



PITT-11-16-034

December 2, 2016

Project Number 112IC05958

Mr. Gregory W. Holesh, P.E.
 Environmental Group Manager
 Permitting & Technical Services
 Waterways and Wetlands
 Pennsylvania Department of Environmental Protection
 Southwest Regional Office
 400 Waterfront Drive
 Pittsburgh, Pennsylvania 15222

Re: Pennsylvania Pipeline Project Permit No. ESG 0500015001
 Construction Spreads 1 and 2
 Technical Deficiency Response

Dear Mr. Holesh:

On behalf of our client, Sunoco Pipeline, L.P. (SPLP), Tetra Tech, Inc. provides the following responses to the Pennsylvania Department of Environmental Protection (DEP) Technical Deficiency Response letter dated September 6, 2016 regarding the above-referenced ESCGP-2 Permit Application. The supporting attachments represent a revision of the ESCGP-2 Application in response to the comments received and also incorporates revisions that have been made to the project design since the original submission.

For ease of your review, each DEP item is set forth bolded verbatim below, followed by an italicized narrative response.

Comments and Responses to September 6, 2016 Technical Deficiency Response

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General Technical Deficiencies		
1.	DEP	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)
	<i>SPLP Response:</i>	<i>A "Delegation of Authority" letter authorizing Mr. Gordon to sign the Application on behalf of the partnership is provided in Attachment 7 of the Application.</i>
2.	DEP	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(1). 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.
	<i>SPLP Response:</i>	<i>The Preparedness, Prevention, and Contingency Plan (PPC Plan) has been updated to be applicable project-wide. The PPC Plan is designed to address spill prevention in general. Potential impacts to surface waters and public and private water supplies in particular have been analyzed and addressed within two supplemental plans to the PPC Plan: a Water Supply Assessment, Prevention, Preparedness, and Contingency Plan (Water Supply Plan); and an Inadvertent Return Assessment, Prevention, Preparedness, and Contingency Plan (IR Plan). The Water Supply Plan provides for the assessment of the existing public and private water supplies in or along the project, as well as identifies prevention and preparedness measures to be implemented to protect those supplies. The IR Plan outlines the preconstruction activities implemented to ensure sound geological features are included in the HDD profile, the measures to prevent impact, and the plan to be implemented if an impact were to occur. In addition, a Void Mitigation Plan for Karst Terrain and Underground Mining (Karst Plan) is provided as part of the E&S Plan and assesses the potential impacts and avoidance and mitigation measures during open-cut and drilling procedures. The purpose of these plans is to protect surface and groundwater resources project-wide.</i>
	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.
	<i>SPLP Response:</i>	<i>A comprehensive and complete contact list (including USFWS phone number) has been added to the IR Plan provided in Tab 8. The HDD contractor will be informed of sensitive areas through the Environmental Inspection training program, which is discussed within the IR Plan.</i>
	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.

	<i>SPLP Response:</i>	<p><i>The measures SPLP will take to investigate for the presence of private water supplies in areas where HDD crossings are proposed are described within the Water Supply Plan. Those measures include review of data from Pennsylvania Department of Conservation and Natural Resources Pennsylvania Groundwater Information System, landowner consultations, and field verification of all private drinking water wells within 150 feet of HDD activity.</i></p> <p><i>The Water Supply Plan and IR Plan also include the procedures that will be followed to investigate and resolve impacts to private water supplies should they occur as a result of the proposed activities. These include owner/manager notification, the supply of clean drinking water, and water quality re-sampling. The Water Supply Plan and the IR Plan are provided in Tab 8.</i></p> <p><i>The PPC Plan has been revised to remove the reference to FERC standards.</i></p>
	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.
	<i>SPLP Response:</i>	<i>SPLP has developed a stand-alone IR Plan (Tab 8.C) that outlines the preconstruction and construction procedures for reducing the risk of inadvertent returns, as well as the procedures for inspecting, reporting, containing, and restoring discovered returns. This plan has taken into consideration lessons learned during ME1 and evaluation of the areas where inadvertent returns occurred during ME1. Additional geotechnical investigations were conducted as well as an independent review of the proposed drills.</i>
	e.	The PPC plan should address management of excess drilling mud or liquids that may be encountered at the individual bore pits.
	<i>SPLP Response:</i>	<i>The PPC Plan and the IR Plan were updated to include standard operating procedures pertaining to conventional bore drilling. These plans are provided under Tab 8 of the ESCGP-2 Permit Application. The typical detail in the E&S plan notes and details for HDD's addresses drilling muds and liquids.</i>
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3.	DEP	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).
	<i>SPLP Response:</i>	<i>The PNDI Clearances from the PA Game Commission and the US Fish and Wildlife Service have been provided and can be found under Tab 6 of the ESCGP-2 Permit Application.</i>
	b.	Provide proof that you have received clearance for your project from PHMC. 37 Pa.C.S. §508.

	<i>SPLP Response:</i>	<p><i>While DEP is required to consider potential impacts to historic resources under 25 Pa. Code Chapter 105 when DEP conducts reviews of a water obstruction, encroachment or dam permit application, none of the regulations or guidance referenced in DEP’s comment require SPLP to provide clearance or approval from the PHMC as part of a Chapter 102 or Chapter 105 permit application. Furthermore, as noted in a letter from Alexandra C. Chiaruttini, Esq., DEP’s Chief Counsel concerning the SPLP Pennsylvania Pipeline Project, “the [Pennsylvania] History Code does not authorize our agency or any Commonwealth agency to stop the processing of permits solely due to possible or actual presence of archaeological or historic resources, unless the agency’s enabling legislation contains specific statutory authorization for such action. DEP does not have such authorization here.” A copy of the February 1, 2016, letter from Ms. Chiaruttini is provided in Attachment 6. See also Pennsylvania History Code §508(a)(4). Accordingly, SPLP requests that DEP continue its review of SPLP’s applications.</i></p> <p><i>SPLP will continue to work with the PHMC to ensure that impacts to cultural resources are avoided where possible. In addition, SPLP has included with its Chapter 102 application a Cultural Resources Unanticipated Discovery Plan (Tab 11) to be implemented during construction that outlines the protocols SPLP will follow if SPLP unexpectedly encounters archaeological or historic resources, including notification to DEP and PHMC and cessation of earth disturbance.</i></p>
4.	DEP	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.
	<i>SPLP Response:</i>	<i>Both pipelines will be installed within the same limit of disturbance so there would be no additional, temporary disturbance resulting from a second separate installation. For safety purposes, the installation would be staggered by what is estimated to be no more than 60 days. At some HDDs with longer drills, however, the time period between installation of the two pipelines may exceed 60 days. Any temporary stabilization required would be implemented in accordance with the Project’s E&S Plans.</i>
	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?
	<i>SPLP Response:</i>	<i>In previous submissions and coordination documents, the diameter of the second pipeline had not yet been determined by engineering, but SPLP understood the maximum possible size would be 20 inches in diameter. SPLP has completed the initial engineering details for the necessary capacities of the second line and has determined that the second pipe will be 16 inches in diameter. The application has been revised to reference a 16-inch pipeline.</i>
	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.

	<i>SPLP Response:</i>	<i>The Project Description throughout the Application has been updated to reflect the timing of the installation of the 20-inch and the 16-inch pipeline. In general, the 20-inch pipeline would be installed first, followed by the 16-inch line. For a conventional lay, the pipelines would be installed within the same disturbance to the maximum extent practicable. For safety purposes, the installation would be staggered by what is estimated to be no more than 60 days. At some HDDs with longer drills, however, the time period between installation of the two pipelines may exceed 60 days. Any temporary stabilization required would be implemented in accordance with project's E&S Plans.</i>
5.	DEP	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.
	<i>SPLP Response:</i>	<i>A section on "Travel Lanes" has been added to Section 3.4 of the E&S Narrative, and the E&S Plan Sheets have been revised to call out all "Travel Lane" areas, including which are "travel only" and which are "travel and clearing only". For "Travel Lane" areas that involve resources crossings, an equipment bridge/working platform crossing will be installed per the typical details provided in the E&S Plan Sheets. These equipment bridges/working platforms have also been added, where required on the main E&S Plan Sheets.</i> <i>Cross-sectional views of these resource crossings have not been developed because travel is anticipated to occur on existing grade with no grading required. The intent of clearing a "travel and clearing only" "Travel Lane" would be to provide adequate clearance for equipment to access the work area and protect the resources crossed within that travel lane.</i> <i>Use of these "Travel Lanes" will be intermittent throughout the whole life of the project with a brief period of increased use during HDD activities and other construction activities in the immediate area. Impacts for "Travel Lanes" designated as "travel only" will be temporary, while impacts for "Travel Lanes" designated as "travel and clearing only" areas will have permanent impacts associated with tree and brush removal.</i>
6.	DEP	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).

