for Compressor Station 201 to be 59,949 tons per year; the operational greenhouse gas emissions for Compressor Station 515 to be 126,857 tons per year; and the greenhouse gas emissions from the pigging operations along the pipeline (including both the Regional Energy Lateral and the Effort Loop) to be 817.24 tons per year. Transco did not provide estimates of the GHG emissions from burning of the delivered gas (downstream emission), nor did it provide estimates for the upstream GHG emissions from the increased shale gas production resulting from the Project. The reality is, of course, that these activities will result in increased GHG emissions.

DEP recently produced a Climate Action Plan outlining the Commonwealth's GHG reduction goals: 26 percent by 2025 and 80 percent by 2050 from 2005 levels. Adding additional significant emissions from constructing an additional pipeline, building additional compressor stations, and transporting additional fracked gas sabotages these reduction goals.(134)

255. Comment

This proposed project for the purpose of moving gas to market and perpetuating gas extraction is inconsistent with the Pennsylvania Climate Action Plan. We are at a critical juncture in the fight against climate change. No person who reasons with facts denies that we must reduce production of fossil methane. The gas industry wants to extend its life by locking in its business model of moving as much gas to market as possible. The gas industry is responsible for Scope 1,2 and 3 emissions.

Among its several recommendations related to climate change (FERC Document Accession #: 20211119-5147 Filed Date: 11/19/2021), the U.S. EPA asserts, [W]e recommend FERC consider postponing any major decisions on pipeline projects until any pending policy decisions related to climate change and greenhouse gases are finalized. (588)

For these reasons and other critical issues pertaining to climate change impacts that make this pipeline expansion a dead end to climate catastrophe; State Water Quality Certification, Erosion and Sediment Control, Water Obstruction and Encroachment permits and the 401 certification should be denied by the Department. Pennsylvania as an extraction state, must finally start turning the corner to do what many of our neighboring states have begun – and stop issuing these water quality permits that sacrifice our state's health and freshwater and instead look to the future and begin minimizing the harm legacy and ongoing fossil fuel extraction causes to PA communities and the globe. (32, 115, 128, 131, 137, 176, 180, 211, 236, 242, 245, 271, 275, 312, 339, 354, 367, 386, 388, 408, 412, 414-415, 419, 423, 437, 445-446, 463, 470, 492, 619, 622, 639-658, 660-681, 683-693, 719, 728)

257. Comment

Besides the direct habitat degradation this project would inflict, it will exacerbate climate change. The time for fossil fuels has passed. If we are to maintain stable climates on Earth, then we must stop using fossil fuels as soon as possible. In reality, no fossil fuel projects of any kind should even be proposed, let along approved. Although Pennsylvania has a very long history of fossil fuel extraction, it absolutely MUST move on into a clean energy future as many of the states around us are doing. (726)

258. Comment

Dewatering of streams also compound the other impacts of a warming planet due to climate change.

Finally, the impact of warming temperatures caused by climate change (and the burning of natural gas from fracking which will be exacerbated with this pipeline) is actively affecting the long term viability of Pennsylvania's trout streams. As the climate warms, the water temperatures of these streams increase which lowers the dissolved oxygen levels that are required of these sensitive cold water species (i.e. cold water holds more oxygen). This calculation and the direct impact of warmer temperatures and extreme weather conditions on these aquatic species and the prized recreational fishing streams/recreational costs for the long term caused by burning fracked gas must be considered as well as the direct forest cuts and loss of instream habitat from the pipeline cut itself. (1)

259. Comment

Furthermore, natural gas pipelines increase localized soil temperatures and reduce the carbon sequestration abilities of natural soils; therefore, DEP must examine the impact to soils within the vicinity of the pipeline that experience this warming effect. (1)

260. Comment

• Transco REAE would be an extreme detriment to regional climate change goals because it will consist of 47.8% of New Jersey's GHG budget in 2050. Nothing is stopping FERC from certificating a second project that would consist of 65% of New

Jersey's 2050 GHG budget, thus, FERC would be virtually guaranteeing that New Jersey would not meet its emissions reductions goals, which is a large-scale issue that affects Pennsylvania as well.

• FERC's FEIS also concluded that the REAE Project effects would be reduced to less-than-significant levels. This is despite the fact that FERC admitted that certain project components may be predominately borne by environmental justice communities and that climate change impacts would result in annual operation and downstream emissions of 16.62 million metric tons of carbon dioxide equivalent. These levels would exceed FERC's presumptive significance threshold based on 100 percent utilization. DEP must step up where FERC is failing and deny these state permits today!

For these reasons and other critical issues pertaining to climate change impacts that make this pipeline expansion a dead end leading to climate catastrophe, permits should be denied. (7, 32, 109, 116, 118, 123, 131, 143, 147, 156, 176, 185, 211, 214, 236, 242, 275, 296, 312, 320, 330, 338, 354, 359, 376, 386, 408, 414-415, 419, 426, 437, 469, 484, 492, 619, 640, 643, 646, 649-651, 653, 658, 661, 672, 679, 686, 692, 716, 726, 749-780, 783, 788, 790-791, 794, 797-798, 801-805, 807-813, 815-816, 819, 822, 835-836, 842-843, 849, 860)

261. Comment

The entire world is experiencing unheard of catastrophic events as a result of global warming; instead of investing in additional pipelines and methane extraction, we should be investing in clean, truly green energy. (806)

262. Comment

Climate change and its impacts don't respect state borders, and as New Jerseyans, we urge you to say no to these permits. Thank you. (844)

263. Comment

The scientists have been screaming about climate change since the 1970's. Because our predecessors did not act for our future which is the NOW, we must act NOW if we expect this planet to continue to sustain us. Let me be plain when I say, "the planet will be fine... but we might not be around to see the damage we imparted to all of the species who once populated the biosphere in which we all abide,"

I do not understand this madness when the science tells us that we are just a few years from tipping points that will result in irreversible climate breakdown. They are moving forward with business-as-usual as if their only concern is the economics of gas. Have they even read the IPCC report in which the international scientific experts summarize the remaining CO2 budget for the planet? The climate is not warming- it is heating up. Our children will never forgive us!

