



February 24, 2017

Transcontinental Gas Pipe Line Company, LLC
c/o Ms. Roberta Zwier
2800 Post Oak Boulevard, Level 6
Houston, TX 77056

Re: Technical Deficiency #2
Atlantic Sunrise Pipeline – Wyoming County
APS ID# 878960, AUTH ID# 1087354
DEP Application No. E66-160
Clinton Township, Eaton Township, Falls Township,
Monroe Township, Nicholson Township,
Northmoreland Township, Overfield Township
Wyoming County

Dear Ms. Zwier:

On July 29, 2016, the Department of Environmental Protection (Department) sent to Transcontinental Gas Pipe Line Company, LLC (Transcontinental) a technical deficiency letter for the above referenced Project. The Department received a response to that technical deficiency letter on November 21, 2016, and determined that the application, including the resubmission, continues to be technically deficient. ***The Pennsylvania Dam Safety and Waterway Management Regulations, 25 Pa. Code § 105.1 et seq., (Chapter 105 Regulations)*** include information that will aid you in responding to some of the deficiencies listed below. The deficiencies are based on applicable laws and regulations, and the guidance sets forth the Department's preferred means of satisfying the applicable regulatory requirements.

As you are aware, Department staff in two different regional offices is reviewing a combined total of eight Chapter 105 permit applications associated with this project. While the regional offices have coordinated the review of the applications and the identification of deficiencies, it is possible that deficiencies raised in the Department's other deficiency letters may be applicable to this permit, even though not stated herein. The Department recommends that Transcontinental evaluate whether any of the deficiencies identified in the other Chapter 105 permit application deficiency letters, beyond those deficiencies identified in this letter, necessitate revisions in this permit application.

Note: Due to multiple reviewers and the size of the document there may be some duplication of deficiencies.

Technical Deficiencies

1. Original Comment #4: Provide agency clearance letters and copies of correspondence from the Pennsylvania Fish and Boat Commission, Pennsylvania Game Commission, Pennsylvania Department of Conservation and Natural Resources, and U.S. Fish and Wildlife Service for the proposed pipeline, including no-access parcels, and the mitigation area, and identify any mitigation measures that are recommended or required. Please be advised that additional deficiencies may be generated pending responses from resource agencies. 25 Pa Code §105.14(b)(4).

Provide clearance from USFWS for the Northern Long-Eared Bat and Indiana Bat. As PGC deferred comments on bat species to USFWS, clearance from USFWS will complete the clearance for PGC.

Letters from jurisdictional agencies (PFBC, DCNR, PGC, and USFWS) were omitted from the November 2016 submission that had been included with the original 2015 submission. Include all letters from the jurisdictional agencies that identify the potential impacts to threatened/endangered species in addition to the clearance letters for each species. These letters are required in lieu of a PNDI search receipt due to the size of the project.

2. Original Comment #5: Provide clearance or approval from the Pennsylvania Historical and Museum Commission (PHMC) for cultural, archeological, and historic resources for the proposed water obstructions and encroachments, mitigation area, and areas necessary to construct the water obstructions and encroachments. 25 Pa Code §§105.13(e)(1)(x), 105.14(b)(4) and 105.14(b)(5).

Please provide correspondence from the PHMC identifying how the impacts listed in Table D-3 as “BHP Key 862240, Nesbitt Rural Historic District” and “BHP Key 862236 Farm, 4-bay dwelling with additions, dry stone wall on property” are being resolved.

3. Original Comment #12: Several streambank stabilization methods are proposed in the Erosion and Sedimentation Control Plans. Identify where each type of stabilization measure will be utilized. 25 Pa Code §105.21(a)(1).

The stream bank restoration plan has been provided within Attachment L-5, Appendix L-3. The associated stream bank restoration methodology has not been identified on the E&S Control Plans. Please provide the type of stream bank restoration on the E&S Control Plans.

4. Original Comment #16: An Aids to Navigation (ATON) plan may be required for this project. Contact Thomas Burrell with the Pennsylvania Fish and Boat Commission at

717.705.7838 regarding ATON requirements, and provide a copy of the ATON approval to the Department. 25 Pa Code §105.14(b)(2).

The Department's review for evaluating impact to navigable public waterways found Pennsylvania Fish and Boat Commission (PFBC) approvals of ATON plans at two locations in Wyoming County are forthcoming.

Please provide the PFBC ATON plans and approvals for inclusion with your Joint Permit application materials.

