pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

July 3, 2019

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

Re: Technical Deficiency
PennEast Pipeline Project – Carbon County
APS ID# 893362, AUTH ID# 1111981
DEP Application No. E13-185
Kidder Township, Lower Towamensing Township,
Penn Forest Township, & Towamensing Township
Carbon County

Dear Ms. Holly:

The Department of Environmental Protection (DEP) has reviewed the above referenced application package and has identified the following significant technical deficiencies. The Chapter 105 Dam Safety and Waterway Management regulations include information that will aid you in responding to some of the deficiencies listed below. The deficiencies are based on applicable laws and regulations. The referenced guidance set forth below provide DEP's preferred means of satisfying the applicable regulatory requirements.

Technical Deficiencies

1. It appears that the Northampton fees (file B_Northampton JPA Fees) was uploaded instead of the Carbon County document. Please provide the Carbon County JPA fees document. [*25 Pa. Code §105.21(a)(1)*]

2. Please provide the stream bank stabilization method on the Erosion and Sediment (E&S) Control Plan's information ribbon. The stream bank stabilization method should be included for each stream that will be crossed by the pipeline and/or access roadway. Please revise accordingly. [*25 Pa. Code §105.13(g)*]

3. Please revise the Stream Bank Stabilization Detail on the Erosion and Sediment (E&S) Control Plans to clearly show that natural streambed material will be placed within the streambed only. The detail shows natural streambed material extending up the banks of the stream. [*25 Pa. Code § 105.311*]

4. If there is a potential that riprap bank stabilization may be required, please provide a Riprap Bank Stabilization Detail on the Erosion and Sediment (E&S) Control Plans. [*25 Pa. Code § 105.13(g)*]

5. It appears that there are streams and wetlands that do not have erosion and sediment control best management practices (BMPs) proposed to protect the stream or wetland from sediment deposition during construction of the pipeline. Please check each crossing and provide adequate erosion and sediment control BMPs. Please revise the plans accordingly. [*25 Pa. Code §105.13(g)*]

6. It appears there are several wetlands and watercourses with inconsistencies in respect to the municipality where the resource is located on both the Aquatic Resources Impact Table (ARIT) and the Site-Specific Mapping. Please provide consistent municipality locations for watercourses and wetlands. Please revise all corresponding documentation accordingly (i.e. 110316_GM_1003_I_MI has Bethlehem Township which is not located within Carbon County). [*25 Pa. Code §105.21(a)(1)*]

7. The ARIT calls out segments of wetlands on separate rows (e.g., 102114_JC_001_PEM -1 and 102114_JC_001_PEM - 2), but Site-Specific Mapping and E&S Plans do not make clear or specify which projection of a wetland corresponds to the ARIT row. Please clarify. [*25 Pa. Code §105.21(a)(1)*]

8. Per the instructions of 3150-PM-BWEW0557, please provide both the length and width measurements of resource crossings on the ARIT. [DEP Document No. *3150-PM-BWEW0557 and 25 Pa. Code 105.21(a)(1)*]

9. In the ARIT, please identify Class A Wild Trout Streams in the Wild Trout column. [*25 Pa. Code §105.21(a)(1)*]

10. It appears that there is inconsistency in the labeling of the watercourses between the Erosion and Sediment Control Plans, Site-Specific Crossing Plans, and the Aquatic Resources Impact Table with respect to Waterbody 072618_WA_1006_I_MI and 072618_WA_1002_I_MI. It appears that the waterbody crossing ending in 1002 has been mislabeled on the Erosion and Sediment Control Plans. [*25 Pa. Code §105.13(g)*]

11. Please provide consistent stationing throughout the pipeline. As an example, the stationing on the Site-Specific Mapping has the stationing starting over at the locations of the resource, while the Erosion and Sediment Control Plans have the stationing continuing along the pipeline. Please revise accordingly. [*25 Pa. Code § 105.13(g)*]