How can the DEP look at the recent devastating storms happening in places like Florida and Nova Scotia, and NOT consider the impacts on our environment? These events have a causal connection to fossil fuels!

We do not need this pipeline. Please do NOT grant permits for more fouling of our clean air, streams, watersheds, and the ground which grows the food which sustains us!! (846)

264. Comment

Climate Change: As we continue to face the growing impacts of climate change, we cannot ignore the fact that continued investment in fossil fuel infrastructure projects only further diminish our ability to meet our emissions reduction goals. Similarly, it's likely that the emissions, pollution, and related public health risks of these projects will be predominately borne by environmental justice communities. In weighing arguments in favor of this and other pipeline or fossil fuel infrastructure projects, I respectfully request that DEP consider Pennsylvania's ongoing failure to adequately invest in the clean energy economy. According to a new report, the Commonwealth ranks 45th in the nation for percent growth in total solar, wind, and geothermal power generation since 2012. (483)

265. Comment

The application doesn't acknowledge that REAE will increase emissions and exacerbate the climate crisis. Climate change is consistently in the news-we must all take responsibility! Especially those regulatory bodies such as DEP who are tasked with protecting the environment. (120)

266. Comment

Finally, the climate implications of the additional gas that this pipeline will transport cannot and should not be ignored. The burning of this additional gas will put additional greenhouse gases into our atmosphere continuing to add onto the climate emergency. It is not okay to turn a blind eye to the climate consequences of building additional fossil fuel infrastructure. (134)

267. Comment

Now that climate change is magnifying the stresses on dependent species imposing even more extreme fluctuations in precipitation and higher temperatures it is imperative to safeguard remaining wetlands and headwater streams wherever as possible as here.

The project is unnecessary as New Jersey has indicated, and in the not too distant future would be obsolete. If built, this unneeded pipeline would impact 114 exceptional value wetlands, 37 high quality streams and impact around 297 acres of forested lands. The project itself would also be fueling the climate crisis at time when we should be doing everything, everything I underscore, we can do to reduce emissions and protect public health. The industry profits and economic benefits from this project would be short-term. The damage would be permanent. (867)

Response 254-267:

Pennsylvania's Climate Change Act of 2008 (Act of July 9, 2008, P.L. 935, No. 70) (the "CCA") requires DEP to submit to the Governor, every three years, a Climate Change Action Plan that, among other things, is required to, "[e]valuate cost-effective strategies

for reducing or offsetting [greenhouse gas ("GHG")] emissions from various sectors in [the] Commonwealth," and includes a component for evaluating the impact of recommended GHG reduction strategies on the capability of meeting future energy demand within the Commonwealth. *See* Section 7 of the CCA. Consistent with this obligation, in 2021, the Department produced the Pennsylvania Climate Action Plan 2021 ("CAP 2021"), which identifies large contributors of GHG emissions and outlines a pathway to reaching Pennsylvania's GHG reduction goals (26 percent by 2025 and 80 percent by 2050 from 2005 levels).

The CAP 2021 recognizes that Pennsylvania is a significant producer of natural gas, second only to Texas, and that Pennsylvania exports natural gas to other states in the region. It further recognizes that the internal and external distribution of natural gas has grown, along with the distribution network, and production and distribution in Pennsylvania are expected to increase further. Electricity generation is the greatest source of GHG emissions in the Commonwealth, and Pennsylvania is identified as the third-largest energy producing state in the U.S, after Texas and Florida. Significant growth in natural gas production has largely displaced coal-fired electricity generation and natural gas is the largest fuel source for electricity generation in Pennsylvania. This trend is expected to continue for some time.

Recognizing that to be the case, there are strategies recommended in the CAP 2021 for reducing GHG emissions from the fuel supply and power generation sectors. This includes controlling and reducing emissions from the natural gas sector through initiatives like the Methane Reduction Strategy:

https://files.dep.state.pa.us/Air/AirQuality/AQPortalFiles/Methane/DEP%20Methane%20Strategy%201-19-2016%20PDF.pdf.

That strategy includes the implementation of emission reduction requirements through DEP's air quality General Permit 5 and General Permit 5A (GP-5 and GP-5A), as well as Exemption 38. The GP-5, GP-5A and Exemption 38 requirements apply to midstream compression, gas processing facilities, gas transmission, unconventional natural gas well sites, remote pigging stations and other oil and gas production facilities. The Methane Reduction Strategy also includes the recently published (December 10, 2022) final rulemakings for the control of VOC emissions from conventional and unconventional oil and natural gas sources. (See 52 Pa. Bulletin 7587-7635 (Unconventional) and 52 Pa. Bulletin 7635-7681 (Conventional)).

Decarbonization of the electricity grid, which recognizes that changes will need to occur over time, such as amending the Alternative Energy Portfolio Standards ("AEPS"), and the expansion of alternative energy sources to make the electricity grid less reliant on fossil-based sources of electricity, are also identified as strategies that are longer term. In the interim, transitioning from coal to natural gas, and to a lesser degree the gradual increase in clean renewable energy sources, has helped reduce overall power generation emissions. This, together with the implementation of measures in the

Methane Reduction Strategy discussed above, as well as other strategies identified in the CAP 21, demonstrates Pennsylvania's broader approach to controlling and reducing GHGs.

