



pennsylvania

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office

September 6, 2016

Matthew L. Gordon, Project Manager
Sunoco Pipeline, L.P.
525 Fritztown Road
Sinking Spring, PA 19608

Re: Technical Deficiency Letter - Erosion and Sediment Control Permit (ESCGP)
Pennsylvania Pipeline Project (Mariner East II)
ESG 05 000 15 001
Allegheny County: Forward Twp., and Elizabeth Borough
Cambria County: Cambria Twp., Cresson Boro., Jackson Twp., Munster Twp., and Washington Twp.
Indiana County: Burrell Twp., East Wheatfield Twp., and West Wheatfield Twp.
Washington County: Chartiers Twp., North Strabane Twp., Nottingham Twp. and Union Twp.
Westmoreland County: Delmont Boro., Derry Boro., Hempfield Twp., City of Jeanette, Loyalhanna Twp., Murrysville Boro., Penn Twp., Rostraver Twp., Salem Twp., Sewickley Twp., and South Huntingdon Twp.

Dear Mr. Gordon:

The Department of Environmental Protection (DEP) and the following County Conservation Districts in the Southwest Region; Allegheny, Cambria, Indiana, Washington and Westmoreland, have reviewed the above referenced NOI and have identified the following technical deficiencies. 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 the requirements of Article I Section 27 of the Pennsylvania Constitution, applicable laws and regulations, and the guidance that sets forth the DEP's recommended means of satisfying the applicable regulatory and statutory requirements.

The technical deficiencies have been assembled from the County Conservation Districts and DEP staff. General technical deficiencies are identified that appear to be a recurring technical deficiency throughout the plan narratives and drawings. Specific examples of the general deficiencies are provided for reference; however, all of the specific instances may not have been identified. Sunoco Logistics, L.P. and its team of consultants should review the entire project submittal to ensure any and all specific technical deficiencies and general technical deficiencies are addressed in a comprehensive manner.

General Technical Deficiencies

1. The Notice of Intent for Coverage Under the Erosion and Sediment Control General Permit (NOI) was signed and certified by Matthew L. Gordon as the "Project Manager". Per the instructions for the Notice of Intent for Coverage Under the Erosion and Sediment Control General Permit a responsible official is required to sign and certify the NOI. An NOI from a partnership shall be signed by one or more members authorized to sign on behalf of an entire partnership. Provide information that Mr. Gordon is authorized to sign the NOI or have the proper partner(s) sign the NOI. 25 Pa Code §102.6(a)(1)
2. The application will need a comprehensive Preparedness Prevention Contingency (PPC) plan to protect against potential impacts, including, but not limited to, potential impacts to public and private water supplies. 25 Pa. Code §§91.33(b) and 102.5(l). Regarding these plans:
 - a. The application includes separate documents covering PPC activities. Due to the scope of this project, you must consolidate these plans into one stand-alone document that can be used in the field. This plan must also be consistent with and within your Joint Permit Applications (JPA) submitted for this project.
 - b. In a letter dated June 24, 2016, regarding the northeastern bulrush, the U.S. Fish and Wildlife Service stated, "As a means to minimize impacts should an IR occur, you provided an HDD Inadvertent Release Contingency Plan. In addition to the instructions in this Plan, please add the USFWS phone number as an agency to be contacted should an IR occur, and inform the HDD contractor about the sensitive nature of the drill at this location." Revise your Contingency Plan to incorporate this information.
 - c. While you provided a narrative discussing how impacts to private water supplies will be investigated and addressed, a formal plan has not been provided. As such, revise your PPC plan to include the following:
 - i. Measures the applicant will take to investigate for the presence of private water supplies in areas where HDD crossings are proposed.
 - ii. Procedures that will be followed to investigate and resolve impacts to private water supplies should they occur as a result of the proposed activities. This procedure should discuss how private water supply owners will be alerted in the event of an inadvertent return.
 - iii. The application states, "SPLP plans to use the FERC standards in accepting and investigating landowner complaints of spring and well water supply impairment." Provide a copy of these FERC standards and incorporate the FERC standards into your PPC plan.
 - d. The Mariner East 1 pipeline had several inadvertent returns during the construction process. Provide a list of areas where Mariner East 1 had issues with inadvertent returns to the surface when conducting HDD crossings, and discuss how you have taken these historic issues into account in your design of the proposed project.
 - e. The PPC plan should address management of excess drilling mud or liquids that may be encountered at the individual bore pits.

3. Regarding your agency coordination:
 - a. Provide PNDI clearances from the PA Game Commission and US Fish and Wildlife Service. 25 Pa. Code §102.6(a)(2).
 - b. Provide proof that you have received clearance for your project from PHMC. 37 Pa.C.S. §508.
4. The project description provided in the Cultural Resource Notice states that the second pipeline is to be installed within 5 years of the first pipeline. The project description provided in the application, however, does not discuss this timeframe. 25 Pa. Code §102.6.
 - a. Revise the application to discuss if the pipelines will be installed at the same time, or on different schedules.
 - b. The application states that the second pipeline will be 16 inches in diameter, while other applications related to this project state that the second pipeline could be up to 20 inches in diameter. Which is correct?
 - c. If the pipelines are proposed to be installed at separate times, revise the application to clearly indicate this, and to identify the permanent and temporary impacts from the second pipeline installation. Please be advised that if issued the permit may expire before construction is completed on any second line.
5. Your application identifies “travel lanes” at numerous resource crossings, however, details on these travel lanes have not been provided. Please provide details on these travel lanes that includes but is not limited to, cross sectional view, length of time in service, potential impacts, and any other relevant details. Please note that the application did not detail any impacts, permanent or temporary, or E&S Controls for these travel lanes even though they may constitute disturbance and are shown to cross resources. Please revise your application as necessary. 25 Pa. Code §102.6.
6. We have compared the Plans submitted with this application and the Plans submitted with the five Joint Permit Applications regarding consistency between the site plans and Erosion and Sediment Control Plans you have provided. Inconsistencies were noted as follows: 25 Pa. Code §102.6.
 - a. Describe the difference between the “Permanent Easement” and “Permanent Right-of-Way” areas that are identified on your plans. This description should discuss maintenance activities that will be performed on these areas following construction of the pipeline, and measures that will be taken to ensure that future maintenance activities do not detrimentally impact aquatic resources (i.e. cutting PSS wetlands after restoration).
 - b. Provide a description of the “Travel Lane” that is shown on your project plans. This description should include:
 - i. The purpose of these features.
 - ii. Whether these features will be temporary or permanent.
 - iii. The crossing methods (i.e. mats, pads) that will be used to cross resources.
 - c. The plan views provided do not show a permanent right-of-way proposed over areas where HDD installation is proposed. Describe any clearing or maintenance activities that are

proposed to occur over areas where your pipeline installation will utilize HDD or bore methods to install the line.

- d. The E&S Plan sheets show the proposed gas line being located on top of an existing gas line. Discuss how this will be achieved and not prevent access to the existing line.
 - e. It is recommended that changes to either the JPA or the E&S application be reflected in the other application. Failure to ensure consistency between the two applications will delay any permit decision for this project.
7. To ensure adherence to Threatened and Endangered species restrictions and avoidance measures that are part of any PNDI clearances, the Plans and drawings need to clearly identify these locations and provide construction notes and seasonal restrictions. Both the plans for this application (ESG 05 000 15 001) and the plans for the Joint Permit Applications will need to be revised to include this information. 25 Pa. Code §102.6(a)(2).
 8. The time of concentration line(s) do not appear to follow the contour on the PCSM plan drawings. The time of concentration lines should be drawn perpendicular to the respective existing and proposed contours. Please justify or amend the plan drawings and calculations accordingly. 25 Pa. Code §§102.8(f)(8), 102.8(f)(9), 102.8(g)(3) and 102.8(g)(4)
 9. The time of concentration line lengths on the drawings do not appear to match up with the time of concentrations calculations. Please verify and amend accordingly. 25 Pa. Code §§102.8(f)(8), 102.8(f)(9), 102.8(g)(3) and 102.8(g)(4)
 10. It is difficult to follow how the additional time of concentration is calculated at the bottom of DEP Worksheet 5. This calculation should show every step (i.e. detailed computations) of the calculation for the additional time of concentration for each modeled storm event (for 2, 10, 50, and 100-year storms). 25 Pa. Code §§ 102.8(f)(8), 102.8(f)(9), 102.8(g)(3) and 102.8(g)(4)
 11. For DEP Worksheets 1-5 and the ESCGP-2 application, please amend the following [DEP Application and Worksheets] for all above-ground structures (i.e. valve locations and compressor stations): 25 Pa. Code §102.6.
 - a. Please include all causes of impairment for each respective receiving watercourse
 - b. Please verify the receiving watercourse for each valve site's point of interest
 - c. Please verify the approval status of the Act 167 Plan for the watershed of each valve site. Please provide verification that the site addresses the Act 167 Plan requirements
 - d. Please verify the Chapter 93 classification for each respective receiving watercourse
 - e. Please verify the 2-year/24-hour runoff volume to each berm based on the berm's drainage area
 - f. Please verify the total structure volume provided on DEP Worksheet 5. This should be the lowest value amongst (i) the drainage area runoff volume, (ii) the storage volume of the berm and (iii) the infiltrated volume within 72 hours after the 2-year/24-hour storm event.
 - g. Please verify the recommended infiltration rate for each valve site with the calculations and the infiltration test data

