APPLICATION NO. E32-508

PERMIT REVIEW SUMMARY

Client Name	Sunoco Pipeline, LP (SPLP)		
Client Address	535 Fritztown Road Sinking Spring, PA 19608		
Site Name:	**Pennsylvania Pipeline Project**		
Permit Signer:	**Matthew L. Gordon, Sunoco Project Manager**		
Phone Number	**610-670-3284**		
Contact Person	**Matthew L. Gordon, Sunoco Project Manager**		
Phone Number:	610-670-3284	Fax:	
Consultant	**Brad Schaeffer, Env. Proj. Mgr., Tetra Tech, Inc.**		
Consultant Phone	716-849-9419	Fax:	
Address	285 Ellicott Street Buffalo, NY 14203		

☐	Small Project
X	Joint Permit
☐	Amendment
☐	401 Certification

CLIENT#	290687
SITE#	781093
PFAC#	803419
SFAC#	1182019
APS#	876490
AUTH#	1083228
Consultant	30663
Name:	

Latitude:	40 ° 26' 43"
Longitude:	-79° 18 ' 00 "

App Fee:	
Check#	

eFacts entered?

Alyssa	677580
Bill	041736
Bob	450369
Chris	449671
Chuck	034978
Hadi	026085
Jamie	651975
Joe	426384
Mike	682365
Rich	051322
Stacey	537630

Closed in eFACTS	

ENG:	Tim
ENV:	Mike

Environmental Decision

X	Approved	Reviewer Signature:	Date 2/10/17
	Denied	Still Needed:	
	Conditional		
	Withdrawn/Returned		

Engineering Decision

X	Approved	Reviewer Signature:	Date 2/10/17
	Denied	Still Needed:	
	Conditional		
	Withdrawn/Returned		

Supervisor Review

X	Approved	Reviewer Signature:	Date 2/10/17
	Denied	Still Needed:	
	Conditional		
	Withdrawn/Returned		

Date of Compliance Check:	2/10/17
Date Sent to Corps:	
Date of Corps Letter/Phone:	
Date Sent to Fish Comm.	
Comments Received	10/16/2015
Date Sent to Corps:	

	USACE File No. (if known):				
	SPGP Ineligible (Corps will issue/deny)				
x	SPGP Reporting (Corps will issue/deny)				
	SPGP Non-Reporting (Send to Corps after issue)				
	E&S NPDES	Number			
	Wetland Fund	Amount			
9/22/15	SLLA to HBG	Letter to Applicant		Ready to Issue Y/N?	
	537 Approval	Engineer		Ready to Issue Y/N?	
	Clean Water Part II	Engineer		Ready to Issue Y/N?	
	Other Permit?	Type/Reviewer		Ready to Issue Y/N?	

Application/Plans Rec'd:	7/13/15	Permit Issued	
App to PAB		Action to PAB	
App published PAB		Action Published PAB	
Revision/Addtl Plans Rec'd	9/4/15, 9/22/15, 3/25/16, 5/31/16	Time Limit	
Enter Ch 105 Inventory Details		eFACTS Updates	

Include with Permit		Bridge Standards		Other:	
		GP-number		Other:	

12/5/16, 12/31/16, 1/17/17, 1/22/17, 1/24/17, 1/30/17, 2/10/17

CLNT:		SUB-FAC:		App.# E -
SITE:	APS:	FAC:		AUTH:

PA Bulletin Description

E32-508 Name of applicant Sunoco Pipeline, LP
Address: 535 Fritztown Road, Sinking Spring, PA 19608
Twp/Boro: Burrell Township, West Wheatfield Township, East Wheatfield Township
County: Indiana
ACOE: Pittsburgh

Quadrangle: Blairsville, Bolivar, New Florence, Vintondale
N: inches; W: inches; Enter: Lat: 40° 26' 43" ; Long: -79° 18' 00"; Exit: Lat: 40° 25' 46" ; Long: -78° 57' 16" Sub-basin 18D
Chapter 93 Type

Initial Bulletin Notice

To:

to construct, operate and maintain fifty (50) wetland utility line crossings, one hundred four (104) utility line stream crossings and one hundred forty one (141) temporary road crossings, in, across or along watercourses within the Conemaugh River (HQ-CWF, TSF, CWF, WWF), West Branch (CWF), Toms Run (CWF), Blacklick Creek (CWF), East Branch (CWF), Findley Run (HQ-CWF), Hedges Lakes (CWF), and Roaring Run watersheds. The project is located in Burrell, West Wheatfield, and East Wheatfield Townships, in Indiana County, starting at at a crossing of the Conemaugh River, approximately two miles downstream from U.S. 119N (End: USGS Blairsville Quadrangle, Lat: 40/26/43, Long: -79/18/00), and exit the county approximately one mile to the northeast of Findley Run Reservoir (End: USGS Vintondale Quadrangle, Lat: 40/25/46 Long: -78/57/16). This project is a portion of a larger project that will construct two parallel natural gas liquid pipelines, within multiple counties, across the Commonwealth, for the purpose of interconnecting the existing SPLP Mariner East pipelines, over a 306-mile, 50-foot-wide right-of-way (ROW), from Houston, Washington County, Pennsylvania to Sunoco Pipeline, L.P.'s (SPLP) Marcus Hook facility in Delaware County, Pennsylvania. The portion of this project within Indiana County will cumulatively and permanently impact 1.383 acres of PEM, PSS, and PFO wetlands and 4,357 feet of watercourses. In addition, this project will temporarily impact 0.027 acres of PEM wetlands and 169 feet of watercourses.

Final Pa Bulletin Notice

Southwest Region: Waterways & Wetlands Program, 500 Waterfront Drive, Pittsburgh, PA 15222, Rita A. Coleman (412) 442-4149

E32-508, Sunoco Pipeline, L.P., 535 Fritztown Road, Sinking Spring, PA 19608. Pennsylvania Pipeline Project (Mariner East 2), in Burrell Township, West Wheatfield Township, and East Wheatfield Township, Indiana County, ACOE Pittsburgh District. The proposed project starts approximately at a crossing of the Conemaugh River, approximately two miles downstream from U.S. 119N (USGS Blairsville Quadrangle, Lat: 40° 26' 43", Long: -79° 18' 00"), and exit the county approximately one mile to the northeast of Findley Run Reservoir (USGS Vintondale Quadrangle, Lat: 40° 25' 46" Long: -78° 57' 16").

The project consists of the installation and maintenance of approximately 18.8 miles of a 20 inch diameter pipeline and a 16 inch diameter pipeline and appurtenant structures to convey natural gas liquid. The following listed temporary and permanent impacts include both disturbances and direct and indirect impacts to watercourse, wetland, floodplain, and floodway resources, of which direct and indirect impacts will be compensated through site restoration or additional compensation as identified. The proposed project impacts in Indiana County include a total of 221 linear feet of temporary impacts to UNT's to UNT to Conemaugh River (CWF), UNT to Blacklick Creek (CWF), West Branch Richards Run (CWF), UNT's to West Branch Richards Run (CWF), Findley Run (HQ-CWF), UNT to Findley Run (HQ-CWF), UNT to Roaring Run (CWF), a total of 4,393 linear feet of permanent impacts to UNT's to UNT's to Conemaugh River (TSF, CWF, WWF), Conemaugh River (WWF), UNT's to Blacklick Creek (CWF), UNT's to East Branch Richards Run (CWF), West Branch Richards Run (CWF), UNT's to West Branch Richards Run (CWF), Toms Run (CWF), UNT's to Toms Run (CWF), Findley Run (HQ-CWF), UNT's to Findley Run (HQ-CWF), UNT's to Hedges Lakes (CWF), UNT's to Roaring Run (CWF), and 11.56 acre(s) of floodway impacts, 0.269 acre(s) of temporary impacts to PEM and PSS wetland(s) and 1.151 acre(s) of permanent impacts to PEM, PSS, PUB, and PFO wetland(s). No compensation is being proposed by the applicant for the proposed permanent project impacts in Indiana County. The proposed project impacts in this permit application are associated with a proposed transmission pipeline project extending approximately 307 miles in Pennsylvania between Chartiers Township, Washington County, PA and Marcus Hook Borough, Delaware County, PA.

For more detailed information regarding the Indiana County Chapter 105 permit application related to this proposed project, which is available in the DEP regional office, please contact Rita A. Coleman (412) 442-4149 to request a file review.

Area of Open Water Impacted ____0.016_____ (ac.)

Area of Open Water Replaced _____0_____(ac) *Impacts restored on-site.