12. It appears that there are wetland, watercourse and floodway permanent impact area values on the Aquatic Resource Impact Table, Subfacility Tables, and Site-Specific Mapping of zero (0.00). The Erosion and Sediment Control Plans show that there will be matting or other impacts located within the following wetlands, watercourses, and floodways of the following resources:

    a. 102114_JC_001A_PSS-2
    b. 110316_GM_1004_I_MI
    c. 042115_JC_1005_E_MI
    d. 040517_BT_1001_E_MI
    e. 091516_GM_1002_E_MI
    f. 061715_DB_1001_I_MI
    g. 122215_DB_1001_P_MI
    h. 051115_JC_1002_P_MI
    i. 051115_JC_1001_P_MI
    j. 041018_WA_1003_I_MI
    k. 041217_GM_1001_P_MI
    l. 072618_WA_1010_I_MI
    m. 072618_WA_1009_I_MI
    n. 072618_WA_1007_I_MI
    o. 072618_WA_1004_I_MI
    p. 041017_GM_1001_P_MI
    q. 041117_GM_1002_E_MI
    r. 102114_JC_001A_PSS-1
    s. 102114_JC_001A_PSS-2
    t. 102314_JC_002_PFO-1
    u. 102314_JC_002_PFO-2

    Please revise the area to a minimum of 0.001 for consistency. [*25 Pa. Code §§ 105.13(g) and 105.21(a)(1)*]

13. There are several stream crossings that have a waterbody crossing method as DX-NF. However, the E&S Typical Details Sheets do not include a waterbody crossing method DX-NF. Please include this waterbody crossing method to the E&S Typical Details Sheets. [*25 Pa. Code §105.13(g)*]

14. There are several stream crossings that have a waterbody crossing method as BX. However, the E&S Typical Details Sheets do not include a waterbody crossing method BX. Please include this waterbody crossing method to the E&S Typical Details Sheet. [*25 Pa. Code §§105.13(g) and 105.21(a)(1)*]

15. The proposed temporary equipment bridge (Flexi-float or portable) crossing does not have any measures to prevent sediment from falling off the sides of the equipment crossing into the stream. Please provide a minimum of a 6-inch high side rail wrapped with geo-textile. [*25 Pa. Code §105.13(g)*]

16. Provide plans or a detail for the restoration of stream beds at open cut stream crossings. This should include replacement of native stream bed material, reestablishment of the thalweg, and assurance that no significant changes in bed grade occur. [*25 Pa. Code §§ 105.13(e)(1)(i)(G), 105.13(e)(1)(ix), 105.1(definition of Mitigation), 105.13(e)(1)(x), 105.15(a)(1), 105.14(b)(4), 105.16(d), and 105.242(c)*]

17. Procedures should take into account the weather forecast and current conditions be implemented prior to stream crossing installations. Such procedures should include a sign-off sheet documenting that the Environmental Inspector, Foreman, and any other responsible individual agree that the crossing can be constructed during that specific time frame. [*25 Pa. Code § 105.13(g)*]

18. Please evaluate the need for in-stream supports on temporary equipment crossings of streams. If, upon evaluation, it is determined that supports are required, please provide details and a summary of impacts associated with the in-stream supports. [*25 Pa. Code §105.161(a)*]

19. The Erosion and Sediment Control Plan Alignment Sheets do not include the temporary equipment crossing method for the stream crossings. Please provide the type of temporary equipment bridge crossing method for each stream that is proposed to be crossed by a temporary equipment bridge. Please show the proposed erosion and sediment control BMPs on the Erosion and Sediment Control Plan Alignment Sheets. Revise the plans and other applicable components of the application appropriately. [*25 Pa. Code § 105.13(g)*]

20. Tables 11.3, 11.4 and 11.5 in the E&S General Notes mention use of crown vetch in seeding mixtures. DEP does not recommend use of crown vetch. Remove these seed mixture options and consider using native upland seed mixtures as an alternative. [*25 Pa. Code §§ 105.13(e) and 105.21(a)(1)*]

21. You appear to be proposing to construct permanent waterbars upslope of wetlands. These permanent waterbars should not divert surface water from the wetland as this may cause a secondary impact to the downgradient wetlands. Please provide information elaborating on the potentially affected wetland(s) hydrology and whether the proposed permanent waterbars will cause secondary impacts to those wetland(s). [*25 Pa. Code §§ 105.18a(b)(1-3) and 105.14(b)(4)*]

22. You appear to be proposing to have permanent water bars discharge within the riparian buffer of streams. The locations of the permanent waterbars should not create an outlet where the banks of the stream have the potential to erode. The permanent waterbars should outlet to mimic the existing conditions and provide sheet flow to then discharge into a surface water. Also, the permanent waterbars should be located outside of the riparian buffer, as practical. [*25 Pa. Code § 105.14(b)(4)*]