12. To be able to utilize PCSM Standard Worksheet #10, 90% of the disturbed area has to be controlled and managed by a PCSM BMP (refer to Flow Chart D in Chapter 8 of the PCSM Manual). Provide the demonstration that 90% of the disturbed area at each site (individually) is controlled and managed by a PCSM BMP (e.g. it appears that less than 90% of the disturbed area is being controlled and managed by a PCSM BMP at the Juniata River West Block Valve site). If less than 90% of the disturbed area is being controlled and managed by a PCSM BMP, then water quality management can be shown through PCSM Standard Worksheets # 12 & 13 (for TSS, TP & NO₃). Make all revisions necessary. 25 Pa. Code §§ 102.8(f)(6), 102.8(f)(8), 102.8(g)(2), 102.8(g)(4) and 102.11(a)(2).
13. Provide the calculations for each Time of Concentration Adjustment. Ensure that these calculations identify the storage volume utilized and how that storage volume was calculated. The storage volume used in these calculations is the storage volume utilized for the storm event, not the total possible storage of the BMP. Make all revisions necessary. 25 Pa. Code §§102.8(f)(8), 102.8(g)(2),and 102.8(g)(4)
14. Discuss why HDD or conventional boring was not utilized to cross all special protection surface waters as a boring could be considered an ABACT E&S BMP (refer to Page 290 of the E&S Pollution Control Program Manual). 25 Pa Code §§ 102.4(b)(5)(vi), 102.4(b)(6), and 102.11(a)(1)
15. Provide information on which E&S BMPs will be utilized at the HDD and conventional boring locations for management of the drilling mud. Ensure that these BMPs are properly shown on the plan view drawings. 25 Pa Code §§ 102.4(b)(5)(iii), 102.4(b)(5)(vi), and 102.4(b)(5)(ix)
16. Notice of Intent (NOI):
 - a. Site Restoration Plan BMPs, Section E.1: Provide a better identification of which areas of the project were designed to meet which design standards (e.g. which areas were designed to the standards in an approved Act 167 Plan and which areas were designed to the standards of 25 Pa Code §§ 102.8(g)(2) and 102.8(g)(3)).

If an area is covered by an approved and current (approved by the DEP on or after January 2005) Act 167 Plan, the Post Construction Stormwater Management Plan shall be consistent with any approved and current Act 167 Plan. To demonstrate consistency with an approved and current Act 167 Plan, the applicant may select one of the following options (per Erosion and Sediment Control General Permit for Earth Disturbance Associated with Oil and Gas Exploration, Production, Processing, or Treatment Operation or Transmission Facilities Condition 18.b).

- i. Submit a letter provided by the municipal or county planning engineer that verifies plan consistency.
- ii. Submit an Act 167 Plan consistency verification report, which is prepared and sealed by a licensed professional.

Make all necessary revisions to the NOI. 25 Pa Code §102.6(a)(1)

- b. Site Restoration Plan BMPs, Section E.5: Provide a better identification where you propose to discharge stormwater to off-site areas other than a surface water. Refer to the attached DEP's *Off-site Discharges of Stormwater Areas That Are Not Surface Waters Fact Sheet*

(DEP Document No. 3150-FS-DEP4124). 25 Pa Code §§ 102.4(c), 102.6(a)(1), and 102.8(f)(15)

- c. Post Construction Stormwater Management Plan BMPs, Section F.1: Provide a better identification of which areas of the project were designed to meet which design standards (e.g. which areas were designed to the standards in an approved Act 167 Plan and which areas were designed to the standards of 25 Pa Code §§ 102.8(g)(2) and 102.8(g)(3)).

If an area is covered by an approved and current (approved by the DEP on or after January 2005) Act 167 Plan, the Post Construction Stormwater Management Plan shall be consistent with any approved and current Act 167 Plan. To demonstrate consistency with an approved and current Act 167 Plan, the applicant may select one of the following options (per Erosion and Sediment Control General Permit for Earth Disturbance Associated with Oil and Gas Exploration, Production, Processing, or Treatment Operation or Transmission Facilities Condition 18.b).

- iii. Submit a letter provided by the municipal or county planning engineer that verifies plan consistency.
- iv. Submit an Act 167 Plan consistency verification report, which is prepared and sealed by a licensed professional.

Make all necessary revisions to the NOI. 25 Pa Code §102.6(a)(1)

- d. Post Construction Stormwater Management Plan BMPs, Section F.5: Provide a better identification where you propose to discharge stormwater to off-site areas other than a surface water. Refer to the attached DEP's *Off-site Discharges of Stormwater Areas That Are Not Surface Waters Fact Sheet* (DEP Document No. 3150-FS-DEP4124). 25 Pa Code §§ 102.4(c), 102.6(a)(1), and 102.8(f)(15)
- e. Post Construction Stormwater Management Plan BMPs, Section G: Provide a separate Anti-Degradation Analysis for each discharge to a special protection surface water or watershed. Ensure that areas where there may be concentrated stormwater runoff that there are adequate BMPs to control the volume, rate and water quality from the site. 25 Pa Code §§102.6(a)(1), 102.6(c)(1), 102.16(e), and 102.8(f)(6)
- f. Post Construction Stormwater Management Plan BMPs, Section H: Clarify the meaning of the statement, "Notices of Violations attached in formal application", found in this section. Provide complete information related to Sunoco Pipeline, L.P.'s compliance history. 25 Pa Code §102.6(a)(1) and 102.6(c)(1)

Erosion and Sedimentation Control Plan General Technical Deficiencies

- 17. The E&S Plan shall be separate from the PCSM Plan. Provide a separate, detailed PCSM Plan drawing for each of the proposed Block Valve sites. 25 Pa Code §§ 102.4(b)(5)(xiv), 102.8(d), and 102.8(n)
- 18. Ensure that adequate notes are provided related to the HDD sites. Refer to Pages 284 & 285 of the Erosion and Sediment Pollution Control Program Manual for guidance on proper notes related to the HDD and those work sites; identify where this information can be found within the E&S Plan. 25 Pa Code §§ 102.4(b)(5)(vi), 102.4(b)(5)(ix), and 102.11(a)(1)

19. Revise Standard Erosion and Sediment Control Plan Note such that upon temporary cessation of an earth disturbance activity or any stage or phase of an activity where cessation of earth disturbance activities in non-special protection watersheds will exceed 4 days, the site shall be immediately seeded, mulched, or otherwise protected from accelerated erosion and sedimentation pending future earth disturbance activities. In special protection watersheds temporary stabilization shall be immediate. 25 Pa Code §§ 102.4(b)(5)(vi), 102.4(b)(6), and 102.22(b)(1)
20. Show the waterbars on the drawings at the stream and wetland crossings, as identified in the Timber Mat Crossing Detail. 25 Pa Code §§ 102.4(b)(5)(iii) and 102.4(b)(5)(ix)
21. The waterbars shown on the Timber Mat Crossing Detail are not shown on the plan view and are not identified to discharge to sediment control BMPs. Clarify these discrepancies. 25 Pa Code §§ 102.4(b)(5)(vi) and 102.4(b)(5)(ix)
22. Provide a detail for the J-hooks at the end of a waterbar. Provide a demonstration that the designed J-hooks will function adequately and appropriately to manage the erosion and sedimentation from the runoff. 25 Pa Code §§ 102.4(b)(5)(iii), 102.4(b)(5)(viii), 102.4(b)(5)(ix), and 102.4(c)
23. Show which waterbars are temporary and which are permanent on the plan drawing. 25 Pa Code §§ 102.4(b)(5)(iii) and 102.4(b)(5)(ix)
24. Provide for surface roughening, as recommended on Page 260 of the E&S Manual. If surface roughening is not proposed, then provide the alternative BMP and design standard demonstration. 25 Pa Code §§ 102.4(b)(5)(vi), 102.4(b)(5)(ix), 102.4(b)(6), 102.11(a)(1), and 102.11(b)
25. Identify the type of erosion control blanket and matting to be used and for which conditions. Provide the staple pattern details for the erosion control blanket installations. 25 Pa Code §§ 102.4(b)(5)(vi) and 102.4(b)(5)(ix)
26. Note 3 on the plan view drawings identifies that "BMP installation to be adjusted as needed..."; however, it is not clear who is to be determining the adjustment(s). Properly identify who will make the determination of adjusting the BMPs. A deviation from the approved E&S plans may be necessary, however, the appropriate county conservation district or the DEP must approve any deviation to the authorized plans. Make all revisions necessary to clearly identify this requirement. 25 Pa Code §§ 102.4(b)(5)(vi) and 102.4(b)(5)(ix)
27. Set forth the timing of the sequence of construction, including how runoff will be properly managed from when the trench backfill is complete to the installation of the waterbars and permanent stabilization. 25 Pa Code §§ 102.4(b)(5)(iii), 102.4(b)(5)(vi), and 102.4(b)(5)(vii)
28. Provide a note on the E&S Plan that identifies no soil amendments (lime, fertilizer, etc.) are to be used in wetland areas (refer to Page 265 of the E&S Manual). 25 Pa Code §§ 102.4(b)(5)(vi), 102.4(b)(5)(ix), and 102.11(a)(1)
29. The compost standards identified in Table 4.2 in Attachment 4 of the E&S Plan narrative are not correct. Per the Corrections For Erosion And Sediment Pollution Control Program Manual TGN 363-2134-008 Mach 2012, the following are the correct compost standards:
 - Organic Matter Content: 25% - 100% (dry weight basis)
 - Organic Portion: Fibrous and elongate
 - pH: 5.5 - 8.5

