ENVIRONMENTAL REVIEW FOR CHAPTER 105 APPLICATIONS

Pe	mittee: Sunoco Pipeline, LP App. No.: E38-194
Er	ironmental Recommendation:
	Approval* Denial Withdrawal Concur Not Concur Concur
	Special Conditions: see a Hached
I.	Record of Decision
	Has any portion of the regulated work already occurred? () Yes X No
	Initial Proposed Acreage to be Impacted see application (ac.)
	Final Wetland Area Impacted: 1.158 (ac.); Permanent 1.138 (ac.); Temporary 0.02 (ac.)
	Wetland Area Replaced no permanent wetland loss (ac.)
	Length of Channel Impacted 2,196 (feet) permanent; 27 (feet) temporary
	Length of Channel Replaced N/A (feet)
	Area of Open Water Impacted 00 (as) Area of Open Water Penlaged: N/A (as)

A. <u>Review of Application</u> - Notes (Identify plan used to determine regulated structures and activities, and list each regulated activity. Be sure to identify any waiver or general permit, if applicable.)

The applicant seeks a Water Obstruction and Encroachment permit to conduct activities described in the attached impact tables. Note that permanent stream channel impacts in the tables differ from the impact numbers listed above and in the permit description because the tables only provide square footage of HDD stream impacts and the numbers listed above and in the permit description have included linear footage of impacts.

The project requires a Water Obstruction and Encroachment Permit under 25 Pa. Code Chapter 105. The project was not eligible to use General Permit-5 because exceptional value resources are being crossed. SPLP initially submitted an application on August 17, 2015. In June, 2016, based on the amount of information submitted and the nature of the responses to date, the review moved into the technical stage rather than focusing on the administrative completeness review. Additional revisions and other technical information were submitted to DEP and shared in meetings over the course of the next 6 months.

On December 5, 2016, SPLP submitted a Comprehensive Environmental Assessment for Ch. 105 Water Obstruction and Encroachment Permit Activities. Each region had a representative review this assessment. I was the representative for the Southcentral region. The following discussion was provided by the lead region, southeast, as it relates to the Comprehensive Environmental Evaluation. The purpose of the Comprehensive Environmental Evaluation 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 requirement 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-specific application. This item is addressed within the corresponding section of the Record of Decision for 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.

Crossings:

The streams and wetlands within Lebanon County that will be crossed are summarized in the attached table. The crossings will be made by horizontal directional drilling (HDD), Direct Bore (DB) or dry open cut methods. While the HDD method has potential risks of failures and/or pollution incidents, the DEP views HDD as a protective crossing method for stream and wetland resources, in appropriate circumstances. Implementation of can reduce risk to groundwater and surface waters. Special conditions will be added to the permit as safeguards to HDD operations and potential inadvertent returns. DB are likely to result in little to no impact to the stream or wetland provided these areas are properly. Special condition will also be added to the permit for direct bore pit restoration. The remaining crossings will be made by open-cut method in a dry channel and/or utilizing a flume or pump-bypass system so that the work will be conducted in dry conditions per the provided plans and E&S BMP manual. If conducted

E38-194 - 2 -

correctly, the dry open-trench method is protective of water resources; any impacts to water quality and/or aquatic life should be temporary. The applicant has proposed, and special conditions will be added, that following construction, the stream beds, banks, swales and riparian zones will be restored to their original contours, stabilized and planted with suitable indigenous species. Forested riparian areas in the Temporary ROW will be planted in accordance with the special condition.