23. Please show on the Erosion and Sediment Control Plan Alignment Sheets the locations of the public and private water supplies. [*25 Pa. Code §§105.13(e)(1)(ii) and 105.14(b)(5)*]

24. The Department does not recommend stockpiling soil or subsoil within the wetland. Evaluate the ability to stockpile soils outside wetland boundaries throughout project when possible. [*25 Pa. Code §105.13(e)*]

25. Please clarify what soil is used below the 12-inches in the following statement found in the construction sequencing (File H-1_03) "BACKFILL PIPE TRENCH. BACKFILL THE TOP 12-INCHES OF THE EXCAVATED TRENCH WITH THE STOCKPILED WETLAND SOIL TO MATCH ORIGINAL SURFACE GRADES." [*25 Pa. Code §105.13(e)*]

26. It appears that several access road (AR) crossings of streams and wetlands have not been accounted for in the Aquatic Resource Impact Table and Site-Specific Mapping (e.g., 012617_GM_1003_I_MI, 071817_MB_1003_I_MI, etc.). Please account for impacts and revise application accordingly. [*25 Pa. Code §105.21(a)(1)*]

27. It appears that you are proposing to replace several culverts along existing access roads. Please provide hydrologic and hydraulic calculations for the proposed culvert replacements. Also, please be advised that the invert of the culvert must be depressed a minimum of 6-inches below streambed elevation for drainage areas less than one square mile and 12-inches below streambed elevation for drainage areas greater than one square mile. [*25 Pa. Code § 105.161*]

28. Please provide the culvert length from the upstream face to the downstream face on the Kidder Compressor Proposed Culvert Plans and the Access Road AR-034 Plans. [*25 Pa. Code §105.166(a)*]

29. Please provide endwall details for the proposed culvert on the Kidder Compressor Proposed Culvert Plans and the Access Road AR-034 Plans. [*25 Pa. Code §105.166(c)*]

30. Please provide the data in a digital format that was used in the HEC-RAS modelling for the Kidder Compression Station Culvert and Access Road AR-034 culvert. [*25 Pa. Code §105.161(a)*]

31. The proposed Access Road AR-034 culvert must be depressed a minimum of 6-inches below natural streambed elevation since the drainage area is less than one square mile (640 acres). Please revise the plans and calculations accordingly. [*25 Pa. Code §105.161(a)(3)*]

32. Please provide details for aquatic organism passage for the proposed Access Road AR-034 culvert, the use of riprap, and how the slope of the culvert will tie into existing grade. [*25 Pa. Code §§105.14(b)(4) and 105.16(d)*]

33. Please provide Site-Specific Mapping resource impact details for the Kidder Compressor Station, as the plans are greyed out and provide limited details on impact footprints. [*25 Pa. Code §§105.13(e) and 105.21(a)(1)*]

34. The pipeline appears to run directly parallel to and under and the stream 110316_GM_1003_I_MI. Please revise the location or discuss erosion protection measures. [*25 Pa. Code §105.314*]

35. Provide further details for the crossings of wetlands 020117_GM_1001_PUB regarding their depth and what BMPs will be used to protect the resource. Please verify that a wetland mat will be sufficient to cross this wetland or whether a bridge would be more appropriate. [*25 Pa. Code §§105.13(e) and 105.21(a)(1)*]

36. Pennsylvania Fish and Boat Commission (PFBC) has provided a concern regarding the auger bore near watercourse 041217_GM_1001_P_IN and adjacent wetlands 041117_GM_1001_PFO and 041117_GM_1001_PSS. Discuss methods to ensure groundwater levels are not affected by any dewatering that may be needed within bore pits. If deemed appropriate, consider monitoring wells and providing a monitoring well plan. [*25 Pa. Code §105.13(e)*]

37. Pennsylvania Fish and Boat Commission (PFBC) has provided a concern regarding right-of-way (ROW) slope failure north of Mud Run (Stream 042115_JC_1001_P_IN). Please discuss how construction will minimize the risk of slope failure along this stream. [*25 Pa. Code §105.13(e),* 105.16(d), *105.313(c), and 105.123 (2)*]

38. Provide adequate provisions for shut-off in the event of pipeline break or rupture. Provide locations and descriptions of how this action will be completed if a break or rupture occurs. [*25 Pa. Code § 105.301(9)*]