	<p><i>SPLP Response:</i></p>	<p><i>“Permanent Easement” refers to the legal document that gives rise to a right of way. The “Permanent Easement” is legally protected from encroachment by the landowner. The “Permanent Easement” designation on the plans has no relevance to the maintenance activities that will occur.</i></p> <p><i>“Permanent Right-of-Way” is the term used in the plans to designate the area where future maintenance activities will occur. The maintenance activity in the Permanent Right-of-Way will vary depending on the type of Right-of-Way (e.g., Permanent Right-of-Way, ROW-Travel LOD, ROW-Travel, Station-LOD, or Block Valve Setting-LOD). These designations are described in the Project Description in Attachment 9 of the Chapter 105 Application and the Permanent ROW is shown on the E&S Plan Drawings. The Minimization, Avoidance, and Mitigation Procedures, provided in Attachment 11, Enclosure E, Part 4 of the Chapter 105 Application discusses maintenance activities that will be performed in the Permanent Right-of-Way areas following construction of the pipeline as well as measures that will be taken to ensure that future maintenance activities do not detrimentally impact aquatic resources. For example, the plan indicates that “No Mowing” signs will be placed in PSS areas that will be restored within the Permanent Right-of Way. These areas will also be inspected for continued presence of signage as part of SPLP’s maintenance activities.</i></p>
	<p>b.</p>	<p>Provide a description of the "Travel Lane" that is shown on your project plans. This description should include:</p> <ul style="list-style-type: none"> 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.
	<p><i>SPLP Response:</i></p>	<p><i>"Travel Lanes" are portions of the project LOD that will be used for travel between HDD workspaces. Some of these lanes will require mechanical clearing of trees and brush to improve travel conditions and/or line-of-sight for HDD activities. No other construction activities will occur in these areas. A section on "Travel Lanes" has been added to Section 3.4 of the E&S Narrative, and the E&S Plan Sheets have been revised to call out "Travel Lane" areas, including those which are "travel only" (no mechanical clearing required) and those which are "travel and clearing only" (mechanical clearing required).</i></p> <p><i>Use of these "Travel Lanes" will be intermittent throughout the duration of the project with a brief period of increased use during HDD activities and other construction activities in the immediate area. Impacts for "Travel Lanes" designated as "travel only" will be temporary, while impacts for "Travel Lanes" designated as "travel and clearing only" areas will have permanent impact associated with tree and brush removal.</i></p> <p><i>The LOD for "Travel Lanes" designated as “travel and clearing only” do not cross wetlands and most floodplains and floodways. For any portions of the "Travel Lanes" that are crossing resources, an equipment bridge/working platform crossing will be installed consistent with the descriptions provided in the E&S Plan Sheets. These equipment bridges/working platforms have also been added, where required on the main E&S Plan Sheets.</i></p>
	<p>c.</p>	<p>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.</p>

	<i>SPLP Response:</i>	<i>Vegetation clearing, grubbing, or removal within the permanent ROW is not anticipated to occur as part of the pipelines construction to be installed via an HDD or bore except in the areas within the LOD, which is depicted in the plan drawings. However, in instances where the LOD extends into wetlands, floodplains, and floodways, no maintenance clearing, cutting, removal, or other alteration will occur. Instead, alternative methods of inspections (e.g., foot patrol) will be employed to maintain the pipeline ROW in wetlands, floodplains, and floodways.</i>
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	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.
	<i>SPLP Response:</i>	<i>There are locations where the Project lines (16" and 20") share the ROW with another Sunoco 8" line, and in some cases, the Project line will cross the Sunoco 8" line. The new lines are still expected to be installed underneath the existing line. If for some reason, the Project lines must cross over top of the Sunoco 8" line while still maintaining the minimum necessary cover, SPLP will be able to stop flow through any line, as necessary, to facilitate safe access to their crossed line.</i>
	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.
	<i>SPLP Response:</i>	<i>SPLP has undertaken efforts to ensure that all changes to either the JPA or the ESCGP-2 Applications are consistent between the two applications.</i>
7.	DEP	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).
	<i>SPLP Response:</i>	<i>A "Rare, Threatened, and Endangered Species Restrictions and Avoidance Measures" table and site specific restrictions have been added to the plans and the drawings</i>
8.	DEP	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)
	<i>SPLP Response:</i>	<i>The time of concentration lines have been amended to be shown perpendicular to the respective existing and proposed contours and are reflected on the PCSM plan drawings.</i>

9.	DEP	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)
	SPLP Response:	<i>The time of concentration line lengths on the PCSM drawings have been amended to match the time of concentration calculations in Attachment 4 of the PCSM report.</i>
10.	DEP	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)
	SPLP Response:	<i>Detailed calculations for the Time of Concentration Adjustment method have been provided for each site within Attachment 4 calculations for each site. Additionally, the adjustment calculations have been revised to only utilize the storage volume for the storm event rather than the total possible storage of the BMP.</i>
11.	DEP	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
	SPLP Response:	<i>The causes of impairment for each respective receiving watercourse have been added to Worksheet 1.</i>
	b.	Please verify the receiving watercourse for each valve site's point of interest
	SPLP Response:	<i>The receiving watercourse for each point of interest has been verified and revised, where necessary, on Worksheet 1.</i>
	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
	SPLP Response:	<i>The approval status of the Act 167 Plan for the watershed at each valve site has been verified and revised on Worksheet 1, where necessary. Verification that the site addresses the Act 167 Plan requirements, when applicable, is detailed in the Act 167 Consistency Verification Reports, located in Tab 5 of the ESCGP-2 Permit Application.</i>
	d.	Please verify the Chapter 93 classification for each respective receiving watercourse
	SPLP Response:	<i>The Chapter 93 designation of each respective receiving watercourse has been verified and revised, where necessary.</i>
	e.	Please verify the 2-year/24-hour runoff volume to each berm based on the berm's drainage area

	<i>SPLP Response:</i>	<i>The 2-year/24-hour runoff volume to each berm has been determined. This information can be found in the hydraflow output for the detained drainage area.</i>
	f.	Please verify the total structure volume provided on DEP Worksheet 5. This should be the lowest value amongst (1) 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.
	<i>SPLP Response:</i>	<i>The total structural volume provided on DEP Worksheet 5 has been revised so that it is the lowest value amongst (1) 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.</i>
	g.	Please verify the recommended infiltration rate for each valve site with the calculations and the infiltration test data
	<i>SPLP Response:</i>	<i>The recommended infiltration rates for each valve site have been revised based on new field data and relocating PCSM BMPs. The recommended infiltration rates are summarized in Attachment 5 of the Site Restoration and Post-Construction Stormwater Management Plan.</i>
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12.	DEP	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 & N03). 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).
	<i>SPLP Response:</i>	<i>A write-up has been generated to accompany the PCSM calculation for each block valve sites. The write-up provides evidence that 90% of the disturbed area is now controlled and managed by a PCSM BMP at each of the sites. As a result, Worksheets 12 and 13 are not needed.</i>
13.	DEP	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)
	<i>SPLP Response:</i>	<i>Detailed calculations for the Time of Concentration Adjustment method have been provided for each site. Additionally, the adjustment calculations have been revised to only utilize the storage volume for the storm event rather than the total possible storage of the BMP. The calculation is provided in Attachment 4.</i>

14.	DEP	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)
	SPLP Response:	<i>The Alternatives Analysis included within the Chapter 105 applications demonstrate that the proposed pipeline route has been designed to maximize the use of existing utility corridors, and minimize the number and linear footage of crossings of all surface waters, including those classified as High Quality (HQ) or Exceptional Value (EV). The Trenchless Construction Feasibility Analysis sets forth an analysis of the possible implementation of trenchless construction methods at certain stream or wetland crossing, and indicates the use of trenchless crossing installation methods where feasible. For those surface water crossings crossed by the open cut installation method, the E&S Plan identifies and incorporates ABACT E&S best management practices (BMPs).</i>
15.	DEP	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)
	SPLP Response:	<i>Drilling mud is managed in tanks or pits and not utilizing E&S BMPs. All E&S BMPs were verified and are shown on the plan view drawings.</i>
16.	DEP	Notice of Intent (NOI):
	a.	<p>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)).</p> <p>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).</p> <ul style="list-style-type: none"> 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. <p>Make all necessary revisions to the NOI 25 Pa Code §102.6(a)(1)</p>
	SPLP Response:	<i>The Act 167 verification reports, Act 167 tracking tables, and Site Restoration narrative have been updated to verify consistency with Act 167 or defined where the designs meet the standards of 25 Pa Code §§ 102.8(g)(2) and 102.8(g)(3)). The PCSM design calculations in Attachment 4 also summarize the design criteria utilized for the proposed aboveground facilities.</i>

	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 <i>Off-site Discharges of Stormwater Areas That Are Not Surface Waters Fact Sheet</i> (DEP Document No. 3150-FS-DEP4124). 25 Pa Code §102.4(c), §102.6(a)(1), and §102.8(f)(15)
	<i>SPLP Response:</i>	<i>Section E.5 has been corrected in the NOI (Tab 2 of the ESCGP-2 permit application). As a part of this correction, a table is attached which identifies the areas where stormwater is discharged offsite to areas other than a surface water.</i>
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	c.	<p>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)).</p> <p>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).</p> <ul style="list-style-type: none"> 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. <p>Make all necessary revisions to the NOI 25 Pa Code §102.6(a)(1)</p>
	<i>SPLP Response:</i>	<i>The Act 167 verification reports, Act 167 tracking tables, and Post Construction Stormwater Management narrative have been updated to verify consistency with Act 167 or defined where the designs meet the standards of 25 Pa Code §§ 102.8(g)(2) and 102.8(g)(3). The PCSM design calculations in Attachment 4 also summarize the design criteria utilized for the proposed aboveground facilities.</i>
	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 <i>Off-site Discharges of Stormwater Areas That Are Not Surface Waters Fact Sheet</i> (DEP Document No. 3150-FS-DEP4124). 25 Pa Code §102.4(c), §102.6(a)(1), and §102.8(f)(15)
	<i>SPLP Response:</i>	<i>A separate Offsite Discharge Analysis, Attachment 8 of the NOI, has been prepared for the project consistent with the guidance in DEP Document No. 3150-FS-DEP4124.</i>

