

May 14, 2020

PennEast Pipeline Company, LLC c/o Ms. Amber Holly Environmental Project Manager 835 Knitting Mills Way Wyomissing, PA 19610

Re: Technical Deficiency Letter – Erosion and Sediment Control General Permit (ESCGP)

PennEast Pipeline Project

DEP Application No. ESG02000160002

Bear Creek Township, Dallas Township, Jenkins Township, Kingston Township, Plains

Township, West Wyoming Borough, & Wyoming Borough, Luzerne County

Kidder Township, Lower Towamensing Township, Penn Forest Township, &

Towamensing Township, Carbon County

Bethlehem Township, East Allen Township, City of Easton, Lower Nazareth Township,

Lower Saucon Township, Moore Township, Upper Nazareth Township & Williams

Township, Northampton County

Eldred Township, Monroe County

Durham Township & Riegelsville Borough, Bucks County

Dear Ms. Holly:

The Department of Environmental Protection (DEP) and the following County Conservation Districts (CCDs), Luzerne, Carbon, Monroe, Northampton, and Bucks, have reviewed the above referenced NOI from PennEast Pipeline Company LLC ("PennEast") and have identified the following technical deficiencies. The deficiencies are based on applicable laws and regulations, and the guidance sets forth the DEP's established means of satisfying the applicable regulatory and statutory requirements. The Pennsylvania Erosion and Sediment Pollution Control Program Manual (E&SPC Manual) and the Pennsylvania Stormwater Best Management Practices Manual (PCSM Manual) include information that will aid you in responding to some of the deficiencies listed below.

General technical deficiencies are identified that appear to be a reoccurring technical deficiency throughout the plan narratives and drawings. Specific examples of the general deficiencies are provided for reference. However, all of the specific instances may not have been identified. PennEast Pipeline, LLC should review the entire project submittal to ensure all specific technical deficiencies and general technical deficiencies are addressed.

1. §102.4(b)(5)(viii) Permit Requirements.

a. Original Comment 1.a.ii: Section F, Erosion and Sediment Control Plan, Item e. This box should be checked yes since not all discharges from the project will be direct to

surface waters. The E&S and PCSM plans should include the demonstration that the discharge will not cause erosion, damage, or a nuisance to off-site properties (i.e., site restoration maintaining existing drainage patterns and discharge points). Similar information and revisions should be made to Section H, Item d.

This question should be checked "yes" since the pipeline portion of the project will not discharge directly to the surface waters at all points along the pipeline. The preparation of an offsite discharge analysis does not change the answer to this question. The NOI should reference the applicable section of the PCSM narrative.

2. §102.4(b)(5)(viii) Supporting calculations and measurements.

a. Original Comment 5.a: A design calculation example should be provided for the slope pipe and level spreader design. The design should utilize the worst-case scenario and include anticipated discharge velocities below the level spreader. It appears the discharge velocity through the holes was not taken into account. For example, the discharge pipe from swale DS 50.66_6 specifies a five-foot pipe length with 6 holes (3/8" size) at a 1.94" spacing. A five-foot pipe will have 30 rows of holes, or 180 total holes, which results in a discharge velocity in excess of 10 fps. Please revisit the level spreader design to meet the allowable velocity requirements outlined in the E&S Manual, page 141.

As noted above, the velocity exiting the level spreader pipe exceeds 10 fps. The void space in the rock will not instantly reduce the velocity to zero as claimed. The rock envelope around the level spreader should be designed to resist the anticipated velocity from the pipe and to also resist the displacement of the rock from the pipe discharge. A 10 fps discharge velocity requires R-5 rock and a corresponding D_{50} of 9" in accordance with Table 6.6 of the E&S manual. AASHTO #1 only provides a D_{50} of 2.5". Please revisit the design and increase the level spreader length and/or increase the rock size (and corresponding thickness) to resist the anticipated velocity. Independent calculations indicate that the level spreader lengths need to be doubled to result in an allowable velocity for the use of AASHTO #1 aggregate.

b. The diversion swale calculations (using diversion socks) indicate a freeboard of 0.33 feet (4") in accordance with the manufacturer's recommendation. The E&S Manual requires a minimum of 6 inches of freeboard for swales. In addition, over time the socks will flatten or compress as the filler material compacts. Please revise the swale calculations and size of the socks utilized for the diversions to provide the freeboard in accordance with the E&S Manual.