The Department reviewed these water obstruction and encroachments applications and erosion and sediment control permit applications in accordance with the agency's constitutional obligations under Article I, Section 27, statutory authority under the Clean Streams Law, 35 P. S. § 691.1 et seq., the Dam Safety and Encroachments Act, 32 P.S. §§ 693.1-693.27, Pennsylvania regulations, including Title 25 Pa. Code Chapters 93, 96, 102 and 105, and made determinations of the proposed project's effect on health, safety and the environment in accordance with those laws as well as prevailing practices in the engineering profession and in accordance with current environmental science. The Department has determined that Transco has met the requirements for obtaining the necessary Chapter 102 and Chapter 105 permits for the project.

Compressor Station - Pollution, Greenhouse Gases, & Noise

This section addresses the comments received by the Department during the public comment period on the topics of air pollution, greenhouse gases, noise and light. Excerpts of comments received from individual commenters on these topics, as well as the Department's response to these comments, are provided below.

268. Comment

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

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

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://state impact.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/REAEP/March_2 022/State WaterQualityCertification/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 https://www.epa.gov/system/files/documents/2022-07/ghgrp-data-quality-improvements-proposal.pdf (588)

269. Comment

The proposed REAE project does not only impact Pennsylvania. It is diametrically opposed to New Jersey's stated goals of reducing greenhouse gas emissions 50% by 2030. In fact, this project would add over 16.62 million metric tons of carbon dioxide equivalent per year to New Jersey's total inventory, an approximate 16-18% increase in the state's from just this project.

Both through routine venting and fugitive leaks, compressor stations release methane, carbon monoxide, carbon dioxide, nitrogen oxides, volatile organic compounds, sulfur dioxide and fine particulate matter, all of which are harmful pollutants with direct public health impacts, including asthma. (844)

270. Comment

Among our concerns are the following impacts:

- Sinkholes, spills, property damage, and noise from the drilling process similar to the destruction caused by Mariner East II
- Damage to riparian areas and streams from open-cut crossings
- Forest fragmentation, soil compaction, stormwater runoff, and flooding
- Public health impacts like air quality degradation from compressor stations and industry equipment along the route
- Drinking water contamination and water quality degradation
- Habitat destruction, impacts on threatened and endangered species, and loss of wetlands

Not only is this project dangerous for Pennsylvanians' health and the environment, Transco's proposed REAE project would be an extreme detriment to our region's climate goals. Now is

the time to reduce the impact of climate pollution and reduce our dependence on fossil fuels. (858)

Response 268-270

The Department acknowledges the comment regarding this proposed pipeline project. Transco acquired the appropriate permits from DEP for the air emissions associated with this Project in Pennsylvania. FERC's Final EIS addresses noise and air pollution and may be viewed on FERC's website at www.ferc.gov (search eLibrary; Docket Search; CP21-94-000).

FERC/EIS/EA

This section addresses the comments received by the Department during the public comment period on the topics of FERC, EIS, and EA. Excerpts of comments received from individual commenters on these topics, as well as the Department's response to these comments, are provided below.

271. Comment

To DRN's knowledge, the Transco REAE has not yet developed its EIS or EA for FERC. DRN would argue that an EIS is critical for the FERC process and an EA would not suffice. Again, pushing the PA process and public comment period along when these federal documents are not yet out for comment may be pre-empting a project that may never come on line. What is the harm in waiting? (1)

272. Comment

To DRN's knowledge, the Transco REAE has not yet developed its EIS or EA for FERC. DRN would argue that an EIS is critical for the FERC process and an EA would not suffice. Again, pushing the PA process and public comment period along when these federal documents are not yet out for comment may be pre-empting a project that may never come on line and waste agency resources. What is the harm in waiting? (16, 32, 78, 115, 118, 123, 131, 137, 185, 211, 245, 265, 271, 275, 290, 295, 297, 304-327, 329-332, 334-363, 365-369, 371-385, 388-391, 393-394, 397-403, 406-419, 421, 423-428, 437-457, 460-463, 468-470, 472, 474-475, 477-478, 482, 484-496, 563)

273. Comment

The Department's Issuance of the State Water Quality Certification, the Chapter 102 Authorizations, and the Chapter 105 Authorizations is Premature.

The Department's actions here are, at best, premature. The Department cannot certify yet that the state water quality standards will be met by this project because the scope of the project, and its full impact on human health and the environment, have not yet been determined. The Department should also not rush to issue approvals that will result in destruction of Pennsylvania's resources when the project might not ultimately be approved in other

jurisdictions, leaving Pennsylvania's environment to suffer pointless harms for a defunct project.

First, the requirements of the National Environmental Policy Act have not yet been met.

On March 26, 2021, Transco submitted an application to FERC pursuant to sections 7(b) and 7(c) of the federal Natural Gas Act to construct, install, modify, operation and maintain the Regional Energy Access Expansion Project. The initial commenting period closed on April 30, 2021. FERC is still in the process of gathering environmental information from Transco, and has not yet issued a Notice of Schedule for Environmental Review. Commenters on the REAE Project overwhelmingly urged FERC to prepare an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act ("NEPA"), in order to comprehensively and accurately evaluate the Project's impacts.

Commenters in the FERC proceeding raised several issues pertaining to water quality that must be addressed in an EIS. For example, the United States Environmental Protection Agency recommended "evaluation of water quality issues including surface water, groundwater, drinking water, stormwater management, wastewater management, wetlands and watersheds." EPA further recommended a comprehensive study of all types of waterbody crossing construction methods and their impacts, including a water body crossing plan with mitigation measures, full delineation and functional assessment of wetlands impacted by the Project, and consideration of both short-term and long-term stormwater impacts.