	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)
	<i>SPLP Response:</i>	<i>Due to the linear nature of this project all of the HQ/EV special protection watersheds received the same non discharge alternative evaluation and incorporation of ABACT site restoration BMPs throughout the pipeline. A site-specific antidegradation analysis is provided for the areas requiring PCSM in Attachment 11 of the E&S Control Plan.</i>
	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)
	<i>SPLP Response:</i>	<i>The statement has been revised to state, "Notices of Violations can be found in Tab 9 of the ESCGP-2 Permit Application."</i>
Erosion and Sedimentation Control Plan General Technical Deficiencies		
17.	DEP	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)
	<i>SPLP Response:</i>	<i>Separate, detailed PCSM Plan drawings are provided and can be found in the PCSM Report --Tab 7, Attachment 6 of the ESCGP-2 Permit Application.</i>
18.	DEP	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)
	<i>SPLP Response:</i>	<i>Additional notes have been added to the E&S Sheets related to the HDD sites. The general construction sequence for HDD crossings can be found under the Construction Sequence notes on ES-0.05 or ES-0.06.</i>
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19.	DEP	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)

	<i>SPLP Response:</i>	<i>Standard Erosion and Sediment Control Plan Note #27 (previously #26) has been revised to state, "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, and in special protection watersheds temporary stabilization shall be immediate."</i>
20.	DEP	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)
	<i>SPLP Response:</i>	<i>Water bars are placed a minimum of 50' from the top of bank per the detail and the DEP-designated floodway for streams that do not have a FEMA-designated floodplain. Water bars are placed where applicable outside that 50' buffer based on topography. Areas where contours are parallel to the LOD cannot accommodate water bars.</i>
21.	DEP	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)
	<i>SPLP Response:</i>	<i>Water bars are placed a minimum of 50' from the top of bank per the detail and the PADEP-designated floodway for streams that do not have a FEMA-designated floodway. Water bars are placed where applicable outside that 50' buffer based on topography. Areas where contours are parallel to the LOD cannot accommodate water bars. Compost Filter Socks (CFS) are applied at the end of each water bar, and along the edges of the ROW parallel to pre-disturbed surface gradients. Per the DEP BMP manual, edges of CFS are turned "upflow" at each location. The waterbar detail has been modified to indicate the addition of the compost filter socks at the end of waterbars.</i>
22.	DEP	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)
	<i>SPLP Response:</i>	<i>The compost filter sock (J-hooks) are shown on the individual E&S sheets and typical detail #3 on ES-0.08. The J-hook will be upsized one standard size from what the slope and up slope length would require from Worksheet 1 in the E&S Design Calculations.</i>
23.	DEP	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)
	<i>SPLP Response:</i>	<i>The waterbars have been updated to display temporary versus permanent. Temporary waterbars are indicated with a green color, and permanent waterbars are shown as blue.</i>
24.	DEP	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)

	<i>SPLP Response:</i>	<i>Notes have been added to the E&S Plans to indicate that, "Surface roughening should be applied to slopes 3H:1V or steeper unless a stable rock face is provided or it can be shown that there is not a potential for sediment pollution to surface waters. For roughened surfaces within 50 feet of a surface water, and where blanketing of seeded areas is proposed as the means to achieving permanent stabilization, spray-on type blankets are recommended. Surface roughening shall be accomplished using dozers affixed with grouser tracked equipment. Dozers shall run up and down the slopes leaving horizontal grooves perpendicular to the slope. Dozer blades shall be raised and not used during surface roughening."</i>
25.	DEP	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)
	<i>SPLP Response:</i>	<i>A table has been added to the E&S Plans on ES-0.07 to identify the types of erosion control blanket and matting to be used for which conditions.</i>
26.	DEP	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)
	<i>SPLP Response:</i>	<i>The on-site Environmental Inspector and/or Inspection Chief will determine whether any BMPs need to be adjusted. Language has been added to Note 3 on the plan view drawings to identify that, "A deviation from the authorized plans may be necessary; however, the appropriate county conservation district and DEP must approve any material deviation to the authorized plans."</i>
27.	DEP	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)
	<i>SPLP Response:</i>	<i>The Construction Sequence, #9, has been revised to state, "Water bars or approved interceptor dykes will be installed along the alignment prior to pipe installation at the end of each work day. During the periods of time where pipe trench is open contractors will provide positive control of all storm water on site, water bars will be constructed at the end of each work day, or during each work day if required contractor will install silt fence to control erosion until 70% vegetation growth has been achieved."</i>
28.	DEP	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)

	<i>SPLP Response:</i>	<i>A note has been added to the Standard Erosion and Sediment Control Plan Notes (ES-0.06) and to the notes regarding Working in a Wetland Area which states, "No soil amendments such as agricultural lime or fertilizer will be used within wetland areas."</i>
29.	DEP	<p>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 March 2012, the following are the correct compost standards:</p> <p style="padding-left: 40px;">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.</p> <p>Make all revisions necessary. 25 Pa Code §102.4(b)(5)(vi), §102.4(b)(5)(ix), and §102.11(a)(1)</p>
	<i>SPLP Response:</i>	<i>The compost standards in Table 4.2 of Attachment 4 of the E&S Plan narrative have been updated to reflect the latest compost standards from the March 31, 2015 modifications to the Erosion and Sediment Control Program Manual - March 2012.</i>
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30.	DEP	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 TON 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)
	<i>SPLP Response:</i>	<i>The tables have been added to the compost filter sock detail, on ES-0.05 or ES-0.06 (county dependent).</i>
31.	DEP	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)
	<i>SPLP Response:</i>	<i>HDD staging areas are shown on the plan sheets. Where grading is necessary for use of the staging area, grading is shown. All E&S BMPs have been verified and are shown on the plans.</i>
32.	DEP	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 TON 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)

	<i>SPLP Response:</i>	<i>An updated detail has been provided on ES-0.07 or ES-0.08 (county dependent).</i>
33.	DEP	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)
	<i>SPLP Response:</i>	<i>The temporary seeding information has been reviewed and verified to be consistent between the E&S Narrative and the plan drawings.</i>
34.	DEP	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)
	<i>SPLP Response:</i>	<i>The Project Description throughout the Application has been updated to reflect the timing of the installation of the 20-inch and the 16-inch pipeline. In general, the 20-inch pipeline would be installed first, followed by the 16-inch line. For a conventional lay, the pipelines would be installed within the same disturbance to the maximum extent practicable. For safety purposes, the installation would be staggered by what is estimated to be no more than 60 days. At some HDDs with longer drills, however, the time period between installations of the two pipelines may exceed 60 days. Any temporary stabilization required would be implemented in accordance with the Project's E&S Plans.</i> <i>The E&S Plans have been reviewed and revised to display the trench plugs for each of the two pipelines at the same locations.</i>
35.	DEP	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.S(c), §102.8(e), §102.8(f), §102.S(h), §102.8(i), §102.8(l) and §102.8(m)
	<i>SPLP Response:</i>	<i>A site restoration narrative has been added to the E&S plan for the mainline pipeline construction. In addition, Section 3.0 of the Site Restoration and Post-Construction Stormwater Management Plan discusses site restoration for the mainline pipeline. The narratives are in conformance with the E&S Plan for the project.</i>
36.	DEP	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)
	<i>SPLP Response:</i>	<i>A note has been added to the Construction Sequence to state, "Strip topsoil from trench area (where required) and stockpile within the right-of-way in accordance with the details provided. In wetlands, agricultural areas, and residential areas additional topsoil stripping and stockpiling may be required.</i>

37.	DEP	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)
	<i>SPLP Response:</i>	<i>A note has been added on the plan drawings and the E&S Narrative that states, "In any area that used stone and/or timber mats for temporary stabilization and/or access, the stone and/or timber mats will be completely removed, soil will be decompacted by using tracked equipment making multiple passes over the area, preconstruction contours will be reestablished,, and topsoil will be replaced to a minimum of 4-8 inches deep, and the area will be seeded and mulched. Vehicular traffic should utilize designated and approved access areas in order to minimize compaction to the greatest extent possible</i>
38.	DEP	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.
	<i>SPLP Response:</i>	<i>Compaction concerns are restricted to the limit of disturbance, which has been minimized to the maximum extent practicable. Within the pipeline right of way, travel lanes will be utilized to restrict the extent of compaction. Following installation of the pipeline, deep ripping or chisel plowing will occur to alleviate compaction, promote infiltration, and facilitate vegetative growth. The site restoration construction sequence has been updated in the Site Restoration and Post-Construction Stormwater Management Plan narrative and on drawing PCS-0.01. The sequence now specifies chisel plowing or incorporating soil amendments where compaction occurs. The sequence also specifically addresses restoration of access roads.</i>
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39.	DEP	Describe how your planning and design requirements satisfy 25 Pa. Code §102.4(b)(4) and §102.S(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.
	<i>SPLP Response:</i>	<i>The Site Restoration and Post Construction Stormwater Management Plan addresses how the project minimizes the extent and duration of construction to minimize stormwater. The plan addresses the potential impacts to surface waters when the corridor is in close proximity or crosses the surface waters and how the waters are protected.</i>
Allegheny County Technical Deficiencies (Contact Person: Matt Gordon and Tim McClelland)		
E1.	ACCD	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).