The design flow of 2.82 cfs was determined for diversion swale DS_50.95.2. The design calculation indicates a design flow of 0.692 cfs. Please revise the design to utilize the design flow.

3. $\S102.4(b)(5)(ix)$ Plan drawings.

a. Additional information should be provided for the level spreader detail, including dimensions for the rock envelope around the pipe, perforation requirements, and the anchorage of the pipe and stone on slope areas (if required). In addition, please address how the pipe will be removed and reset during trenching and pipe installation operations when the slope pipe conflicts with these operations.

Please add the information provided in the comment response regarding the use of zip tie connections and the requirement to reset the slope pipe prior to wet weather events and at the end of each working day to the level spreader detail.

4. §102.6. Permit Applications and Fees.

- a. The application indicates that the applicant is still in consultation with the Pennsylvania Department of Conservation and Natural Resources (DCNR) regarding outstanding issues on the Frances Slocum State Park and Pinchot State Forest impacts. Please provide final documentation and revise the application accordingly.
- 5. §102.22(a) Permanent stabilization. Upon final completion of an earth disturbance activity or any stage or phase of an activity, the site shall immediately have topsoil restored, replaced, or amended, seeded, mulched or otherwise permanently stabilized and protected from accelerated erosion and sedimentation.
 - a. The Site Restoration Narrative General Notes for upland areas should include the installation of permanent waterbars along the pipeline route.

Luzerne County

- 1. 102.2 (a) & (b) "Scope and purpose."
 - a. Original Comment Luzerne County 1.d: The construction sequence is not provided for Mainline Valve 1 project. Please provide the construction sequence.
 - The Sequence of Construction for the Mainline Valve 1 could not be located within the resubmission. Please provide accordingly.
 - b. Original Comment Luzerne County 1.f: There appears to be a concentrated flow (proposed channel 1) above proposed infiltration berm 4. Please revise.
 - The area under the level spreader should be undisturbed. Also, the infiltration berm should not be utilized at a level spreader. Please revise accordingly.

2. §102.4 (b)(5)(iii) Characteristics of the earth disturbance activity.

a. Original Comment Luzerne County 2.a: The location of the proposed access road AR01 detail sheet has not been provided. Please provide access road AR01 detail sheet.

The location of the proposed AR01 access road is not legible on Sheet 0301001. Please show the location of this access road and provide all applicable E&S BMPs.

3. §102.4 (b)(5)(iv) Volume and rate of runoff.

a. Original Comment Luzerne County 2.b: The *maximum* drainage area(s) during construction for all BMPs (ex. sediment traps) have not been outlined and labeled on the plan drawing.

Maximum during construction drainage areas for all BMPs has not been outlined and labeled on the drawings. Please provide a drainage area map showing the maximum during construction drainage area for each E&S BMP, along with the maximum during construct drainage area acreage for all facilities on this plan.

4. §102.4 (b)(5)(vii) Sequence of BMP installation and removal.

a. Original Comment Luzerne County 4.b: The construction sequence does not provide erosion controls for spoils between approximate stations 13-25, 127-135, 173-176, 196-188, 210-217, 229-237, and 263-267.