Stream Name: _UNT's to Conemaugh River (HQ-CWF, TSF, CWF, WWF), Conemaugh River (WWF), UNT's to Blacklick Creek (CWF), UNT's to East Branch Richards Run (CWF), West Branch Richards Run (CWF), UNT's to West Branch Richards Run (CWF), Toms Run (CWF), UNT's to Toms Run (CWF), Findley Run (HQ-CWF), UNT's to Findley Run (HQ-CWF), UNT's to Hedges Lakes (CWF), UNT's to Roaring Run (CWF), _____ Chapter 93 type See Above_ _____Sub-basin___18D____

Length of Channel Replaced: All channel to be restored in place

0.771 acre/ 221 LF Stream Temporary Disturbance

0.042 acre/ 4,393 LF Stream Permanent Disturbance

0.016 acre Permanent Open Water Disturbance

1.151 Permanent Wetland Disturbance

0.269 Temporary Wetland Disturbance

11.563 acre Floodway Permanent Disturbance

5.426 acre Floodway Temporary Disturbance

51 Wetland Crossings
47 Temporary Wetland Crossings

103 Stream Crossings
95 Temporary Stream Crossings

CLNT:		SUB-FAC:		App.# E -
SITE:	APS:	FAC:	AUTH:	

Completeness Review

Provided (Y,N,N/A)	Tech Adequate (Y,N,N/A)	Item Description (If Small Projects application only review items marked with asterisk{*})
Y	Y	a.* GIF and permit properly signed, sealed and witnessed
Y	Y	b.* Application Fee enclosed (see Section G)
Y	Y	c.* Copies and proof of receipt – Act 14 notification- Acts 67/68/127
Y**	Y**	d.* Cultural Resource Notice (Notice, return receipt and PHMC review letter as appropriate)
Y	Y	e.* PASPGP-4 Cumulative Impact Project Screening Form
N/A	N/A	f.* Bog Turtle Habitat Screening: copy of "No Effect" determination from the Army Corps of Engineers **OR** copy of documented clearance from the US Fish and Wildlife Service
Y**	Y**	g.* Pennsylvania Natural Diversity Inventory (PNDI Project Environmental Review Search Receipt including Avoidance Measures and documentation of agency coordination, as appropriate)
		h.* Plans (site plan including cross sections and profiles for Subsections 151, 191, 231, 261)
Y	Y	i.* Location Map
Y	Y	j.* Project Description narrative
		k.* Color photographs with map showing location taken
		l.* Environmental Assessment Form (USE N/A if does not apply)
Y	Y	Part I
Y	Y	*Enclosure A
Y	Y	*Enclosure B
Y	Y	Enclosure C
Y	Y	Part II
Y	Y	Enclosure D
Y	Y	*Part III
N	N	m. Erosion and Sediment Control Plan and approval letter or proof of application
N/A	N/A	n. Hydrologic and Hydraulic analysis
N/A	N/A	o. Stormwater Management Analysis with consistency letter
N/A	N/A	p. Floodplain management Analysis with consistency letter
N/A	N/A	q. Risk Assessment
N/A	N/A	r. Professional engineer's seal and certification
Y	Y	s. Alternative Analysis
Y	Y	t. Mitigation Plan

****Adequate for completeness. Additional info/clearance needed during tech.**

Corps Discussions

Permit being reviewed by Pittsburgh, Baltimore, and Philadelphia Corps Districts.

Completeness

Administrative Deficiency Letter (ADL) sent: 08/06/2015

Response to ADL received: 9/4/2015 and 9/22/2015

Application Complete: 9/23/2015

SPECIAL CONDITIONS

Permittee shall be responsible for compliance with each of the following special conditions. The Pennsylvania Department of Environmental Protection shall be referred to hereinafter as either "DEP" or the "Department."

A. **Water Supplies:**

1. At least 72 hours in advance of beginning any construction activities, the permittee shall notify all identified public and private water supplies along the project's corridor that may be affected by increased turbidity or other water quality changes caused by the permittee's construction activities.
    - If the project results in a pollution event which may impact any public or private water supplies, the permittee shall immediately notify the Department and the potentially affected public or private water supplies of the pollution event.
2. In the event the permittee's work causes adverse impacts to a public or private water supply source, the permittee shall also immediately notify the Department and implement a contingency plan, to the satisfaction of the public and private water supply owners that addresses all adverse impacts imposed on the public and private water supply as a result of the pollution event, including the restoration or replacement of the impacted water supply.
3. At least 72 hours in advance of beginning construction activities, the permittee shall notify all water users with downstream surface water intakes within one mile downstream, including but not limited to, drinking water users, industrial and commercial users that may be impacted by turbidity or water quality changes.
4. The permittee shall notify such downstream water users immediately of any pollution event or incident at its site that may endanger downstream users. The permittee shall

also immediately implement its approved contingency plan to prevent further adverse impacts and remediate all adverse impacts as a result of the pollution event or incident.

5. If a public or private drinking water source not previously identified by the permittee is discovered by the permittee during construction, the permittee shall immediately notify the Department of the identified water source and shall notify that source of the permittee's construction activities.

B. PHMC General Conditions:

1. The permittee and its agents shall visually inspect for archaeological artifacts and shall immediately cease earth disturbance activities upon discovery of archaeological artifacts.
2. If archaeological artifacts are discovered, the permittee shall immediately notify the DEP Regional Office in the DEP region where the artifact is found and shall concurrently notify the Pennsylvania Historical and Museum Commission (PHMC) at P.O. Box 1026, Harrisburg, PA 17120-1026, telephone 717.783.8947.
3. At all times, the permittee shall protect historic, cultural and archaeological sites as identified in the latest published version of the Pennsylvania Inventory of Historical Places and the National Register of Historical Places.

C. Submerged Lands License Agreements:

1. The permittee shall comply with all terms and conditions of the Submerged Lands License Agreement entered into between the Department and the permittee for the Conemaugh River crossing, which is incorporated herein by reference.

D. **Temporary Road Crossings:** All temporary road crossings of streams and wetlands must meet all of the following conditions:

1. The permittee shall restore and stabilize all temporary crossing sites, except fords, within five (5) days after termination of its permitted use.
2. Permittee shall not utilize or construct fords on any stream or watercourse within High Quality (HQ) and Exceptional Value (EV) watersheds as specified in 25 Pa. Code Chapter 93, or in watersheds tributary to drinking water intakes or reservoirs for public water supply users, where the ford is within 2,000 feet upstream of such intake or reservoir.
3. The permittee shall adequately block and stabilize all approaches for fords used as temporary crossings within five (5) days after termination of their permitted use in order to prevent future use.
4. The permittee is prohibited from skidding across fords.
5. Where a streambed at the site of a ford does not have a rock bottom, a layer of clean rock over geo-fabric must be placed and maintained. This layer of clean rock must not obstruct the stream flow. In addition, the ford's approaches must: (1) be maintained in a firm and stable condition; and (2) enter the stream on less than a 10% grade within 50 feet of the stream with the flow; and (3) exit the stream against the flow on the same grade and distance limitation as specified for the entrance. Permittee shall ensure that all roads cross all watercourses at a right angle to the stream, unless permittee obtains specific and separate approval from the Department.

6. Permittee shall ensure that all culverts provide a waterway area sufficient to adequately discharge the normal flow of the watercourse or stream, and that culverts are of sufficient length to extend beyond the toe of the clean rock fill.
7. Permittee shall ensure that culverts are installed in such manner that overtopping of the roadway will occur within the stream channel. This can be accomplished by providing a depressed roadway embankment.
8. Permittee shall minimize excessive fill and excavation of stream banks by utilizing culverts with as large a diameter as possible. The minimum diameter size of a culvert to be used is no less than 12 inches.
9. Road and causeway embankments shall only consist of clean rock material to prevent stream channel sedimentation during placement, removal, and periods of overtopping.
10. Bridges shall be single span from top of bank to top of bank, and must be structurally stable.
11. Approach roads to temporary road crossings shall utilize original grades. However, clean rock material or gravel to a depth of six inches above original grade can be utilized for approaches, as necessary.
12. Causeways shall not extend streamward a distance greater than one-half the width of the stream channel.
13. Temporary road crossings shall be kept open and functioning at all times by maintaining the crossings free of debris and other obstructions.
14. The permittee shall promptly repair any damage resulting from increased backwater caused by a temporary road crossing. The permittee shall remove temporary road crossings in the event of high waters to prevent increased backwater.
15. If permittee cannot avoid a wetland crossing, the crossing is permissible if it is located at the narrowest practicable point of the wetland.
16. All wetlands crossing sites shall be stabilized by any appropriate means, including, but not limited to, using removable, temporary mats, pads or other similar devices to ensure minimization of impact on the wetlands ecology.
17. Temporary embankments for roads across wetlands shall be installed to maintain the hydrology of the wetland.
18. Pollution of any waterway with harmful chemicals, fuels, oils, greases, bituminous material, acid, or other harmful or polluting materials, is prohibited.
19. Access roads should not approach the stream channel directly downslope, but should traverse the slope obliquely to prevent high velocity road drainage flows from directly entering the stream channel. Road drainage shall include proper erosion and sediment control Best Management Practices.
20. The permittee shall remove all or any portion of a temporary road crossing upon written notification to the permittee from the Department in the event the project is causing an adverse impact on public health, safety or the environment or in any other manner violates the requirements of the Pennsylvania Clean Streams Law, 25 Pa. Code Chapter 105, or both.