Transco also applied in April 2021 for a Clean Water Act Section 404 and Rivers and Harbors Act Section 10 permit from the United States Army Corps of Engineers ("Corps") in both the Baltimore and Philadelphia Districts. Those applications have not yet been publicly noticed by the Corps. Meanwhile, the Corps has agreed to be a cooperating federal agency in the preparation of an EIS. The Corps submitted a comment to FERC recommending the inclusion of both the Clean Water Act Section 404(b)(1) alternatives analysis, an evaluation of any compensatory mitigation sites, an analysis of cumulative and direct secondary impacts from discharge of fill material into aquatic resources, and the inclusion of a restoration plan for impacted resources.

As of September 24, 2021, Transco's REAE Project was identified by FERC Chairman Richard Glick in a letter to Senator John Barrasso, Ranking Member of the United States Senate Committee on Energy and Natural Resources as one of several natural gas projects currently under review for authorization under the Natural Gas Act. In that letter, Chairman Glick describes FERC's current approach to NEPA evaluation in connection with requests for Natural Gas Act authorization. First, an EIS is normally prepared for authorization under section 7 of the Natural Gas Act, unless FERC "can determine that the project either will not cause any significant adverse impacts or that such impacts will be mitigated." According to Chairman Glick, "when there are any 'arguably significant' environmental impacts, the Commission must address those impacts in an EIS." Given the size and scope of the Project, it is highly likely that FERC will issue a Notice of Intent to prepare an EIS, and through the process of drafting and finalizing the EIS, will address wide-ranging effects on water quality

in Pennsylvania. DEP should not rush to issue the Chapters 105 and 102 permits or the Clean Water Act Section 401 Certificate until after the completion of the EIS. The EIS will provide additional information and analysis that may ultimately justify modification or denial of authorizations by either DEP or FERC.

Second, in addition to these federal issues, it is premature for the Department to issue these proposed authorizations because the project is still subject to evaluation in other states. The Department's authorizations at issue here are only one piece of a larger project that crosses state lines. As proposed, the project, in addition to all the components of the project in Pennsylvania, includes the installation of a new compressor station (Compressor Station 201) in Gloucester County, New Jersey, the installation of a gas turbine or electric motor-driven compressor unit at existing Compressor Station 505 in Somerset County, New Jersey, and also modifications at existing compressor stations, meter stations, interconnects, and ancillary facilities in Maryland and New Jersey. It is Commenters' understanding that none of these out- of-state facilities and/or modifications have received final approval.

The New Jersey Department of Environmental Protection has commented on the Resource Documents provided as part of the NEPA process (available in FERC Docket PF-20-3- 000) and raised concerns regarding facilities proposed in flood hazard areas and the need for additional permitting from various divisions of NJDEP. NJDEP also identified multiple other permits potentially required for these New Jersey portions of the project, including NJPDES Discharge to Surface Water permits and air emissions permits. Additionally, as Commenter Delaware Riverkeeper Network has pointed out in comments in the FERC docket for the Transco's application for a certificate of public convenience and necessity (available at FERC docket CP21-94-000), one of the proposed New Jersey facilities is at a site undergoing active remediation, and as a result this site may involve additional work, additional permitting, or may be found to be unsuitable for the proposed facility. (134)

274. Comment

For the Regional Energy Lateral Loop proposed to cut across 22.3 miles of Luzerne County-often with multiple watershed cuts: Shades Creek, Little Shades Creek, Meadow Run, Bear Creek, Little Bear Creek, and Mill Creek are just some of the special protection HQ or EV streams to be cut by the pipeline. In addition, Transco proposes to create another pipe across the Susquehanna River located further north of the existing ROW. Along this proposed Regional Energy Lateral loop there are multiple instances beyond the Susquehanna River crossing where the pipeline path is proposed to diverge from the existing Transco pipeline which will inflict more harm nearby that may be unnecessary.

The DEP should require Transco to justify why these variances and diversions away from the existing pipeline ROW path are needed instead of co-locating the new pipeline loop within and adjacent the existing ROW. It is concerning that Transco has already failed a very fundamental task of resource identification for the Project, as such, this must raise red flags for careful scrutiny in the future by DEP of assertions made by Transco regarding environmental harms resulting from the Project. It appears already that not only is Transco

under-counting and under-valuing the resources harmed, but that it is also proposing alternative routes based on political maneuvering rather than reducing harms or collocating. (1)

275. Comment

Furthermore, increasing the runoff potential of soils due to compaction will negatively impact groundwater recharge areas surrounding the ROW. By removing the topsoil layer and associated forest litter and humus, runoff will decrease the soil porosity and moisture retention capacity. This will induce even greater levels of runoff and will damage the groundwater recharge capabilities of the ecosystem. The decreased ability to absorb water resulting in runoff and sedimentation severely decreases water quality. Previous FERC jurisdictional projects have resulted in significant soil compaction issues. The EIS must identify ways in which previous soil compaction problems can be avoided or properly remediated. A restatement of previous practices would be unacceptable.

To determine current water quality, the EIS must include a survey of the established benthic community in potentially impacted streams. This should include the composition, quantity, and diversity of the community using standardized sampling protocols consistent with the state's assessments. Anti-degradation streams that have special designations warrant special attention and protection, especially when a tributary has Category 1, Exceptional Value or High Quality designation. (1)

276. Comment

The DEP should closely examine impacts of new pipeline that will not be co-located with existing pipeline.

As pointed out in various parts of this comment, DEP should require Transco to justify the need for not collocating along the existing route. It appears that the 22.3 mile regional Energy Lateral loop in Luzerne has multiple places where the proposed route diverges away from the already impacted Transco ROW, including the crossing to the Susquehanna River (screenshot of Susquehanna crossing below – red line is the proposed route/yellow line is the original Transco route). In some instances, it appears that the new route is designed to avoid the existing ROW where housing developments have been built but this may be at the environmental expense of the route cutting through more natural and forested habitats, wetlands, streams or sensitive steep slopes. DRN asserts cutting across manicured lawn in subdivisions for a pipeline ROW is far less impactful to the environment than cutting across forest and other natural sensitive habitats; the EIS should require Transco to justify why it may propose to sacrifice forest, streams or preserved lands over paying landowners more money to cut within the existing already impacted boundary where houses may have sprouted up around the original Transco pipeline. For each segment that is not co-located, a full justification into why colocation is not possible.