Moisture Content: 30% - 60%

Particle Size: 30% - 50% pass through 3/8" sieve

Soluble Salt Concentration: 5.0 dS/m (mmhos/cm) Maximum.

Make all revisions necessary. 25 Pa Code §§ 102.4(b)(5)(vi), 102.4(b)(5)(ix), and 102.11(a)(1)

30. Include Table 4.1 (from Page 63 of the Erosion and Sediment Pollution Control Program Manual) and the corrected Table 4.2 (from the Erosion and Sediment Pollution Control Program Manual and Corrections For Erosion And Sediment Pollution Control Program Manual TGN 363-2134-008 March 2012) on the plan drawing sheet with the Compost Filter Sock detail. 25 Pa Code §§ 102.4(b)(5)(vi) and 102.4(b)(5)(ix)
31. Identify each HDD location's staging areas, including contours (if grading is proposed) and stockpile locations. Provide a demonstration that perimeter controls are sufficient for these large areas and that other E&S BMPs, such as sediment basins and sediment traps will not be required to properly manage the runoff. 25 Pa Code §§ 102.4(b)(5)(iii), 102.4(b)(5)(vi), and 102.4(b)(5)(ix)
32. Standard Construction Detail #13-4 in Attachment 4 of the E&S Plan narrative and the Trench Plug Installation detail may not be correct. Standard Construction Detail #13-4 from the Erosion and Sediment Pollution Control Program Manual was revised per the Corrections For Erosion And Sediment Pollution Control Program Manual TGN 363-2134-008 March 2012, to identify the trench plugs extending to the trench bottom (as opposed to the bottom of the pipe). Provide justification for any proposed alternate BMPs or designs proposed. 25 Pa Code §§ 102.4(b)(5)(vi), 102.4(b)(5)(ix), 102.11(a)(1), and 102.11(b)
33. There are instances where the temporary seeding information is not consistent between the narrative and the plan drawings. Clarify this discrepancy. 25 Pa Code §§ 102.4(b)(5)(vi) and 102.4(b)(5)(ix)
34. Clarify whether the dual pipelines will be constructed within the same trench or if two trenches will excavated. If the two pipelines will be installed within the same trench, then identify the trench plugs for each pipeline at the same location (not at different locations as shown on some drawings). 25 Pa Code §§ 102.4(b)(5)(vi) and 102.4(b)(5)(ix)
35. A Site Restoration Plan narrative shall be provided for the mainline pipeline construction. This narrative can be part of the E&S Plan narrative for the mainlines, and it is required to be in conformance with 25 Pa. Code § 102.8(n). 25 Pa. Code §§ 102.8(b), 102.8(c), 102.8(e), 102.8(f), 102.8(h), 102.8(i), 102.8(l) and 102.8(m)
36. Provide more identification in the narratives and on the plan drawings related to topsoil segregation. 25 Pa. Code §§ 102.4(b)(5)(iii), 102.4(b)(5)(vi), 102.4(b)(5)(ix), 102.8(f)(3), 102.8(f)(6) and 102.8(f)(9)
37. Provide more identification in the narratives and on the plan drawings related to loosening of compacted soils prior to topsoil placement and stabilization (at the temporary access roads, topsoil stockpiles and access routes along the mainline). 25 Pa. Code §§ 102.4(b)(5)(iii), 102.4(b)(5)(vi), 102.4(b)(5)(ix), 102.8(f)(3), 102.8(f)(6) and 102.8(f)(9)
38. Provide a discussion of measures that will be taken to avoid and minimize compaction to the maximum extent practicable and where compaction occurs, what measures will be taken to ensure adequate infiltration and successful vegetation of the right of way. 25 Pa. Code §§ 102.4(b)(4), 102.8(b) and 102.22. The Department recommends you evaluate Section 6.7 (Restoration BMPs) of

the PCSM Manual. Ensure notes are included on the drawings and in the documents that will be provided to the construction contractors.

39. Describe how your planning and design requirements satisfy 25 Pa. Code §§ 102.4(b)(4) and 102.8(b) to minimize the extent and duration of the construction and to minimize any increase in stormwater runoff. Identify how these measures are satisfied when the right-of-way is in close proximity or crosses surface waters or wetlands.

Allegheny County Technical Deficiencies (Contact Person: Matt Gordon and Tim McClelland)

- E1. The Drawings Legend on sheet ES-0.01 shows identical symbols for various sizes of compost filter sock (CFS) and silt fence (SF). How are these to be differentiated on the plans? Will CFS only be used in special protection watersheds? 25 Pa. Code §102.4(b)(5)(ix).
- E2. Riparian Forest Buffers are called out in several, but not all, locations on the plan drawings where the ROW narrows at a stream or wetland crossing. Please clearly identify the protected Riparian Buffer areas on the plans §102.4(b)(5)(ix)E3.
- E3. Show the proposed Rock Construction Entrance on plan drawings sheet ES-1.02 and ES-1.05 for access roads. 25 Pa. Code §102.4(b)(5)(ix).
- E4. There is an UNT to Sunfish Run (WWF) that is crossed several times on ES-1.16. How will sedimentation be controlled in this unusual crossing configuration that contains a stream parallel to the gas line and several crossings over a short distance? 25 Pa. Code §102.4(b)(4).
- E5. The HDD bore pit on ES-1.18 appears to be located within the UNT to Becks Run (WWF) from top-of-bank to top-of-bank. Revise the plan accordingly. 25 Pa. Code §102.4(b)(5)(ix).
- E6. Provide a detail of the proposed HDD settling basin on ES -1.01 and ES-1.22. Is this a lined pond? What is the maintenance and restoration plan for this facility? 25 Pa. Code §102.4(b)(4). E7. A small tributary appears to be within the LOD on ES-1.23 with no special crossing considerations. Clarify E&S controls at this location. Is this resource crossing identified in your JPA? 25 Pa. Code §102.4(b)(4).
- E8. Either CFS or SF is proposed within the stream channel of Long Run (WWF) on ES-1.27. Revise the plan accordingly to remove the BMP from the stream. 25 Pa. Code §102.4(b)(5)(ix).
- E9. Identify the permit boundary on the E&S drawings legend. 25 Pa. Code §102.4(b)(5)(ix).
- E10. Revise to show stone stabilization at the toe of slope below typical water level on the Bank Restoration Detail on sheet ES-0.09. 25 Pa. Code §102.4(b)(4).
- E11. Revise to show Typical Stream Crossings with culverts with a low point in center to pass high flows.. 25 Pa. Code §102.4(b)(4).
- P1. Provide the Standard Worksheets for each watershed along the pipeline. Address volume, rate and water quality for each watershed along the pipeline. 25 Pa. Code §102.8(f)(8).
- P2. The application contained a general, permit-wide request for both an exception (25 Pa. Code §102.14 (d)(1)(ix)) and a waiver (25 Pa. Code §102.14 (d)(2)(ii)) of the riparian buffer requirements. Identify each area of proposed Riparian Buffer encroachment in Special Protection Waters. Clearly specify the square-footage of each individual encroachment. If an exception or waiver of the Riparian Buffer requirements is proposed, a written request for that exception or waiver must be included

identifying the specific exception or waiver section for each individual area that an exception or waiver is being requested. Provide detailed plan views at a larger scale of the areas of encroachment into the Special Protection Riparian Buffers. Justification must be provided for each requested exception or waiver. 25 Pa. Code §§ 102.14(d)(1), 102.14(d)(2), and §102.8(f)(9).

