



AECOM
625 W Ridge Pike
Suite E-100
Conshohocken, PA 19428
www.aecom.com

610 832 3500 tel
610 832 3501 fax

July 22, 2016

Eric Engle, P.G.
Delaware River Basin Commission
Water Resources Management Branch
PO Box 7360
25 State Police Drive
West Trenton, NJ 08628-0360

Re: PennEast Pipeline Project
Response to DRBC May 23, 2016 Comments

Dear Mr. Engle:

Pursuant to the PennEast Pipeline Project and on behalf of PennEast Pipeline Company, LLC (PennEast), please find enclosed AECOM's response to the Delaware River Basin Commission's (DRBC) comments sent via email on May 23, 2016. AECOM has addressed the items DRBC listed for resubmittal or submission of additional information to supplement PennEast's original application.

DRBC's Items for Resubmittal or Submission of Additional Information

- 1) The Application indicates that DRBC receipt of approval expected in March 2017. Narrative (Section 2.1) indicates that some construction work is expected to begin third quarter of 2016 and winter tree clearing scheduled to commence October 2016.**

We realize that the project schedule has changed, however, please be advised that Article 3, Section 2.3.4.E of the Delaware River Basin Commission's Rules of Practice and Procedure states:

"Whenever a project is subject to review and approval by the Commission under this section, there shall be no substantial construction activity thereon, including related preparation of land, unless and until the project has been approved by the Commission; provided, however, that this prohibition shall not apply to the drilling of wells for purposes of obtaining geohydrologic data, nor to in-plant control and pretreatment facilities for pollution abatement."

AECOM Response:

Based on the Notice of Schedule that the Federal Energy Regulatory Commission (FERC) released on March 29, 2016, PennEast anticipates an in-service date in the second half of 2018. To meet the anticipated in-service date, winter tree clearing and some construction work are scheduled to commence in late 2017 and early 2018.

- 2) We have a shapefile of the pipeline from mid-December 2015 and an updated KMZ file showing the 400 feet of center line (Feb 2016). Please submit a Shapefile of the current route (centerline, mileposts and above ground facilities).**

AECOM Response:

Updated shapefiles for the current pipeline route, mileposts, and aboveground facilities filed with FERC in February 2016 are provided on the enclosed CD as Enclosure 1.

- 3) The PADEP Application included Erosion and Sediment Pollution Control Plans for Pennsylvania. Are the E&SCP's referenced in the NJ wetland and waterbody tables available?**

AECOM Response:

A Project-wide Erosion and Sediment Control Plan (E&SCP) narrative has been prepared for the Project and submitted to the FERC as a part of PennEast's FERC September 2015 Application. This narrative was provided as Appendix C in PennEast's DRBC February 2016 Application. Since that time, PennEast has prepared a site-specific E&SCP for the Pennsylvania portions of the Project which meets the 25 PA Code Chapter 102 requirements. This site-specific plan includes a narrative and drawings, which were submitted to the Pennsylvania Department of Environmental Protection (PADEP) in February 2016 as part of the Joint Permit Application, and submitted to the PADEP, Bucks County Conservation District, Carbon Conservation District, Luzerne Conservation District, and Northampton County Conservation District in March 2016 as part of the Erosion and Sediment Control General Permit (ESCGP-2) application. The E&SCP was updated in June 2016 in response to administrative incompleteness letters from the PADEP, and the revised plan narrative and drawing package is provided on the enclosed CD as Enclosure 2.

A site-specific E&SCP is currently being developed for the New Jersey portion of the Project. Upon completion of PennEast's New Jersey E&SCP, AECOM will provide an electronic copy to the DRBC. This E&SCP will be reviewed by county soil conservation districts during the permitting process. Alignment sheets that do not yet show erosion and sediment controls have been developed for the New Jersey portion of the Project, and they were filed with the FERC on May 16, 2016. Electronic copies of the alignment sheets are provided on the enclosed CD as Enclosure 3.