The resubmission did not address this comment. Please provide the E&S BMPs for spoils between the stations.

b. Original Comment Luzerne County 4.f: Please indicate the BMPs to be installed prior to general clearing and grubbing (Step 1) (see bottom of page 8 of the E&SPC Manual). §102.11(a)(1)

The resubmission did not include any proposed E&S BMPs to be installed prior to the general clearing and grubbing. Please provide accordingly.

c. Original Comment Luzerne County 4.1: Provide instructions for removal/conversion of the proposed sediment trap within Springville Interconnect and Auburn/Leidy sites to a stormwater management facility. See the bottom of page 10 in the E&SPC Manual for guidance. §102.11(a)(1)

The Construction Sequence does not adequately address BMPs for the conversion of the sediment basin to a permanent stormwater management basin. When the temporary riser must be removed to allow for the establishment of the permanent grass cover, the Conservation District suggests that: 1) a minimum 2' high horseshoe-shaped stone filter berm be installed around the permanent outlet structure with permanent seeding and straw-mulching (or) installation of an erosion control blanket with permanent seeding over the entire interior of the basin. Sediment basins should not be converted to the permanent stormwater management basin during non-germinating periods. All sediment deposited within storm sewers should be removed prior to converting the sediment basin.

5. §102.4 (b)(5)(viii) Supporting calculations and measurements.

a. Wherever temporary channel linings are proposed, specific calculations to demonstrate flow capacity and stability <u>during its use</u> should be provided. Separate calculations should be provided for the vegetated condition.

Separate calculations must be provided for the vegetated condition.

6. §102.4 (b)(5)(ix) Plan drawings.

a. Original Comment Luzerne County 6.i: The Access Road Cross Section detail (Figure 1I) includes a note to "Coordinate with the County Conservation District if access road widening is needed". Please revise this note to read "If roadway widening is required, contact and coordinate with the appropriate County Conservation District to determine permitting requirements prior to widening the roads. Upon project completion, access roads will be restored to original conditions unless appropriately sized PCSM BMPs are provided."

The notation in the Plan resubmission was not included. Please revise accordingly.

b. Original Comment Luzerne County 6.k: The compost sock diversion does not specify the type of filter media. Please revise to specify the type of filter media.

The resubmission did not include the specific type of filter media. Please provide accordingly.

- c. Original Comment Luzerne County 6.m: Springville Interconnect:
 - i. Provide a typical detail for each type of channel and diversion berm proposed (Item 9, page 5 of the E&SPC Manual) §102.11(a)(1).

Carbon County

- 1. §102.4(b)(5)(viii) Supporting Calculations.
 - a. Kidder Compressor Station:
 - i. Upon review of standard E&S worksheet #11, several swales do not appear to meet the 6" freeboard requirement. (Ex. Swales 4, 8, 11 and 12)

b. Blue Mtn. Interconnect:

- i. Upon review of the E&S plan, standard E&S worksheet #11 is not provided for proposed swales 1 & 2. Please revise.
- c. Blue Mtn. Side Valve:

i. Upon review of the E&S plan, standard E&S worksheet #11 is not provided for proposed swales 1 & 2. Please revise.

d. Mainline Block Valve 3:

i. Upon review of the E&S plan, standard E&S worksheet #11 is not provided for proposed swales 1. Please revise.

2. §102.6(b)(3) Permit fees.

a. As per the District's fee schedule item IV. (D) If, after the second review, the plan is deemed inadequate, the third submission is subject to a charge of 50% of the original fee. Therefore, the fee for service of the next submittal is \$19,675.00, payable to the "Carbon Conservation District".

3. §102.6(b)(3) Permit fees.

a. The fee for service the next submittal is \$562.50, payable to "Monroe County Conservation District".