	<i>SPLP Response:</i>	<i>The legend has been revised to indicate the use of compost filter sock for the project. The symbol for silt fence in legend removed. Silt fence is an approved alternative in non HQ/EV watersheds and the detail along with allowable lengths is provided on the E&S notes and details to ensure proper installation if used.</i>
E2.	ACCD	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.
	<i>SPLP Response:</i>	<i>The protected Riparian Buffer areas on the plans have been reviewed and verified at applicable stream crossings, and are clearly identified on the plans.</i>
E3.	ACCD	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).
	<i>SPLP Response:</i>	<i>The proposed Rock Construction Entrance is now shown on the plan drawing sheets ES-1.02 and ES1.05 for access roads.</i>
E4.	ACCD	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).
	<i>SPLP Response:</i>	<i>A site specific crossing detail has been added to clarify how this location will be addressed. This site specific detail is identified as S-151-A and S-151-B, which is called out on ES-1.16 and provided with the E&S drawing package.</i>
E5.	ACCD	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).
	<i>SPLP Response:</i>	<i>The bore pit has been moved beyond the top-of-bank and the 50-ft floodway line of UNT to Becks Run. This change is reflected on ES-1.18.</i>
E6.	ACCD	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.
	<i>SPLP Response:</i>	<i>The HDD settling basin has been removed from E&S Sheets ES-1.01 and ES-1.22. The need for basins/containment of drilling mud will be indicated on the typical drawings and not on the plan sheets. Maintenance is the responsibility of the driller as the basins are temporary only during HDD drilling.</i>
E7.	ACCD	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).
	<i>SPLP Response:</i>	<i>ES-1.23 has been revised to show the LOD outside the limit of the tributary. This crossing is identified on Sheet 15 of the Chapter 105 Site Plans as being crossed by an HDD.</i>

E8.	ACCD	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).
	<i>SPLP Response:</i>	<i>The BMP has been removed from the stream channel on ES-1.27.</i>
E9.	ACCD	Identify the permit boundary on the E&S drawings legend. 25 Pa. Code §102.4(b)(5)(ix).
	<i>SPLP Response:</i>	<i>The permit boundary is concurrent with the LOD on the E&S drawings. See the Legend on ES-0.01 for the symbol clarification.</i>
E10.	ACCD	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).
	<i>SPLP Response:</i>	<i>The streambank stabilization detail has been revised to reflect adequate protection measures. The corresponding table (ES-0.20) to the detail provides the stabilization methods to be utilized.</i>
E11.	ACCD	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).
	<i>SPLP Response:</i>	<i>The Typical Stream Crossing details depicting culverts have been revised to reflect the standard details from the PADEP E&S Manual, which indicate a low point in the center of the crossings to pass high flows.</i>
P1.	ACCD	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).
	<i>SPLP Response:</i>	<i>Standard worksheets have been proposed for all areas along the pipeline where permanent, impervious cover is proposed. All other areas of the project will be restored to a meadow or lawn in good condition, thereby meeting the requirements set forth in 25 Pa Code § 102.8(n).</i>
P2.	ACCD	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).

	<i>SPLP Response:</i>	<i>A waiver, provided as Attachment 6 of the NOI, is being requested for all of the Riparian Buffer Encroachments in Special Protection Waters. The Riparian Buffer Waiver Request provides the total area of the buffer encroachment in Table 2. Additionally, a detailed plan view for each individual buffer encroachment area is included. The justification for the request is provided in the form of an alternatives analysis which is located in both the narrative and in Table 3 of the Riparian Buffer Waiver request.</i>
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P3.	ACCD	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.S(m).
	<i>SPLP Response:</i>	<i>The requested information is now provided in section 4.5 of the Site Restoration and Post-Construction Stormwater Management Plan narrative.</i>
P4.	ACCD	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.S(k).
	<i>SPLP Response:</i>	<i>The critical stages of the PCSM plan that require oversight by a licensed professional are included in the PCSM construction sequences.</i>
P5.	ACCD	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).
	<i>SPLP Response:</i>	<i>A recorded instrument will be recorded at the recorder of deeds to provide necessary access for long term operation and maintenance of PCSM BMPs, and 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 is now provided. It is understood that this item will be a Condition of Approval, and the documentation must be provided with the Notice of Termination.</i>
Cambria County Technical Deficiencies (Contact Person: Bobbie Blososky and Tim McClelland)		
E1.	CCCD	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).
	<i>SPLP Response:</i>	<i>The Rock Filter Outlet detail provided in the PA ESPCP Manual for areas of concentrated flow where CFS and/or silt fence is failing has been added to ES-0.06. The silt fence details are also now on sheet ES-0.06.</i>

E2.	CCCD	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).
	<i>SPLP Response:</i>	<i>The details have been replaced with Standard Construction Details #3-13, and #3-14. A note has also been added to reference the PA manual and these details for additional information. Additional revisions to the notes have been updated based on other comments received. These details are now located on sheet ES-0.10 under Temporary Equipment Crossing Details.</i>
E3.	CCCD	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).
	<i>SPLP Response:</i>	<i>The Typical Bank Restoration Detail now located on sheet ES-0.08 has been revised to indicate that a minimum of 4-inches of topsoil will be used for bank stabilization and that native streambank material will be used for the underwater portions of restoration. Stone will not be required for all stream bank restorations, however for the larger streams or streams of interest a site specific stream crossings has been developed and provided in the E&S plans. These site specific crossings are listed on Sheet ES-0.18 and a detail provided.</i>
E4.	CCCD	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).
	<i>SPLP Response:</i>	<i>A temporary equipment crossing is shown as the crossing method for the installation of the temporary access road over stream S-BB61 on E&S Sheet ES-2.03. A site specific stream crossing detail has been prepared for this crossing and it is called out as follows: "See Sheets S-BB61-A and S-BB61-B for site specific plans".</i>
E5.	CCCD	Identify the ESC Permit Boundary on the E&S Plan drawings. 25 Pa. Code §102.4(b)(5)(ix).
	<i>SPLP Response:</i>	<i>The permit boundary is concurrent with the LOD on the E&S drawings. See the Legend on ES-0.01 for the symbol clarification.</i>
E6.	CCCD	Identify soils and include soil symbols on the E&S Plan drawings. 25 Pa. Code §102.4(b)(5)(ix).
	<i>SPLP Response:</i>	<i>Updated soils maps, which identify and include soil symbols, have been provided in Attachment 5 of the E&S Report and Attachment 2 of the PCSM Report.</i>
E7.	CCCD	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.SS and the Typical Wetland Restoration Detail on ES-0.10. 25 Pa. Code §102.11(a)(1).
	<i>SPLP Response:</i>	<i>The plans and detail have been revised to indicate that erosion control blankets will be used in all seeded areas within 100 feet of special protection waters.</i>

E8.	CCCD	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).
	<i>SPLP Response:</i>	<i>Percheron LLC is the land agent subcontracted by Sunoco to support acquisition of the properties associated with permanent and temporary easements and surface agreements, where necessary. An review of this property determined that the acquired easements are not within the areas of identified contamination and therefore the contamination will not impact this Project</i>
Page 11		
P1.	CCCD	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).
	<i>SPLP Response:</i>	<i>Additional infiltration tests were conducted at the depth of the proposed PCSM BMP, and results are summarized in Attachment 5.</i>
P2.	CCCD	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).
	<i>SPLP Response:</i>	<i>A maximum 5:1 impervious area to infiltration area has been achieved for PCSM BMPs at the block valve sites. The PCSM write-up that accompanies each site includes a summary of the loading ratios, and the same information is included in Section 4.7 of the narrative.</i>
P3.	CCCD	Identify the site location of the proposed Infiltration Berms. Confirm the proposed Infiltration Be1m locations are on natural, uncompacted soils, and constructed along the contours. 25 Pa. Code §102.8(f)(9).
	<i>SPLP Response:</i>	<i>The site location of the proposed infiltration berms have been revised and verified as being on natural, uncompacted soils, and constructed along the contours and are shown on the PCSM plan drawings</i>
P4.	CCCD	Confirm the design volume of each proposed Infiltration Berm. 25 Pa. Code §102.8(f)(8).
	<i>SPLP Response:</i>	<i>The design volume of each proposed infiltration berm has been verified in Attachment 4 of the PCSM report.</i>
P5.	CCCD	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).
	<i>SPLP Response:</i>	<i>Standard worksheets have been proposed for all areas along the pipeline where permanent, impervious cover is proposed. All other areas of the project will be restored to a meadow or lawn in good condition, thereby meeting the requirements set forth in 25 Pa Code § 102.8(n).</i>

P6.	CCCD	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).
	<i>SPLP Response:</i>	<i>Specific inspection and maintenance language has been added for each of the proposed PCSM BMPs.</i>
P7.	CCCD	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).
	<i>SPLP Response:</i>	<i>A waiver, provided as Attachment 6 of the NOI, is being requested for all of the Riparian Buffer Encroachments in Special Protection Waters. The Riparian Buffer Waiver Request provides the total area of the buffer encroachment in Table 2. Additionally, a detailed plan view for each individual buffer encroachment area is included. The justification for the request is provided in the form of an alternatives analysis which is located in both the narrative and in Table 3 of the Riparian Buffer Waiver request.</i>
P8.	CCCD	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).
	<i>SPLP Response:</i>	<i>A Long-Term Operation and Maintenance Schedule has been provided in Section 4.5 of the SWRO PCSM Narrative for all PCSM BMPs being implemented on the project. Also, a table has been provided in Section 4.5 of the PCSM Narrative to address time frames for inspections, repairs, BMP life expectancy, reconstruction, and all associated costs.</i>
P9.	CCCD	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).
	<i>SPLP Response:</i>	<i>The critical stages of the PCSM plan that require oversight by a licensed professional are included in the PCSM construction sequences.</i>