21. The permittee shall be responsible for determining and documenting which method of crossing is appropriate for each resource. This documentation shall be provided to the Department with the pre- and post-construction photographs. The permittee shall submit this documentation to the respective DEP Regional Office within ninety (90) days after completion of work under the respective permit.

E. Site Field Verification, Restoration and Monitoring:

1. Prior to installation of pipeline crossings, the permittee shall take new pre-construction photographs of the natural resources at each of the crossings. The permittee shall prepare and maintain a record of pre- and post- conditions of each stream and wetland crossing. The permittee shall submit this documentation to the respective DEP Regional Office within ninety (90) days after completion of work under the respective permit.
2. All wetlands within the project area shall be accurately field-delineated prior to the start of construction activities and up to the time that earth disturbance activities are completed and the site has been stabilized. An acceptable means of field-identification of wetlands includes but not limited to, the use of an orange construction safety fence and/or flags.
3. For a period of up to 5 years following construction, the permittee shall monitor for secondary impacts to hydrology, i.e., the loss of hydrology, to all watercourses with a drainage area of less than 100 acres, including those watercourses that originate within the project ROW. Reports shall be submitted to DEP in the spring and fall for the first two (2) calendar years following construction and annually for three (3) years thereafter.
    - The monitoring reports shall contain information describing the presence or absence of hydrology at the time of inspection, a narrative comparison to hydrology present in the watercourse during pre-permitting field investigation(s), and photographs of the watercourse.
    - If the monitoring identifies a diminution or complete loss of hydrology, the permittee shall evaluate whether the activities authorized by this permit caused the loss of hydrology and submit this evaluation to the Department for review.
    - If the Department determines that the activities authorized by this permit are contributing to the loss of hydrology, the permittee shall prepare a written plan to correct the loss of hydrology to the watercourse. The permittee shall implement the approved plan within ninety (90) and submit this plan to DEP for review and approval. If DEP identifies any deficiencies with permittee's plan, then the permittee shall provide DEP a written response to address the stated deficiencies within 15 days of receiving written notice of DEP's deficiencies, unless DEP extends that timeframe in writing.
    - The permittee shall implement the DEP-approved plan within 90 days of receiving written approval from DEP, unless DEP extends that timeframe in writing.
    - In the event that loss of hydrology from activities conducted under this permit cannot be restored, the permittee shall submit a mitigation plan to DEP that sets forth the manner in which full loss of hydrology and associated water will be compensated for. If DEP identifies any deficiencies with the permittee's mitigation plan, then the permittee shall provide DEP a written response to address the stated deficiencies within 15 days of receiving written notice of DEP's deficiencies, unless DEP extends that timeframe in writing. The permittee shall implement the DEP-approved mitigation plan within 90 days of receiving written approval from DEP, unless DEP extends that timeframe in writing.

4. Wetland excavation shall segregate the soil horizons and replace the soil horizons to match pre-construction conditions. For areas where bore pits are proposed in or adjacent to wetlands, or if a restrictive layer, including but not limited to clay or fragipans, is encountered during the trench excavation, the permittee shall have a knowledgeable wetlands scientist on the Environmental Inspection Team that shall oversee backfilling of the trench and installation of trench plugs, in order to maintain wetland hydrology.
5. Topsoil shall be segregated from subsoil in all wetland areas.
6. All disturbed areas are to be restored, stabilized and shall be replanted with indigenous plant species. Excess fill from disturbed areas and construction activities shall be located outside of the floodway, floodplain and wetlands. The permittee is responsible for stabilizing any excess materials spoiled onsite or offsite, whether the permittee owns the site or others own the site.
7. Rock riprap shall be used in the stream bed only where a shear stress analysis has determined that scour protection is necessary to ensure stability of the resource.
8. A trench in which the pipeline will be laid shall be backfilled in a manner that does not create the formation of a permanent ridge in a streambed or wetland.
9. Restored streams shall use a minimum of six (6) inches of native stream bed material. For streams where riprap is necessary to prevent scour, the riprap shall be depressed sufficiently to allow six (6) inches of native stream bed material over the riprap.
10. All PFO and PSS wetlands within the temporary ROW shall be replanted with woody species present in the wetland prior to the permittee conducting construction activities. The plantings need not mirror pre-construction maturity.
11. Forested Riparian Areas in the temporary ROW along watercourses shall be replanted with native tree species for a minimum distance of fifty (50) feet landward from the top of both banks of warm water fisheries and trout stocked fisheries, 100 feet from cold water fisheries, and 150 feet from HQ/EV streams, in a similar density as the trees existed prior to the permittee conducting construction activities. The density of replanted trees shall be similar to the density that existed prior to the permittee conducting construction activities but shall provide no less than 60% uniform canopy cover upon maturation and shall be appropriate to the geographic location. Maintenance and inspections shall ensure survival and growth of plantings and protection from competing plants and animals including noxious weeds and invasive species over a 5-year establishment period to ensure and proper functioning of riparian forest buffers, and shall include measures to repair damage to the buffer from storm events greater than the 2-year/24-hour storm.
12. Each stream channel shall be restored and properly stabilized upon completion of the associated stream crossing. Where riprap is proposed, the riprap shall be depressed and covered with a minimum of 6-inches of streambed material. The restored streambed elevation shall not exceed the pre-existing streambed elevation.
13. The permittee shall avoid wetland impacts, to the extent practicable, and minimize any such impacts. The permittee shall immediately restore all disturbed wetland areas to original contours, and replant with indigenous wetland vegetation in accordance with their restoration plans as presented in their permit application. Streambank and wetland disturbances shall be minimized and stabilized with indigenous vegetation within ten (10) calendar days of final earthmoving to prevent erosion and provide cover, shading, and food

source for aquatic life. Any temporary wetland crossings shall be made by low ground pressure machinery and wetland mats or similar devices. Excess fill shall not be deposited in any wetland, watercourse, floodway, floodplain, or other body of water.

14. For a period of up to five years, the permittee shall monitor the stream and wetland plantings. Monitoring reports shall be submitted to the respective DEP Regional Office in the spring (May15) and fall (November 15) for the first two (2) calendar years following construction and annually (November 15) for four (4) years thereafter.
    - The monitoring reports shall contain information describing the success of the site at the time of each inspection, an inventory of the surviving plant species and percent areal coverage, photographs of the replacement site with plans showing the location and orientation of each of the photographs, and a written plan to correct any deficiencies identified during the monitoring phase.
15. Permittee shall ensure at least an 85 percent survival rate. Additional plantings and or reports in subsequent years beyond the initial five (5) years may be required if an 85 percent survivability of planted species is not achieved.
16. For a period of at least three years, the permittee shall monitor any exceptional value wetlands under 25 Pa. Code §§ 105.17(1)(i) and 105.17(1)(ii) that are disturbed, as authorized pursuant to this permit. Monitoring reports shall be submitted to the respective DEP regional office in the spring (May 15) and fall (November 15) for the first two (2) calendar years following construction and once (November 15) in the third year. The monitoring reports shall contain information describing the wetland restoration and function and values at the time of inspection, photographs of the wetland with plans showing the location and orientation of each photograph, and a written plan to correct any deficiencies identified during the monitoring phase.
17. Streambank disturbance shall be minimized and stabilized with indigenous vegetation within 24 hours upon completion of final earthmoving to prevent erosion and provide cover, shading, and food source for aquatic life.

F. Wetland Compensatory Mitigation and Monitoring:

1. The permittee shall create Palustrine Forested (PFO) wetlands in accordance with their "Permittee-Responsible Compensatory Wetland Mitigation Plan" to compensate for the function and value loss associated with permanently converting 0.405 acres of PFO wetlands to Palustrine Emergent (PEM) wetlands.
2. The proposed compensatory wetland mitigation site in Cumberland County: The permittee shall only plant the 0.58 acres in the seasonally saturated areas identified in the Compensatory Wetland Mitigation Plan and shall not plant in the areas identified as saturated in the present condition in the Compensatory Wetland Mitigation Plan.
3. For at least five (5) years after the restoration activities are completed, the permittee shall monitor the compensatory mitigation sites, wetland restoration sites, streams restoration sites and floodway restoration sites. Within sixty (60) days of completing construction, the permittee shall submit "as-built" drawings for the forested wetland creation project to the DEP. Monitoring reports shall be submitted to the respective DEP Regional Office where the mitigation project(s) is(are) located at a frequency of every six (6) months for the first two (2) years after mitigation site construction and annually for three (3) years thereafter.