- 4) Plans showing the locations of above ground facilities, access roads and pipeyards were found on the FEMA Floodplain Maps included with the DRBC Application and also in the PADEP Application materials. We could not locate maps showing the locations of the staging areas.**

AECOM Response:

The FEMA Floodplain Maps have been revised to show proposed staging areas. The revised mapbook is provided on the enclosed CD as Enclosure 4.

- 5) Please indicate if detailed plans showing actual withdrawal locations and equipment setup details have been developed for each water withdrawal source and discharge location.**

AECOM Response:

Detailed plans showing withdrawal and discharge locations and equipment setup have not been developed at this time. Information from water source owners, surface water source locations, and equipment vendors will continue to be collected and reviewed prior to proceeding with plan development. Detailed plans can be provided to the DRBC when available; general plans that will be followed are as provided in the February 5, 2016 application narrative.

- 6) Wetland and Stream Crossing tables in excel format were included in the PADEP permit applications. Please confirm that this copy is still the most recent. Is the NJ wetland and waterbody crossing information available in excel format?**

AECOM Response:

PennEast updated the Pennsylvania and New Jersey wetland and waterbody crossing tables in response to FERC's April 29, 2016 data request. The Excel versions of these tables are provided on the enclosed CD as Enclosure 5.

Table 2.5-1 Land Use Acreage Affected by Construction and Operation of Project Pipeline Facilities- DRB

- 7) Please provide a similar land use breakdown for the other components of the project (access roads, pipeyards, staging areas, above ground facilities, Kidder compressor station, etc.).**

AECOM Response:

Table 2.5-1 has been expanded to include access roads, contractor yards, pipe yards, staging areas, and aboveground facilities within the Delaware River Basin. The updated table is provided on the enclosed CD as Enclosure 6.

- 8) The table indicates that permanent impacts to forest and woodlands includes the full 50-foot permanent ROW, but actual maintained width will be 30 feet or 10 feet in forested wetlands. Please provide the actual acreage of existing upland forest and wetland forest (separate) that will be maintained during operation over the length of the pipeline and at the above ground facilities.**

AECOM Response:

A new table has been created to provide the acreage of existing upland forest and wetland forest that will be permanently impacted within the 30-foot wide maintained right of way (ROW) over the length of the pipeline in the Delaware River Basin. This information is provided on the enclosed CD as Enclosure 7.

Table 2.5-2 Land Requirements for Pipeline Facilities within the DRB

- 9) Please provide a table that indicates the miles of pipeline co-located within or parallel to existing ROW's.**

AECOM Response:

Table 8.2-4, Co-locations of the Project Pipeline Facilities with Existing Right-of-Way, which PennEast submitted to the FERC in its February 22, 2016 response to FERC's February 10, 2016 data request, is provided on the enclosed CD as Enclosure 8. The table includes the beginning and ending mileposts, parallel length in miles, and the type of ROW.

- 10) Please explain the difference between existing and partially existing Permanent Easement. Is the total permanent easement the sum of existing, partially existing and new?
Existing permanent easement only includes existing third party easement overlapping proposed project permanent 50 foot ROW, within the limits of construction.**

AECOM Response:

Existing easement refers to areas where the PennEast Pipeline easement is entirely within an existing third party easement (e.g., powerline, pipeline, or road right-of-way). A partially existing easement refers to areas where the PennEast Pipeline is only partially located with an existing easement. The total permanent easement is the sum of the existing, partial existing, and new permanent easements.

- 11) Is the 370.8 acres of operational ROW just the area centered over the pipeline or does it include the land area necessary for the compressor station, other above ground facilities and permanent access roads?**

AECOM Response:

The 30-foot wide operational ROW is the area centered over the pipeline and does not include any overlap area with aboveground facilities or permanent access roads. Footnote 6 in the updated Table 2.5-2 (Enclosure 9 on the enclosed CD) has been revised to add clarity.