Alternatives:

The alternatives analysis included avoidance and minimization measures to reduce the level of impacts, and compensatory mitigation measures are required where impacts cannot be avoided. These measures included crossing wetlands and streams by trenchless methods (HDD and Direct Boring) where feasible (see the Trenchless Feasibility Assessment). The applicant's analysis discusses overall efforts to avoid and minimize impacts to Regulated Waters of the Commonwealth including 4 major route alternatives, 12 minor realignments, and an evaluation of type of crossing method. According to SPLP, co-location is main effort put forth to avoid and minimize impacts to Regulated Waters of the Commonwealth. The analysis also showed preferred localized or smaller segment route alternatives. This information was sufficient for the project-wide Alternatives Analysis overall, yet there were outstanding questions on localized alternatives that could further avoid and minimize impacts to Regulated waters of the Commonwealth. Additional information was provided on February 7, 2017 in the Response to DEP 01-27-17 Comments No 4 and 5. When raised to program management, direction was provided that for a project of this scale, looking at the broader scope of the project and the process SPLP moved through to avoid and minimize impacts rather than focusing on localized alternative routes is sufficient for the review.

Antidegradation:

The applicant provided an Antidegradation Analysis. As an antidegradation measure, SPLP proposes to institute Antidegradation Best Available Combination of Technologies (ABACT) measures or BMPs for regulated activities under Chapter 105, including to EV wetlands, through implementing their Erosion and Sediment Control Plan (ESCP), HDD Inadvertent Return Contingency Plan (IRCP), Prevention and Control Plans (PPC), Water Supply and Karst PPC Plans. SPLP must restore impacted watercourses and wetlands to original contours and not alter the wetland's functions and values. Additionally, SPLP must implement Compensatory Wetlands Mitigation. Special conditions are attached to the permit to ensure these plans are followed.

E38-194 - 3 -

Public Water Supplies:

The applicant identified public water supplies that could be impacted by the construction of this project. The initial search was not conducted properly. SPLP conducted the search again and identified additional water supply areas. Materials downloaded on February 7, 2017, indicated that no new EV wetlands were identified due to additional water supply areas identified. Their conclusions were not verified, but were accepted.

Any potential impacts to public water supplies will be the responsibility of the SPLP through a special condition of the permit. According to the application, SPLP has assessed and minimized the risk of an IR occurrence at HDD sites. Potential impacts to water supplies from this project will be mitigated by the implementation of the PPC plan. Special conditions added to the permit for added protection. Much of the issues with water supplies were looked in to by the Dam Safety, Waterways and Wetlands Section Chief.

PNDI/Threatened & Endangered Species:

The applicant coordinated with each resource agency to check for the presence of threatened or endangered species. Numerous potential impacts were identified. The applicant coordinated locations and habitat conservation plans with each resource agency to obtain a final clearance letter for T&E species. The permit will be special conditioned that all habitat conservation plans and conditions associated with agency clearance letters be followed.

PA Historical & Museum Commission:

SPLP does not have final approval from PA Historical & Museum Commission (PHMC). Bureau and legal analysis revealed that PHMC approval is not required to approve the project. Three (3) special conditions are attached to the permit to be protective archeological artifacts and sites identified in the latest published version of the Pennsylvania Inventory of Historical Places or the National Register of Historical Places.

PA Fish & Boat Commission:

The PA Fish & Boat Commission's Division of Environmental Services has recommended that the project be approved. On October 13, 2015 their office provided comments found on the attached sheet. DEP agrees with the comments and time of year restrictions. Special condition will be added to the permit for time of year restriction unless a waiver is received from Fish and Boat Commission.

Aids-to-Navigation:

The applicant has provided an Aids-To-Navigation (ATON) plan for impacts to streams that are potentially navigable, as deemed by the PA Fish and Boat Commission. A special

E38-194 - 4 -

condition will be included to require approval of the ATON from the PA Fish and Boat Commission.

Parks/Natural Areas:

In Lebanon County, the line will cross under the local hiking trails, parks, and National Heritage Areas (NHA). These areas are identified and accounted for in the Environmental Assessment, enclosures C &D. Impacts are temporary to hiking trails and the trails will be restored. Parks and NHAs are proposed to be collocated with existing ROW and minimal impact is anticipated. All areas will be restored per the standard restoration details, including wetlands, streams and riparian areas.