- The monitoring reports shall contain information describing the success of the site at the time of inspection, an inventory of the surviving plant species and percent aerial coverage, photographs of each site with plans showing the location and orientation of each of the photographs, and a written plan to correct any deficiencies identified during the monitoring phase.
- If the restoration sites and compensatory forest wetland enhancement sites have not achieved design objectives within the monitoring period, the permittee will undertake remedial work to assure establishment of functional wetland habitats.

4. Restored and enhanced habitats shall be considered successful when they meet the design objectives.
5. Wetland compensation construction shall occur prior to or concurrently with wetland impacts requiring compensation as authorized by this permit.
6. Compensatory wetland mitigation shall be started and completed within one (1) growing season from the commencement of the activities authorized by this permit. Within thirty (30) days of completing the planting plan, the permittee shall submit revised plans to the respective DEP Regional Office if as-built conditions are significantly different from the original approved plans.
7. The permittee shall provide copies of the recorded deed restrictions or conservation easements for the compensatory wetland mitigation sites within 60) days after permit issuance. Time-stamped copies of the instruments shall be sent to the respective DEP Regional Office.

G. Horizontal Directional Drilling:

1. The permittee shall construct and operate the Horizontal Directional Drilling (HDD) crossings at wetlands, streams and floodways in accordance with Tables 2, 3, and 4 of the Joint Permit Application (Section F, Attachments, Environmental Assessment, Attachment 11, Resource Tables) in a manner to prevent a release of drilling fluid to "Regulated waters of this Commonwealth" (RWC). The permittee shall immediately notify the Department at 866-825-0208 in the event of an Inadvertent Return occurring, and immediately activate and implement the Pollution Prevention Control Plans (PPC Plans) including the HDD Inadvertent Return Contingency Plan (IRCP), Water Supply and Karst PPC Plans to prevent any impacts to RWC and other natural resources.
2. The permittee shall take measures to avoid mine voids and utilities.
3. The permittee shall visually monitor the ground surface and within RWC generally along the path of the Horizontal Directional Drilling while drilling operations are occurring. This monitoring shall include walking, wading and use of a boat, as necessary to effectively observe and monitor for any return to the surface during all RWC crossings. If loss of circulation of drilling fluid occurs or drilling fluid pressure is lost, the permittee shall immediately investigate the drilling pathway and general surrounding area for an inadvertent return. If an inadvertent return is discovered, then drilling shall immediately cease.
4. Inadvertent returns that impact or discharge to streams, floodways or wetlands during the Horizontal Directional Drilling operations shall be remediated in compliance with the Inadvertent Return Contingency Plans. If clean-up operations differ from the submitted

plans, prior approval from the respective DEP Regional Office will be necessary for any modifications to the Inadvertent Return Contingency Plan for additional mitigation.

5. HDD additives which are certified for conformance with ANSI/NSF Standard 60 (Drinking Water Treatment Chemicals - Health Effects) are deemed acceptable to DEP, when used in the manner indicated in the certification of the additive. All conditions included as part of the additive's certification should be followed. A current listing of certified drilling fluids is maintained by NSF at http://www.nsf.org/Certified/PwsChemicals/Listings.asp?ProductFunction=Drilling+Fluid&. Use of drilling additives certified for conformance with ANSI/NSF Standard 60 does not relieve operators from the requirement to obtain the necessary permits to conduct HDD operations. Use of certified additives does not relieve the operator of liability should an inadvertent return or other pollution of the waters of the Commonwealth occur as a result of drilling operations.

H. Habitat Conservation Plans and Threatened and Endangered Species Protection:

1. The permittee shall comply with all applicable provisions of the Habitat Conservation Plan submitted and approved by the U.S. Fish and Wildlife Service (USFWS), PA Game Commission (PGC), PA Fish and Boat Commission (PFBC) and PA Department of Conservation and Natural Resources (DCNR) to protect federal and state listed species. Provide a copy of the plan to the Department prior to initiation of any work under this permit.
2. The permittee shall implement the approved Habitat Conservation Plan and in accordance with all PA Game Commission approvals for the Allegheny Woodrat (*Neotoma magister*). This includes no blasting or the use of herbicide on the project or in the vicinity of the project on PA DCNR lands as identified in the PGC clearance. Provide a copy of the plan to the Department prior to initiation of any work under this permit.
3. The permittee shall implement the Migratory Bird Conservation Plan approved by the USFWS. Provide a copy of the plan to the Department prior to initiation of any work under this permit.
4. The permittee shall implement all Avoidance Measures identified by the jurisdictional resource agencies for any threatened or endangered species or species of special concern. (permit specific avoidance measures should be listed).
5. The permittee shall implement the Avoidance Measures identified in Appendix A of the permit for all open trench wetland crossings in bog turtle (*Clemmys muhlenbergii*) counties identified by the USFWS as occupied, potentially occupied or adjacent habitats, unless otherwise specified by the USFWS.
6. The permittee shall comply with all protocols set forth by the USFWS for protection of the Rusty Patch Bumble Bee.
7. Prior to conducting any future maintenance activities on the pipeline or right of way which involves disturbance, the Permittee shall conduct a then current Pennsylvania Natural Diversity Inventory search, shall obtain clearance(s) for any species or resource where a potential impact is identified, provide the avoidance and mitigation plan to the Department prior to initiating such maintenance work and shall implement and adhere to all avoidance measures outlined in such clearance(s).

I. Seasonal Restrictions:

1. The permittee shall not perform any in-stream work in waters listed by the PAFBC as trout stocked streams and their tributaries between March 1 and June 15 without the prior written approval from the Pennsylvania Fish & Boat Commission's Division of Environmental Services, 450 Robinson Lane, Bellefonte, PA 16823-9620; telephone 814.359.5147.
2. The permittee shall not perform any in-stream work in waters listed by the Pennsylvania Fish and Boat Commission as Class A wild trout fishery streams and their tributaries between October 1 and April1 without the prior written approval of the Pennsylvania Fish & Boat Commission's Division of Environmental Services, 450 Robinson Lane, Bellefonte, PA 16823-9620; telephone 814.359.5147.
3. The permittee shall not perform any in-stream work in waters listed by the Pennsylvania Fish and Boat Commission's other wild trout streams or their tributaries between October 1 and December 31 without the prior written approval of the Pennsylvania Fish and Boat Commission's Division of Environmental Services, 450 Robinson Lane, Bellefonte, PA 16823-9620; telephone 814.359.5147. (In addition to those listed in the application this special condition also applies to streams S-CJ2, S-CJ3, S-CJ4. (the specific streams listed are permit specific).
4. Other seasonal restrictions stated in the various Habitat Conservation Plans shall be complied with unless a written variance is issued by the appropriate resource agency.

J. Miscellaneous:

1. Maintenance mowing or herbicide spraying of wetlands is not authorized by this permit. The permittee shall place and maintain signs or other demarcation around the boundary of each wetland to clearly delineate the areas where this maintenance is not authorized. The permittee shall place the signs or other demarcations when all restoration work is completed and prior to permit termination.
2. This permit does not convey any real property rights or interests or authorization to trespass on privately-owned riparian land. By accepting this permit, the permittee certifies that he/she holds title, easement, right or other real interest in the riparian land. Any dispute over ownership of this land is solely a matter for private litigation.
3. The permittee may not commence construction activities on Pennsylvania Game Commission (PGC) lands without prior written approval from PGC.
4. Riprap and stone used throughout the project, including the construction of causeways and coffer dams, shall be free of fines and silts, or other non-erodible material.
5. All temporary water withdrawal intake structures and all appurtenant works shall be removed from the watercourse, body of water, floodway, and floodplains within sixty (60) days of initial placement, unless otherwise extended in writing by the Department.
6. Trench plugs shall be placed at each of the following locations:
    - At ten (10) feet from the top of each bank of a stream
    - At fifty (50) feet from the top of each bank of a stream
    - At ten (10) feet from the edge of a wetland
    - At fifty (50) feet from the edge of a wetland