Northampton County

1. §102.4(b)(5)(iv) The volume and rate of runoff from the project site and its upstream watershed area.

a. Original Comment Northampton County 3.a: Maximum drainage areas to the proposed inlet protection during construction should be provided on the E&S plan drawing to support BMP design, (e.g., inlet drainage area table). Where the capacity of the filter-bag inlet is exceeded by the maximum allowable drainage area, alternative BMPs should be provided. (page 123 of the E&SPC Manual)

Description of raised inlets does not satisfy the need for drainage area calculation to support inlet filter bag protection. Design each inlet specific to the drainage area and/or ensure each drainage area is less than 0.5 acre for CFS and less than 1.0 acre for stone and block.

b. Mainline Block Valve #6

i. <u>Original Comment Northampton County 3.c.i:</u> Maximum drainage areas during construction to proposed Swale 1 should be provided on the E&S plan drawing to support BMP design. (page 123 of the E&SPC Manual)

The response provided does not address the deficiency, a reference made to check the PCSM Plan/Narrative is not acceptable. Please revise accordingly.

2. §102.4(b)(5)(viii) Supporting calculations and measurements.

a. Original Comment 7.b: Standard Worksheet #11: The Channel Calculations provided on the Worksheet are inconsistent with the standards found in the E&SPC Manual. All channels require a minimum of 6" of freeboard (calculations for diversion socks should be based on maximum effective heights when considering proposed depths).

The effective height of a 12" diversion sock is 9.5" and an 18" diversion sock is 14.5", the required 6" of freeboard is not provided for the proposed diversion socks. Please revise.

b. Hellertown Launcher

i. Original Comment Northampton County 7.d.iii: The Manning's n value used for Swales 1 & 2 in the non-reinforced vegetation condition does not conform to Table 6.3. Either show supporting evidence for the n value used or adjust the n value used to conform to Table 6.3.

Manufacturer's specifications for the proposed Landlok TRM matting was not provided in the revised narrative; specifications for NAG were provided. Please revise accordingly.

ii. Original Comment Northampton County 7.d.vii: Calculations should be provided to show that the barrel riser spillway provides 1.5 cfs/acre discharge capacity. Please provide Standard Worksheet #17 or supporting calculations.

Supporting calculations for Swale 1 are not addressed in the E&S Narrative, the reference to PCSM Narrative is not acceptable. Please provide the applicable supporting calculations within the E&S Narrative for Swale 1.

3. $\S102.4(b)(5)(ix)$ Plan drawings.

a. Original Comment Northampton County 8.b: Provide a construction detail for the sediment trap emergency spillway (Item 9, page 5 of the E&SPC Manual) §102.11(a)(1). Standard Construction Detail # 7-13 is recommended for this purpose. Revise the plan accordingly.

Sediment Trap Emergency Detail was not provided on the E&S Drawing, the reference to a PCSM Drawing is not acceptable. Sediment Trap is not a PCSM BMP and should not be located on the PCSM Drawing. Please revise accordingly.

b. Original Comment Northampton County 8.e: Specify the type of lime to be applied for permanent seeding (page 265 of the E&SPC Manual). Table 11.2 is recommended.

The table provided on the revised drawing is not consistent with the E&SPC Manual for the proposed fertilizer; per Errata sheet 10-20-20 is required. Please revise accordingly.

Church Road Interconnect

- 1. §102.4(b)(5)(i) The existing topographic features of the project site and the immediate surrounding area.
 - a. Please provide a location map on the Church Road Interconnects E&S plan sheet (024B-03-03-002) that conforms to the standards on page 397 of the E&SPC Manual. Provide a larger scale map to depict the location (e.g. USGS 1:24000 scale).
- 2. §102.4(b)(5)(ii) The types, depth, slope, locations, and limitations of the soils.
 - a. A check of the soil resolutions found that the following limitations have not been addressed: sinkhole potential in soils of the Washington Series. The resolution was not found in Section 2.1 or elsewhere (sinkhole remediation details, etc.).
- 3. §102.4(b)(5)(iii) The characteristics of the earth disturbance activity, including the past, present, and proposed land uses and the proposed alteration to the project site.
 - a. Describe the past (50 years) land uses for the site as described in Item 3 on page 2 of the E&SPC Manual.
- 4. §102.4(b)(5)(iv) The volume and rate of runoff from the project site and its upstream watershed area.
 - a. Provide contour labels on all closed contours on the drainage area maps in the narrative report.
- 5. §102.4(b)(5)(vii) A sequence of BMP installation and removal in relation to the scheduling of earth disturbance activities, prior to, during, and after earth disturbance activities that ensure the proper functioning of all BMPs.
 - a. A check of the plan drawing found that the installation of the erosion control matting in the swales was not addressed by the BMP construction sequence.
- 6. §102.4(b)(5)(viii) Supporting calculations and measurements.
 - a. The temporary condition (TRM alone) and permanent condition (TRM with grass) should be evaluated independently in separate columns. See footnote #2 on Standard E&S Worksheet #11.
 - b. Swale 4 appears to contain a bottom width to flow depth ratio exceeding 12:1. Please re-evaluate Swale 4 and adjust accordingly.

