



July 11, 2017

Ms. Roberta Zwier
Transcontinental Gas Pipe Line Company, LLC
2800 Post Oak Blvd., Level 6
Houston, Texas 77056

Re: Technical Deficiency Letter #3 – Erosion and Sediment Control General Permit (ESCGP)
Atlantic Sunrise Project
CPL North, CPL South and Associated Facilities
DEP File No. ESG03000150001
Cleveland, Franklin, Greenwood, Hemlock, Jackson, Montour, Mount Pleasant, Orange, Rapho &
Sugarloaf Townships, Columbia County
Conestoga, Drumore, East Donegal, Eden, Manor, Martic, Pequa, Rapho & West Hempfield
Townships and Mount Joy Borough, Lancaster County
Cold Springs, East Hanover, North Annville, North Lebanon, South Annville, South Londonderry,
Swatara & Union Townships, Lebanon County
Dallas, Fairmont, Harveys Lake, Jenkins, Lake, Lehman & Ross Townships, Luzerne County
Coal, East Cameron & Rapho Townships, Northumberland County
Eldred, Frailey, Hegins, Pine Grove, Porter & Tremont Townships, Schuylkill County
Lenox Township, Susquehanna County
Clinton, Eaton, Falls, Monroe, Nicholson, Northmoreland & Overfield Townships, Wyoming
County

Dear Ms. Zwier:

On July 29, 2016 (TD#1) and February 24, 2017 (TD#2), the Department of Environmental Protection (Department) and the following County Conservation Districts (CCDs), Columbia, Lancaster, Lebanon, Luzerne, Northumberland, Schuylkill, Susquehanna & Wyoming, sent technical deficiency letters to the Transcontinental Gas Pipe Line Company, LLC, for the above referenced Project. The Department received responses to those technical deficiency letters on November 22, 2016 and May 5, 2017, respectively, and determined that the application, including the resubmission, continues to be technically deficient. The Pennsylvania Erosion and Sediment Pollution Control Program Manual (E&S Manual) and the Pennsylvania Stormwater Best Management Practices Manual (PCSM Manual) 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 established means of satisfying the applicable regulatory and statutory requirements.

The technical deficiencies have been noted by the County Conservation Districts and Department staff. General technical deficiencies are identified that appear to reoccur throughout the plan narratives and drawings. The Department has identified specific examples of deficiencies. It is recommended that

Transcontinental Gas Pipe Line Company, LLC, and its consultant team review the entire project submittal to ensure that all specific technical deficiencies and general technical deficiencies are comprehensively addressed. Any public comments that raise issues not addressed in this letter may require additional responses.

1. A review of the resubmission's Summary of PHMC Coordination revealed a recent request from the Pennsylvania Historical and Museum Commission (PHMC) dated April 21, 2017 which further evaluates the remaining portions of the Phase I survey. Provide the subsequent PHMC coordination evaluations and associated clearance documentation. Review all technical drawings, narratives, support documents, and calculations to assure that identified resources, temporary impacts, and permanent impacts are consistently identified and reported. 25 Pa. Code § 102.6(a)(2).

COLUMBIA COUNTY

Soil Erosion and Sediment Control Plan / Site Restoration Plan Drawings – Proposed 42" Central Penn South

1. Comment #8 on TD#2: Contractor Staging Area CSA-CO-4-003: a) The plans call for a Rock Construction Entrance (RCE) with a wash rack. More information is needed as to the treatment of the water from the wash rack. The RCE Rock Construction (RCW) detail requires the discharge to be directed to a sediment basin or trap but none is shown on the plans. Please revise the plans accordingly. 25 Pa. Code § 102.4 (B)(5)(ix).

The silt sock associated with the RCE wash rack is proposed to be located in the drainage ditch for the road associated with this location. The RCE and silt sock should be located in a manner that the wash water will be treated before the discharge enters the road ditch.

LANCASTER COUNTY

1. DEP cross-check review of the provided cultural resources evaluations with the documented subsequent PHMC coordination found one identified potential archeologic site and four above-ground historic sites possibly needing cultural resource evaluation clearance. Referenced in the PHMC March 22, 2017 correspondence, review staff understood Archeologic Site ID 36LA1535 could be under PHMC review. Review of Attachment D-1 (Table D-4) identified above-ground sites BHP Key #862287, BHP Key #862260, No BHP Key- Like Cemetery, and BHP Key #862288 which suggested PHMC coordination was pending, whereas no PHMC documentation relative to these four above-ground sites was found. If PHMC correspondence for the archeological and four above-ground sites was provided to DEP in your May 5, 2017 submission or as follow-up addendum, please provide DEP with direction as to how to locate this necessary PHMC documentation. If these cultural resources are under PHCM review, please acknowledge that this agency review is ongoing and provide DEP with copies of the PHMC final clearance letters. 25 Pa. Code § 102.6(a)(2).