P3. Provide a Long-Term Operation and Maintenance Schedule for the inspection, repair, replacement, and other routine maintenance of each BMP. Identify in the Long-Term Operation and Maintenance Schedule the contact name, address and telephone number of the person responsible for the long term maintenance. Provide a specific Operation and Maintenance Schedule for each BMP. This should include time frames for inspections, repairs, BMP life expectancy, and reconstruction. Additionally, the associated cost for each should be provided including inspections, repairs, and reconstruction. 25 Pa. Code §102.8(f)(10), and 25 Pa. Code §102.8(m).

P4. Identify the Critical Stages within the PCSM narrative that will require oversight by a licensed professional. Each proposed PCSM BMP should have at least one inspection and Critical Stage identified. 25 Pa. Code § 102.8(k).

P5. Provide documentation that a recorded instrument will be recorded at the recorder of deeds to provide for necessary access for long term operation and maintenance for PCSM BMPs and provide notice that the responsibility for long-term operation and maintenance of the PCSM BMPs is a covenant that runs with the land and is binding and enforceable by subsequent grantees. This item will be a Condition of Approval and the documentation must be provided with the Notice of Termination. 25 Pa. Code §102.8(m)(2).

Cambria County Technical Deficiencies (Contact Person: Bobbie Blososky and Tim McClelland)

E1. The Rock Filter Outlet Detail was not provided as noted on ES-0.09 for Standard and Reinforced Silt Fence Maintenance and referenced as Detail #4-6. Provide the detail. 25 Pa. Code §102.4(b)(4).

E2. Add notes to typical details for Stream Crossing Single/Multiple Culvert on ES-0.11 conforming to Standard Detail #3-13 and #3-14. Revise details as required to conform to the Standard Construction Details of the E&SPCP Manual. 25 Pa. Code §102.4(b)(5)(ix).

E3. Indicate stone placement at toe of slope or depth of topsoil placement for Bank Restoration Detail shown on ES-0.10. 25 Pa. Code §102.4(b)(4).

E4. Reference details for Stream Crossing for the installation of the Temporary Access Road shown on ES-2.03. 25 Pa. Code §102.4(b)(5)(ix).

E5. Identify the ESC Permit Boundary on the E&S Plan drawings. 25 Pa. Code §102.4(b)(5)(ix).

E6. Identify soils and include soil symbols on the E&S Plan drawings. 25 Pa. Code §102.4(b)(5)(ix).

E7. Erosion Control blankets should be used for all seeded areas within 100 feet of a special protection water. Review and revise accordingly ES-2.02, ES-2.03, ES-2.55 and the Typical Wetland Restoration Detail on ES-0.10. 25 Pa. Code §102.11(a)(1).

E8. Drawing Sheet ES-2.17 indicates that the pipeline proposed alignment will cross through the Yurasek property located along the eastern side of SR271, William Penn Avenue. This property is an Act 2 site currently in the process of a voluntary cleanup in some areas. Provide documentation

identifying all potential conditions or presence of contaminants that may potentially cause pollution during or after construction. 25 Pa. Code §102.8(f)(12).

P1. Provide field measured infiltration rates for the proposed Infiltration Berms per the Pennsylvania Stormwater Best Management Practices Manual, Protocol 1, Site Evaluation and Soil Infiltration Testing and Protocol 2, Infiltration Systems Guidelines, Appendix C. Were tests taken at elevation of infiltration BMP per the BMP manual? 25 Pa. Code §102.8(f)(8).

P2. Confirm the 5:1 impervious area to infiltration area (maximum) has been achieved for each proposed Infiltration Berm. 25 Pa. Code §102.8(f)(8).

P3. Identify the site location of the proposed Infiltration Berms. Confirm the proposed Infiltration Berm locations are on natural, uncompacted soils, and constructed along the contours. 25 Pa. Code §102.8(f)(9).

P4. Confirm the design volume of each proposed Infiltration Berm. 25 Pa. Code §102.8(f)(8).

P5. Provide the Standard Worksheets for each watershed along the pipeline. Address volume, rate and water quality for each watershed along the pipeline. 25 Pa. Code §102.8(f)(8).

P6. Identify and provide specific maintenance criteria for all proposed BMPs, including the proposed Infiltration Berms and Soil Amendment areas. 25 Pa. Code §102.8(f)(10).

P7. The application contained a general, permit-wide request for both an exception (25 Pa. Code §102.14 (d)(1)(ix)) and a waiver (25 Pa. Code §102.14 (d)(2)(ii)) of the riparian buffer requirements. Identify each area of proposed Riparian Buffer encroachment in Special Protection Waters. Clearly specify the square-footage of each individual encroachment. If an exception or waiver of the Riparian Buffer requirements is proposed, a written request for that exception or waiver must be included identifying the specific exception or waiver section for each individual area that an exception or waiver is being requested. Provide detailed plan views at a larger scale of the areas of encroachment into the Special Protection Riparian Buffers. Justification must be provided for each requested exception or waiver. 25 Pa. Code §§ 102.14(d)(1), 102.14(d)(2), and §102.8(f)(9).

P8. Provide detailed plan views at a larger scale of the areas of encroachment into the Special Protection Riparian Buffers. Justification must be provided for each request. 25 Pa. Code §§102.14(d)(2), 102.14(d)(1) and §102.8(f)(9). P8. Provide a Long-Term Operation and Maintenance Schedule for the inspection, repair, replacement, and other routine maintenance of each BMP. Identify in the Long-Term Operation and Maintenance Schedule the contact name, address and telephone number of the person responsible for the long term maintenance. The following BMPs are identified in the PCSM report: Soil Amendment; and Infiltration Berms. Provide a specific Operation and Maintenance Schedule for each BMP. This should include time frames for inspections, repairs, BMP life expectancy, and reconstruction. Additionally, please include the associated cost for each should be provided including inspections, repairs, and reconstruction. 25 Pa. Code §102.8(f)(10), and 25 Pa. Code §102.8(m).

P9. Identify the Critical Stages within the PCSM narrative that will require oversight by a licensed professional. Each proposed PCSM BMP should have at least one inspection and Critical Stage identified. 25 Pa. Code §102.8(k).

P10. Provide documentation that a recorded instrument will be recorded at the recorder of deeds to provide for necessary access for long term operation and maintenance for PCSM BMPs and provide notice that the responsibility for long-term operation and maintenance of the PCSM BMPs is a covenant

that runs with the land and is binding and enforceable by subsequent grantees. This item will be a Condition of Approval and the documentation must be provided with the Notice of Termination. 25 Pa. Code §102.8(m)(2).

Compressor Station Supplemental Comments

The Deficiencies include:

- E1. Correct the NOI disturbed acreage. 25 Pa. Code §102.6(a)(2).
- E2. Revise the Act 14 letter, which is required based on the increased acreage. 25 Pa. Code §102.6(a)(1).

E&S Narrative:

- E3. Submit E&S worksheets #1, 8, 11, 20 and 22 in narrative. 25 Pa. Code §102.4(b)(5)(vi).
- E4. Address narrative description of location and use for E&S Controls rip rap apron and vegetative channels under section 3.3. 25 Pa. Code §102.4(b)(5)(vi).
- E5. Add note identifying project construction wastes. 25 Pa. Code §102.4(b)(5)(xi).