- c. Please provide the manufacture's specifications to support calculated Manning's n values provided and/or allowable shear stress where applicable.
- d. Provide maximum during construction slope lengths and slope percent for Worksheet #1. It appears, based on existing topography mapping, that post-construction slope lengths and slope percent were used for sizing compost filter socks (for example #1, #2, #3, etc.).

7. §102.4(b)(5)(ix) Plan drawings.

- a. All swales should discharge to adequate receiving water courses or surface waters. Please re-evaluate discharges from Swales 3 and 4 and the infiltration basin outlet.
- b. Provide a suitable protective lining that extends to the bottom of the basin and at least 10' along the basin bottom to dissipate excess energy. See page 199 of E&SPC Manual.
- c. Provide suitable outlet protection for all channels. See page 139 of E&SPC Manual.
- d. An inlet protection detail (Standard Construction Detail #4-16) was provided on the detail sheet but the location in plan view could not be found. Additionally, the BMP was not specified in the construction sequence. Please clarify the use of inlet protection.

Northampton County

- 1. Complete PCSM/SR Plans.
 - a. NOI Checklist # 7.h.: Supporting Calculations
 - iii. Please clarify which Saucon Township listed on Worksheet #1 of the Hellertown Launcher supporting calculations is being referenced.

Worksheet #1 still has Saucon Township as the municipality that the Hellertown Launcher is located. Please revise accordingly.

2. §102.8(f)(8) Supporting calculations.

a. b. The Managed Area should be the Total Site Area minus the Protected Site Area. This does not appear to be consistent in the application. For example, the Springville interconnect PCSM Report, Page 70 of 368 shows a Total Site Area of 3.03 acres and the Managed Area of 1.79 acres; but there is not any Protected Site Area that would decrease the Managed Area. Please revise all Worksheet #4 throughout the application to have consistency with respect to the Total Site Area,

Protected Site Area, and Managed Area.

Worksheet #4 for the Blue Mountain Side Valve has a Total Site Area of 0.41 acre, a Managed Area of 0.36 acre, and a total area for the Existing and Proposed Conditions of 0.61 acre. Please revise Worksheet #4 for the Blue Mountain Side Valve to indicate the correct acreage for this site.

Auburn-Leidy Interconnect

Original Comment 3.h.: Please show on the PCSM Plans the area(s) where infiltration will be taking place for the infiltration berms.

The proposed hatching has not been provided on the Auburn-Leidy PCSM Plans. Please provide the hatching for the infiltration area above the infiltration berms as indicated in the response to the Department dated November 1, 2019.

TCO & UGI LEH Interconnect

- 1. $\S102.8(f)(9)$ Plan drawings.
 - a. Original Comment 3.a: Please label on the PCSM Plans the swales or section of swales that are being utilized as a vegetated filter swale.