7. Place a minimum of one (1) trench plug at a maximum spacing of 100 feet between trench plugs within a wetland. Wetland crossings less than fifty (50) feet do not require an internal trench plug.
8. If during excavation, a groundwater seep is encountered, a trench plug shall be placed at ten (10) feet from each side of the seep.
9. Any french drains installed as part of de-watering for construction activities shall be removed or otherwise rendered inoperable prior to final site restoration.
10. Water pumped from any construction area shall be diverted into a sediment trap, basin, or a filter bag discharging into an appropriate vegetated filter area to prevent sediment from being discharged into any waters of the Commonwealth.
11. Open Trench Crossings: The permittee shall construct open trench pipeline crossings in dry conditions by constructing during periods of no water flow and/or by installing stream flow bypass systems (flumed or pumped) through the affected area.
    - Each crossing shall be conducted in an uninterrupted process in the shortest period of time possible. Impacts to RWC shall be avoided, to the extent practicable, and if not practicable, then minimized in accordance with the permittee's approved plans.
    - The permittee may cross dry channels, swales and ephemeral streams without the use of stream flow bypass systems if the channel has no flow and the stream crossing and stabilization can be completed in dry conditions and within twenty-four (24) hours. Standby sandbag dams and pumps shall be located on-site and installed in the event of precipitation resulting in channel flow.
12. The permittee shall cross intermittent and perennial streams through the use of trenchless methods (HDD or Direct Boring [DB]) or through the use of stream flow bypass systems. Bypass systems must stay in use until streambeds and banks are adequately stabilized. Downstream flow must be maintained during the construction.
13. Depth of Pipeline in Stream Bed: The permittee shall locate all pipelines under stream beds such that there will be a minimum of three feet of cover between the top of the pipe or encasement and the lowest point in the stream bed, unless the pipeline is in rock, where a minimum cover of one foot shall be provided.
14. Aids to Navigation Plan: The permittee shall implement the approved Aids to Navigation (ATON) Plan as received under the Fish and Boat Code, 30 Pa C.S. §§5121-5124, and 58 Pa Code Chapter 113.
15. This permit authorizes specific impacts to *RWC* that were specifically described in the permit applications and revisions. Any proposed changes regarding the specific impacts will require a permit modification.
16. Any additional impacts to *RWC*, such as temporary access roads, lay-down areas, staging areas, or temporary work spaces that have not been specifically identified in the permit application are not authorized by this permit.
17. No deviation in the construction methodology or project design that is shown on the approved drawings is authorized under this permit unless approved through an amendment by the Department.

18. This permit does not relieve the permittee of the obligation of complying with all Federal, interstate compact, State laws, regulations and standards, and local ordinances applicable to the construction, operation or maintenance of the water obstruction or encroachment.
19. The permittee shall follow the measures specified in the Preparedness, Prevention, and Contingency Plan during construction.
20. The permittee shall maintain a copy of the Preparedness, Prevention, and Contingency Plan on-site at all times during construction, train all staff to use and implement this plan, and have this plan available to provide at the request of any Department inspector.
21. Permittee shall coordinate project activities with the appropriate DCNR or PA Game Commission representatives when the project crosses lands owned/operated by these agencies.

ENGINEERING & BIOLOGIST RECORD OF DECISION

Technical Deficiency Letter (TDL) sent: 12/7/15

Response to TDL received: 3/25/16

Technical Deficiency Letter (TDL) sent: 9/6/16

Response to TDL received: 12/5/16

Technical Deficiency Letter (TDL) sent: 12/22/16

Response to TDL received: 12/31/16

Technical Deficiency Letter (TDL) sent: 1/27 and 30/17

Response to TDL received: 2/10/17

1.) Project Summary

This project is a portion of a larger project that will construct two (a 20" diameter and a 16" diameter) parallel natural gas liquid pipelines across the Commonwealth, for the purpose of interconnecting the existing SPLP Mariner East pipelines. This activity will entail a 306-mile, 50-foot-wide right-of-way, from Houston, Washington County, Pennsylvania to Sunoco Pipeline, L.P.'s (SPLP) Marcus Hook facility in Delaware County, Pennsylvania. The 18.8 mile portion of this project within Indiana County will cumulatively and permanently impact 1.151 acres of PEM, PSS, and PFO wetlands and 4,393 feet of watercourses.

The project will provide transportation service for up to 700,000 barrels per day of natural gas liquids in each pipeline for both domestic and international markets. The applicant states that "upstream shippers" of NGL's are currently limited by a lack of transporting options. This project aims to provide an efficient means of transporting the product to an existing port facility and to provide various exit points within Pennsylvania to supply local markets.

The project is broken into 2 phases. Phase I will install pipeline from and existing facility in Houston, PA to the existing port in Marcus Hook, PA. If favorable market conditions exist, Phase II will install pipeline from an existing pump station in Delmont, PA to Marcus Hook, PA. Phase II will include 255 miles of pipeline that will be inside the existing Sunoco corridor. Within the SWRO's jurisdiction, the project is proposed to pass through Washington, Allegheny, Westmoreland, Indiana, and Cambria Counties. It should be noted that Phase II is not included in the Allegheny, or Washington County portions of this project.

The project also includes modifications to existing pump/meter stations, addition of block valves, as well as permanent and temporary access roads. These pump/meter stations and block valves will not have an impact on aquatic resources. 47 temporary wetland crossings and 95 temporary stream crossings are proposed.

In Indiana County, the proposed project proposes to cross 87 wetlands (PEM, PFO, and PSS) and 103 streams (perennial, intermittent, and ephemeral).

2.) PHMC

As of 1/26/17, proof of coordination with PHMC has been provided, though this coordination with PHMC has not been completed. Final clearance has not been provided from PHMC for the project. Additional coordination with PHMC will be conducted between the Permittee and PHMC. The permit will be conditioned regarding Historic Properties.

3.) PNDI/T&E Species Coordination

** PNDI search map provided in initial submission deviates from the proposed route shown on plans (see area around Cresson, PA). The applicant has explained and provided documentation in the 3/25/16 TDL response that reroutes have occurred during the project planning, and these reroutes have been closely coordinated with resource agencies. Updated maps including the rerouted areas have been provided.

a. DCNR hits cleared per 1/15/16 letter.
    i. Recommends a number of avoidance/mitigation/monitoring steps with clearance.

These have been incorporated into the project.

ii. DCNR 1/15/16 letter requests further consultation with Bureau of Forests. The applicant has committed to consulting with the Bureau regarding this issue.

b. PFBC hits in SWRO have been addressed.
   i. Hit for Ghost Shiner in Washington/Allegheny counties. Response states, "Provided that directional boring is used for the Monongahela River and Little Conemaugh River crossings, in-stream work is avoided, strict E&S control measures are maintained, and best management practices are employed, we do not foresee any significant adverse impacts from the proposed activity to the fish species of special concern." Both crossings are to be bored.
   ii. Hit for Timber Rattlesnake in Indiana/Cambria County
      1. 9/22/2015 letter from PFBC states, "I concur with the results of this evaluation and the recommendations in the Timber Rattlesnake Conservation Plan; therefore, I do not foresee the proposed project resulting in adverse impacts to the Timber Rattlesnake."

c. PGC – cleared per 6/8/16 letter
   i. Specifies avoidance/conservation measures, which have been incorporated into the project.
      1. Hits for Allegheny Woodrat in Indiana/Cambria
         a. Mitigation measures specified in approved mitigation plan include revegetation, restoration of travel corridors, and replacement rock structures.
      2. Small-footed bats
         a. Mitigation: Construction of 20 roost structures
      3. Special Conditions for Northern Long-Eared Bat and Silver-haired Bats:
         a. All trees or dead snags greater than 5 inches in diameter at breast height that need to be harvested to facilitate the project (including any access roads or off-ROW work spaces) should be cut between November 1 and March 31.
      4. PGC is deferring to USFWS on Indiana bat/Northern long-eared bat.
   ii. Requested applicant coordinate activities in State Game Lands. Applicant has committed to coordination.

d. USFWS - letter dated 10/31/16 specifies avoidance measures, which have been incorporated into the project.
   i. Bog turtle does not apply in SWRO.
   ii. Indiana bat – tree clearing restriction and contribution to Indiana Bat fund.
   iii. Northern long-eared bat – roost tree cutting restriction
   iv. Northeastern bulrush – HDD under wetland system
   v. Migratory Birds – Migratory Bird Conservation Plan developed and submitted to USFWS.

SPLP has identified numerous areas of concern that resulted from PNDI searches and coordination with resource agencies. In response to these concerns and coordination, SPLP has taken numerous measures to avoid/minimize impacts to T&E species and species of special concern. These measures are discussed in detail within the application and have been considered during the review of these applications. Additionally, copies of up to date correspondence with resource agencies has been included in the application. Specific measures recommended or required by resource agencies to avoid/minimize impacts to specific species have been approved by the respective agencies, and

have been incorporated into the project plans. Where requested, mitigation has been developed to address specific species. Based upon the information provided by the applicant, it is not anticipated that the project will have an adverse impact on T&E species or species of special concern.

4.) Avoidance/Minimization/Alternatives

The applicant evaluated several alternative routes for the proposed project, and has also evaluated a "No-Action" alternative.

The applicant has discussed the adverse impact that not following through with the project would have on local and international communities and markets and has provided evidence of the increased demand for natural gas in these markets as justification for the proposed project. A recommendation by the PA Public Utilities Commission (PA PUC) has also been provided that recommends the construction of additional pipelines to help stabilize regional markets and increase Marcellus Shale gas production to consumers as further justification. Currently, providers are attempting to meet market demand by utilizing truck and rail to transport natural gas liquids to the Marcus Hook facility. If the proposed pipeline were not constructed, these transportation methods would continue to be the primary method of transport. The applicant states that pipeline are generally considered to be a safer, more efficient transportation method for many substances when compared to road/rail methods and has provided sufficient detail to support this.