E&S Maps:

- E7. Add soil types, slopes and locations. Also add identification in legend. 25 Pa. Code §102.4(b)(5)(ix).
- E8. Add construction techniques or special considerations to address soil limitations. 25 Pa. Code §102.4(b)(4).
- E9. Since the watercourse is not close to the construction site, in the general notes add, receiving waters and their Chapter 93 classification. 25 Pa. Code §102.4(b)(4).
- E10. Revise the following standard construction details to match the E&S Manual: 25 Pa. Code §102.4(b)(5)(ix)
 - a. Rock Construction Entrance #3-1, Rip Rap Apron #9-1, and
 - b. Vegetative Channel #6-1.
- E11. Add note about environmental due diligence and clean fill. 25 Pa. Code §102.4(b)(4).
- P1. Provide the location of 100-year floodway on the drawings provided in Appendix G. 25 Pa. Code §102.8(f)(5) and 25 Pa. Code § 102.8(f)(9).
- P2. Provide a Long-Term Operation and Maintenance Schedule for the inspection, repair, replacement, and other routine maintenance of each BMP. Identify in the Long-Term Operation and Maintenance Schedule the contact name, address and telephone number of the person responsible for the long term maintenance. Provide a specific Operation and Maintenance Schedule for each BMP. This should include time frames for inspections, repairs, BMP life expectancy, and reconstruction. Additionally, the associated cost for each should be provided including inspections, repairs, and reconstruction. 25 Pa. Code §102.8(f)(10), and 25 Pa. Code §102.8(m).
- P3. Provide a note that a written report is required for each inspection and maintenance activity. 25 Pa. Code §102.8(f)(10)

- P4. Provide controls to prevent an increase in the rate of stormwater runoff. 25 Pa. Code §102.8(b).
- P5. Include the signature of a licensed professional and a seal on the stormwater verification report. 25 Pa. Code §102.8(e)
- P6. Provide proposed and existing contours and grades on plan drawings. Indicate how the proposed grading ties into existing contours. 25 Pa. Code §102.8(f)(3).
- P7. Identify the Critical Stages within the PCSM narrative that will require oversight by a licensed professional. Each proposed PCSM BMP should have at least one inspection and Critical Stage identified. 25 Pa. Code §102.8(k).
- P8. Provide documentation that a recorded instrument will be recorded at the recorder of deeds to provide for necessary access for long term operation and maintenance for PCSM BMPs and provide notice that the responsibility for long-term operation and maintenance of the PCSM BMPs is a covenant that runs with the land and is binding and enforceable by subsequent grantees. This item will be a Condition of Approval and the documentation must be provided with the Notice of Termination. 25 Pa. Code §102.8(m)(2).

Indiana County Technical Deficiencies Contact Person: Andrea Frustaci and Tim McClelland)

- E1. Volume I: Item #2, Notice of Intent Application; Attachment A- Classify Toms Run as CWF-TSF. 25 Pa. Code §102.6(a)(1).
- E2. Volume II: Item #7, PCSM and Site Restoration Plan; Table I- Classify Toms Run as CWF-TSF. 25 Pa. Code §102.4(b)(5)(v) and 25 Pa. Code §102.8(f)(5)(x).
- E3. ICCD E&S Control & Site Restoration Plan ES-0.03: Stream & Wetland Crossings need to be identified in their respective plan sheets. Plan ES-2.25 incorrectly listed stream S-O110 twice. 25 Pa. Code §102.4(b)(5)(viii).
- E4. Provide appropriate “maximum permissible slope length” for the types of Filter Fencing shown in the details of ICCD E&S Control and Site Restoration Plan ES-0.09. 25 Pa. Code §102.4(b)(4).
- E5. Include the Sediment Trap shown on Drawing ES-0.08 in section 3.3 Sequence of BMP Installation; “Structural Controls”. 25 Pa. Code §102.4(b)(5)(ix).
- E6. Include construction details for the Infiltration Berm referenced on ES-0.02 and shown on various other plan drawings in the ICCD E&S Control & Site Restoration Plan Drawings. 25 Pa. Code §102.4(b)(4).
- E7. Drawing PCS-0.01: Note #2 – Incorrectly lists Dauphin County when it should be Indiana County. 25 Pa. Code §102.4(b)(5)(ix).
- E8. ICCD E&S Control and Site Restoration Plan ES-0.06: Standard Construction Note #35 and Construction Sequence #12 contradict each other regarding the erosion control blanket distance from surface waters. 25 Pa. Code §102.4(b)(5)(ix).
- E9. ICCD E&S Control and Site Restoration Plan ES-0.01: The Township designations appear to be reversed with respect to the appropriate county location. 25 Pa. Code §102.4(b)(5)(ix).

E10. ICCD E&S Control and Site Restoration Plan ES-0.01: The Legend shows identical symbols for 12", 18" and 24" sizes of compost filter sock ("CFS") and silt fence ("SF"). How are these to be differentiated on the plans/field? Will CFS only be used in Special Protection watersheds? 25 Pa. Code §102.4(b)(4).

E11. ICCD E&S Control and Site Restoration Plan ES-2.01: shows that this is the only access for HDD Staging area located at station 3510+00 as well as the HDD Staging area located at station 3527+00. No stream crossing or wetland crossing information has been provided for S-J53 & SJ-54 or for WL-J51 at this access point. Has this crossing been included in the Chapter 105 permit application? Describe the procedure and provide details for crossing the stream channels and wetlands. 25 Pa. Code §102.11(a)(1).

E12. ICCD E&S Control and Site Restoration Plan ES-2.04: Drawing shows "Area to be Bored". No Bore Pit or staging area is shown on the drawing and the gas line shown is outside the Limit of Disturbance. 25 Pa. Code §102.4(b)(4).

E13. ICCD E&S Control and Site Restoration Plan ES-2.16: Erosion control blanket is not shown on the drawing. 25 Pa. Code §102.4(b)(4).

E14. The Detail drawings on Plan Drawings ES-0.10 and ES-0.11 do not meet the minimum requirements for each BMP from the E&SPCP Manual. These include, but are not limited to:

1. Typical Wetland Restoration
2. Bank Restoration
3. Water Deflector
4. Typical Stream Crossings

Please ensure that all Typical Detail Drawings provided comply with the E&SPCP Manual 25 Pa. Code §102.11(a)(1) and 25 Pa. Code §102.4(b)(5)(ix)P1.

P1. Provide field measured infiltration rates for the proposed Infiltration Berms per the Pennsylvania Stormwater Best Management Practices Manual, Protocol 1, Site Evaluation and Soil Infiltration Testing and Protocol 2, Infiltration Systems Guidelines, Appendix C. Were tests taken at the elevation of infiltration BMP per the BMP manual? 25 Pa. Code §102.8(f)(8).

P2. Confirm the 5:1 impervious area to infiltration area (maximum) has been achieved for each proposed Infiltration Berm. 25 Pa. Code §102.8(f)(8).

P3. Identify the site location of the proposed Infiltration Berms. Confirm the proposed Infiltration Berm locations are on natural, uncompacted soils, and constructed along the contours. 25 Pa. Code §102.8(f)(9).

P4. Confirm the design volume of each proposed Infiltration Berm. 25 Pa. Code §102.8(f)(8).

P5. Provide the Standard Worksheets for each watershed along the pipeline. Address volume, rate and water quality for each watershed along the pipeline. 25 Pa. Code §102.8(f)(8).

P6. Identify and provide specific maintenance criteria for all proposed BMPs, including the proposed Infiltration Berms and Soil Amendment areas. §102.8(f)(10)

P7. The application contained a general, permit-wide request for both an exception (25 Pa. Code § 102.14 (d)(1)(ix)) and a waiver (25 Pa. Code § 102.14 (d)(2)(ii)) of the riparian buffer requirements.

Identify each area of proposed Riparian Buffer encroachment in Special Protection Waters. Clearly specify the square-footage of each individual encroachment. If an exception or waiver of the Riparian Buffer requirements is proposed a written request for that exception or waiver must be included identifying the specific exception or waiver section for each individual area that an exception or waiver is being requested. Provide detailed plan views at a larger scale of the areas of encroachment into the Special Protection Riparian Buffers. Justification must be provided for each requested exception or waiver. 25 Pa. Code §§ 102.14(d)(1), 102.14(d)(2), and §102.8(f)(9).

P8. Provide a Long-Term Operation and Maintenance Schedule for the inspection, repair, replacement, and other routine maintenance of each BMP. Identify in the Long-Term Operation and Maintenance Schedule the contact name, address and telephone number of the person responsible for the long term maintenance. The following BMPs are identified in the PCSM report: Soil Amendment and Infiltration Berms. Provide a specific Operation and Maintenance Schedule for each BMP. This should include time frames for inspections, repairs, BMP life expectancy, and reconstruction. Additionally, the associated cost for each should be provided including inspections, repairs, and reconstruction. 25 Pa. Code §102.8(f)(10), and 25 Pa. Code §102.8(m).

P9. Identify the Critical Stages within the PCSM narrative that will require oversight by a licensed professional. Each proposed PCSM BMP should have at least one inspection and Critical Stage identified. 25 Pa. Code §102.8(k).

P10. Provide documentation that a recorded instrument will be recorded at the recorder of deeds to provide for necessary access for long term operation and maintenance for PCSM BMPs and provide notice that the responsibility for long-term operation and maintenance of the PCSM BMPs is a covenant that runs with the land and is binding and enforceable by subsequent grantees. This item will be a Condition of Approval and the documentation must be provided with the Notice of Termination. 25 Pa. Code §102.8(m)(2).

Washington County Technical Deficiencies (Contact Person: Nathan Simon and Tim McClelland)

E1. Include soil symbols on the plan drawings. 25 Pa. Code §102.4(b)(5)(ix).