P10.	CCCD	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).
	<i>SPLP Response:</i>	<i>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 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 is now provided. It is understood that this item will be a Condition of Approval, and the documentation must be provided with the Notice of Termination.</i>
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Compressor Station Supplemental Comments		
The Deficiencies include:		
E1.	CCCD	Correct the NOI disturbed acreage. 25 Pa. Code §102.6(a)(2).
	<i>SPLP Response:</i>	<i>The LOD on the NOI has been updated.</i>
E2.	CCCD	Revise the Act 14 letter, which is required based on the increased acreage. 25 Pa. Code §102.6(a)(1).
	<i>SPLP Response:</i>	<i>Revised Act 14 letters with updated LODs have been sent to all necessary parties.</i>
E&S Narrative:		
E3.	CCCD	Submit E&S worksheets #1, 8, 11, 20 and 22 in narrative. 25 Pa. Code §102.4(b)(5)(vi).
	<i>SPLP Response:</i>	<i>E&S Worksheets #1, 8, 11, 20, and 22 have been included in Attachment 4 of the E&S report.</i>
E4.	CCCD	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).
	<i>SPLP Response:</i>	<i>Section 3.3 of the E&S Narrative has been updated to include a narrative description of the location and use of vegetated channels and riprap aprons.</i>
E5.	CCCD	Add note identifying project construction wastes. 25 Pa. Code §102.4(b)(5)(xi).
	<i>SPLP Response:</i>	<i>The identification of project construction wastes are addressed in Section 3.4 of the E&S Plan and Note 23 on page C-3 of Attachment 2.</i>
E&S Maps:		
E7.	CCCD	Add soil types, slopes and locations. Also add identification in legend. 25 Pa. Code §102.4(b)(5)(ix).

	<i>SPLP Response:</i>	<i>Soil types and slopes are mapped on Sheet 2 of the E&S plan to show their location, and lines dividing soil types are added to the legend on Sheet C-1 of the E&S plan</i>
E8.	CCCD	Add construction techniques or special considerations to address soil limitations. 25 Pa. Code §102.4(b)(4).
	<i>SPLP Response:</i>	<i>Section 2.2 of the E&S Narrative has been updated to address special considerations for soil limitations.</i>
E9.	CCCD	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).
	<i>SPLP Response:</i>	<i>A note has been added to sheet C-1 (see note 9) of the E&S plan drawings which identifies the receiving waters and their Chapter 93 classifications.</i>
E10.	CCCD	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.
	<i>SPLP Response:</i>	<i>The Rock Construction Entrance and vegetative channel details have been updated to match the E&S Manual details. The riprap apron detail provided is the same as Detail 9-1 of the E&S Manual.</i>
E11	CCCD	Add note about environmental due diligence and clean fill. 25 Pa. Code §102.4(b)(4).
	<i>SPLP Response:</i>	<i>Section 3.4 of the E&S Narrative has been updated to address environmental due diligence and clean fill. Also, Note 10 on page C-1 of Attachment 2 addresses clean fill.</i>
P1.	CCCD	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).
	<i>SPLP Response:</i>	<i>The 100-year floodway is outside the view of the plan set. A note has been added to Sheet C-1 regarding the receiving waters and their Chapter 93 classification.</i>
P2.	CCCD	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).

	<i>SPLP Response:</i>	<i>A Long-Term O&M schedule for each BMP has been added to Section 3.8 of the PCSM Narrative, and a table is provided to clearly show all requested information. A footnote was added to the Long-Term Operation and Maintenance Schedule in Section 3.8 of the PCSM Narrative stating that SPLP is the owner/operator and responsible party for long-term O&M. SPLP's contact information was provided as well. The time and cost of inspections, repairs, and reconstruction are based upon industry standards and are subject to change based upon the severity of any damage as well as billing rates.</i>
P3.	CCCD	Provide a note that a written report is required for each inspection and maintenance activity. 25 Pa. Code §102.8(f)(10)
	<i>SPLP Response:</i>	<i>A note regarding the requirement to produce a written report for each inspection and maintenance activity can be found in Note 11 on page C-1 of Appendix G.</i>
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P4.	CCCD	Provide controls to prevent an increase in the rate of stormwater runoff. 25 Pa. Code §102.8(b).
	<i>SPLP Response:</i>	<i>BMP controls to prevent an increase in the rate of stormwater runoff include 3 infiltration filters with a total of 1,095 linear feet of 24" diameter storage pipe and 1 underground storage BMP with a total of 510 linear feet of 24" diameter storage pipe. Details for these BMP controls are provided in Section 4.0 of the PCSM Plan.</i>
P5.	CCCD	Include the signature of a licensed professional and a seal on the stormwater verification report. 25 Pa. Code §102.8(e)
	<i>SPLP Response:</i>	<i>A signature and seal of a licensed professional has been added to the stormwater verification report.</i>
P6.	CCCD	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).
	<i>SPLP Response:</i>	<i>Proposed and existing contours are provided on plan drawings. Line types have been corrected to clarify differences between contour types. An existing conditions plan sheet has been added to the PCSM drawings to clarify existing conditions.</i>
P7.	CCCD	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)
	<i>SPLP Response:</i>	<i>Section 3.8 of the PCSM Narrative has been updated to identify and address the critical stages that a licensed professional must oversee.</i>

P8.	CCCD	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).
	<i>SPLP Response:</i>	<i>A note has been added to Sheet C-1 of the PCSM Plan specifying this requirement.</i>
Indiana County Technical Deficiencies (Contact Person: Andrea Frustaci and Tim McClelland)		
E1.	ICCD	Volume I: Item #2, <u>Notice of Intent Application</u>: Attachment A – Classify Toms Run as CWF-TSF. 25 Pa. Code §102.6(a)(1).
	<i>SPLP Response:</i>	<i>Toms Run is now classified as CWF-TSF stream in the NOI Application.</i>
E2.	ICCD	Volume II: Item #7, <u>PCSM and Site Restoration Plan</u>: 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).
	<i>SPLP Response:</i>	<i>Toms Run is now classified as CWF-TSF stream in the PCSM and Site Restoration Plan.</i>
E3.	ICCD	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).
	<i>SPLP Response:</i>	<i>The Stream and Wetland Crossings have been reviewed and are identified on their respective plan sheets. The first iteration of S-0110 on ES-2.25 has been revised to reflect correct stream, S-0111.</i>
E4.	ICCD	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).
	<i>SPLP Response:</i>	<i>Table 4.4, Maximum Slope Length for Silt Fence, has been added to the details of the ICCD E&S Control and Site Restoration Plan ES-0.07.</i>
E5.	ICCD	Include the Sediment Trap shown on Drawing ES-0.08 in section 3.3 <u>Sequence of BMP Installation</u>; “Structural Controls”. 25 Pa. Code §102.4(b)(5)(ix).
	<i>SPLP Response:</i>	<i>The Sediment Trap now on Drawing ES-0.06 (formerly ES-0.08) is now included in Section 3.3, Sequence of BMP Installation; “Structural Control.”</i>
E6.	ICCD	Include construction details for the Infiltration Berm referenced on ES-0.02 and show on various other plan drawings in the ICCD E&S Control & Site Restoration Plan Drawings. 25 Pa. Code §102.4(b)(4).

	<i>SPLP Response:</i>	<i>Construction details have been included for the Infiltration Berm and other PCSM controls and are now provided on sheet ES-0.23 of the E&S Control & Site Restoration Plan Drawings package.</i>
E7.	ICCD	Drawing PCS-0.01: Note #2 – Incorrectly lists Dauphin County when it should be Indiana County. 25 Pa. Code §102.4(b)(5)(ix).
	<i>SPLP Response:</i>	<i>PCS-0.01 has been revised to list "Westmoreland, Indiana, and Cambria Counties" and not Dauphin County.</i>
E8.	ICCD	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).
	<i>SPLP Response:</i>	<i>Both statements now match to indicate that erosion control blankets will be installed within 50 feet of surface water and 100 feet of a special protection surface water. This is now note #36 on Standard E&S Control Plan Notes and #16 on Construction Sequence on sheet ES-0.03.</i>
E9.	ICCD	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).
	<i>SPLP Response:</i>	<i>The Township designations have been verified with respect to county location and revised accordingly.</i>
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E10.	ICCD	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).
	<i>SPLP Response:</i>	<i>The project has been designed using compost filter sock. The call-out in the legend for silt fence has been removed. The size of the compost filter sock is presented on the individual E&S Plan Sheets.</i>
E11.	ICCD	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).
	<i>SPLP Response:</i>	<i>Access to these two HDD will occur via the long access road shown on ES-2.02. The sheet has been updated to show approved crossing methods (timber matting) of these streams and wetland, which are included in the Chapter 105 permit application on Sheets 1 and 2 of the Indiana County Site Plans.</i>

E12.	ICCD	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).
	<i>SPLP Response:</i>	<i>The bore pit and staging areas have been added to Plan ES-2.04.</i>
E13.	ICCD	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).
	<i>SPLP Response:</i>	<i>Erosion control blanket has been added to Plan ES-2.16.</i>
E14.	ICCD	<p>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:</p> <ol style="list-style-type: none"> 1. Typical Wetland Restoration 2. Bank Restoration 3. Water Deflector 4. Typical Stream Crossings <p>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.</p>
	<i>SPLP Response:</i>	<i>The details have been updated to comply with the E&SPCP BMP Manual, dated March 2012 and errata document from March 31, 2016.</i>
P1.	ICCD	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).
	<i>SPLP Response:</i>	<i>Additional infiltration tests were conducted at the depth of the proposed PCSM BMP, and the recommended design rates are shown on the plan drawings.</i>
P2.	ICCD	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).
	<i>SPLP Response:</i>	<i>A maximum 5:1 impervious area to infiltration area has been achieved for PCSM BMPs at the block valve sites. The PCSM write-up that accompanies each site includes a summary of the loading ratios, and the same information is included in Section 4.7 of the narrative.</i>
P3.	ICCD	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).
	<i>SPLP Response:</i>	<i>The site locations of the proposed infiltration berms have been revised and verified as being on natural, uncompacted soils, and constructed along the contours.</i>