LUZERNE COUNTY

Soil Erosion and Sediment Control Plan / Site Restoration Plan Drawings – Proposed 30” Central Penn North

1. Comment #11 on TD#1 and Comment #6 on TD#2: The plan drawings (not just the Erosion and Sediment (E&S) narrative) should include a complete schedule of installation and removal of erosion control Best Management Practices (BMPs) as they relate to the various phases of earthmoving activities. 25 Pa. Code § 102.11(a)(1).

Construction sequence not provided on the pipeline E&S plans (Proposed 30” Central Penn North). Please revise the E&S Plans accordingly.

2. Comment #11 on TD#2: Erosion control blanket locations associated with the pipeline have not been identified/labeled on the plan drawing. Please revise the plans accordingly. 25 Pa. Code § 102.11(a)(1).

Blanket labeling on Average Percent (%) Slope Band is illegible and not shown on all disturbed areas within 50 feet (50’) of a surface water (100 feet (100’) for High Quality (HQ) or Exceptional Value (EV) waters), Page 273 of the E&S Manual). Please review the E&S Plans accordingly.

3. A check of silt sock slope lengths in areas where the pipeline has been realigned could not be conducted due to insufficient existing contour elevation labeling. Please revise the E&S Plans accordingly. 25 Pa. Code § 102.11(a)(1).

Erosion and Sediment Control and Layout Plans Drawings – Access Roads

4. The E&S plan identifies existing cover for access road off SR 309, connecting to new access road LU-020.3, as gravel. A recent site visit shows that the majority of the road is soil. Please adjust location of proposed rock construction entrance to account for actual cover conditions. Rock Construction Entrance. 25 Pa. Code § 102.11(a)(1).

Soil Erosion and Sediment Control Plan Drawings – North Diamond Regulator Station

5. Proposed outfall from rain garden, channel 1 and culvert 1 should extend to an adequate surface water body or storm sewer. Please revise the E&S Plans accordingly. 25 Pa. Code § 102.11(a)(1).

SCHUYLKILL COUNTY

Erosion and Sediment Control Plan and Post Construction Stormwater Management/Site Restoration Plan Narrative – Temporary and Permanent Access Roads

1. Comment #1 on TD#1 and Comment #2 on TD#2: Provide calculations for the proposed earthen level spreaders to demonstrate that the structure will reduce the discharge velocity in the receiving flow path to a non-erosive level. You may use the guidance in Item 15 on Page 161 and Appendix G of E&S Manual. 25 Pa. Code § 102.11(a)(1).

The response letter states an Adequacy of Discharge analysis was provided for access road

AR-SC-068; however, the analysis could not be located. Please identify where the Department can find the discharge analysis. It appears the sock diversions and aprons were removed on the proposed temporary access road through a strip mine area in Porter/Frailey Townships Please clarify why this plan modification occurred.

Erosion and Sediment Control and Layout Plans Drawings – Access Roads

2. Comment #3 on TD#1 and Comment #12 on TD#2: Timber mats are shown at low points in access roads to convey/maintain drainage of clean upslope water on a road with construction traffic. Please specify what BMPs will be used to clean upslope water or provide an alternate means of conveyance of clean water through a construction area. 25 Pa. Code § 102.11(a)(1).

“Rock Matting” has been proposed in these areas, rather than the Timber Mats. Please provide details.

A Rock Matting detail has been added to the beginning of the Schuylkill County Access Road plan set and is shown on the site plans. On Drawing Sheet 3 of 4 for Access Road SC-067.1, a perimeter sediment control BMP, e.g. compost filter sock, should be shown downslope of the proposed Rock Matting.

Erosion and Sediment Control Plan Narrative – Proposed Central Penn South

3. Appendix B (Channel Design): Standard Worksheet #11 and the corresponding drainage areas for swale diversion ID numbers 64.03 through 67.02 have not been provided with this revision. Please provide appropriate design specifications for the identified swales. 25 Pa. Code § 102.11(a)(1).