From the topographical map, below it also appears quarrying and coal or culm refuse piles are present near the proposed pipeline route. The harms of trenching and installing an explosive gas pipeline near these industrial uses where blasting for quarrying and fuel/culm waste is

nearby must be considered. DEP should also take note of the high school location just to the west of the River and pipeline as well. Transco must thoroughly account and justify its project that could lead to these public safety concerns.

Figure REL-3 - Proposed Susquehanna River Crossing deviation

For the 13.8-mile Effort Loop, there appears to be fewer variances away from the existing pipeline ROW. Furthermore, from Transco's 3/17/21 Crossing Photographic Documentation Maps - Figure Number 9 (EL-8) that depicts MP 50.9 the proposed route looks to be located within the existing ROW. A duplicate of Figure 9 (EL-9) (is this a mistake in diagram numbers by Transco?) also depicts a cut over at MP 52.6 that appears to align the proposed route back into the existing ROW as well. This type of colocation within the already cleared and impacted ROW (rather than expanding the ROW adjacent to the active ROW) is certainly a better option for the adjacent habitats to avoid more disturbance along the edge as the ROW expands. If this colocation within the disturbed corridor is possible in some places, DRN would suggest the EIS analysis require Transco to justify why this is not an option along other areas of the ROW, especially where stream crossings, forests, wetlands, and other natural habitats are being proposed to be cut.

For example, Figure: REL-2 (diagram below – red line is proposed REAE route/yellow line is the existing Transco pipeline) shows an extremely steep sloped proposed greenfield route from 6.5MP-9.5MP. It is unclear why Transco cannot collocate within the existing Transco line to the south which is also steep but already has been impacted. The proposed route also appears to cut across a headwater tributary between 7.0 and 7.5MP. Transco must justify and share its analysis for each of these deviations and greenfield workarounds and why the original route is not a viable option as well as why locating within the active ROW is not an option. (1)

277. Comment

Impacts including to recreation, aesthetics, art and the resulting economics

In studying impacts to water quality, wetlands, parklands, forest land, naturally vegetated areas, and/or any of the landscapes, water resources, open space areas, conserved lands or parklands impacted by Transco REAE the ramifications for the beauty of the region and the recreational use and value of the region must also be considered. For example, consideration of the direct and indirect impacts must also be given to how diminished water quality would affect recreational and visitor uses to state and county parklands (e.g., boating, canoeing, aesthetic qualities, and degradation of fisheries), tributaries valued for their birding, boating and fishing. The market value of homes, the success of recreational ventures, the economic success of the many recreationally and aesthetically dependent businesses of the region will all be impacted by the land, water, landscape, aquatic life and wildlife impacts of the Transco REAE project. All of these issues must be considered.

When considering alternative routes, the short and long-term implications of disturbing and fragmenting natural areas must be given greater weight than consideration of manicured lawn and active recreation areas.

Additionally, these Pocono region watersheds of Monroe County are highly favored and utilized by artists because of its beauty, its unparalleled ecological values and visuals, and the community it has attracted and supported. The ramifications for art, artists and art related businesses and nonprofits must also be given due consideration and valuation. (1)

278. Comment

On July 29, 2022, FERC issued the Final Environmental Impact Statement for Transcontinental Gas Pipe Line Company, LLC's Regional Energy Access Expansion Project under CP21-94. Volumes of information is requiring public review for this EIS at this time. Sadly, there are shocking issues and inadequacies with the Final EIS for this project. For example, FERC compares the GHG emissions of the project with state and national goals in a bare and quantitative manner—claiming that it cannot "determine how individual projects will affect international, national, or statewide GHG emissions reduction targets or whether a project's GHG emissions comply with those goals or laws." By acting as if the GHG emissions calculations are meaningless, FERC is essentially greenlighting projects that could incrementally exceed emissions goals. Transco REAE, for example, will consist of 47.8% of New Jersey's GHG budget in 2050. Nothing is stopping FERC from certificating a second project that would consist of 65% of New Jersey's 2050 GHG budget, thus, FERC would be virtually guaranteeing that New Jersey would not meet its emissions reductions goals. This result is inconsistent with FERC's conclusion that it cannot determine the significance of the project's GHG emissions. Furthermore, FERC has punted and not addressed thermal impacts to waterbodies in the FEIS due to climate change or by the direct cuts of cut riparian forested buffers and pipeline cuts inflict. With these types of federal inadequacies, it is critical and logical that the state of Pennsylvania, that already bares a large burden (and responsibility as a polluter) from the fossil fuel industry and fossil fuel infrastructure and extraction historically and with the present shale buildout, provide more time for the public to adequately and thoroughly review these state permits. This additional comment review time and statewide leadership is needed now to provide much needed state leadership and ideally, a denial of the permit and pipeline project when the public process is borne out. (1)

279. Comment

It is premature for the Department to allow tree felling under these proposed authorizations because the project is still subject to evaluation in other states. The Department's authorizations at issue here are only one piece of a larger project that crosses state lines. As proposed, the project, in addition to all the components of the project in Pennsylvania, includes the installation of a new compressor station (Compressor Station 201) in Gloucester County, New Jersey, the installation of a gas turbine or electric motor-driven compressor unit at existing Compressor Station 505 in Somerset County, New Jersey, and also modifications at existing compressor stations, meter stations, interconnects, and ancillary facilities in Maryland and New Jersey. It is Commenters' understanding that not all of these out-of-state facilities and/or modifications have received final approval. For previous multi-state pipeline projects such as this, agencies have allowed tree felling and enormous damage has been done for projects that were never built (as with, for example, the never-built Constitution pipeline). At

a minimum, no tree felling should take place until all permits for all parts of the project have been received. (134)

Response 271-279

The Department has determined that Transco has satisfied the applicable statutory and regulatory requirements for obtaining Chapter 102 and Chapter 105 permits associated with this project. The Permit Application materials have addressed the technical deficiencies and demonstrated compliance with all applicable regulatory requirements. Transco provided responses to various environmental information requests by FERC during its analysis of the application. FERC issued the Final EIS on July 29, 2022 and provided an Order Issuing Certificate and Approving Abandonment on January 11, 2023, both of which may be viewed on FERC's website at www.ferc.gov (search eLibrary; Docket Search; CP21-94-000).