39. The Cultural Resource Summary indicates there will be an upcoming Determination of Effect Report. Please verify if the proper documentation has been received and update the application where applicable. [*25 Pa. Code §§105.13(e), 105.14(b)(5), 105.21(a)(1), and 105.24*]

40. Please update any table in the Environmental Assessment (EA) which may relate to changes to the ARIT. [*25 Pa. Code §105.21(a)(1)*]

41. For the comprehensive environmental assessment (CEA) and EA Module 3, discuss future potential upgrades to the Kidder Compressor stations, and how potential upgrades may impact wetlands within the limit of disturbance. [*25 Pa. Code §§105.13(e) and105.14(12)*]

42. EA Module 2, Section S2.A.5, suggests the applicant is still in consultation with the Pennsylvania Department of Conservation and Natural Resources (DCNR) regarding outstanding issues on the Beltzville Lake crossing. Please provide final documentation and revise this section. [*25 Pa. Code §§105.21(a)(1) and 105.24*]

43. EA Module 2, Section S2.A.5, suggests the applicant is still in consultation with PADCNR regarding outstanding issues on the Hickory Run State Park and Weiser State Forest impacts. Please provide final documentation and revise application accordingly. [*25 Pa. Code §§105.21(a)(1) and 105.24*]

44. EA Module 2, Section S2.A.5, states the applicant is continuing coordination with Lehighton Water Authority. Please provide final documentation and revise this section. [*25 Pa. Code §§105.21(a)(1) and 105.24*]

45. EA Module 2, Section S2.A.4 references Appendix CA-L-2C as the location map "that identifies regulated waters of the Commonwealth, natural areas, wildlife sanctuaries, natural landmarks, political boundaries, publicly available service areas for public water supplies, and historic landmarks within 1 mile of the Project and State Parks and prime farmland within 100 feet of the Project….". Appendix CA-L-2C is not a map. It is the table of prime farmland referenced in EA Module 2, S2.A.5. Please provide the location map for EA Module S2.A.4 or verify if I_LocationMap_2400 is the correct document and correct language in the EA. [*25 Pa. Code §§ 105.13(e) and 105.21(a)(1)*]

46. Discuss how sensitive resources will be protected and proper vegetation establishment will be assured before agriculture land is handed over to landowner. [*25 Pa. Code §105.13(e)*]

47. In the EA Module 2, the application indicates Northeastern bulrush surveys still need to be conducted in the Fall 2019. Please provide the report and update the application where applicable. [*25 Pa. Code §§105.13, 105.21(a)(1), and 105.24*]

48. The EA Module 2, Section S2.C, indicates coordination with Pennsylvania Game Commission (PGC) is ongoing and that the U.S. Fish and Wildlife Service (USFWS) recommends the Federal Energy Regulatory Commission (FERC) re-initiate consultation. Please provide final reports and clearances from applicable agencies and revise this section. [*25 Pa. Code § 105.21(a)(1)*]

49. Please supply the consultation update letter from the USFWS regarding the modified 2017 Biological Opinion and discuss any changes to avoidance and minimization plans. [*25 Pa. Code §§105.13(e), 105.14(b)(4),105.21(a)(1), and 105.24*]

50. EA Module 2, Section S2.D.1, states, "Following restoration, a 50-foot-wide permanent right-of-way (ROW) will be maintained for the life of the pipeline. No trees will be permitted to grow within that width." Module 3 and 4 discuss a 30-foot corridor for tree cutting. Please clarify and revise application as needed. [*25 Pa. Code §§ 105.21(a)(1)*]

51. In the EA Module 3, Section S3A, provide a final summary of total impacts for each table (Tables L3-1 through 4). [*25 Pa. Code §105.21(a)(1)*]

52. Please provide the invasive species plan (ISMP) referenced in Module 3 of the EA. Clarify and indicate if this plan will be used during the monitoring periods for the ROW and compensatory mitigation sites. [*25 Pa. Code §105.13(e)*]