Since this is a long, linear project the project is considered water dependent.

The PA Pipeline Infrastructure Task Force Report (dated February 2016) strongly recommends utilizing existing utility corridors for routing of pipelines and employing construction measures that avoid and minimize impacts to aquatic resources. In accordance with this recommendation, the initial routing of the pipeline was sited along the existing Mariner East 1 corridor. Where the ME1 route could not be followed, the applicant attempted to use existing right-of-way corridors to the best extent practicable. Approximately 230 miles of the 306-mile pipeline are co-located along the existing Mariner East pipeline system. In Indiana County, less than 4 miles of the proposed pipeline are within "new" right-of-way. The remainder of the length has been co-located with existing right-of-ways.

Major and minor variations to the initially proposed, co-located routing along the existing ME1 pipeline were incorporated for a number of reasons including, but not limited to, the presence of facilities and easements owned by other companies, the presence of sensitive historical/environmental resources, and existing land uses (residential, commercial, etc.). Four "major variations" were incorporated into the overall project plans. One of these is located in Indiana County, where a major reroute was incorporated around the area of Blairsville. This route was chosen to avoid densely populated and commercial areas in Blairsville. This route alternative allows the project to avoid densely populated and commercial areas. No EV resources are located along the area of major variation in Indiana County.

Minor routing variations were also evaluated and incorporated into project plans. These variations place a priority on maintaining co-location with existing right-of-way corridors, but also evaluate minor routes that could reduce impacts. The evaluation includes reasoning such as; the impacts that a reroute would have on other portions of the line, site topography, the extent of wetland areas, the presence of other utility corridors, the presence of residential areas, and several other site

characteristics that preclude the ability to avoid the specific resource impacts. Several changes were incorporated to further avoid and reduce impacts.

Once routing was chosen, a right-of-way plan was set to minimize disturbance and impacts. The applicant states that typically, pipelines of this size would require a 75-foot ROW along their alignment. They have minimized impacts in the area of aquatic resources by locating both proposed pipelines together and reducing the permanent ROW width to 50 feet at the resource crossings. The reduction is proposed to occur 10 feet before, and 10 feet after the crossings of aquatic resources.

In some cases, additional temporary work space will be needed to facilitate construction of resource crossings. These areas have been located outside of stream channels and to the maximum extent possible from floodway areas. The applicant states that these areas will be allowed to revert or be restored to pre-construction conditions.

To further minimize impacts the applicant conducted an assessment of utilizing "trenchless" installation methods (such as horizontal directional drilling) at numerous crossings to reduce surface disturbance and incorporated these measures where practicable to avoid impacts such as conversion of wetland cover types. This further minimized impacts in several areas where trenchless methods were determined to be feasible.

The applicant has acknowledged that while horizontal directional drilling reduces surface impacts, HDD installations come with a risk of impacts to surface waters and groundwater in the form of inadvertent returns (IR's). In addition to incorporating erosion and sediment control measures to avoid and minimize construction impacts of conventional and trenchless installation techniques, the applicant has developed a three-part Inadvertent Return Contingency Plan that presents measures to evaluate and reduce the risk associated with HDD methods. This plan establishes a procedure for inspecting, reporting, containing, and taking corrective action in the event that impacts from an IR were to occur.

The applicant has included measures to prevent and minimize long-term impacts to prime farmland soils and actively farmed areas, and does not anticipate the project having long- term impacts on soils in these areas. SPLP addressed possible impacts to farmland and has specified practices that will be applied to farmland restoration including topsoil segregation, conservation of topsoil, and soil decompaction as needed.

5.) Parks, Refuges, Landmarks (105.14(b)(4)

The Project crosses three parks and recreation areas including the Conemaugh River Recreational Area, Pine Ridge County Park, and Gallitzin State Forest. The Project is co-located with existing ROW where it crosses these areas. There will be no long-term impact to the purpose and functions of the areas as the area will continue to provide recreational use and there will be no change in the existing land use.

The Project crosses State Game Lands No. 276 in Indiana County for approximately 0.77 mile. SPLP is coordinating with the Pennsylvania Game Commission (PGC) to obtain a license agreement to cross these lands. The Project is co-located with existing ROW through this area. There will be a minor expansion of existing ROW habitat, but no new edge habitat will be created. By collocating with existing ROW the Project will minimize permanent habitat alterations to the maximum extent practicable. There will be no long-term impact to the State Game Lands as the area will continue to

provide recreational use and there will be no change in its existing land use.

For all parks and recreation areas crossed by the Project, SPLP has committed to working with the appropriate land administering agency to obtain the required land easements, licenses, and approvals on those lands.

No designated Natural, Wild, or Wilderness Areas, designated natural landmarks, national wildlife refuges are known to be crossed by the proposed Project in Indiana County.

The applicant is coordinating with the PA Historic and Museum Commission regarding historical, cultural, and archaeological resources. The permit will be conditioned regarding watching for historic properties during construction.

6.) Stream Restoration

The majority of the stream crossings proposed by the project will be completed by backfilling over the pipeline with the natural streambed material to restore the stream to the pre-construction condition. In several cases, the applicant has determined that the stream velocities through the crossing area require rip-rap placement. In the areas where rip-rap is to be placed, the applicant has committed to stockpiling and incorporating natural streambed material into the rip-rap to provide additional function and restore the stream as close as possible to the pre-construction condition. Given the limited right-of-way width at stream crossings (50'), it is not anticipated that installation of the proposed stream crossings will cause an adverse impact on the watercourses that are proposed to be crossed.

7.) Wetland Antidegradation Evaluation

§105.18a(4) and (5), and 105.18b(4) and (5): Approved E&S controls, BMP's and PCSM measures will be implemented to ensure water quality standards are not violated, and groundwater or surface water pollution does not occur as a result of construction activities. PPC plans have been developed to address and correct any accidental pollution incidents that could occur.

The majority of wetlands will be restored to pre-construction function and value. The portions of PFO wetlands that are converted to PEM cover type will retain principal functions (such as sediment/toxicant retention, nutrient removal) that contribute to water quality. No net loss of wetlands is proposed to result from the project. Mitigation has also been provided as compensation for loss of PFO cover type that is proposed to result from right-of-way creation and maintenance. This conversion has been avoided and minimized where feasible, and overall has been reduced to under one half acre for the entire state-wide project.

Regarding diminution of wetland resources, in accordance with §105.18b(1)...

(i) The areal extent of the wetland impacts:
The nature and size of the proposed impacts would not significantly or adversely affect the functions and values of the exceptional value and other wetlands described in the permit application. Impacts to wetlands have been reduced the maximum extent practicable through narrowing of the right-of-of way to 50 feet through aquatic resources, analysis of multiple alternatives, use of special restoration measures to maintain hydrology, and utilization of trenchless installation techniques where feasible. Colocation with existing right-of-ways in accordance with PITF guidance limits the amount of new wetland and upland disturbance associated with this project. No net loss of wetlands is proposed by the project.

Overall, the amount of wetland impacts represents a small fraction of the overall wetlands within the study area. It is worth noting that in many cases, wetland areas extend beyond the study area as part of a larger wetland complex. These areas are not to be impacted by the proposed project.

(ii) The wetland's values and functions:
No net loss of wetlands is proposed by the project. The nature and size of the cover type conversions in each wetland would not significantly or adversely affect the functions and values of these wetlands. There will be no loss of wetland acreage due to fill or new impervious areas in the wetland, and the areas will be restored to wetlands and permanently revegetated and stabilized. Accordingly, the functions of groundwater recharge/discharge and floodflow alteration should remain equally effective as the existing pre-construction wetland condition

A small change in cover type (particularly in larger wetland systems and those where impacts are co-located with existing rights-of-way) will have neutral or no effects on certain functions/values, such as wildlife habitat (changing one type of habitat [forested] to another [emergent/meadow], large areal extent, landscape support, and production export.

(iii) Whether the affected wetlands values and functions are unique to the area or region:
No areas of unique function and value have been specifically identified. Across the length of the project in the southwest region, 3 wetlands in Cambria County are identified as providing habitat for a Rare, Threatened, or Endangered plant species. These areas were reviewed by DCNR as part of the PNDI process, and "no impact" determinations were made by the agency. The activities proposed in these areas are not anticipated to have an impact on the ability of the wetland to support the RTE plant species, and thus will not have an impact on the "uniqueness" of these resources.