Mitigation for Palustrine Forested (PFO) Wetland Conversion:

In order to compensate for the proposed PFO wetland conversion, the applicant proposes tree plantings at two sites-one in Cambria County and one in Cumberland County. Southcentral reviewers only evaluated the Cumberland County site (Site). During the review DEP expressed concern that, given the many functions the Site already performs, there would be little functional uplift associated with the proposed plantings and suggested that the Compensatory Mitigation Plan be revised to focus on planting of areas of the Site identified as "seasonally saturated", which would allow for a more biologically and functionally diverse wetland complex. A draft conservation easement has been provided identifying Sunoco as the holder. It is recommended that a special condition be added to the Permit requiring the applicant to prepare and execute a deed restriction for the conservation easement in lieu of a conservation easement. The applicant proposes and the Permit will be special conditioned to require the applicant to monitor the Site for a period of no less than five years to ensure success.

Compliance:

It is understood that SPLP is not in compliance with the Department's Chapter 102 regulations in at least the Southcentral Region and Southwest Region of DEP regarding other projects. However, the details of these compliance issues are not known by this reviewer. The decision of whether a permit can be issued in regards to ongoing compliance has been elevated to Program and Bureau management.

On August 28, 2015, the application was forwarded to the U.S. Army Corps of Engineers for their review and approval.

E38-194 - 5 -

The project description was placed in Volume 46, Number 26 of the PA Bulletin on June 15, 2016 and has since expired. The DEP received a seemingly unprecedented number of comments. The comment response document was prepared by DEP's Central Office with assistance from the Bureau and Program Management. On a case by case basis, individual reviewers were also consulted by Program Management during the preparation of the response. See the comment response document for more information on DEP's position regarding the comments.

Numerous deficiencies were identified during the review of the application. The DEP has made a determination at the Bureau level that while the deficiencies and potential deficiencies are valid and inconsistencies throughout the application exist, the sloppiness is on the applicant's part. A narrowed list of deficiencies was provided to SPLP on February, 1, 2017. Remaining deficiencies were discussed at a meeting with the Bureau on February 3, 2017. The Bureau explained that minimum standards have been met and many remaining identified deficiencies are not required to be addressed for permit issuance. Therefore, at the direction of the Bureau, special conditions have been drafted to address the outstanding items, including those provided to SPLP prior to the February 2, 2017.

*Based on the application submitted, attached review, and direction provided by DEP Bureau and legal staff, an individual Chapter 105 Water Obstruction and Encroachment Permit with Water Quality Certification pursuant to Section 401 of the Federal Water Pollution Control Act can be approved with conditions.

Additional sheets attached.

			<u>YES</u>	<u>NO</u>
В.	<u>Po</u>	tential Project Impacts		
	1.	Potential Threats to Life or Property		\boxtimes
	2.	Potential Threats to Safe Navigation	\boxtimes	
	3.	Riparian Rights Above, Below or Adjacent to Project		\boxtimes
	4.	Regimen and Ecology of		
		a. Watercourse	\boxtimes	
		b. Body of Water	\boxtimes	
	5.	National/State Natural Areas, Wildlife Sanctuary/Refuge		\boxtimes
	6.	National/State/Local Park or Recreation Area	\boxtimes	
	7.	National/State/Local Cultural, Archaeological, or Historical Site	\boxtimes	