- 12) Access Roads: Footnote 3 indicates that estimated temporary workspace for construction includes access roads (new and existing); however, the temporary workspace for construction of access roads is listed as zero (0). Permanent easement is listed as 90.3 acres. Please indicate if any of the access roads will be retained for permanent access to the project site.**

AECOM Response:

A breakdown of land requirements for the Project facilities (e.g., pipeline, access roads, pipeyards, above ground facilities, and staging areas) is provided in an updated Table 2.5-2 (Enclosure 9 on the enclosed CD). For access roads, the total workspace for construction is estimated as 90.3 acres, with approximately 85.5 acres being temporary workspace for construction and 4.9 acres being new permanent easement. (The numbers may not add up due to rounding.) Land requirements for other Project facilities can be found in the table.

- 13) Please confirm my understanding that the 52.2 acres of above ground facilities are the portions of the facilities outside the construction workspace of the mainline and laterals. The portion of the facilities within the temporary or perm easement would be included in the pipeline totals.**

AECOM Response:

The workspace requirements for facilities total 52.2 acres, some of which lies within the temporary and permanent pipeline easement and some of which lies outside of the pipeline construction footprint; however, the portion of the aboveground facility workspace that overlaps with the temporary or permanent pipeline easement is not included in the pipeline acreage totals. Therefore the construction workspace requirements are additive and not double-counted.

Section 2.5.1

- 14) A standard 100-foot wide construction ROW is proposed for the project. In wetland and waterbodies the construction ROW will be reduced to 75 feet unless a variance from FERC is requested. Please provide a table listing the locations where any variances were requested.**

AECOM Response:

The table provided on the enclosed CD as Enclosure 10 identifies where additional temporary workspace is required within a wetland or stream.

Table 2.5-3 Summary of Wetlands Affected by Construction and Operation of the Project within DRB

- 15) The footnote indicates that access roads and the Kidder Compressor Station are included in the construction and operation acreage. Please indicate if the wetland acreages include potential disturbance at other off-ROW areas (pipeyards, staging areas, above ground facilities, etc.). If not, please provide.**

AECOM Response:

The Project will not result in temporary or permanent wetland impacts at pipeyards, staging areas, contractor yards, or aboveground facilities with the exception of the Kidder Compressor Station.

- 16) The table submitted with the original application lists wetland acreage in the temporary workspace and in the permanent ROW. The table submitted with the April 1, 2016 supplemental information lists the wetland area affected during construction and wetland area affected during operation. Please confirm that the actual area affected during construction would be the sum of the two columns.**

AECOM Response:

The total acreage affected during construction includes both temporary workspace and permanent ROW. An updated Table 2.5-3 is provided on the enclosed CD as Enclosure 11. Table headings have been adjusted for clarity, and an additional footnote was added.

- 17) Is the acreage of the wetland area affected during operation based on the 50-foot wide PE or the narrower maintained ROW? In wetlands, is this narrower maintained ROW 30 feet or 10 feet wide?**

AECOM Response:

The column heading in Table 2.5-3 has been revised to clarify that the wetland acreages presented represent impacts within the temporary workspace and the 50-foot wide permanent ROW. The two columns are additive, and the total wetland impacts are shown in a new column that has been added to the table. The Pennsylvania and New Jersey Wetland Impact tables (Enclosure 5) provide permanent wetland impacts associated with the conversion of palustrine forested (PFO) and palustrine scrub shrub (PSS) wetlands to palustrine emergent (PEM) wetlands within the 30-foot maintained ROW.

- 18) The wetland total for Pennsylvania in Table 2.5-3 may include the acreage of wetlands in the Susquehanna River Basin. Please confirm.**

AECOM Response:

The wetland total for Pennsylvania in Table 2.5-3 does not include the acreage of wetlands in the Susquehanna River Basin. The wetlands that will be impacted in the Susquehanna River Basin between milepost 0.0 and 14.4 have not been included in this application. The updated Table 2.5-3 in Enclosure 11 corresponds with the updated wetland impacts tables provided in Enclosure 5.