P4.	ICCD	Confirm the design volume of each proposed Infiltration Berm. 25 Pa. Code §102.8(f)(8).
	<i>SPLP Response:</i>	<i>The design volume of each proposed infiltration berms has been verified.</i>
P5.	ICCD	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).
	<i>SPLP Response:</i>	<i>Standard worksheets have been proposed for all areas along the pipeline where permanent, impervious cover is proposed. All other areas of the project will be restored to a meadow or lawn in good condition, thereby meeting the requirements set forth in 25 Pa Code § 102.8(n).</i>
P6.	ICCD	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)
	<i>SPLP Response:</i>	<i>Specific inspection and maintenance language has been added for each of the proposed PCSM BMPs.</i>
P7.	ICCD	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).
	<i>SPLP Response:</i>	<i>A waiver, provided as Attachment 6 of the NOI, is being requested for all of the Riparian Buffer Encroachments in Special Protection Waters. The Riparian Buffer Waiver Request provides the total area of the buffer encroachment in Table 2. Additionally, a detailed plan view for each individual buffer encroachment area is included. The justification for the request is provided in the form of an alternatives analysis which is located in both the narrative and in Table 3 of the Riparian Buffer Waiver request.</i>

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P8.	ICCD	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).
	<i>SPLP Response:</i>	<i>A Long-Term Operation and Maintenance Schedule has been provided in Section 4.5 of the SWRO PCSM Narrative for all PCSM BMPs being implemented on the project. Also, a table has been provided in Section 4.5 of the PCSM Narrative to address time frames for inspections, repairs, BMP life expectancy, reconstruction, and all associated costs.</i>
P9.	ICCD	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).
	<i>SPLP Response:</i>	<i>The critical stages of the PCSM plan that require oversight by a licensed professional are included in the PCSM construction sequences.</i>
P10.	ICCD	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).
	<i>SPLP Response:</i>	<i>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 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 is now provided. It is understood that this item will be a Condition of Approval, and the documentation must be provided with the Notice of Termination.</i>
Washington County Technical Deficiencies (Contact Person: Nathan Simon and Tim McClelland)		
E1.	WCCD	Include soil symbols on the plan drawings. 25 Pa. Code §102.4(b)(5)(ix).
	<i>SPLP Response:</i>	<i>The plan drawings were updated to include soil symbols (see Attachment 5 of the E&S Report and Attachment 2 of the PCSM Report).</i>
E2.	WCCD	Include permit boundary on the plan drawings. 25 Pa. Code §102.4(b)(5)(ix).
	<i>SPLP Response:</i>	<i>The permit boundary is concurrent with the LOD on the E&S drawings. See the Legend on ES-0.01 for the symbol clarification.</i>

E3.	WCCD	Include station numbers on the plan drawings. 25 Pa. Code §102.4(b)(5)(ix).
	<i>SPLP Response:</i>	<i>Stationing has been added to all plan drawings.</i>
E4.	WCCD	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).
	<i>SPLP Response:</i>	<i>Riparian buffer areas have been reviewed and verified on the plan drawings.</i>
E5.	WCCD	Provide Worksheet #1 for compost filter socks or compost filter sock sections. 25 Pa. Code §102.4(b)(5)(viii).
	<i>SPLP Response:</i>	<i>Worksheet #1 has been completed and can be found in Attachment 4 of the E&S Report.</i>
E6.	WCCD	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).
	<i>SPLP Response:</i>	<i>Compost filter socks across the pipeline have been modified to be adequately sized according to the topography of the area.</i>
E7.	WCCD	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).
	<i>SPLP Response:</i>	<i>SPLP reevaluated and revised, as necessary, the sizing of the compost filter socks above the Simon and Minnick Ponds (see ES-1.42 and ES-1.43).</i>
Page 16		
E8.	WCCD	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).
	<i>SPLP Response:</i>	<i>The statement, "The DEP and/or 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," has been added to Plans ES-1.41, 1.42, and 1.43 to call special attention to this area.</i>
P1.	WCCD	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)

	<i>SPLP Response:</i>	<i>Standard worksheets have been proposed for all areas along the pipeline where permanent, impervious cover is proposed. All other areas of the project will be restored to a meadow or lawn in good condition, thereby meeting the requirements set forth in 25 Pa Code § 102.8(n).</i>
P2.	WCCD	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).
	<i>SPLP Response:</i>	<i>A waiver, provided as Attachment 6 of the NOI, is being requested for all of the Riparian Buffer Encroachments in Special Protection Waters. The Riparian Buffer Waiver Request provides the total area of the buffer encroachment in Table 2. Additionally, a detailed plan view for each individual buffer encroachment area is included. The justification for the request is provided in the form of an alternatives analysis which is located in both the narrative and in Table 3 of the Riparian Buffer Waiver request.</i>
P3.	WCCD	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).
	<i>SPLP Response:</i>	<i>The long-term operation and maintenance schedule for the inspection, repair, replacement, and other routine maintenance for PCSM BMPs is now provided on the up front plan drawings.</i>
P4.	WCCD	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).
	<i>SPLP Response:</i>	<i>The critical stages of the PCSM plan that require oversight by a licensed professional are included in the PCSM construction sequences.</i>
P5.	WCCD	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).

	<i>SPLP Response:</i>	<i>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 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 is now provided. It is understood that this item will be a Condition of Approval, and the documentation must be provided with the Notice of Termination.</i>
Compressor Station Supplemental Comments		
E1.	WCCD	In the maintenance of the E&SCs section, change "as soon as practical" to within 24 hours. §102.4 (b)(5)(x).
	<i>SPLP Response:</i>	<i>The report and notes have been updated to say "within 24 hours" in Section 1.2 of the E&S Narrative and Section 3.0 of the PCSM Narrative.</i>
E2.	WCCD	Indicate the permit boundary on plan drawings 25 Pa. Code §102.4(b)(5)(ix).
	<i>SPLP Response:</i>	<i>The permit boundary is concurrent with the LOD on the E&S drawings.</i>
E3.	WCCD	Indicate the soil boundaries on plan drawings. 25 Pa. Code §102.4(b)(5)(ix).
	<i>SPLP Response:</i>	<i>The soil boundaries have been added to the plan drawings.</i>
E4.	WCCD	Flag or field mark wetlands on plan drawings 25 Pa. Code §102.4(b)(5)(ix).
	<i>SPLP Response:</i>	<i>Wetlands neighboring the LOD are shown on the plans east of the LOD. Step #5 of the construction sequence states to protect these areas with orange construction fence.</i>
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E5.	WCCD	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).
	<i>SPLP Response:</i>	<i>Section 2.2 of the E&S Narrative has been updated to address the use limitations of the pertinent soils.</i>
E6.	WCCD	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).
	<i>SPLP Response:</i>	<i>The injection station piping connection has been added to the plans with the permit boundary shown.</i>
E7.	WCCD	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).
	<i>SPLP Response:</i>	<i>A summary table has been provided via Standard E&S Worksheet 1 to address the proposed compost filter socks, percent slope, and slope length above the sock.</i>

E8.	WCCD	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).
	<i>SPLP Response:</i>	<i>The maintenance instructions in Section 3.5 of the E&S Narrative have been updated to specify that inspections are to be logged onto DEP form 3150-FM-BWEW0083 (included in the construction details attachment) and kept on site at all times.</i>
E9.	WCCD	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).
	<i>SPLP Response:</i>	<i>Section 2.2 of the E&S Narrative has been updated to address potential causes of surface water pollution due to geologic formations or soil conditions.</i>
E10.	WCCD	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)
	<i>SPLP Response:</i>	<i>The impacts to the 50' floodway are accounted for in the Joint Permit Application. The total acreage on the NOI has been updated.</i>
P1.	WCCD	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).
	<i>SPLP Response:</i>	<i>The geoweb has been relocated to an area where compaction will not be required. The specifications for compaction have been revised on sheet C-4 of the PCSM drawings.</i>
P2.	WCCD	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).
	<i>SPLP Response:</i>	<i>The geoweb has been relocated to an area where compaction will not be required. The specifications for compaction have been revised on sheet C-4 of the PCSM drawings.</i>
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).
	<i>SPLP Response:</i>	<i>The 100-year floodway has been added to the plans in Appendix G.</i>