Blue Mountain Side Valve

- 1. §102.8(f)(6) A written description of the location and type of PCSM BMPs including construction details for permanent stormwater BMPS including permanent stabilization specification and locations.
 - a. Original Comment 1.a: The proposed PCSM BMP of re-vegetating and reforestation of disturbed areas using native species has been selected on Worksheet #10. It is unclear whether this BMP will be protecting existing vegetation or will be for new vegetation. Please clarify.

Worksheet #10 continues to show the Protect/Utilize Natural Drainage Features as a PCSM BMP that will be used for the Blue Mountain Side Valve site; however, the ESCGP Tech Def Response dated October 28, 2019, states that this PCSM BMP will not be used as a water quality BMP. Also, the response states that the PCSM BMP vegetated swale is being used as a water quality BMP and will be on Worksheet #10, this BMP has not been included in the revised Worksheet #10.

2. §102.8(f)(8) Supporting Calculations.

a. Original Comment 2.b: Please provide the calculations relating to the length between each check dam, height, ponding time, and the number of check dams for each proposed vegetated filter swale that will need to use check dams.

The check dam calculations could not be found within the revised PCSM Report for the Blue Mountain Side Valve site.

3. $\S102.8(f)(9)$ Plan drawings.

a. Original Comment 3.d: Please delineate and label on the PCSM Plans those areas where you propose to protect and/or utilize the natural drainage features as a PCSM BMP.

The response to this deficiency does not answer the comment. Please provide a response to the deficiency. Please show the delineation and labeling of the PCSM BMP protect and/or utilize the natural drainage features on the PCSM Plans.

- b. Original Comment 3.h: If using the minimization of soil compaction as a PCSM BMP, please provide the following notations on the PCSM Plans:
 - i. The protected area shall not be stripped of the existing topsoil.
 - ii. The protected areas are not to be subject to excess equipment movement, storage, or stockpile of equipment or material of any kind.
 - iii. The protected area must be clearly delineated in the field and protected prior to any construction activities taking place.
 - iv. Soil amendment or additional topsoil and light grading are permitted in the protected area.
 - v. Should the minimum soil compaction areas be disturbed/compacted, they may require soil amendment and restoration.

The notations for the proposed PCSM BMP minimizing soil compaction were not provided on the PCSM Plans for the Blue Mountain Side Valve Site. Please provide the notations on the PCSM Plans.

- c. Original Comment 3.h: Please provide the following notations on the PCSM Plans for the areas proposed to be protected from earth disturbance:
 - i. The protected areas are not to be subject to grading or movement of existing soils.
 - ii. Existing native vegetation is not to be removed from the protected area.
 - iii. Additional planting of native vegetation is allowed within the protected area.
 - iv. Pruning or other required maintenance of vegetation is allowed in the protected
 - v. The protected area must be clearly delineated in the field and protected prior to any construction activities taking place.
 - vi. Any protected areas that have been disturbed/compacted during construction may require soil amendment and restoration.

The notations for the proposed PCSM BMP minimize total disturbed area were not provided on the PCSM Plans for the Blue Mountain Side Valve Site. Please provide the notations on the PCSM Plans.

d. Original Comment 3.j: Please show on the PCSM Plans the areas of landscape

restoration.

Main Line Valve MLV-1

- 1. $\S102.8(f)(9)$ Plan drawings.
 - a. Original Comment 3.a: Please delineate and label on the PCSM Plans those areas where you propose to protect and/or utilize the natural drainage features as a PCSM BMP.

Worksheet #10 has not been provided in the revised PCSM Narrative for Mainline Valve MLV-1. Please provide Worksheet #10 for MLV-1.