FERC will not grant Transco notice to proceed (NTP) until all federal permits and clearances for the Project have been issued. This includes the USACE, which has a separate review of the proposed project's Clean Water Act Section 404 permit and makes a determination independently from the Department.

FERC has jurisdiction over interstate natural gas pipelines, including routing and siting, under the Natural Gas Act, 15 U.S.C. §§ 717 et seq. FERC, intervenors, or any commenter may suggest alternatives and modifications to the proposed routing or siting of the project to reduce the effects of the proposed pipeline project. Except as provided in the Natural Gas Act, nothing affects the rights of States under the federal Clean Water Act (33 U.S.C. §§ 1251 et seq.). See, 15 U.S.C. § 717b. This includes the requirement for applicants to request water quality certification from the State in which a discharge from a proposed project may occur under section 401 of the Clean Water Act (33 U.S.C. § 1341).

The Department evaluated Transco's request for a Section 401 Water Quality Certification and issued a Section 401 Water Quality Certification for the project on March 30, 2022. Transco is required to obtain and comply with Department Chapter 102 and 105 permits as a condition of the Department's Section 401 Water Quality Certification. Transco has indicated that it will not conduct tree felling activities before receiving the Department's Chapter 102 and 105 permits and a Notice to Proceed from FERC.

Municipal Correspondence/ Municipal Notifications

This section addresses the comments received by the Department during the public comment period on the topic of municipal correspondence and notifications. Excerpts of comments received from individual commenters on this topic, as well as the Department's response to these comments, are provided below.

Public input

Transco-REAEP sent the required Act 14 notices to municipalities in April 2021. I don't see any subsequent notices to municipalities from Transco-REAEP or DEP. The municipal notices state: For more information about this land use review process, please visit www.depweb.state.pa.us, (keyword: Land Use Reviews).

In the FERC docket CP21-94, there are several submittals by FERC, Transco-REAEP, and concerned persons since April 2021. Do municipal officials know how to or that they should file with FERC docket CP21-94 for intervenor status in order to be notified of updates?

The Pennsylvania Bulleting notice states, More information regarding the permit applications related to this proposed project may be available online (dep.pa.gov/pipelines) or in the Department's Regional Permit Coordination Office. Upon visiting this link and associated links, one sees posts of several documents. However, there is no link to the full file at https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/REAEP/

People don't know about the Pipeline Portal.

When one uses eFACTS, there is no Public Permit link. https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults_singleAuth.aspx?AuthID=1350583

I find the above to be major omissions of public information.

The Pennsylvania Bulletin notes, "The Department may conduct a fact-finding hearing or an informal conference in response to comments if deemed necessary." I recommend that DEP conduct public hearings which, not only describe the project, but inform the public as to opportunities for public participation. A such hearings, DEP would have the opportunity to hear the public's questions and concerns.

DEP should establish a repository for comments, like it does for regulations, and like FERC does for dockets. Commenters to DEP should have the opportunity to see comments submitted by others. Perhaps DEP could add a folder to the Pipeline Portal.

I have observed, generally, that large projects that span several years lead to project applicants applying for permit "modifications." Whereas these are published in the Pennsylvania Bulleting, they generally go unnoticed by the public. Yet such modifications can be significant and can incrementally expand the harm of a project. Will DEP develop an approach, similar to that of FERC, whereby all persons requesting intervenor status are notified? (588)

281. Comment

In the August 11, 2022 updates to the Chapter 105 applications, Transco includes two sets of municipal notification correspondence in response to Requirement C: that for the April 2021 submission and that for the April 2022 submission. There is no evidence provided to confirm correspondence with the municipalities notifying them of the updated August 2022

applications, nor anything posted since then updating the municipal letters. The same is true for the stormwater and floodplain analysis correspondence provided in response to Requirements O and P. (134)

282. Comment

More concerning than merely the lack of updated municipal correspondence, however, is the lack of return correspondence from the municipalities and counties commenting on the stormwater and floodplain analyses. 25 Pa. Code § 105.13(e)(1)(v)-(vi) specifically require the submission of "a letter from the county or municipality commenting on the analysis," or in the case of floodplain management, specifically the municipality. Transco has only included outgoing letters, not incoming letters. Transco's outgoing letters do not even ask for comment to be sent to Transco in response, suggesting instead that "any comments" be sent to the mailing address of the Department. To the contrary, it is the applicant's obligation per the express language of the Pennsylvania Code to include work with the local governments and include responsive comments in the application itself. Transco here skipped those steps entirely, which renders its Chapter 105 applications incomplete under the express language of 25 Pa. Code § 105.13. (134)

Response 280-282

Municipal notifications are required to be provided when an application is submitted to the Department. This process affords municipalities and counties the ability to submit comments to the Department for consideration at any time during the review of the application. The Department's rules and regulations require that any comments from a municipality or county to be forwarded to the Department and that the applicant respond to such comments. Transco satisfied its Act 14 municipal notice obligation.