PROPOSED E&S BMPs

1. Please provide calculations for the level spreader system and specifically address concerns that it will effectively handle all flows for the duration of its use. These calculations should include, but need not be limited to, the following:
 - a. Please provide calculations that show the proposed slope pipes will have enough capacity to convey the flow of the contributing drainage area. Should there be any ponding at the inlet of the slope pipe, please provide calculations showing that the headwall will be adequate and overtopping of the headwall will not occur. 25 Pa. Code §102.11(a)(1)
 - b. Calculations showing the available head at the end of the level spreader pipe after accounting for all head losses in both the supply pipe and the level spreader pipe. 25 Pa. Code §102.11(a)(1).
 - c. Please provide calculations per the E&S BMP manual on the sizing of the level spreader in order to diffuse flow rates based on the type of down slope vegetation/ground cover after the level spreader. 25 Pa. Code §102.11(a)(1).
 - d. Should the calculations show that the proposed level spreader system will not adequately convey the stormwater to minimize accelerated erosion, please redesign accordingly. 25 Pa. Code §102.11(a)(1)
2. The table entitled Temporary Perforated Pipe Level Spreader Calculations on Sheet 3 of 6 in the Quantity, Crossing and Acidic Soils tables in the Best Management Practices and Quantities Plan set should have an additional column listing the total length of the level spreader to avoid confusion in cases where multiple pipes will be required. Please revise the E&S Plans

accordingly. 25 Pa. Code § 102.4(b)(5)(ix).

3. The following comments relate to particular proposed level spreaders:
 - a. Level spreader for crossing 93.01 proposes a 100 foot level spreader as designed. Show how this will be installed within the Limit of Disturbance (LOD) while keeping the pipe level. Since the discharge appears to empty into a defined channel, consideration should be given to proposing the installation of an energy dissipating BMP prior to discharging directly into the drainageway. 25 Pa. Code §102.4(b)(5)(ix).
 - b. Level spreaders/supply pipes at 117.01 and 117.02 should be better shown on the drawings. It is not clear how they will be installed. 25 Pa. Code § 102.4(b)(5)(ix).
 - c. Level spreader at 119.01 appears to discharge into an established drainageway. Consideration should be given to installing an energy dissipating BMP prior to discharging directly into the drainageway. 25 Pa. Code §102.11(a)(1).
 - d. Should the calculations show that the proposed level spreader system will not adequately convey the stormwater to minimize accelerated erosion, please redesign accordingly. 25 Pa. Code §102.11(a)(1).
4. Please provide additional dimensions with respect to multiple slope pipes, in excess of two, and level spreader connections. 25 Pa. Code § 102.4 (b)(5)(ix).

POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLANS

GENERAL PCSM TECHNICAL DEFICIENCIES RELATED TO ALL DOCUMENTS

1. Comment #8 on TD#2: A land preservation agreement, deed restriction or other enforceable instrument that ensures perpetual protection of the proposed BMP to protect sensitive and special value features (25% slopes) has not been provided for the PCSM BMP. Please revise the application accordingly. 25 Pa. Code § 102.8(m).

Please provide the land preservation agreement, deed restriction or other enforceable instrument with respect to the proposed PCSM BMP utilized for the River Road Regulator Station.

2. Comment #9 on TD#2: Please provide specific coordinates (metes and bounds) that are to be used within the enforceable instrument for the proposed PCSM BMP to protect sensitive and special value features. 25 Pa. Code § 102.8(f)(9).

Please provide the metes and bounds for the enforceable instrument with respect to the proposed PCSM BMP utilized for the River Road Regulator Station.

3. Comment #12 on TD#2: Please provide the following notations on the PCSM Plans for the proposed PCSM BMP to protect sensitive and special value features, 25 Pa. Code § 102.8(f)(9).:
 - a. The protected areas shall be clearly delineated in the field prior to any construction activities taking place.
 - b. The protected area should not be disturbed during construction except for temporary impacts for mitigation or restoration efforts.

Please provide the notations on the Plans with respect to the proposed PCSM BMP utilized for the River Road Regulator Station.

COLUMBIA COUNTY

Post Construction Stormwater Management Site Restoration Plans Narrative - Compressor Station 610

1. The plans now call for a level spreader with perforated pipe to discharge the flow onto the identified infiltration areas. 25 Pa. Code § 102.8(f)(8).
 - a) The capacity for this system should be adjusted to allow for partial blockage of the holes by debris entering the system via the supply pipes and also for blockage of the holes by the rock bedding around the pipe.
 - b) The maintenance plan for the site should include methods to check for and clean debris from inside the pipe as needed.

Post Construction Stormwater Management Site Restoration Plans Narrative - West Diamond Regulator Station

2. Comment #11 on TD#2: More information is needed to show how sediment and floating debris will be prevented from sealing the underground discharge pipe for the basin and/or how it will be cleaned if blocked. 25 Pa. Code § 102.11(a)(2).
 - a) **The response from the consultant states that the trash rack will prevent blockage. It does not appear that the trash rack is capable of filtering out debris large enough to block the discharge holes. Please provide details on how that will be accomplished and verify that any reduction in cross sectional area of the grate required to provide this protection has been accounted for in the routings of the pond.**
 - b) **The maintenance section of the plan still does not address how the discharge holes in the buried level spreader pipe will be checked for blockage or how they will be cleaned if necessary.**

Post Construction Stormwater Management Plan Narrative - Access Roads Columbia Township

Permanent Access Road AR-C0-097.1.1 (New Site)

3. Worksheet #12 for this Site does not appear to reflect the permanent improvements on the Site. Please address. 25 Pa. Code § 102.8(f)(8).