New Comment

- 2. §102.8(f)(6) A written description of the location and type of PCSM BMPs including construction details for permanent stormwater BMPS including permanent stabilization specification and locations.
 - a. Worksheet #10 has the proposed PCSM BMP cluster uses at each site. The general concept of a cluster development is that the amount of area on a project site that may be disturbed and impervious areas added to has been significantly reduced from what is proposed to be developed. Therefore, a significant portion of the project site will remain perpetually protected in a natural conservation area. The project site area is 00.00 acres and the protected area is 00.00 acres as per the NOI and BMP worksheets #2 and #3. It has been determined that amount of area proposed to be developed when compared to the amount of area proposed to be protected does not lend itself to fall under the cluster development classification. Please clearly demonstrate that a significant portion of the project site will remain perpetually protected when compared to the area that is proposed to be developed or revise all documentation as necessary. Note that existing conservation areas are not applicable for water quality credit.

Main Line Valve MLV-2

- 1. §102.8(f)(6) A written description of the location and type of PCSM BMPs including construction details for permanent stormwater BMPS including permanent stabilization specification and locations.
 - a. Worksheet #10 has the proposed PCSM BMP cluster uses at each site. The general concept of a cluster development is that the amount of area on a project site that may be disturbed and impervious areas added to has been significantly reduced from what is proposed to be developed. Therefore, a significant portion of the project site will remain perpetually protected in a natural conservation area. The project site area is 00.00 acres and the protected area is 00.00 acres as per the NOI and BMP worksheets #2 and #3. It has been determined that amount of area proposed to be developed when compared to the amount of area proposed to be protected does not lend itself to fall under the cluster development classification. Please clearly demonstrate that a

significant portion of the project site will remain perpetually protected when compared to the area that is proposed to be developed or revise all documentation as necessary. Note that existing conservation areas are not applicable for water quality credit.

Main Line Valve MLV-3

- 1. §102.8(f)(6) A written description of the location and type of PCSM BMPs including construction details for permanent stormwater BMPS including permanent stabilization specification and locations.
 - a. Worksheet #10 has the proposed PCSM BMP cluster uses at each site. The general concept of a cluster development is that the amount of area on a project site that may be disturbed and impervious areas added to has been significantly reduced from what is proposed to be developed. Therefore, a significant portion of the project site will remain perpetually protected in a natural conservation area. The project site area is 00.00 acres and the protected area is 00.00 acres as per the NOI and BMP worksheets # 2 and #3. It has been determined that amount of area proposed to be developed when compared to the amount of area proposed to be protected does not lend itself to fall under the cluster development classification. Please clearly demonstrate that a significant portion of the project site will remain perpetually protected when compared to the area that is proposed to be developed or revise all documentation as necessary. Note that existing conservation areas are not applicable for water quality credit.

Main Line Valve MLV-4

- 1. §102.8(f)(6) A written description of the location and type of PCSM BMPs including construction details for permanent stormwater BMPS including permanent stabilization specification and locations.
 - a. Worksheet #10 has the proposed PCSM BMP cluster uses at each site. The general concept of a cluster development is that the amount of area on a project site that may be disturbed and impervious areas added to has been significantly reduced from what is proposed to be developed. Therefore, a significant portion of the project site will remain perpetually protected in a natural conservation area. The project site area is 00.00 acres and the protected area is 00.00 acres as per the NOI and BMP worksheets #2 and #3. It has been determined that amount of area proposed to be developed when compared to the amount of area proposed to be protected does not lend itself to fall under the cluster development classification. Please clearly demonstrate that a significant portion of the project site will remain perpetually protected when compared to the area that is proposed to be developed or revise all documentation as necessary. Note that existing conservation areas are not applicable for water quality credit.

Main Line Valve MLV-6

1. §102.8(f)(6) A written description of the location and type of PCSM BMPs including construction details for permanent stormwater BMPS including permanent stabilization

specification and locations.

a. Worksheet #10 has the proposed PCSM BMP cluster uses at each site. The general concept of a cluster development is that the amount of area on a project site that may be disturbed and impervious areas added to has been significantly reduced from what is proposed to be developed. Therefore, a significant portion of the project site will remain perpetually protected in a natural conservation area. The project site area is 00.00 acres and the protected area is 00.00 acres as per the NOI and BMP worksheets #2 and #3. It has been determined that amount of area proposed to be developed when compared to the amount of area proposed to be protected does not lend itself to fall under the cluster development classification. Please clearly demonstrate that a significant portion of the project site will remain perpetually protected when compared to the area that is proposed to be developed or revise all documentation as necessary. Note that existing conservation areas are not applicable for water quality credit.