(iv) Comments from other State and Federal environmental agencies:
Aside from the 3 RTE plant wetlands discussed above, no comments from other State and Federal environmental agencies regarding specific wetland resources in Allegheny, Washington, Indiana, Westmoreland, or Cambria County have been received. PNDI clearances have been obtained from DCNR, PA Game Commission, US Fish and Wildlife Service, and PA Fish and Boat.

8.) Cumulative Impact Analysis

I have reviewed the Joint Permit Applications in detail for the 5 counties (Washington, Allegheny, Westmoreland, Indiana, and Cambria) located within the Southwest Region, and have performed an overall review of the cumulative impacts of this project, and several other projects proposed along the length of the project.

On December 5, 2016, SPLP submitted a Comprehensive Environmental Assessment (CPA) for Ch. 105 Water Obstruction and Encroachment Permit Activities. The purpose of the CPA is to ensure that the regulatory requirements related to the Environmental Assessment in Ch. 105 are met by permit applicants proposing project impacts to waters of the Commonwealth. Specifically, the following items were to be addressed:

1. Measures taken to avoid and minimize the overall project's impact on waters of the

Commonwealth, to the maximum extent practicable. The submittal addresses this item and references application materials that apply to each requirement pursuant to 105.18a and associated referenced regulations including 105.13(e)(1)(vii-x), (2),(3), (g) and (j); and 105.15

2. Specific measures taken to mitigate for impacts that could not be avoided or minimized. The submittal addresses this item and references application materials that apply to each requirer pursuant to 105.18a and associated referenced regulations including 105.14.
3. Overall consistency with Antidegradation. The submittal addresses consistency with State Antidegradation requirements contained in Chapters 93, 95, 102 and 105.
4. Address alternatives analysis, impacts analysis and mitigation measures in each County-spe application. This item is addressed within the corresponding section of the Record of Decisio each county specific Ch. 105 Joint Permit Application.
5. Assess the cumulative impact of the project and other existing and potential projects on each wetland resource. The applicant must utilize due diligence when identifying these impacts. This item is addressed within the corresponding section of the Record of Decision for each county specific Ch. 105 Joint Permit Application.

The applicant has consistently demonstrated avoidance and minimization measures across the entire length of the project. Where impacts cannot be avoided, they have been minimized by a number of methods discussed in this ROD. The vast majority of wetlands will be restored to pre-construction condition, and will not be impacted in the future during maintenance of the right-of-way. As such, the functions and values of these wetlands that are to be restored to existing condition are expected to remain the same.

Regarding situations where wetlands will not be restored to the pre-construction condition; Limited instances of cover type conversion (PFO to PEM) are proposed to occur due to a need to keep the permanent right-of-way clear of trees for operation and maintenance of the line. It is worth noting that the applicant will maintain scrub shrub vegetation where PSS wetlands currently exist. In cases where conversion is proposed, some minor impacts to the functions and values of the wetland may occur. Due to the limited nature of the cover type conversion (only within the permanent right-of-way) and the fact that these areas will remain as a functioning PEM wetland, a significant adverse impact to the converted wetlands is not expected.

In the Southwest Region, several wetlands were classified as Exceptional Value due to their location in the floodplain of a wild trout stream, or due to their providing habitat to T&E plant species. The applicant has coordinated with DCNR regarding the T&E plants, and has received a "no impact" statement from the agency. Considering the proposed activities, restoration measures, the cause for this classification, and also the "no impact" agency determinations, it is not anticipated that this project will have an impact on these resources that would cause them to no longer be classified as Exceptional Value.

Stream crossings are proposed to be restored to existing condition, with the exception of the creation of the proposed right-of-way, which will convert forested areas within the right-of-way to a meadow condition for safe operation and maintenance of the pipeline. The right-of-way has been reduced to 50 feet in width at these crossings. The permanent right-of-way width in these areas represents a very small length of the overall drainage, and is not expected to have an adverse impact on the watercourses to be crossed. In the majority of cases, native stream substrate is proposed to be

restored into the channel following installation of the pipelines. Where this substrate cannot be restored, suitably sized rip-rap is proposed to have native material "choked" into it to restore the channel to as close to the pre-construction condition as possible. Instances where rip-rap is required are limited. Given the restoration measures proposed and limited overall right-of-way width, it is not expected that the proposed activity will have an adverse impact on the watercourses that are proposed to be crossed.

9.) Wetland Restoration/Cover Conversion

The majority of the wetland impacts proposed by the project will be allowed and encouraged to revert to their pre-construction cover type. PEM wetlands will be seeded, and PSS wetlands will be planted with 2-3' "whip sized" native wetland shrubs. Where possible, PFO wetlands within the workspace will be replanted. These plantings aim to restore functions and values of impacted wetlands at an accelerated rate by providing a "jump-start" to the restoration process and reducing the overall time that functions and values of resources are impacted. Temporary impact areas in PFO wetlands will be planted with 1" diameter DBH containerized trees, and tree stumps will be left in place to encourage sprouting and restoration of the PFO systems in the area.

No PFO wetlands are proposed to be converted in Indiana County.

PFO wetlands that are converted to PEM for ROW maintenance purposes will be cleared during construction, restored as PEM following construction, and will remain as a PEM cover type. "No Mowing" signs will be installed in wetland areas that are restored so that they may provide functions and values consistent with their pre-construction condition, and SPLP has committed that maintenance crews will be trained regarding the operation and maintenance of these areas. The applicant will monitor these areas in accordance with permit conditions to ensure that restoration is successful.

The nature and size of the cover type conversions in each wetland would not significantly or adversely affect the functions and values of these wetlands. Installation of the proposed pipelines will not result in a loss of wetland acreage due to fill or new impervious areas in the wetland. All wetland areas impacted by construction will be restored to wetlands and permanently revegetated and stabilized. Accordingly, the functions of groundwater recharge and discharge and floodflow alteration should remain equally effective as the existing pre-construction wetland condition. The proposed changes in cover type are minor in size (particularly in larger wetland systems, and in relation to the overall project), and will have no adverse effects on the overall functions and values of the resources.

Overall, the amount of PFO conversion represents a small fraction of the overall wetland present at the impact site. The total acreage of PFO conversion represents a minor percentage of the wetlands that have a permanent conversion. Where the total size of those same wetlands outside the survey area is typically much greater, this percent would be even further reduced. In summary, the very small amount of permanent conversion of vegetation cover type in these wetlands would not represent any meaningful change or reduction of the overall functions and values of the wetland.

10.) Mitigation for Cover Conversion

It should be noted that no cover type conversion is proposed in Indiana County.

Where cover type conversion is proposed, the applicant has provided a mitigation plan to offset the

conversion. In total, the applicant used a 1:1 ratio to determine that 0.405 acres of wetlands would need to be enhanced to a PFO cover type as compensation for the 0.405 acres of cover type conversion proposed by the entire project in 17 counties

Department guidance suggests that compensatory mitigation be conducted as close to the site of impact as possible. Given the nature of the conversion impacts (0.405 acres of conversion over the entire project), and minimal success and function associated with very small (<0.10 acre) mitigation sites, SPLP proposed providing compensatory mitigation at two larger sites across the length of the project. Both the DEP and USACE were agreeable to this approach and agreed that smaller sites spread across multiple watersheds (where impacts are proposed) would likely be less successful and provide less function and value as compensation.

As such, SPLP has proposed to enhance wetlands at 2 separate locations. The preferred mitigation sites are located in 2 of the 5 sub-basin areas where conversion is proposed. Sub-basins 18 and 11 are the two sub-basins within the SWRO region where PFO conversion is proposed. 0.085 (Sub-basin 18) and 0.087 (Sub-basin 11) acres of PFO to PEM conversion are proposed in the permit applications received by SWRO (Cambria and Westmoreland Counties). The remaining balance of proposed conversion is located in other DEP regions. 1.05 acre and 1.08 acre of wetland enhancement is proposed at Mitigation Site 05 and Mitigation Site 11 respectively. Mitigation Site 5 is located in sub-basin 18 which is in the Ohio River basin, and provides satisfactory compensation for the impacts proposed in that sub-basin. Mitigation Site 11 is located in Sub-basin 7, which is in the Susquehanna river basin, and provides satisfactory mitigation for the 0.087 acres of impacts located in the SWRO portion of Sub-basin 11, which is also in the Susquehanna basin. Overall, mitigation for the entire project is proposed 2.130 ac of mitigation for 0.405 acre of conversion, which greatly exceeds the 1:1 ratio that is typically required by the Department.

PNDI searches for the project included these mitigation areas as part of a 1,500 buffer around the project. Because these areas are included in close proximity to the project, they were included in the PNDI searches. Planting of trees to create a PFO cover type will not result in significant earth disturbance, or placement of fill. As such, PHMC coordination is not necessary for the proposed mitigation.

Overall, functions and values of the selected areas mimic or exceed those that are proposed to be impacted by the project. The proposed mitigation is satisfactory compensation for the proposed cover type conversions.