E2. Include permit boundary on the plan drawings. 25 Pa. Code §102.4(b)(5)(ix).

E3. Include station numbers on the plan drawings. 25 Pa. Code §102.4(b)(5)(ix).

E4. The plan references riparian forest buffers in areas that do not have existing forest. Clarify the buffers on the plan. 25 Pa. Code §102.4(b)(5)(ix).

E5. Provide Worksheet #1 for compost filter socks or compost filter sock sections. 25 Pa. Code §102.4(b)(5)(viii).

E6. A spot check of the compost filter socks (CFS) shows that some of the proposed socks are inadequately sized. Review slope lengths for CFS and revise your Plan as necessary. 25 Pa. Code §102.4(b)(4).

E7. A spot check of compost filter socks above the Simon and Minnick Ponds shows that some of these socks are inadequately sized. Revise accordingly. 25 Pa. Code §102.4(b)(5)(viii).

E8. Provide specific BMPs to be installed above the Simon and Minnick Ponds. Use of statement "Additional E&S Controls may be required in this area" is not sufficient in light of the ME1 construction issues in this area. Provide a specific note on pages 1.41, 1.42 and 1.43 of the E&S drawings stating that the DEP and/or the Washington County Conservation District must inspect and approve E&S controls once they are in place before earth disturbance is allowed to proceed in the area of Valley View Road to the West to Minnick Road to the East. The E&S Contractor must be made aware of the need for special attention in this area. The area above Simon and Minnick Ponds was previously impacted during construction of ME1. 25 Pa. Code §102.4(b)(4).

P1. Provide the Standard Worksheets for each watershed along the pipeline. Address volume, rate and water quality for each watershed along the pipeline. 25 Pa. Code §102.8(f)(8)

P2. The application contained a general, permit-wide request for both an exception (25 Pa. Code § 102.14 (d)(1)(ix)) and a waiver (25 Pa. Code §102.14 (d)(2)(ii)) of the riparian buffer requirements. Identify each area of proposed Riparian Buffer encroachment in Special Protection Waters. Clearly specify the square-footage of each individual encroachment. If an exception or waiver of the Riparian Buffer requirements is proposed, a written request for that exception or waiver must be included identifying the specific exception or waiver section for each individual area that an exception or waiver is being requested. Provide detailed plan views at a larger scale of the areas of encroachment into the Special Protection Riparian Buffers. Justification must be provided for each requested exception or waiver. 25 Pa. Code §§ 102.14(d)(1), 102.14(d)(2), and §102.8(f)(9).

P3. Provide a Long-Term Operation and Maintenance Schedule for the inspection, repair, replacement, and other routine maintenance of each BMP. Identify in the Long-Term Operation and Maintenance Schedule the contact name, address and telephone number of the person responsible for the long term maintenance. Provide a specific Operation and Maintenance Schedule for each BMP. This should include time frames for inspections, repairs, BMP life expectancy, and reconstruction. Additionally, the associated cost for each should be provided including inspections, repairs, and reconstruction. 25 Pa. Code §102.8(f)(10) and 25 Pa. Code §102.8(m).

P4. Identify the Critical Stages within the PCSM narrative that will require oversight by a licensed professional. Each proposed PCSM BMP should have at least one inspection and Critical Stage identified. 25 Pa. Code §102.8(k).

P5. Provide documentation that a recorded instrument will be recorded at the recorder of deeds to provide for necessary access for long term operation and maintenance for PCSM BMPs and provide notice that the responsibility for long-term operation and maintenance of the PCSM BMPs is a covenant that runs with the land and is binding and enforceable by subsequent grantees. This item will be a Condition of Approval and the documentation must be provided with the Notice of Termination. 25 Pa. Code §102.8(m)(2)..

Compressor Station Supplemental Comments

E1. In the maintenance of the E&SCs section, change "as soon as practical" to within 24 hours. §102.4 (b)(5)(x).

E2. Indicate the permit boundary on plan drawings 25 Pa. Code §102.4 (b)(5)(ix).

E3. Indicate the soil boundaries on plan drawings. 25 Pa. Code §102.4 (b)(5)(ix).

E4. Flag or field mark wetlands on plan drawings 25 Pa. Code §102.4 (b)(5)(ix).

- E5. Indicate the use limitations of the soils pertinent to the proposed project in a manner consistent with Item 2 on page 2 of the E&SPCP Manual. 25 Pa. Code §102.11(a)(1).
- E6. Indicate where the proposed Pennsylvania Pipeline connects to the proposed injection station with the permit boundary on plan drawings. 25 Pa. Code §102.4 (b)(5)(ix).
- E7. Provide a summary table of the proposed compost socks, the percent slope, and slope length above the sock(s). Standard E&S Worksheet Number 1 is recommended for this purpose. 25 Pa. Code §102.11(a)(1).
- E8. The maintenance instructions should specify that inspections be logged onto DEP form 3150-FM-BWEW0083 and kept on site at all times (page 5 of the E&SPCP Manual). 25 Pa. Code §102.11(a)(1).
- E9. Address whether any geologic formations or soil conditions have the potential to cause pollution to a surface water at the site (page 6 of the E&SPCP Manual). §102.11(a)(1).
- E10. The limit of disturbance, proposed pipe and proposed compost filter sock are shown within the 50' floodway. Was this floodway impact addressed in the Joint Permit Application (E63-674)? 25 Pa. Code §102.4(b)(4).
- E11. Total acreage on page 2 box 3 of the NOI appears to be incorrect. §102.6(a)(1)
- P1. Review the installation of the geoweb product on page #8 of PCSM narrative. The narrative requires compaction of soil to 95%. Compaction of infiltration areas is to be avoided, specifically, on natural uncompacted soils. 25 Pa. Code §102.8(b)(7).
- P2. Review the need to minimize compaction in the area of the geoweb. Does the manufacture require compaction of the soil for the infiltration BMP? If so, this proposed BMP is not acceptable. 25 Pa. Code §102.8(b)(7).
- P3. Provide the location of 100-year floodway on the drawings provided in Appendix G. 25 Pa. Code §102.8(f)(5) and 25 Pa. Code §102.8(f)(9).
- P4. Provide a Long-Term Operation and Maintenance Schedule for the inspection, repair, replacement, and other routine maintenance of each BMP. Identify in the Long-Term Operation and Maintenance Schedule the contact name, address and telephone number of the person responsible for the long term maintenance. Provide a specific Operation and Maintenance Schedule for each BMP. Include time frames for inspections, repairs, BMP life expectancy, and reconstruction. Additionally, the associated cost for each should be provided including inspections, repairs, and reconstruction. 25 Pa. Code §102.8(f)(10) and 25 Pa. Code §102.8(m).
- P5. Include a provision requiring a written report documenting each inspection and maintenance activity. 25 Pa. Code §102.8(f)(10).
- P6. Provide instructions on the handling and disposal of strip mined soils to avoid or minimize potential pollution and its impacts. 25 Pa. Code §102.8(f)(12).
- P7. Identify controls to prevent an increase in the rate of stormwater runoff. 25 Pa. Code §102.8(b).
- P8. Include the signature and a seal of a licensed professional on the stormwater verification report. 25 Pa. Code §102.8(e).
- P9. Provide proposed and existing contours and grades on plan drawings. Indicate how the proposed grading impacts existing contours. 25 Pa. Code §102.8(f)(3).

P10. Identify the Critical Stages within the PCSM narrative that will require oversight by a licensed professional. Each proposed PCSM BMP should have at least one inspection/Critical Stage identified. 25 Pa. Code §102.8(k).

P11. Provide documentation that a recorded instrument will be recorded at the recorder of deeds to provide for necessary access for long term operation and maintenance for PCSM BMPs and provide notice that the responsibility for long-term operation and maintenance of the PCSM BMPs is a covenant that runs with the land and is binding and enforceable by subsequent grantees. This item will be a Condition of Approval and the documentation must be provided with the Notice of Termination. 25 Pa. Code §102.8(m)(2).

Westmoreland County Technical Deficiencies (Contact Person: Chris Droste and Tim McClelland)

Spread 1

E1. sizing for the super silt fence and reinforced silt fence have been incorrectly labeled on Spreads 1 and 2 in the plan drawing legend. Revise accordingly and ensure the sizing conforms to standard silt fence details (E&SPCP Manual, page 79, 80 and 84). 25 Pa. Code §102.4(b)(5)(viii).

E2. Erosion control blanketed areas are not shown to extend 50 feet on either side of the disturbance and not shown to extend 100 feet in special protection watersheds on the Typical Wetland Restoration ES-0.10. E&SPCP Manual p. 273; 25 Pa. Code §102.11(a)(1).