5. Original Comment #24: There are inconsistencies between the stream length noted between the Plan maps and the "Impact Table for Individual Permit Application". Please check all stream crossing lengths on the Plan maps with the Impact Table for Individual Permit Application for consistency. 25 Pa Code §§105.13(e)(1)(i)(C) and 105.13(e)(1)(iii).

There are inconsistencies with respect to the stream lengths between the Impact Table for Individual Permit Application and the County Specific Mapping in Appendix H-2. Please revise accordingly.

6. Original Comment #32: Each of the temporary equipment stream crossings shown on the plan view drawings reference numerous typical details for various methods that the contractor may utilize to construct the crossings. The methods include 1. Bridge Equipment Crossing (BEC); 2. Flume Stream Crossing (FX); 3. Wet Minor Waterbody Crossing (MWC); 4. Temporary Stream Crossing Multiple Pipes (TSC.2); 5. Timber Matting Air Bridge (MAT.3); 6. Wet Intermediate Waterbody Crossing (IWC); and 7. Clean Water Crossing (CWC). The Stream impacts vary for each method. Please choose a single method that is both practical and has the least impact on the stream and floodway. Revise the plans and other applicable components of the application appropriately. Please show the proposed erosion and sediment control BMPs on the Erosion and Sediment Control Plans. 25 Pa Code §105.13(g).

The application has been revised to identify the type of temporary equipment stream crossing in attachment H-2; however, the proposed crossing type is not identified on the associated Soil Erosion and Sediment Control Plan/Site Restoration Plan. Please identify the method of crossing being proposed on the Soil Erosion and Sediment Control Plan/Site Restoration Plan.

7. Original Comment #33: Each of the temporary equipment wetland crossings shown on the plan view drawings reference numerous typical details for various methods that the contractor may utilize to construct the crossings. The methods include 1. Timber Matting in Wetlands (MAT.1); and 2. Wetland Equipment Crossing (WEC). The Wetland impacts vary for each method. Please choose a single method that is both practical and has the least impact on the wetland. Revise the plans and other applicable components of the application appropriately. 25 Pa Code §105.13(g).

The application has been revised to identify the type of temporary equipment wetland crossing in attachment H-2; however, the proposed crossing type is not identified on the associated Soil Erosion and Sediment Control Plan/Site Restoration Plan. Please identify the method of crossing being proposed on the Soil Erosion and Sediment Control Plan/Site Restoration Plan.

8. Original Comment #34: Each of the utility crossings shown on the plan view drawings reference numerous typical details for various methods that the contractor may utilize to construct the crossings. The methods include 1. Cofferdam Stream Crossing (CD); 2. Dam and Pump Stream Crossing (DPX); 3. Flume Stream Crossing (FX); 4. Wet Intermediate Waterbody Crossing (IWC); 5. Wet Minor Waterbody Crossing (MWC); 6. Horizontal Directional Drill (HDD); 7. Bored Waterbody Crossing (WBX.1); 8. Unsaturated Wetland Installation Procedure (WCC.1); 9. Saturated Wetland Installation Procedure (WCC.2); and 10. Inundated Wetland Installation Procedure (WCC.3). The Stream impacts vary for each method. Please choose a single method that is both practical and has the least impact on the stream and floodway. Revise the plans and other applicable components of the application appropriately. 25 Pa Code §105.13(g).

The application has been revised to identify the proposed utility crossing design in attachment H-2; however, the proposed crossing type is not identified on the Soil Erosion and Sediment Control Plan/Site Restoration Plan. Please identify the method of crossing proposed on the Soil Erosion and Sediment Control Plan/Site Restoration Plan.

9. The proposed temporary equipment crossing design does not include any measure to prevent sediment from falling off the sides of the equipment crossing into waters of the Commonwealth. Please modify the temporary equipment crossing design to insure that appropriate measures are proposed to address this concern. Please note that modifying the design to provide for the installation of a 1-foot high side rail that will also be wrapped with an appropriate geo-textile fabric would be an acceptable design modification. 25 Pa Code §105.13(g).
10. It appears that USGS StreamSTATS was utilized for the hydrologic calculations to determine the peak flows for the temporary dam and pump to install the pipeline across streams within Wyoming County. USGS StreamSTATS is accurate for drainage areas that are over 1 square mile. There appears to be several drainage areas for the streams that will be crossed within Wyoming County are under the 1 square mile drainage area; therefore, USGS StreamSTATS cannot be used to determine the peak flows to size the proposed dam and pumping systems to dewater the construction area to install the proposed natural gas pipeline. Please provide an acceptable hydrologic method to determine the peak flows. 25 Pa Code §105.161(b).
11. To ensure that all potential impacts to regulated waters are evaluated and approved under applicable Chapter 105 regulatory criteria, the Department seeks a revised Attachment H-