The Department has made all non-privileged, non-confidential permit applications materials and supporting documents including all materials that Transco has submitted for the Department's review and consideration of the Permit application, including but not limited to the initial application itself and technical deficiency letters and responses thereto available online at the Pennsylvania Pipeline Portal. All final decision documents including those related to permit modifications as well as public comments and Department responses will be made available online at the Pennsylvania Pipeline Portal when they are finalized (Pennsylvania Pipeline Portal (pa.gov)).

Specific Comments

This section addresses comments received by the Department during the public comment period on the specific portions of the Permit Application documents. Excerpts of comments received from individual commenters, as well as the Department's response to these comments, are provided below.

Also in both Chapter 105 applications, under "Facility Information" on page 2 of 9, Transco should have checked, but did not check, "Air Emission Plant." Transco's project admittedly involves large increases in emissions from various air pollution sources. Section 4.8.4 of the FERC Final Environmental Impact Statement explains, "Operational emission increases from the Project would result from natural gas combustion turbines at Compressor Stations 505 and 515... Aboveground facilities, including the compressor stations, M&R stations, and pig launcher/receiver facilities along with the pipelines, would generate fugitive emissions of natural gas. Compressor station combustion sources include turbines, emergency engines, and heaters; and fugitive emissions could result from miscellaneous small storage tanks, truck loading, piping components, blowdown events, and pigging operations." Therefore, this part of the Facility Information is inaccurate.

. . .

In the General Information Form for the Luzerne County application, Transco checks under "Coordination Information" that the project will not "involve a construction activity that results in earth disturbance in the area of the earth disturbance that are contaminated at levels exceeding residential or non-residential medium-specific concentrations (MSCs) in 25 Pa. Code Chapter 250 at residential or nonresidential construction sites, respectively." See also Section 1- 11 of the Chapter 102 application. However, according to eFACTS, Compressor construction Station 515, where is planned, is brownfield https://www.ahs.dep.pa.gov/eFACTSWeb/searchResults singleFacility.aspx?FacilityID=77 9934. Commenters do not know whether the site has been fully remediated, but the Department should fully investigate that to determine whether special care must be taken for the earthmoving at that location. (134)

Response 283

The GIF serves primarily an administrative function for permit coordination. The Department does not rely on the GIF for the technical review of an application. Although Transco did not check the "Air Emission Plant" box, DEP and Transco were aware that there would be approvals required from the Department's Bureau of Air Quality for compressor station additions and modifications, pig launcher/receiver facilities, and other air emission sources associated with the project within Pennsylvania. All air emission information was included under Item 13 of the "Coordination Information" section of the GIF. Transco omitted the Facility ID (249383) for Compressor Station 515 as an administrative oversight. As noted in the header of the GIF, the form is used by the Department to inform DEP staff programs regarding what other DEP permits or authorizations may be needed for the proposed project or

activity. Transco has acquired the appropriate permits from DEP for the air emissions sources associated with this Project in Pennsylvania.

Likewise, the Compressor Station 515 site has been fully remediated in accordance with a Consent Order and Agreement (COA) between Transco and the Department dated April 1, 1992. Should contaminated soils (soils exceeding DEP's Statewide Health Standard) be identified or encountered, Transco will need to contact and coordinate with DEP representatives regarding an appropriate and acceptable way to address this media.

284. Comment

The Chapter 102 application suffers from its own inaccuracies and omissions.

On the final page of Section 1-1, Transco checks boxes for the different riparian buffer waivers it is requesting. It does not check the box for "The project is a redevelopment project which may include brownfields or use of other vacant land and property within a developed area for further construction or development." This is the box that corresponds with the riparian buffer exception at 25 Pa. Code § 102.14(d)(2)(v). However, according to Section 1-7 (see Attachment 1), there are twenty separate crossings for which Transco makes that request. (134)

Response 284

The Project is a linear pipeline project; it is not a redevelopment project. It was therefore appropriate that Transco did not check the box stating, "The project is a redevelopment project which may include brownfields or use of other vacant land and property within a developed area for further construction or development." However, if Transco encounters any brownfield or other such properties along the pipeline route, Transco will need to coordinate with DEP on how to address this situation in a manner in accordance with applicable regulations.

Next, W2-T5 (wetland) along a proposed aquatic resource is missing from the Aquatic

285. Comment

Resource Impact Table but it is included as S2-T5 (Dairy Lane area). Transco marks this crossing as ephemeral and a temporary impact for a HQ-CWF UNT to McMichael Creek. Excavation is also proposed for this aquatic resource, which indicates to Commenters that Transco plans to widen the access road. It is unclear why Transco is not staying within the existing driveway for this access. There appear to be two large ponds and wetland complexes for this UNT as well as cattail (Typha latifolia) (outlined in the on the ground photos by Transco's consultant—not shown here) which is an obligate wetland species. These ponds and

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the species present suggest that the stream is not ephemeral in nature, and Transco's

⁷⁰ See *Stedge v. DEP*, 2015 EHB 577, 584 ("The General Information Form serves primarily an administrative function and the Department relies on it to route an application to the appropriate Department programs for purposes of permit coordination. The Department does not rely on the General Information Form for the technical review of an application.")

delineation as ephemeral may be in error. Also note the date of photos and the need to ensure current conditions at the time, such as drought conditions and potential extreme weather events. Delineation at dry times or drought times may change the perimeter mapping. (134)

Response 285

Transco will be using the existing culverted crossing. Transco has provided this culvert and crossing within the Aquatic Resource Impact Table should the culvert become damaged during construction of the pipeline and in need of replacement.