53. In reference to the following statements in the EA Module 3, "Selectively clearing, by hand methods, a 30-foot wide operational easement to improve line of sight between pipeline markers where horizontal directional drillings (HDD) are proposed" and "Wetland systems comprised of forested communities will be allowed to revert back to their original site condition (excluding

locations maintained for line of sight)," please specify how much tree clearing will be done in the floodway and wetland for both the project construction and operation and maintenance (O&M) for the HDD crossings. Please note clearing of trees in PFO wetlands will be considered conversion and require mitigation. [25 Pa. Code 105.302(6)]

54. Per the EA instructions S3C10 and EA Appendix V (3150-PM-BWEW0017), please provide the key details for each subfacility. In addition, after consultation with the Bureau of Waterways Engineering and Wetlands, WETRE will not be a required subfacility on the pipeline, it may be required for offsite mitigation locations. Please use PIPE, which should include O&M; FLACT for floodway impacts not associated with pipe, such as access roads; and TMPWI for wetland disturbance areas during construction. WTDIM may be used at the compressor station, where fill in wetlands will occur. At this time, WTIIM will not be required if the disturbance is captured in TMPWI. Neither WTIIM nor TMPWI is required for horizontal directional drilling (HDD) bored pipe impacts. [*25 Pa. Code § 105.21(a)(1)*]

55. In the EA Module 3, PennEast discusses reducing workspace to 75-feet with a 30-foot-wide permanent ROW in Hickory Run State Park. Explain why such standards cannot be applied to other key areas to reduce impacts to resources and the environment including forests. [*25 Pa. Code §105.13(e)*]

56. Wetland 061615_DB_1002_PFO data form does not contain soil data, stating "soils TBD". Provide complete and accurate datasheets. [*25 Pa. Code §105.21(a)(1)*]

57. It appears a stream enclosure of stream 041017_GM_1001_P_IN is proposed. The proposed stream enclosure must pass the flows from a flood of a 100-year frequency. Also, it appears that stream 041017_GM_1001_P_IN will discharge into stream 041117_GM_1002_E_MI through the proposed stream enclosure. Please provide calculations showing that the discharge will not cause erosion of the channel. Lastly, stream 041117_GM_1002_E_MI may have secondary impacts associated with the stream enclosure, which may cause the loss of stream from the headwaters to the outfall of the stream enclosure. Please provide information indicating that there will not be a loss of stream. [*25 Pa. Code §105 Subchapter D, 25 Pa. Code §105.181, 25 Pa. Code §105.191, 25 Pa. Code §105.201, 25 Pa. Code §105.301(6), 25 Pa. Code §105.231*]

58. Based on aerial photographs and photographs provided in the application, wetlands 082515_BT_003_PEM, 110316_GM_1001_PEM_3, 010716_GM_1001_VP, 020117_GM_1001_PUB, and 082515_BT_004_PEM appear to have significant canopy cover. Overhanging strata can impact the function of wetland systems even without having roots directly within wetland. Please reevaluate whether these wetlands should be considered forested and how tree removal around this wetland may affect wetland functions. [*25 Pa. Code §§105.18(b)(1) and 105.13(e)*]

59. Wetland 102114_JC_001_PEM is labeled as PEM but is mapped as a PFO on the Photo Maps (file K) and appears to be at a different location on the Site-Specific Mapping. Please revise accordingly. [*25 Pa. Code §105.21(a)(1)*]

60. The Department was unable to corroborate the wetland boundaries provided by the applicant at the proposed Kidder Compressor station. Please flag all wetland boundaries at this site. Provide the Department an updated wetland delineation for this facility. Include upland data points to separate wetland boundaries. [*25 Pa. Code §§105.18(b)(1) and 105.13(e)*]

61. The Department identified additional potential receiving waters north of the proposed Kidder Compressor Station (tangent to 082515_BT_1001_P_IM / 102114_JC_1001_P_MI) that are not included within the permit application. Please update application materials to include all potential receiving waters. *[25 Pa. Code §§105.13(e)(1)(i)(A)]*

62. The Cumulative Impacts analysis notes 3.84 acres of permanent PFO/PSS wetland impacts from the 30-foot maintained ROW. Please note, for the purposes of mitigation, all cleared PFO and grubbed PSS wetlands must be calculated and mitigated for, regardless of location on or off permanent ROW. Please revise application accordingly, including mitigation documents. [*25 Pa. Code §§105.14(b)(13) and 105.20a(a)*]

63. Please include in the HDD Inadvertent Returns and Contingency Plan and the Erosion and Sediment Plans provisions to contact the Department immediately by email, phone, or electronically delivered letter if a loss of pressure or an inadvertent return occurs during the horizontal directional drilling operations. Drilling operations should not continue until a Professional Engineer (PE) or Professional Geologist (PG) has performed an inspection of the drilling site and drill alignment. The PE or PG should then notify the Department in writing that the drilling can commence without the risk of an inadvertent return.