P4.	WCCD	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).
	<i>SPLP Response:</i>	<i>A long-term O&M schedule has been added to Section 3.8 of the PCSM Narrative. A table has also been provided to clearly show all requested information. A footnote was added to the Long-Term Operation and Maintenance Schedule in Section 3.8 of the PCSM Narrative stating that SPLP is the owner/operator and responsible party for long-term O&M. SPLP's contact information was provided as well. Please also note that time and cost of inspections, repairs, and reconstruction are based upon industry standards and are subject to change based on severity of damage and billing rates.</i>
P5.	WCCD	Include a provision requiring a written report documenting each inspection and maintenance activity. 25 Pa. Code §102.8(f)(10).
	<i>SPLP Response:</i>	<i>Section 3.8 of the PCSM Narrative has been updated to require a written report for each inspection and maintenance activity.</i>
P6.	WCCD	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).
	<i>SPLP Response:</i>	<i>Section 2.2 of the PCSM Narrative has been updated to address the handling and disposal of strip mined soils.</i>
P7.	WCCD	Identify controls to prevent an increase in the rate of stormwater runoff. 25 Pa. Code §102.8(b).
	<i>SPLP Response:</i>	<i>BMP controls provided to prevent an increase in the rate of stormwater runoff include 3 infiltration filters with a total of 1,095 linear feet of 24' diameter storage pipe and 1 underground storage BMP with a total of 510 linear feet of 24' diameter storage pipe. Details are provided in Section 4.0 of the PCSM Plan.</i>
P8.	WCCD	Include the signature and a seal of a licensed professional on the stormwater verification report. 25 Pa. Code §102.8(e).
	<i>SPLP Response:</i>	<i>Seal and signature of a licensed professional have been added to the stormwater verification report.</i>
P9.	WCCD	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).
	<i>SPLP Response:</i>	<i>Proposed and existing contours are provided. Line types have been corrected to clarify differences between contour types. An existing conditions plan sheet has been added to the PCSM drawings to clarify existing conditions.</i>

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P10.	WCCD	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).
	<i>SPLP Response:</i>	<i>The Critical Stages that will require oversight by a licensed professional have been identified in Section 3.8 of the PCSM Narrative.</i>
P11.	WCCD	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).
	<i>SPLP Response:</i>	<i>A note has been added to Sheet PCS-1 of the PCSM plan specifying this requirement.</i>
Westmoreland County Technical Deficiencies (Contact Person: Chris Droste and Tim McClelland)		
Spread 1		
E1.	WCCD	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).
	<i>SPLP Response:</i>	<i>The super silt fence and reinforced silt fence have been removed from the E&S Plan drawing legend since they will not be used as and E&S BMP within this project.</i>
E2.	WCCD	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).
	<i>SPLP Response:</i>	<i>The detail has been changed to show the appropriate placement of ECB for 50 feet on either side of the disturbance or 100 feet in special protection watersheds.</i>
E3.	WCCD	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).
	<i>SPLP Response:</i>	<i>Native material, not stone, will be used in typical restorations to restore the toe of slopes to preconstruction conditions at stream banks. Stone has been sized in atypical crossings for stabilization. The details in the E&S notes and details provide information for stabilization of the streambanks.</i>
E4.	WCCD	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).
	<i>SPLP Response:</i>	<i>A note has been added to the detail depicting a minimum of 4-inches of topsoil will be placed along the streambanks during restoration. The revised detail is on plan sheet ES-0.09.</i>

E5.	WCCD	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).
	<i>SPLP Response:</i>	<i>The Water Deflector detail is consistent with standard construction detail #3-9 from the E&S Manual. This standard detail from manual is now located on plan sheet ES-0.08.</i>
E6.	WCCD	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)
	<i>SPLP Response:</i>	<i>A new details have been added for the Typical Stream Crossings. The energy dissipater is associated with the Pump Bypass detail and is located on sheet ES-0.11. The energy dissipater is called out as a "5' X 5' (18-inches thickness) R-4 (or approved equal) to comply with the manual.</i>
E7.	WCCD	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).
	<i>SPLP Response:</i>	<i>The detail has been updated to show a new location of the spoil piles.</i>
E8.	WCCD	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).
	<i>SPLP Response:</i>	<i>Culvert Stream Crossing details has been updated to standard detail #3-13 from the PADEP E&S Manual, which show a low point at the crossing for high flows. This detail is shown on ES-0.12.</i>
E9.	WCCD	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).
	<i>SPLP Response:</i>	<i>The timber mat has been extended the entire length of the wetland on ES-1.38.</i>
E10.	WCCD	The erosion control blanket symbol is not shown on sheet ES-1.44. 25 Pa. Code §102.4(b)(5)(ix).
	<i>SPLP Response:</i>	<i>The erosion control blanket symbol has been added to ES-1.44.</i>
E11.	WCCD	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).
	<i>SPLP Response:</i>	<i>Compost filter sock ends have been turned to face uphill instead of downhill on sheet ES-1.60.</i>
E12.	WCCD	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).

	<i>SPLP Response:</i>	<i>There is no HDD in the area of ES-1.67.</i>
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E13.	WCCD	Label the Chapter 93 stream classification on plan drawings throughout Spread 1. 25 Pa. Code §102.4(b)(5)(ix).
	<i>SPLP Response:</i>	<i>Chapter 93 stream classifications have been reviewed, verified, and labeled throughout Spread 1.</i>
Spread 2		
E1.	WCCD	ES-0.03: The Chapter 93 stream classifications are not complete in the charts. The information under PAFBC stream designation states NIA 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).
	<i>SPLP Response:</i>	<i>The table on ES-0.02 is not intended to show the Chapter 93 designations. The Chapter 93 designations are displayed next to each stream on each E&S Sheet.</i>
E2.	WCCD	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).
	<i>SPLP Response:</i>	<i>The timber mat has been replaced with a Temporary Equipment Crossing and the standard details have been updated to provide a culvert crossing detail. The equipment crossing details are provided on ES-0.10. Typical pipe installation stream crossing details have also been developed to provide alternate stream crossing options for the wider stream crossings (ES-11 thru ES-0.13).</i>
E3.	WCCD	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).
	<i>SPLP Response:</i>	<i>A silt sock trap and water bar have been added at the rock construction entrance off of Trees Mills Road.</i>
E4.	WCCD	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).
	<i>SPLP Response:</i>	<i>The house is uphill from the LOD and water bars will not direct water towards them.</i>
E5.	WCCD	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).

	<i>SPLP Response:</i>	<i>The E&S controls have been reevaluated across the project and in this area temporary upslope diversion berms with temporary slope pipes have been employed in place of additional water bars in this area located on Sheet ES-2.16.</i>
E6.	WCCD	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).
	<i>SPLP Response:</i>	<i>A site specific plan has been provided for this crossing.</i>
E7.	WCCD	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).
	<i>SPLP Response:</i>	<i>The Infiltration Berm detail has been added to the details section of the E&S Plans (Sheet ES-0.23). Also, calculations, design, and soils information for the Loyalhanna Lake West Block Valve site on ES-2.21 can be found in Attachment 6 of the PCSM Report found in Tab 7 of the ESCGP-2 Permit Application.</i>
E8.	WCCD	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).
	<i>SPLP Response:</i>	<i>A PPC Inadvertent Return plan has been prepared to provide information regarding the actions to be taken to prevent, identify, and respond to inadvertent returns. The plan is provided in Tab 8 of the application. The HDD staging area will be regraded during the drilling operations and an intermediate grading plan with appropriate E&S controls is shown on the E&S plan drawings. A standard detail has been developed for the HDD staging areas and provided in ES-0.16. The notes provided with this detail identify to install compost filter sock / silt fence along the down gradient perimeter of the HD Bore Pit. If there is a bentonite slurry overflow in this area the CFS will contain the overflow.</i>
E9.	WCCD	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).
	<i>SPLP Response:</i>	<i>The area above WL-N80 is not within the project LOD. A spring has not been identified within the LOD in this area, therefore timber matting was not called out. If site conditions during construction indicate timber mats would be beneficial, they will be implemented within the LOD and the E&S sheet redlined to identify this action was taken. The E&S controls in this area have also been updated to identify a temporary diversion berm and slope pipe to adjacent to the wetland to account for the large upslope drainage area.</i>
E10.	WCCD	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).
	<i>SPLP Response:</i>	<i>The pipeline location has been added to sheet ES-2.35.</i>

P1.	WCCD	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).
	<i>SPLP Response:</i>	<i>Additional infiltration tests were conducted at the depth of the proposed PCSM BMP, and the recommended design rates are shown on the plan drawings.</i>
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P2.	WCCD	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).
	<i>SPLP Response:</i>	<i>A maximum 5:1 impervious area to infiltration area has been achieved for PCSM BMPs at the block valve sites. The PCSM write-up that accompanies each site includes a summary of the loading ratios, and the same information is included in Section 4.7 of the narrative.</i>
P3.	WCCD	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).
	<i>SPLP Response:</i>	<i>The site location of the proposed infiltration berms have been revised and verified as being on natural, uncompacted soils, and constructed along the contours.</i>
P4.	WCCD	Confirm the design volume of each proposed Infiltration Berm. 25 Pa. Code §102.8(f)(8).
	<i>SPLP Response:</i>	<i>The design volume of each of the proposed infiltration berms have been verified.</i>
P5.	WCCD	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).
	<i>SPLP Response:</i>	<i>Standard worksheets have been proposed for all areas along the pipeline where permanent, impervious cover is proposed. All other areas of the project will be restored to a meadow or lawn in good condition, thereby meeting the requirements set forth in 25 Pa Code § 102.8(n).</i>
P6.	WCCD	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).
	<i>SPLP Response:</i>	<i>Specific inspection and maintenance language has been added for each of the proposed PCSM BMPs.</i>

P7.	WCCD	<p>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).</p>
	<p><i>SPLP Response:</i></p>	<p><i>A waiver, provided as Attachment 6 of the NOI, is being requested for all of the Riparian Buffer Encroachments in Special Protection Waters. The Riparian Buffer Waiver Request provides the total area of the buffer encroachment in Table 2. Additionally, a detailed plan view for each individual buffer encroachment area is included. The justification for the request is provided in the form of an alternatives analysis which is located in both the narrative and in Table 3 of the Riparian Buffer Waiver request.</i></p>
P8.	WCCD	<p>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).</p>
	<p><i>SPLP Response:</i></p>	<p><i>The long-term operation and maintenance schedule for the inspection, repair, replacement, and other routine maintenance for PCSM BMPs is now provided on the up front plan drawings.</i></p>
P9.	WCCD	<p>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).</p>
	<p><i>SPLP Response:</i></p>	<p><i>The critical stages of the PCSM plan that require oversight by a licensed professional are included in the PCSM construction sequences.</i></p>
P10.	WCCD	<p>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).</p>