2 that includes primary, secondary and even tertiary pipeline installation methods (e.g., CD, DPX, FX, etc.), temporary construction crossing methods (e.g., BEC, MAT.1, MAT.3. etc.), and streambank restorative methods (e.g., RSS, SBR, etc.). The Department further seeks revision of each Attachment H-2 impact table to report worst case scenario regulated waters impact should the secondary or tertiary method need to be implemented. 25 Pa Code §105.13(e)(1)(x).

12. The hydraulic calculations for the flume crossings only provide the Water Surface Profile Plot for a Culvert. Please provide the HY-8 Report identifying the water surface elevations for the existing and proposed conditions, overtopping characteristics, etc. 25 Pa Code §105.161(d).
13. The crossing type for the Susquehanna River is not consistently represented throughout the application. The table within the Hydrologic and Hydraulic Calculations for Wyoming County states, “not applicable for the crossing type for the Susquehanna River.” The Impact Table for Individual Permit Application indicates that the crossing method will be HDD. Please revise accordingly. 25 Pa Code §105.13(e)(1)(iii).
14. The Hydrologic & Hydraulic Calculations for Waterbody Crossings for Wyoming County, Section 1, Project Introduction, Paragraph #3 states, “This report summarizes the hydrologic and hydraulic calculations for the waterbodies to be crossed in *Susquehanna County*. All of the crossings in *Susquehanna County*....” Also, the heading for Section 1.2 also identifies the incorrect county. Please revise the application to reflect the correct county for which the calculations have been completed. 25 Pa Code §105.13(e)(1)(iii).
15. The crossing type identified for WW-T10-20001 is not consistent throughout the application. The Impact Table for Individual Permit Application states that the crossing method for WW-T10-20001 is a flumed crossing. Attachment H-2 states that the crossing method for WW-T10-20001 will be dam and pump. Please identify the correct crossing method for WW-T10-20001 and address any inconsistencies in the application. 25 Pa Code §105.161(d).
16. Comments have been received regarding alternative routing of the pipeline around the Nesbitt Property. A copy of the comment is attached. Please evaluate this comment and provide analysis on the feasibility of the alternative. 25 Pa Code §105.13(e)(1)(viii).

You may request a time extension, in writing, before **April 25, 2017** to respond to deficiencies beyond the sixty (60) calendar days. Requests for time extensions will be reviewed by the Department and considered. You will be notified in writing of the decision either to grant or deny, including a specific due date to respond if the extension is granted. Time extensions shall be in accordance with 25 Pa. Code §105.13a(b).

Pursuant to 25 Pa. Code §105.13a of the Department’s Chapter 105 Rules and Regulations you must submit a response fully addressing each of the significant technical deficiencies set forth above. Please note that this information must be received within sixty (60) calendar days from

the date of this letter, on or before **April 25, 2017** or the Department may consider the application to be withdrawn by the applicant.

If you believe that any of the stated deficiencies are not significant, instead of submitting a response to that deficiency, you have the option of asking the Department to make a decision based on the information with regard to the subject matter of that deficiency that you have already made available. If you choose this option with regard to any deficiency, you should explain and justify how your current submission satisfies that deficiency. Please keep in mind that if you fail to respond, your application may be withdrawn or denied.

Should you have any questions regarding the identified deficiencies, please call Michael Luciani, and refer to Application No. E66-160, Atlantic Sunrise to discuss your concerns or to schedule a meeting. The meeting must be scheduled within the 60-day period allotted for your reply, unless otherwise extended by the Department.

You may also follow your application through the review process via *eFACTS on the Web* at: <http://www.ahs2.dep.state.pa.us/eFactsWeb/default.aspx>.

Sincerely,



Kevin S. White, P.E.
Environmental Group Manager
Waterways & Wetlands Program

Enclosure

cc: Mr. Michael Dombroskie/US Army Corps of Engineers, Baltimore District
Ms. Jamie Davis/US Environmental Protection Agency
Wyoming County Conservation District
Mr. Aaron Blair/Transcontinental Pipe Line Company, LLC
Mr. John Zimmer/TRC Environmental
PA Fish & Boat Commission, Division of Environmental Services
Clinton Township
Eaton Township
Falls Township
Monroe Township
Nicholson Township
Northmoreland Township
Overfield Township