    Should an inadvertent return occur during drilling operations, a Re-evaluation Report should be submitted to the Department by the PE or PG examining the drilling alignment and ensuring that another inadvertent return is unlikely. The Department will need to review this submitted information and approve the restarting of drilling operations. [*25 Pa. Code § 105.302(6)*]

64. An analysis of well production zones was not evaluated. Please provide this analysis. [*25 Pa. Code §105.14*]

65. All private water supply wells located within 450-feet of the bore path and public water supply wells within 0.5-mile radius of the bore path should be identified. A physical investigation of the area should be conducted due to online resources being unreliable for listing public and private water supply well locations. [*25 Pa. Code §§105.13(e)(1)(ii) and 105.14(b)(5)*]

66. The Department recommends that any private or public water supplies within the requested search radii be sampled pre- and post- construction for water quality, yield, and turbidity parameters for horizontally directionally drilled pipeline section. Additional supply wells outside of the search radius that are determined to be at high risk for impact (e.g. along a fault line) should also be included. [*25 Pa. Code §105.14*]

67. Strike and dip of bedrock in the area of the HDD was not documented. High angle fractures were documented during the geotechnical borings. The steep fractures should be considered a potential preferential pathway to the surface with an increased potential for IRs. [*25 Pa. Code § 105.313(c)*]

68. Please provide the approved Aids to Navigation (ATON) plan for the Lehigh River. [*25 Pa. Code §105.14(c)(3)*]

69. In the Alternative Analysis section 11.2.3, please further describe which "specific conditions [would] render a dry crossing infeasible" and the course of action to be followed if a dry crossing is infeasible. [*25 Pa. Code §§ 105.13(e) and 105.21(a)(1)*]

70. In the Alternative Analysis Table: Riverine Resources (S4), some streams specifically state they can be crossed within 24 or 48 hours. Please state the expected crossing time for each resource. Based on previous projects, unexpected circumstances can arise during stream crossings which result in an extended crossing time. Please state if any streams are expected to exceed the recommended crossing time of 24-48 hours (respectively). Discuss plan of action if the proposed crossing timeline is exceeded, and state the proposed timeline in both the AA table and construction narrative. [*25 Pa. Code §105.21(a)(1)*]

71. In the Alternative Analysis Table: Wetland Resources, it states wetland 042415_JC_1001_PFO "is not crossed by centerline." Please review table and revise accordingly. [*25 Pa. Code §105.21(a)(1)*]

72. Provide additional details regarding how impacts to Wetlands 050115_JC_1001_PFO, 042315_JC_1001_PFO, and 050615_JC_1001_PFO have been avoided and minimized. Please include an evaluation of whether an alternative method of crossing or reduced ROW is feasible through these resources. [*25 Pa. Code §105.13(e)*]

73. Throughout the permit (including EA-Module 4 and the Alternative Analysis), wetland and watercourse restoration monitoring timelines are not consistent stating in some places two years and in other places three years of monitoring (respectively). In any event, the proposed monitoring timelines are inconsistent with the Department's guidance for Wetlands Replacement/Monitoring, Department document 363-0300-001, which states wetland replacement must be monitored for a period of not less than five years. Please revise the monitoring timelines to reflect a 5-year monitoring period. [*25 Pa. Code §105.21(a)(1)*]

74. The Wetland and Riparian Reforestation Plan does not clearly show what the intentions are with respect to which wetlands and riparian areas get seeded and which wetlands and riparian areas get reforested. Please provide a Reforestation Plan that clearly demonstrates the vegetation type proposed for each site that will be restored. Please include the resource ID and designation on the plans as well as the planting schematics, including width of plantings in riparian buffers based on water course designation (typical vs. EV/HQ, according to §102.14 requirements, where applicable). [*25 Pa. Code §§ 105.13(e) and 105.16(d)*]