286. Comment

In Section 1-4, at internal Section 1.2.1.1, Transco counts toward miles of colocation 1.1 miles of the Regional Energy Lateral that would be near the "Certificated PennEast Pipeline." As the Department well knows, the PennEast Pipeline project is dead, so this would be entirely greenfield pipeline. (134)

Response 286

Transco's statement was accurate at the time it submitted its application. While sections of the Regional Energy Lateral will be co-located with existing pipelines, since the PennEast Pipeline project was not constructed, this particular 1.1 mile section will not be co-located and will involve greenfield construction. However, the company will be required to comply with applicable permit conditions in order to minimize impacts from construction and will be required to undertake restoration in disturbed greenfield areas.

287. Comment

The Applications Do Not Demonstrate that the Requirements of the Department's Environmental Justice Participation Policy Have Been Met, and the Public Engagement Process Has Been Limited.

The Chapter 102 applications do not demonstrate that Transco has complied with the requirements of the Department's environmental justice participation policy, and the Department should ensure that the applicant has met the requirements of the policy before issuing the permits.

In the overall application for the Chapter 102 permits, Transco acknowledges that the pipeline traverses environmental justice communities (see, e.g., Requirement O – Stormwater Notifications and Receipts, section entitled "Project Information" for each county). Transco then appears to indicate that it has followed the environmental justice participation policy with the following text:

2.	Have you informed the surrounding community prior to submitting the application to the Department?	es/es	No	
	Method of notification:			
	Open house schedule mailed to affected parties;			
	2) Newspaper advertisements of open houses placed in newspapers of general circulation in the Project area;			
	3) Open houses (a mixture of virtual and in-person) held in the county			
	of each major project scope item; 4) Newspaper advertisements prior to commencement of construction, which will be placed in those same publications;			
	5) Notification to businesses potentially affected by construction;			
	6) Designation of a point of contact for stakeholder communication;			
	7) A Project toll free telephone number for public inquiries; and			
	O) A Designat weeksite with assigning undertaged advant information			

Transco appears to be stating either that it has provided all the methods of notification that it has filled in under "method of notification," or that it has only provided the eighth item on the list (with the bullet point next to it). In either case, it is not clear that any of those actions, including the eighth item, a project website with periodic updates, were actually taken. (134)

Response 287

The Department approved the existing Environmental Justice ("EJ") Policy in 2004. This EJ Policy identifies "Trigger Permits" in an effort to focus review on specific permits regulating activities that may lead to significant public concern due to potential impacts on human health and the environment in environmental justice communities. The proposed Project does not require any "Trigger Permits", as defined by the Department's 2004 EJ Policy. Nevertheless, Transco acknowledges that the Project will be located in certain Environmental Justice communities and that the Department is in the process of updating the EJ Policy. Accordingly, Transco has conducted a robust community outreach and public information program that addresses the substantive provisions of DEP's EJ Policy, with revisions from 2005 (DEP Document ID No. 012-0501-002) (rev. January 1, 2005).

The EJ Policy outlines enhanced public participation strategies for permitted activities located in predominantly minority or low-income communities. However, the EJ Policy is a policy statement, not a binding law. See Stevens et al. v. DEP, 2000 EHB 438, 441 ("A policy, by definition, is not binding."). The EJ Policy's terms are not mandated by any statute or regulation. Further, the EJ Policy explicitly states that "the policies [in the EJ Policy] are not an adjudication or regulation. There is no intent on the part of DEP to give the rules in these policies that weight or deference." EJ Policy at 2.

Contrary to commenter's assertions, Transco has in fact undertook each of the notification methods identified in its permit applications for the Project. Under the EJ Policy, permit applicants are strongly encouraged to meet with community stakeholders. Transco held several in-person meetings with community stakeholders in Pennsylvania and New Jersey in order to provide information about the Project. In February 2022, Transco held in-person meetings with NEPA Inclusive, the Commission on Economic Opportunity of Wilkes Barre, and the United Way of Wyoming Valley. In the summer

of 2022, Transco held in-person meetings with the Red Cross, Keystone Human Services, Midwest Food Bank, and Community Aid (York, PA). Transco provided attendees with bilingual (English and Spanish) informational materials at each in-person meeting.

The EJ Policy encourages permit applicants to circulate written information about the project to residents in the community. Transco distributed user-friendly, bilingual (English and Spanish) Project information materials throughout the communities, which identify a point of contact for any questions about the Project. Transco distributed these materials at various community centers and local organizations such as the Red Cross, Midwest Food Bank, Community Action Association, and the PA chapter of Volunteers of America. Transco mailed bilingual notices to stakeholders on March 14, 2022, with information regarding the public comment period, the public hearing dates, and how to submit public comments.

Transco also partnered with the Community Action Association of Pennsylvania ("CAAP"). Transco met with representatives of CAAP on January 11, 2022 to provide project information and to establish ways to further communicate information to the organizations CAAP works with. Specifically, CAAP provides services to a network of 42 non-profit organizations working to effectively address issues of poverty, self-sufficiency, and community need, including residents in the project area. Transco provided information to CAAP to distribute to the organizations with its extensive network. Transco continues to pursue opportunities to engage stakeholders in EJ-identified block groups. This includes pursuing neighborhood and civic leaders, community organizers and faith-leaders to build awareness of the company, our operations and Project. Transco has also conducted outreach to local, county, and state representatives regarding the Project. Among other outreach efforts, Transco reached out to these representatives on March 3 and 4, 2022 within 48 hours of the issuance of the DEIS. Bilingual notices to stakeholders were mailed the week of March 14, 2022, and these notices included details regarding the EIS and how to submit comments to FERC.

With respect to the commenter's contentions about the Project website, the EJ Policy does not require permit applicants to develop a website for a proposed project. Nevertheless, Transco established a bilingual website containing information about the Project. The website contains informational materials such as a bilingual project brochure, maps identifying the Project location, contact information, permitting updates, project timelines, and answers to frequently asked questions. (Available online at: https://www.williams.com/expansion-project/regional-energy-access/).