	<i>SPLP Response:</i>	<i>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 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 is now provided. It is understood that this item will be a Condition of Approval, and the documentation must be provided with the Notice of Termination.</i>
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Compressor Station Supplemental Comments		
Site Plan Details:		
E1.	WCCD	Include the methodology for designing outlet protection including the discharge rate. 2S Pa. Code §102.4(b)(5)(viii).
	<i>SPLP Response:</i>	<i>DEP's Standard E&S worksheet was used to design outlet protection. The worksheet was added to Appendix E of the PCSM Report.</i>
E2.	WCCD	Explain the reasoning for geo-synthetic clay liner in vegetated channels. 25 Pa. Code §102.11(a)(1).
	<i>SPLP Response:</i>	<i>The geosynthetic clay liner (GCL) is provided in the vegetated channels where the channel is at the top or toe of a slope. The GCL acts as a water barrier to prevent slope saturation.</i>
E3.	WCCD	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).
	<i>SPLP Response:</i>	<i>As indicated in detail #1 on drawing PCS-4, the TRM shall be rated for velocities up to 15 ft/s with vegetation. It will be specified on the drawing to use Landlok 450 TRM or an engineer approved equivalent.</i>
E4.	WCCD	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).
	<i>SPLP Response:</i>	<i>The anti-seep collar specified is made of concrete.</i>
E5.	WCCD	In the detail on sheet C-10, specify concrete as the outlet structure barrel material. 25 Pa. Code §102.11(a)(1).
	<i>SPLP Response:</i>	<i>Concrete is specified as the material for the barrels on Sheet C-10.</i>
Site Plan Drawing:		
E6.	WCCD	Extend the Limit of Disturbance to include the rock apron shown on sheet C-6. 25 Pa. Code §102.4(b)(4).
	<i>SPLP Response:</i>	<i>The rock aprons are included inside of the LOD as shown on sheets ES-2 and ES-3 of the E&S drawings.</i>
E7.	WCCD	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).

	<i>SPLP Response:</i>	<i>An LOD connecting the areas was added.</i>
E8.	WCCD	Indicate the rock apron inlet and outlet at the infiltration basin on sheet C-6. 25 Pa. Code §102.4(b)(5)(ix).
	<i>SPLP Response:</i>	<i>The rock aprons are part of the PCSM plan and are identified on sheet PCS-3 of the PCSM drawings.</i>
E9.	WCCD	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).
	<i>SPLP Response:</i>	<i>A temporary sediment basin will be shown on the E&S plans where the infiltration basin is located. A liner will be used in the basin to prevent sediment clogging and reduction of infiltration rates. The construction sequence has been modified accordingly.</i>
P1.	WCCD	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).
	<i>SPLP Response:</i>	<i>The 100-year floodway is shown on the drawings provided in Appendix G.</i>
P2.	WCCD	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).
	<i>SPLP Response:</i>	<i>A long-term O&M schedule has been added to Section 3.8 of the PCSM Narrative. Additionally, a table has been added to Section 3.8 to clearly show all requested information. A footnote was added to the Long-Term Operation and Maintenance Schedule in Section 3.8 of the PCSM Narrative stating that SPLP is the owner/operator and responsible party for long-term O&M. SPLP's contact information was provided as well. Please also note that the times and costs of inspection, repair, and reconstruction are based on industry standards and are subject to change due to severity of damage and billing rates.</i>
P3.	WCCD	Provide a note that a written report is required for each inspection and maintenance activity. 25 Pa. Code §102.8(f)(10).
	<i>SPLP Response:</i>	<i>Section 3.8 of the PCSM Narrative has been updated to require a written report for each inspection and maintenance activity.</i>
P4.	WCCD	Identify controls to prevent an increase in the rate of stormwater runoff, 25 Pa. Code §102.8(b).

	<i>SPLP Response:</i>	<i>BMP controls provided to prevent an increase in the rate of stormwater runoff include 4 BMPs (2 infiltration basins, 1 infiltration filter and 1 underground pipe storage system). Details are provided in Section 4.0 of the PCSM Plan.</i>
P5.	WCCD	Include the signature of a licensed professional and a seal on the stormwater verification report. 25 Pa. Code §102.8(e).
	<i>SPLP Response:</i>	<i>The signature and seal of a licensed professional has been added to the stormwater verification report.</i>
P6.	WCCD	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).
	<i>SPLP Response:</i>	<i>Proposed and existing contours have been differentiated clearly by different line types. An existing conditions plan sheet has been added to the PCSM drawings to clearly show the existing condition.</i>
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P7.	WCCD	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).
	<i>SPLP Response:</i>	<i>Section 3.8 of the PCSM Narrative has been updated to address the critical stages that a licensed professional must oversee.</i>
P8.	WCCD	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).
	<i>SPLP Response:</i>	<i>A note has been added to Sheet PCS-1 of the PCSM Plan specifying this requirement.</i>
Delmont Station Supplemental Comments		
E1.	WCCD	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).
	<i>SPLP Response:</i>	<i>Forebays are a part of the plan and the LOD is limited to only the work area needed, reducing runoff and the need to plant additional trees.</i>
E2.	WCCD	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).

	<i>SPLP Response:</i>	<i>SPLP agrees that the tested rate is unusual for the soils found in the county. The infiltration calculation for the BMP has been redone and the assumption is that the required volume infiltrated is equal to the volume below the lowest orifice outlet. An underdrain has been provided to drain the basin in case infiltration is too slow.</i>
E3.	WCCD	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).
	<i>SPLP Response:</i>	<i>The outlet of BMP-4 will be tied into the existing inlet near where riprap apron RA-05 discharges.</i>
E4.	WCCD	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).
	<i>SPLP Response:</i>	<i>The inlet to BMP-4 will be lined with riprap.</i>
E5.	WCCD	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).
	<i>SPLP Response:</i>	<i>On the steep slopes in that area, construction of a dam would likely take up more overall space. SPLP prefers to use the underground storage pipes. The riprap outfall will be replaced with a level spreader.</i>
E6.	WCCD	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).
	<i>SPLP Response:</i>	<i>The single wall 12" and 18" pipe is rated for AASHTO H-25 or HS-25 loads with a minimum of 1 foot of cover and can be buried to depths up to 25' depending on soil properties and compaction. Pipes intended for storage only will remain single wall. Culverts and other stormwater conveyance piping were assessed and changed to double wall as necessary.</i>
E7.	WCCD	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).
	<i>SPLP Response:</i>	<i>The drawings have been revised to show the sumps. A domed grate is provided in swales as it is less susceptible to clogging.</i>
E8.	WCCD	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).

	<i>SPLP Response:</i>	<i>R-5 riprap is now specified.</i>
E9.	WCCD	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).
	<i>SPLP Response:</i>	<i>The circular concrete riser was determined to be readily constructible. The barrels for BMP-2 and BMP-4 have been labeled as concrete.</i>
E10.	WCCD	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).
	<i>SPLP Response:</i>	<i>In HDPE inlets, they can be ordered with the weir structure installed by the manufacturer. It would be integral to the plastic inlet.</i>
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E11.	WCCD	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).
	<i>SPLP Response:</i>	<i>Industrial Drive does have storm inlets and a drainage system. There is not a clearly defined flow path to the drainage system. A level spreader will be installed in place of riprap.</i>
E12.	WCCD	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).
	<i>SPLP Response:</i>	<i>The grading for the proposed road to the metering station off of the existing plant entrance road was modified to have an inward cross-slope, directing runoff to the channel and proposed BMP-4. Runoff from the other access roads at the station are directed to the detention systems and BMPs.</i>
Other Technical Comments		
1.	DEP	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/dcnr20026634.pdf
	<i>SPLP Response:</i>	<i>Crown-vetch was replaced in the seed mixtures with Big Bluestem. Big Bluestem is a native alternative recommended in the DCNR's Invasive Plant Fact Sheet (referenced in the E&S report) for Crown-vetch.</i>

Mr. Gregory W. Holesh, P.E.
 Pennsylvania Department of Environmental Protection
 Southwest Regional Office

	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.
	<i>SPLP Response:</i>	<i>In areas where livestock are located an alternative Erosion Control Blanket is proposed. Contractors are to use North American Green BioNet-SC150BN in these areas. Bio-Net-SC150BN is made of combination of straw and coconut fiber.</i>
	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.
	<i>SPLP Response:</i>	<i>The Impact, Avoidance, Minimization, and Mitigation Procedures in Attachment 11, Enclosure E, Part 4 detail the procedures that address invasive species prevention, restoration monitoring, and associated recordkeeping.</i>
2.	DEP	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).
	<i>SPLP Response:</i>	<i>A "Seasonal in Stream Restrictions" table has been added to the plans and the drawings.</i>

Attached are two copies of the revised documents for your review and approval. A CD with the updated sections is provided with this submission. SPLP appreciates your timely review of this application. Please contact Rob Simcik of Tetra Tech, Inc. with any questions at 412-921-8163, or email Robert.simcik@tetratech.com.

Sincerely,



Robert F. Simcik, P.E.
 Project Manager
 Tetra Tech, Inc.

RFS/clm

Enclosures: Attachments

cc:

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