Section 2.5.4.1

- 19) Please clarify the pipeline's minimum installation depth below surface grade within upland areas, floodways and flood fringe at stream crossing locations. Bullet 2 indicates 3 feet below surface grade in floodways and Bullet 4 and elsewhere it is noted as minimums of 3 feet below surface grade in upland locations subject to flooding and 5 feet below surface grade at water body crossings.**

AECOM Response:

The pipeline will be installed with a minimum of 3-foot depth of cover. In actively cultivated agricultural lands, PennEast plans to install the pipeline with a minimum of 4 feet of cover, except where rock prevents this depth. At waterbody crossings where the pipeline is located directly under a stream channel, PennEast will increase the depth of cover to 5 feet to provide extra depth for potential scour and for additional overburden for negative buoyancy for the pipe. Therefore, the minimum depth of cover within a DRBC-defined floodway or flood fringe may vary from 3 to 5 feet, with a minimum of 3 feet of cover within the flood fringe and within the portion of the floodway that is outside of the stream channel, and a minimum of 5 feet of cover under the stream channel.

Table 2.5-4

- 20) Please confirm that the 206 water body crossings include the crossings of pipeline, access roads, and crossings of the construction workspace where the pipeline does not cross the waterbody. I believe the sum of the PA mainline crossings should read 124.**

AECOM Response:

The sum of waterbody crossings on the PA mainline is 124. There are 215 total waterbody crossings. This includes waters crossed by access roads and waters that are within the construction workspace that are not crossed by the pipeline. A revised Table 2.5-4 is provided on the enclosed CD as Enclosure 12.

Section 3.0 Water Use

- 21) Please describe how the water will be transferred from the source to the vehicles, HDD equipment or natural gas pipeline. Are any land improvements planned due to the frequent trips back to the source to refill water trucks for dust control? Will the intake and pumping equipment be removed from the waterbody when not used or will it be left in place during the construction period?**

AECOM Response:

The method of water transfer from the source to the pipeline will be dependent on the distance the pipeline is from the water source. The water may be transported via temporary conduit to the site or the water may be transported via truck. If trucks are utilized, water will transferred to the trucks via hose or other temporary conduit. It is anticipated that trucks will stay on established travel ways and suitable parking areas and that hoses will be run to the water sources; locations will be determined to minimize any land improvements. Intake and pumping equipment will be removed from the waterbody when not in use.

- 22) For each purchased water source, please provide the owner of the facility/water supply, a description of the facility and how water will be taken and delivered to the point of use.**

AECOM Response:

A table that lists the owner of each proposed purchased water source, a description of the facility, and the anticipated delivery method is provided on the enclosed CD as Enclosure 13.

Tables 3.1-1 and -2

- 23) The table notes that the 31,500 gallons of water used to hydrostatically test the Kidder Compressor station will be hauled off site. If known, please indicate the location.**

AECOM Response:

The hydrostatic test water from the Kidder Compressor Station will be hauled offsite and disposed of at an approved wastewater treatment facility within the Delaware River Basin. PennEast is currently evaluating disposal options within the Delaware River Basin.

3.2 HDD Activities

- 24) Are HDD figures showing entry and exit points and profiles available for the New Jersey HDD's?**



AECOM Response:

The New Jersey HDD figures that were filed with the FERC on March 24, 2016 show the entry and exit points and profiles. These figures are provided on the enclosed CD as Enclosure 14.

25) Please provide the location of the HDD drilling mud disposal facilities if they have been identified.

AECOM Response:

The HDD drilling mud disposal facilities have not been identified at this time. PennEast will provide DRBC with the locations of the disposal facilities when the locations have been determined.

26) Please keep us updated on the potential I-80 HDD and the Alexauken Creek HDD discharge location.

AECOM Response:

The I-80 HDD concept has not been finalized; however, the Alexauken Creek is one of the New Jersey HDDs provided in the HDD figures (Enclosure 14). The HDD buoyancy control water may be discharged at the existing discharge location D15, which is located in close proximity to one of the HDD's entry and exit points. If the I-80 HDD is implemented in the Project Design, PennEast will provide DRBC with a figure showing the entry and exit points and profile, as well as the discharge location of any HDD buoyancy control water.

Appendix B3

27) It does not appear that all of the waterbodies are shown on the Wetland Delineation Maps for the New Jersey portion of the project.