E3. Show the stone stabilization at the toe of slope below typical water level on the Bank Restoration Detail of sheet ES-0.10. 25 Pa. Code §102.4(b)(5)(ix).

E4. Provide the depth of the topsoil on the Bank Restoration Detail. The depth of required topsoil is set forth in the E&SPCP Manual on page 263. 25 Pa. Code §102.11(a)(1).

E5. The Water Deflector detail on page ES-0.10 includes an inadequate minimum angle downgrade and depth of belt below and above ground. Provide adequate detail. 25 Pa. Code §102.4(b)(4).

E6. Specify the type of energy dissipater to be used on Typical Stream Crossing on sheet ES-0.11 to comply with page 46 of the E&SPCP Manual. §102.11(a)(1)

E7. Typical Stream Crossing – Culverts on sheet ES-0.11 indicate water will be diverted directly to the spoil piles. Relocate the spoil piles to an alternate location. 25 Pa. Code §102.4(b)(4).

E8. Typical Stream Crossings with culverts have not been shown to have a low point over the typical flow area. 25 Pa. Code §102.4(b)(5)(ix).

E9. The timber mat does not span the full extent of the wetland on ES-1.38. Extend the span of the timber mat. 25 Pa. Code §102.4(b)(4).

E10. The erosion control blanket symbol is not shown on sheet ES-1.44. 25 Pa. Code §102.4(b)(5)(ix).

E11. Compost filter sock ends have been turned to face downhill instead of uphill on sheet ES-1.60. 25 Pa. Code §102.4(b)(5)(ix).

E12. Indicate where the entry point for the corresponding HDD bore pit exit point is shown on ES-1.67. 25 Pa. Code §102.4(b)(5)(ix).

E13. Label the Chapter 93 stream classification on plan drawings throughout Spread 1. 25 Pa. Code §102.4(b)(5)(ix).

Spread 2

E1. ES-0.03: The Chapter 93 stream classifications are not complete in the charts. The information under PAFBC stream designation states N/A for most columns. Complete the columns according to the Chapter 93 classification. (25 PA Code §102.4(b)(5). Indicate the location of all surface waters, which may receive runoff within or from the project and their classification under Chapter 93. See 25 Pa. Code §§ 93.9a-93.9z and 25 Pa. Code §102.4(b)(5)(viii).

E2. ES – 2.04: The proposed Beaver Run crossing states that a timber mat bridge will be used. The span may be too large. Please evaluate whether crossing pipes will be needed under the timber mat to provide support. A pillar in the middle will block flow passage and is not recommended. (See 25 Pa. Code Chapter 105) Provide a detail of cross pipes with a bridge on top or an equivalent design. 25 Pa. Code §102.4(b)(5)(ix).

E3. ES- 2.07: Indicate the installation of a Silt Sock Trap at the rock construction entrance off Trees Mills Road to help prevent additional runoff from entering the roadway. Also include a water bar extended across the area to the trap. (Use standard details in the design of the sock trap from E&SPCP Manual.) 25 Pa. Code §102.4(b)(4).

E4. ES- 2.15: It is unclear what direction water will exit the water bar. Indicate that flow from water bars will be deflected from water bars away from the house structures (nearest the roadway). 25 Pa. Code §102.4(b)(5)(ix).

E5. ES 2.16: Indicate the installation of an additional water bar in the location of the 100 year floodplain marking at the 1230 contour. 25 Pa. Code §102.4(b)(4).

E6. ES-2.20: Given the angle of the crossing and the width of the stream, please use a cross pipe in conjunction with the timber mat. 25 Pa. Code Chapter 105; 25 Pa. Code §102.4(b)(4).

E7. ES- 2.21- Under the restoration (storm water) an infiltration berm is shown, however there are no details of this berm. 25 Pa. Code §102.11(a)(2) Pennsylvania Stormwater Best Management Practices Manual. Provide calculations and design of the structure including soils information. 25 Pa. Code §102.4(b)(5)(ix).

E8. ES-2.22-2.25 – Provide details for an emergency action plan for possible releases from the long bore under Loyalhanna Lake: As part of the plan, please provide for the installation of a containment silt sock trap around the perimeter of the large staging area that will be used at this site for containment of bentonite slurry. 25 Pa. Code §102.4(b)(5)(ix) and 25 Pa. Code §102.11(a)(1).

E9. ES-2.27: Please indicate whether a spring feeds the area immediately above WL-N80. If so, please obtain the necessary authorization for a timber mat or equivalent BMP. 25 Pa. Code §102.4(b)(5)(ix) and 25 Pa. Code §102.11(a)(1).

E10. ES-2.35: The pipeline location is not shown on the sheet. A CADD layer might be the issue. 25 Pa. Code §102.4(b)(5)(ix).

P1. Provide field measured infiltration rates for the proposed Infiltration Berms per the Pennsylvania Stormwater Best Management Practices Manual. Protocol 1, Site Evaluation and Soil Infiltration Testing

and Protocol 2, Infiltration Systems Guidelines, Appendix C. In accordance with the Manual, please provide test results taken at the elevation of infiltration BMP. 25 Pa. Code §102.8(f)(8).

P2. Confirm that a 5:1 impervious area to infiltration area (maximum) has been achieved for each proposed Infiltration Berm. 25 Pa. Code §102.8(f)(8).

P3. Identify the site location of the proposed Infiltration Berms. Confirm the proposed Infiltration Berm locations are on natural, uncompacted soils, and constructed along the contours. 25 Pa. Code §102.4(b)(4)(iii) and 25 Pa. Code §102.8(f)(9).

P4. Confirm the design volume of each proposed Infiltration Berm. 25 Pa. Code §102.8(f)(8).

P5. Provide the Standard Worksheets for each watershed along the pipeline. Provide the volume, rate and water quality for each watershed along the pipeline. 25 Pa. Code §102.8(f)(8).

P6. Identify and provide specific maintenance criteria for all proposed BMPs, including the proposed Infiltration Berms and Soil Amendment areas. 25 Pa. Code §102.8(f)(10).

P7. The application contained a general, permit-wide request for both an exception (25 Pa. Code §102.14 (d)(1)(ix)) and a waiver (25 Pa. Code §102.14 (d)(2)(ii)) of the riparian buffer requirements. Identify each area of proposed Riparian Buffer encroachment in Special Protection Waters. Clearly specify the square-footage of each individual encroachment. If an exception or waiver of the Riparian Buffer requirements is proposed, a written request for that exception or waiver must be included identifying the specific exception or waiver section for each individual area that an exception or waiver is being requested. Provide detailed plan views at a larger scale of the areas of encroachment into the Special Protection Riparian Buffers. Justification must be provided for each requested exception or waiver. 25 Pa. Code §§ 102.14(d)(1), 102.14(d)(2), and §102.8(f)(9).

P8. Provide a Long-Term Operation and Maintenance Schedule for the inspection, repair, replacement, and other routine maintenance of each BMP. Identify in the Long-Term Operation and Maintenance Schedule the contact name, address and telephone number of the person responsible for the long term maintenance. The following BMPs are identified in the PCSM report: Soil Amendment and Infiltration Berms. Provide a specific Operation and Maintenance Schedule for each BMP. This should include time frames for inspections, repairs, BMP life expectancy, and reconstruction. Additionally, the associated cost for each should be provided including inspections, repairs, and reconstruction. 25 Pa. Code §102.8(f)(10) and §102.8(m).

P9. Identify the Critical Stages within the PCSM narrative that will require oversight by a licensed professional. Each proposed PCSM BMP should have at least one inspection/Critical Stage identified. 25 Pa. Code §102.8(k).

P10. Provide documentation that a recorded instrument will be recorded at the recorder of deeds to provide for necessary access for long term operation and maintenance for PCSM BMPs and provide notice that the responsibility for long-term operation and maintenance of the PCSM BMPs is a covenant that runs with the land and is binding and enforceable by subsequent grantees. This item will be a Condition of Approval and the documentation must be provided with the Notice of Termination. 25 Pa. Code §102.8(l)(2) and 25 Pa. Code §102.8(m)(2).

Compressor Station Supplemental Comments

Site Plan Details:

- E1. Include the methodology for designing outlet protection including the discharge rate. 25 Pa. Code §102.4(b)(5)(viii).
- E2. Explain the reasoning for geo-synthetic clay liner in vegetated channels. 25 Pa. Code §102.11(a)(1).
- E3. Provide the detail for grass and turf reinforcement matting (TRM) to be used in channels as well as the specifications for TRM. 25 Pa. Code §102.11(a)(1).
- E4. Because metal collars have been known to shear concrete pipes during compaction, we suggest the use of and alternate anti-seep collar such as concrete anti-seep collars on any concrete pipes. 25 Pa. Code §102.11(a)(1).
- E5. In the detail on sheet C-10, specify concrete as the outlet structure barrel material. 25 Pa. Code §102.11(a)(1).