ENGINEERING SUMMARY

(update eFACTS and Chapter 105 Inventory Details)

Stormwater/Act 167:

The applicant either provided Act 167 consistency letters or provided information to show that their PCSM Plan Meets design criteria of 25 Pa. Code Chapter 102.8(g)(2) and (3).

Hydrologic & Hydraulic:

None of the proposed structures impact or create an obstruction to floodwaters. The activities proposed will not increase the design flood elevation(s)

B. Project Impacts

All Permits		Yes	No	
1.	Wetlands	☒	☐	
	a. Vegetation (NWI Designation __numerous_____)	☒	☐	
	b. Soils (SCS Designation ___ numerous _____)	☒	☐	(Temporary impact. Soils to be restored.)
	c. Hydrology . (numerous)	☐	☒	
2.	Exceptional Value Wetlands	☒	☐	
3.	Stocked Trout Stream	☒	☐	(See PFBC memos)
4.	Wild Trout Stream	☒	☐	(See PFBC memos)
5.	Chapter 93 Designation __Multiple – see PA Bulletin Description_____			
	a. Exceptional Value Watershed	☐	☒	
	b. High Quality Watershed	☒	☐	
	c. Cold Water Fisher	☒	☐	
6.	Threatened or Endangered Species	☐	☒	(See PNDI above)
7.	Other Species of Special Concern	☐	☒	(See PNDI above)
8.	Scenic river corridor (Status __n/a__)	☐	☒	
9.	Public Water Supply	☐	☒	(See PPC/WSA plan in application)

Joint Permit Only		Yes	No	
10.	Potential Threats to Life or Property the Commonwealth)	☐	☒	(There are no proposed obstructions to Waters of
11.	Potential Threats to Safe Navigation	☐	☒	
12.	Riparian Rights Above, Below or Adjacent to Project	☐	☒	
13.	Regimen and Ecology of	☐	☒	
	a. Watercourse	☐	☒	
	b. Body of Water	☐	☒	
14.	National/State Natural Areas, Wildlife Sanctuary/Refuge	☐	☒	(See #5 above)
15.	National/State/Local Park or Recreational Area	☒	☐	(See #5 above)
16.	National/State/Local Cultural, Archaeological, or Historical Site	☐	☒	(PHMC coordination)
17.	Non-compliance with Applicable Laws	☐	☒	
18.	Non-water Dependent Project	☐	☒	(Water dependency demonstrated in Alt. Analysis)
19.	Future Development Potential	☐	☒	
20.	State Water Plan Program Area	☐	☒	
21.	Secondary Impacts	☐	☒	
22.	Cumulative Impacts	☐	☒	(See Cumulative Impact Analysis above)

CLNT:	SUB-FAC:	App.# E -
SITE:	APS:	FAC:	AUTH:

All Permits		Yes	No
23.	Adverse Environmental Impact to streams or waterbodies other than wetlands (If yes - environmental, Social and Economic Balancing - 105.16)	☐	☒

C. Record of decision for project impacting wetlands and watercourses. Adverse findings need to be documented in environmental record of decision.

All Wetlands

		Yes	No
1.	Have adverse impacts been avoided or reduced to maximum extent possible 105.18(a)(b)(2)..... Explain: See #4 "Avoidance/Minimization/Alternatives Analysis" above.	☒	☐
2.	Is project least environmentally damaging alternative 105.18a)b)(3)..... Explain: See #3, 4, 5, 7, 8, 9 and 10 above	☒	☐
3.	Will project violate State water quality standard 105.18(b)(4)..... Explain: See #7 above	☐	☒
4.	Will project contribute to the pollution of groundwater or surface water 105.18a(b)(5)..... Explain: See #7 above	☐	☒
5.	Have wetland replacement plans been approved? Affected wetlands will be replaced 105.18a(b)(7) and 105.20a..... Explain: See #9 and 10 above.	☒	☐

Other Wetlands

		Yes	No
6.	Will the cumulative effect of project result in major impairment to wetland resources 105.18a(b)(6)..... Explain: See #7 and 8 above	☐	☒
7.	Will the project have a significant adverse impact on the wetland 105.18a(b)(1)..... Explain: See #7, 8, 9 and 10 above	☐	☒
	If Yes, has applicant affirmatively demonstrated that project is necessary to abate a substantial threat to the public health and safety and that the other requirements of 105.18a(b)(2) through 105.18a(b)(7) have been met?	☐	☐

Exceptional Value Wetlands

Exceptional Value Wetlands - (check the criteria that makes the wetland EV):

☐ natural or wild areas ☐ wild or scenic river ☒ wild trout stream
☐ public or private water supply ☐ EV waters ☐ threatened or endangered species habitat
☐ threatened or endangered species (results of PNDI search)

a. Describe the primary function(s) or value(s) of the wetland: Refer to Enclosure C of the Environmental Assessment provided in the application.

		Yes	No
8.	Will the cumulative effect of this and other projects result in major impairment to exceptional value wetland resources 105.18a(a)(6)..... Explain: See #7, 8, 9, and 10 above	☐	☒

9. Will the project have an adverse impact on the wetland 105.18.a(a)(1)..... ☐ ☒
Explain: See #7, 8, 9, & 10 above

If Yes, has applicant affirmatively demonstrated that project is necessary to abate a substantial threat to the public health and safety 105.18a(c) and that the other requirements of 105.18a(b)(2) through 105.18a(b)(7) have been met?
..... ☐ ☐

10. Is project water-dependent 105.18(a)(2)..... ☒ ☐
Explain: See #4 above

Watercourses (check all that apply)

☒ TSF ☒ HQ ☒ CWF ☒ Wild Trout ☐ EV ☒ WWF

11. Name of watercourse See PA Bulletin description above. Also refer to Waterbody Impact Summary Tables in the Environmental Assessment portion of the application.

12. Will the project have an impact on the following values of the environment?

	YES	NO
Natural	☐	☒
Scenic	☐	☒
Historic	☐	☒
Aesthetic	☐	☒

13. Have impacts been avoided and minimized? ☒ ☐

Explain: See #4 "Alternatives Analysis" above

14. Is project the least environmentally damaging alternative?

List alternatives considered and provide rationale that the least damaging alternative has been selected.
See #4 "Alternatives Analysis" above

15. Has the applicant demonstrated that the public benefits of the proposed project outweigh the harm to the environment? ☒ ☐
Public benefits include:

1. Correction and prevention of pollution.
2. Protection of public health and safety.
3. Reduction of flood damages.
4. Development of energy resources.
5. Creation or preservation of significant employment.
6. Provision of public utility services.
7. Other essential social and economic development which benefits a substantial portion of the public.

Explain: Health and Safety, creation or preservation of significant employment, provision of public utility services, development of energy resources have been identified as public benefits. See #1 above. Refer to "Project Description" portion of application.

		YES	NO
16.	Is the project located in or within 100 feet of a watercourse or body of water that has been designated as a National or State wild or scenic river?	☐	☒
17.	Is the project located in or within 100 feet of a Federal wilderness area?	☐	☒
18.	Is the project located within an area which serves as a habitat of a threatened or endangered species? Indiana County portion)	☐	☒ (None in
19.	Is the project located in waters classified as exceptional value in Chapter 93?	☐	☒
20.	If yes to any 16-19, has the applicant demonstrated that the project will not have an adverse impact upon the public natural resource?	☒	☐

Other portions of project checked "yes" under this. See #3, 4, and 5 above for overall discussion.

D. SOURCES UTILIZED FOR REVIEW

YES	NO	
X		Quad Sheet (multiple)
X		National Wetlands Inventory Map (NWI Maps Online)
X		Special Protection Watershed Map (Ch. 93 PA Code)
X		Scenic Rivers Candidates Map (Ch. 105 JPA)
X		Soil Conservation Service Soils Survey (NRCS Soil Maps Online)
X		PNDI (Large Project Search)
X		State Water Plan (multiple)
X		Other Agencies Review (See E)
		Yes/No Pa Fish Commission
	X	Environmental Review Committee (See F)
		Other _____
		Update eFACTS and Chapter 105Inventory Details
X		Applicant's Environmental Assessment
		Jurisdictional Determination from ACOE*

E. Other Agencies Review & Comments:

Refer to the following memos and letters from PFBC:

- 10/16/2015 Memo listing instream restrictions
- 7/29/16 letter from PFBC to applicant regarding seasonal restriction waivers
- 10/21/16 e-mail from Gary Smith regarding updates to wild trout list.

DCNR – Refer to 1/15/16 letter for clearance.

PGC- Refer to 6/8/16 letter for clearance.

USFWS- Refer to 10/31/16 letter for clearance.

PFBC- Refer to 9/22/15 and 10/26/15 letters for clearance.

F. Environmental Review Committee Comments:

None known.

G. Public Comments:

The Public Comments received by the DEP were considered in the review of the application.