75. In the Wetland and Riparian Reforestation Plan, consider replanting shrubs up to the 10-foot wide buffer (between 15 and 5 feet from center of pipeline) in exceptional value watersheds, where trees would otherwise not be permitted or consider replanting shrubs across the entire ROW, where tree roots would otherwise not be permitted, as stated in the EA Module 3 "A 10-foot wide operational easement centered on the pipeline will be maintained in an herbaceous or scrub/shrub vegetative state in emergent or scrub-shrub wetlands." [*25 Pa. Code §§105.16(d) and 105.18a(b)(3)(ii)(B)*]

76. Please include in the EA Module 4, Section S4.C, the total acres to be mitigated for and the total acres WHM Solutions will uplift/enhance. [*25 Pa. Code §§105.20a(a) and 105.21(a)(1)*]

77. The Department requests function and value mitigation at a rate of 2:1 for conversion impacts to "other" PFO wetlands, 2.5:1 for conversion impacts to EV PFO wetlands; 1.5:1 for conversion impacts to "other" PSS wetlands, and 1.75:1 for conversion impacts to EV PSS wetlands. [*25 Pa. Code §§105.14(b)(13) and 105.20a(a)*(2)]

78. Please submit final documents in the Compensatory Wetland Mitigation Plans that are not labelled "Draft." [*25 Pa. Code §§105.20a(a) and 105.21(a)(1)*]

79. The off-site Compensatory Wetland Mitigation Plan Performance Standards provide for a contingency of 30% canopy cover prior to the end of monitoring." Department guidance, *Design Criteria - Wetlands Replacement/Monitoring*, DEP Doc. No. 363-0300-001, suggests 85% survival of planted species and a monitoring period of not less than five years. The contingency regarding "30% canopy cover prior to end of monitoring" will not be acceptable. Please revise the off-site Compensatory Wetland Mitigation Plan Performance Standards to be consistent with the Department guidance. [*25 Pa. Code §§105.20a(a), 105.21(a)(1), and 105.13(e)*]

80. Regarding the EA Module 4 and Post-Construction Wetland and Watercourse Monitoring Plan, Department guidance, *Design Criteria - Wetlands Replacement/Monitoring*, DEP Doc. No. 363-0300-001, requires 85% cover of hydrophytic species. Please revise performance standards accordingly. [*25 Pa. Code §§105.20a(a), 105.21(a)(1), and 105.13(e)*]

81. The Post-Construction Wetland and Watercourse Monitoring Plan states that you intend to only monitor wetlands 0.1 acres or greater in size. All restored wetland impacts need to be monitored regardless of size. Please revise application to reflect that all restored wetlands will be monitored. [*25 Pa. Code §105.21(b)*]

82. In the Compensatory Wetland Mitigation Plan, consider providing a method to clearly and permanently demarcate easement boundaries. [*25 Pa. Code § 105.13(e)*]

Pursuant to 25 Pa. Code §105.13a of DEP's Chapter 105 Rules and Regulations you must submit a response fully addressing each of the significant technical deficiencies set forth above. Please note that this information must be received within sixty (60) calendar days from the date of this letter, on or before **September 2, 2019**, or DEP may consider the application to be withdrawn by the applicant. You may request a time extension, in writing, before **September 2, 2019** to respond to deficiencies beyond

the sixty (60) calendar days. When you submit the request, you should explain why an extension of time is necessary. Requests for extension of time **are not** automatically granted. After review by DEP, you will be notified in writing of the decision to either to grant or deny the extension, including a specific due date to respond if the extension is granted. Time extensions shall be in accordance with 25 Pa. Code §105.13a(b).

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

If you have any questions regarding the identified deficiencies, please contact Michael Luciani, Application Manager, at 570-826-3089 or mluciani@pa.gov, and refer to Application No. E13-185, Authorization No. 1111981 to discuss your concerns or to schedule a meeting. The meeting must be scheduled within the 60-day period allotted for your reply, unless otherwise extended by DEP. You may also follow your application through the review process via *eFACTS on the Web* at: http://www.ahs2.dep.state.pa.us/eFactsWeb/default.aspx.

Sincerely,

Kevin S. White, P.E.
Environmental Group Manager
Regional Permit Coordination Office

cc: Sarah Binckley, AECOM
Carbon County Conservation District
US Army Corps of Engineers, Philadelphia District
PA Fish & Boat Commission, Division of Environmental Services
Kidder Township
Lower Towamensing Township
Penn Forest Township
Towamensing Township