WYOMING COUNTY

1. The Post Construction Stormwater Management/Site Restoration Plans Narrative for the Compressor Station 605 calculations for the stormwater volume mitigation states that the POI A&B, and POI C requires 25,482 cubic feet and 9,206 of stormwater to be infiltrated respectively. This leaves 3,189 cubic feet for POI A&B and 3,741 cubic feet for POI C of stormwater volume remaining to be infiltrated. It appears that the site can mitigate the remaining stormwater volume and bring the post construction stormwater volume equal to or less than the existing conditions. Please provide calculations for the remaining volume mitigation. 25 Pa. Code § 102.8(f)(8).

2. Please provide Worksheets #12 and #13 for the Springville Meter Station. They are missing from the Post Construction Stormwater Management /Site Restoration Plans for the Springville Meter Station. 25 Pa. Code § 102.8(f)(8).
3. It appears that the Impact Identification Numbers on the Erosion and Sediment Control Plan/Restoration Plans, W-T81-18001B-1, WT-81-18001A-1 and W-T82-18006C-1 are not consistent with the Chapter 105 Impact Table for Individual Permit Application and Appendices H-1 and H-2. Please revise the Erosion and Sediment Control Plan/Restoration Plan to be consistent with the Chapter 105 Impact Table for Individual Permit Application and Appendices H-1 and H-2. 25 Pa. Code § 102.8(f)(9).
4. Sheet 24-1601-70-28-A/1683.3 of the Erosion and Sediment Control Plan/Site Restoration Plans has two streams with the same Impact Identification Number WW-T19-19002. Please revise the Erosion and Sediment Control Plan/Site Restoration Plans to correctly identify the correct Impact Identification Number for the streams shown on Sheet 24-1601-70-28-A/1683.3. 25 Pa. Code § 102.8(f)(9).

Pursuant to 25 Pa. Code § 102.6(c) of the Department's 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 by the Department within sixty (60) calendar days from the date of this letter, on or before **September 9, 2017**, or the Department may consider the application to be withdrawn.

You may submit a written request to the Department for additional time to respond pursuant to 25 Pa. Code § 102.6(c). Written requests for additional time to respond must be received by the Department before **September 9, 2017**. You will be notified in writing of the Department's decision to either grant or deny the request for additional time to respond, The Department's response shall identify a specific due date to respond if the extension is granted. Time extensions should be in accordance with 25 Pa. Code § 102.6(c).

Please submit one (1) copy of the revised E&S/Site Restoration Plans (SR) and PCSM Plan drawings & narratives to all of the County Conservation Districts, one (1) copy of the revised E&S/SR and PCSM Plan drawings & narratives to Mr. Mark Lonergan at the Department's Reading District Office at 1005 Cross Roads Boulevard, Reading, PA 19605 and two (2) copies of the revised E&S/SR and PCSM Plan drawings and narratives to the Department's North-Eastern Region at 2 Public Square, Wilkes-Barre, PA 18701-1915.

If you believe that any of the stated deficiencies are not significant, or that you have addressed them in a previous submission, instead of submitting a response to that deficiency, you have the option of requesting the Department make a permit decision based on the information that you have already provided regarding the subject matter of that deficiency. If you choose this option with regard to any deficiency, you should explain and justify how the stated deficiencies are not significant, or state specifically where in a previous submission they were addressed. Please keep in mind that if you fail to respond, your application will be considered withdrawn.

Should you have any questions regarding the identified deficiencies, please contact me at the 570.826.2511, and refer to ESG0300015001, to discuss your concerns or to schedule a meeting. The meeting must be scheduled within the 60 calendar days allotted for your reply, unless otherwise extended by the Department in response to a written request for extension.

Sincerely,



Pamela R. Dobbins, P.E.
Environmental Group Manager
Waterways & Wetlands Program

cc: Mr. Alaric J. Busher, P.E., BL Companies
Columbia County Conservation District
Lancaster County Conservation District
Lebanon County Conservation District
Luzerne County Conservation District
Northumberland County Conservation District
Schuylkill County Conservation District
Wyoming County Conservation District
Cleveland, Franklin, Greenwood, Hemlock, Jackson, Montour, Mount Pleasant, Orange, Rapho & Sugarloaf Townships, Columbia County
Conestoga, Drumore, East Donegal, Eden, Manor, Martic, Pequa, Rapho & West Hempfield Townships and Mount Joy Borough, Lancaster County
Cold Springs, East Hanover, North Annville, North Lebanon, South Annville, South Londonderry, Swatara & Union Townships, Lebanon County
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