AECOM Response:

Updated Wetland Delineation Report Mapping for Pennsylvania and New Jersey is included on the enclosed CD as Enclosure 15.

Appendix D Wetlands crossed by the PennEast Project

28) The table refers to E&SC Plan alignment sheets. I located the E&SC Plan Alignment sheets that were included in the PA application data submitted to DRBC on April 1, 2016. Are E&SC Plan alignments available for the NJ portion of the project?

AECOM Response:

A site-specific E&SCP is currently being developed for the New Jersey portion of the Project. Upon completion of PennEast's New Jersey E&SCP, AECOM will provide an electronic copy to the DRBC. This E&SCP will be reviewed by county soil conservation districts during the permitting process. Alignment sheets that do not yet show erosion and sediment controls have been developed for the New Jersey portion of the Project, and they were filed with the FERC on May 16, 2016. Electronic copies of the alignment sheets are provided on the enclosed CD as Enclosure 3.

- 29) The tables appear to include all wetlands associated with the pipelines, laterals and compressor station and access roads. Please confirm no wetland disturbance at the aboveground facilities (off ROW), staging areas and pipeyards?**

AECOM Response:

The Project will not result in temporary or permanent wetland impacts at pipeyards, staging areas, contractor yards, or aboveground facilities with the exception of the Kidder Compressor Station.

- 30) Several columns of information presented in the Pennsylvania wetland tables are not included in the NJ wetland tables. Please provide the wetland cover type and square footage of perm conversion PFO&PSS within the 30 foot maintained ROW information. Also, please indicate if the maintained ROW width is 10 feet or 30 feet.**

AECOM Response:

The Pennsylvania wetland and waterbody tables submitted in the February 5, 2016 application included several columns of data that were presented to the Pennsylvania Department of Environmental Protection and US Army Corps of Engineers in the Joint Permit Applications. To facilitate a more unified dataset, PennEast is resubmitting the Pennsylvania and New Jersey wetland and waterbody tables. These tables are consistent with those submitted to the FERC in May 2016, but have been pared down to only show wetland and waterbody impacts within the Delaware River Basin, and have been modified to show the square footage of permanent conversion of palustrine forested and palustrine scrub shrub wetlands within the 30-foot maintained ROW. Although only 10 feet of the 30-foot maintained ROW will be regularly mowed, PennEast will selectively cut woody vegetation within 15 feet of the pipeline (a 30-foot ROW) so that roots do not damage the protective pipeline coating. The updated tables are provided on the enclosed CD as Enclosure 16.

Appendix E

- 31) PA Table: Crossing Width foot note No. 13 indicates that this number is not equal to the width of the stream. Please explain.**

AECOM Response:

Footnote 13 indicates that in some instances the crossing width listed may be longer than the bank-to-bank width of the stream if the pipeline is crossing the waterbody at an angle other than perpendicular to the streamline. The crossing width may be longer, but will not be shorter, than the actual bank-to-bank width.

FEMA Floodplain Map

- 32) I compared the map to FEMA's National Flood Hazard Layer. The FEMA mapping shows 100-year floodplains surrounding Indian Creek (MP 54.3), UNT Hokendauqua Creek (MP 56.7), UNT Lehigh River (MP 70.4) and Bull Run (HL 0.3). Please confirm and update any information as necessary.**



AECOM Response:

The FEMA floodplain mapbook has been updated, and 100-year floodplains are shown surrounding Indian Creek (MP 54.3), UNT Hokendauqua Creek (MP 56.7), UNT Lehigh River (MP 70.4) and Bull Run (HL 0.3). The updated mapbook is provided on the enclosed CD as Enclosure 4.

Thank you for your time and effort in reviewing this application. Please feel free to contact me at (610) 832-2713 or sarah.binckley@aecom.com if you need any additional information.

Sincerely,

AECOM

A handwritten signature in black ink that reads "Sarah K. Binckley". The signature is written in a cursive style.

Sarah K. Binckley
Biologist

cc: Tony Cox, PennEast Pipeline Company LLC