Site Plan Drawing:

- E6. Extend the Limit of Disturbance to include the rock apron shown on sheet C-6. 25 Pa. Code §102.4(b)(4).
- E7. If construction vehicles will be driving from one area to another, the Limit of Disturbance should be connected between disturbed area shown on sheet C-5 and C-6 . 25 Pa. Code §102.4(b)(4).
- E8. Indicate the rock apron inlet and outlet at the infiltration basin on sheet C-6. 25 Pa. Code §102.4(b)(5)(ix).
- E9. Provide temporary sediment trap and basin specifications for the infiltration basin area for use during construction and adjust the construction sequence accordingly. 25 Pa. Code §102.4(b)(4).
- P1. Provide the location of 100-year floodway on the drawings provided in Appendix G. §102.8(f)(5) and 25 Pa. Code §102.8(f)(9).
- P2. Provide a Long-Term Operation and Maintenance Schedule for the inspection, repair, replacement, and other routine maintenance of each BMP. Identify in the Long-Term Operation and Maintenance Schedule the contact name, address and telephone number of the person responsible for the long term maintenance. Provide a specific Operation and Maintenance Schedule for each BMP. This should include time frames for inspections, repairs, BMP life expectancy, and reconstruction. Additionally, the associated cost for each should be provided including inspections, repairs, and reconstruction. 25 Pa. Code §102.8(f)(10) and 25 Pa. Code §102.8(m).
- P3. Provide a note that a written report is required for each inspection and maintenance activity. 25 Pa. Code §102.8(f)(10).
- P4. Identify controls to prevent an increase in the rate of stormwater runoff, 25 Pa. Code §102.8(b).
- P5. Include the signature of a licensed professional and a seal on the stormwater verification report. 25 Pa. Code §102.8(e).
- P6. Provide proposed and existing contours and grades on plan drawings. Indicate how the proposed grading relates to or impacts existing contours. 25 Pa. Code §102.8(f)(3).

P7. Identify the Critical Stages within the PCSM narrative that will require oversight by a licensed professional. Each proposed PCSM BMP should have at least one inspection and Critical Stage identified. 25 Pa. Code §102.8(k).

P8. Provide documentation that a recorded instrument will be recorded at the recorder of deeds to provide for necessary access for long term operation and maintenance for PCSM BMPs and provide notice that the responsibility for long-term operation and maintenance of the PCSM BMPs is a covenant that runs with the land and is binding and enforceable by subsequent grantees. This item will be a Condition of Approval and the documentation must be provided with the Notice of Termination. 25 Pa. Code §102.8(m)(2).

Delmont Station Supplemental Comments

E1. Although infiltration BMPs are an option, they are not the only design option. Grass swales, forebays, extended detention, level spreaders, tree planting, use of permeable pavement surfaces, and other listed BMPs are all options that need to be considered as part of a treatment train. 25 Pa. Code §102.11(a)(2).

E2. Please re-evaluate all infiltration rates. Over time, infiltration rates decrease to almost zero. Please evaluate the use of underdrains or a small low-flow orifice. 25 Pa. Code §102.11(a)(2).

E3. Please explain the reasoning for proposing rip rap apron outlet RA-05 at infiltration basin BMP-4 on Drawing PCS-2. Use of this outlet poses a risk of water running onto Route 66, a heavily traveled road. Please consider tying flow discharge into existing inlets on the driveway. 25 Pa. Code §102.11(a)(2).

E4. Please show a rock chute or other lining to convey water from the driveway collector swale down into the forebay of BMP-4. 25 Pa. Code §102.11(a)(2).

E5. PCS-2 shows 8 rows of 24" perforated pipes for stormwater storage. Please consider the use of a surface detention pond, which may be easier to maintain. Also, the RA-06 outlet may have issues due to its location on a hillside above Route 66. If water needs to be discharged at this location, please evaluate the use a level spreader. 25 Pa. Code §102.11(a)(2).

E6. PCS-4 shows the use of single-wall HDPE. Use of a single-wall pipe is not the industry standard due to its lower strength. Please explain the use of this material or indicate a substitute material. 25 Pa. Code §102.11(a)(2).

E7. On PCS-4, please include a sump that allows water to pond at least a foot deep at the drop inlets which receive flow from surface swales. Also, to avoid clogging the inlet with vegetation, please revise the drawings to show a beehive grate for the inlets, not a pedestrian grate. 25 Pa. Code §102.11(a)(2).

E8. Unless you can provide an explanation why R-3 stone is appropriate for this site, please indicate the use of R-5 rock for rip rap energy dissipaters. 25 Pa. Code §102.11(a)(2).

E9. Unless you can provide an explanation (information and calculations) why ordinary HDPE is suitable for a pond outlet barrel at detention ponds depicted on PCS-4 and 5, please indicate an alternate material for use, including RCP or HP HDPE. 25 Pa. Code §102.11(a)(2).

E10. Identify the material of the weir in the "Weir Structure." Please describe whether the weir is integral to the plastic inlet or whether it is fastened to the inlet. 25 Pa. Code §102.11(a)(2).

E11. Please identify the discharge location and flow path of BMP 2's outlet RA-04 at Industrial Drive as depicted on sheet PCS 3. If the outlet discharges to a non-watercourse on property not owned by Sunoco, the company will need to provide an easement from the property owner(s). 25 Pa. Code §102.11(a)(2).

E12. The various access roads you are building indicate an outward cross-slope that will not direct road runoff to the detention system. Please provide information that the proposed system of access roads will not cause accelerated erosion. Alternatively, consideration should be given to capturing road runoff by using an inward cross-slope to the inboard roadside. 25 Pa. Code §102.11(a)(2).

Other Technical Comments

1. Regarding your proposed restoration activities. 25 Pa. Code § 102.4.
 - a. The restoration plan proposes to use restoration seed mix which would allow crown vetch to be used for revegetation. Crown vetch is considered an invasive plant by PaDCNR and should not be used in any seed mixes;
http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_20026634.pdf
 - b. There is a concern that some of the proposed erosion control matting proposed for use on or near farms may be harmful if ingested by livestock. Consideration should be given for alternate matting in these areas.
 - c. Include a detailed discussion on restoration monitoring that will occur to ensure that invasive species do not occur, restoration is successful and what documentation will be developed and maintained to show success.
2. The Pennsylvania Fish and Boat Commission has established seasonal restrictions for in-stream construction work. To ensure that you adhere to these restrictions, the Department recommends identifying the time-of-year restrictions on your E&S Plans. 25 Pa. Code §102.6(a)(2).

Pursuant to 25 Pa. Code § 102.6(c) of DEP'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 within sixty (60) calendar days from the date of this letter, on or before November 1, 2016 or DEP may consider the application to be withdrawn by the applicant.

You may request a time extension in writing before November 1, 2016 to respond to deficiencies beyond the sixty (60) calendar days. Requests for time extensions will be received by DEP 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 should be in accordance with 25 Pa. Code § 102.6(c).

Please submit one (1) copy of the revised E&S/SR and PCSM Plan drawings and narratives to each of the County Conservation Districts, one (1) copy of the revised E&S/SR and PCSM Plan drawings and narratives to Mr. William Himes at DEP's Altoona District Office at 3001 Fairway Drive,

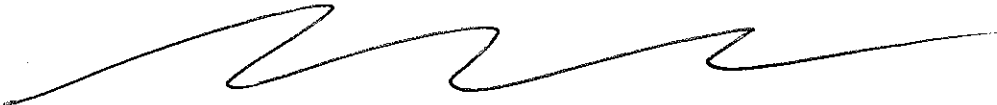
Altoona, PA 16601; and two (2) copies of the revised E&S/SR and PCSM Plan drawings and narratives to the DEP Southwest Region at 400 Waterfront Drive, Pittsburgh, PA 15222.

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 requesting DEP to make a permit decision based on the information 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 your current submission

satisfies that deficiency. 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 the respective Conservation District or Tim McClelland at 412-442-4305 or timmccllell@pa.gov and refer to the Application number listed above to discuss your concerns or to schedule a meeting. Please be advised that the meeting must be scheduled within the 60-day period allotted for your reply, and a complete set of responses must be received within the 60-day period even if a meeting is requested.

Sincerely,



Gregory W. Holesh, P.E.
Environmental Group Manager
Permitting & Technical Services
Waterways & Wetlands Program

Enclosure

cc: Allegheny County Conservation District
Cambria County Conservation District
Indiana County Conservation District
Washington County Conservation District
Westmoreland Conservation District
Robert Simcik P.E., Tetra Tech, Inc.