Main Line Valve MLV-7

- 1. §102.8(f)(6) A written description of the location and type of PCSM BMPs including construction details for permanent stormwater BMPS including permanent stabilization specification and locations.
 - a. Worksheet #10 has the proposed PCSM BMP cluster uses at each site. The general concept of a cluster development is that the amount of area on a project site that may be disturbed and impervious areas added to has been significantly reduced from what is proposed to be developed. Therefore, a significant portion of the project site will remain perpetually protected in a natural conservation area. The project site area is 00.00 acres and the protected area is 00.00 acres as per the NOI and BMP worksheets # 2 and #3. It has been determined that amount of area proposed to be developed when compared to the amount of area proposed to be protected does not lend itself to fall under the cluster development classification. Please clearly demonstrate that a significant portion of the project site will remain perpetually protected when compared to the area that is proposed to be developed or revise all documentation as necessary. Note that existing conservation areas are not applicable for water quality credit.

Church Road Interconnects

- 1. §102.8(f)(8) Supporting Calculations.
 - a. Please provide the void space of the material used in the infiltration trench. Also, please show on the Trench Dewatering Time Calculations that the void space has been accounted for during the dewatering time.

Pursuant to 25 Pa. Code § 102.6(c) of DEP's rules and regulations, you must submit a response fully addressing each of the significant technical deficiencies set forth above. Please note that this information must be received within sixty (60) calendar days from the date of this letter, on or

before July 13, 2020 or DEP may consider the application to be withdrawn by the applicant.

You may request a time extension in writing before **July 13, 2020** to respond to deficiencies beyond the sixty (60) calendar days. Requests for time extensions will be received by DEP and considered. You will be notified in writing of the decision either to grant or deny, including a specific due date to respond if the extension is granted. Time extensions should be in accordance with 25 Pa. Code § 102.6(c).

Please submit one (1) copy of the revised E&S/SR and PCSM Plan drawings & narratives to all of the County Conservation Districts and the one (1) copy of the revised E&S/SR and PCSM Plan drawings & narratives to Michael Luciani, Rachel Carson Building, 400 Market Street, Harrisburg, PA 17101.

If you believe that any of the stated deficiencies are not significant, instead of submitting a response to that deficiency, you have the option of requesting that DEP to make a permit decision based on the information you have already provided regarding the subject matter of that deficiency. If you choose this option for any deficiency, you should explain and justify how your current submission satisfies that deficiency. Please keep in mind that if you fail to respond, your application will be considered withdrawn.

If you have any questions regarding the identified deficiencies, please contact Michael Luciani, Project Manager, at 570-826-2597, and refer to Application No. ESG0200016002, to discuss your concerns or to schedule a meeting. The meeting must be scheduled within the 60 calendar days allotted for your reply unless otherwise extended by DEP.

Sincerely,

Rebecca Albert, P.G.

Environmental Group Manager

Regional Permit Coordination Office

cc: W. Michael Clark, P.E., Mott MacDonald

Sarah Binckley, AECOM

Luzerne Conservation District

Carbon County Conservation District

Monroe County Conservation District

Northampton County Conservation District

Bucks County Conservation District

Bear Creek Township

Dallas Township

Jenkins Township

Kingston Township

Plains Township

West Wyoming Borough Wyoming Borough Kidder Township Lower Towamensing Township Penn Forest Township Towamensing Township Bethlehem Township East Allen Township City of Easton Lower Nazareth Township Lower Saucon Township Moore Township Upper Nazareth Township Williams Township Eldred Township Durham Township

Riegelsville Borough