E38-194 - 6 -

8	3. Public Water Supply		
9	Non-compliance with Applicable laws	\boxtimes	
10	O. Non-water Dependent Project		\boxtimes
11	1. Future Development Potential		\boxtimes
12	2. State Water Plan Program Area		\boxtimes
13	3. Coastal Zone Management Program Area		\boxtimes
14	4. Scenic River Corridor Status: none		\boxtimes
15	5. Chapter 93 Classification: (TSF, WWF, CWF, MF, EV wetlands	\boxtimes	
	a. Exceptional Value Watershed		\boxtimes
	b. High Quality Watershed		\boxtimes
	c. Antidegradation Consistency	\boxtimes	
16	5. Secondary Impacts	\boxtimes	
17	7. Cumulative Impacts (temporary and permanent impacts)	\boxtimes	
18	8. Wetlands		
	a. Vegetation: NWI Designation – <u>PEM, PSS, PFO</u>	\boxtimes	
	b. Soils: NRCS Designation - see application	\boxtimes	
	c. Hydrology: see applicant's assessment	\boxtimes	
19	9. Exceptional Value Wetlands	\boxtimes	
20	D. Stocked Trout Stream	\boxtimes	
21	Wild Trout Stream	\boxtimes	
22	2. Threatened or Endangered Species	\boxtimes	
23	3. Other Species of Special Concern	\boxtimes	
		<u>YES</u>	<u>NO</u>
	Record of Decision for Project Impacts (Any adverse findings must be documente Decision.)	d in the I	Record of
1	. Exceptional Value Wetlands - (check the criteria that makes the wetland EV): I	n accord	ance with
	the SPLP's evaluation, the following were reasons listed for wetlands meeting		
	Lebanon County.		
	☐ natural or wild areas ☐ wild or scenic river ☐ wild trout stream		
	☐ public or private water supply ☐ EV waters ☐ threat	ened or e	endangered
	species habitat		•

E38-194

	threatened or endangered species (results of PNDI search)	
a.	Describe the primary function(s) or value(s) of the wetland: Refer to the Attachm	<u>ent</u>
	A of Enclosure C of the Environmental Assessment Form.	
b.	Will the project have an adverse impact on the wetlands functions or values?	\boxtimes
	Explain: Provided that the applicant implements E&S BMPs and resource agest avoidance measures, segregates topsoil, restores grades and restores vegetates	
	community composition, impacts should be temporary in nature and therefore,	
	adverse impacts to the wetlands' functions and values are anticipated. application states the functions and values will continue to be provided in areas where the functions are application of the wetlands' functions and values are anticipated.	
	the vegetative community will not be fully restored. The application states that	<u>the</u>
	wetland vegetation will not be mowed, hand cut, or have herbicide application	on.
	Special conditions will be added to ensure adequate survival of plantings and mow	<u>ing</u>
	and spraying is not conducted.	
	If Yes, has applicant affirmatively demonstrated that project is necessary to abate a substantial threat to the public health and safety?	
	Has applicant demonstrated that requirements of Section 105.18a(b)(2)-(7) are met?	
c.	Is project water-dependent? (A project is water dependent when the project requires access or proximity to or siting within the wetland or waters to fulfill the basic purpose of the project.)	
	Explain: The applicant states in a statement on water dependency within	the
	alternatives analysis: "because of Pennsylvania's abundant water and wetl	and
	resources, any project which travels approximately 300 miles east-west across	<u>the</u>
	Commonwealth requires the crossing of, and therefore access to, waters and wetland	<u>ıds.</u>
	The Project requires access and proximity to and siting in, on, over or under wa	<u>ters</u>
	and wetlands in order to achieve its primary purpose to transport natural gas liqu	<u>iids</u>
	from Houston, Washington County to SPLP's existing facility in Marcus Ho	ok,
	Delaware County. Therefore, the linear nature and approximately 300 mile length	<u>1 of</u>
	the Project across 17 counties east-west in Pennsylvania makes the Project wa	<u>ter-</u>
	dependent." The applicant further states: "SPLP has avoided and minimi	<u>zed</u>

E38-194

potential impacts to waters and wetlands from the Project. In so doing, the analysis set forth herein concludes that there is no practicable alternative to each of the crossings to waters and wetlands that would have less effect on each water or wetland, and not have other significant adverse effects on the environment, taking into consideration construction costs, existing technology and logistics." Therefore, according to the applicant, the project requires access to/proximity to/siting in water resources and no practicable alternatives exist and is therefore water dependent.

	according to the applicant, the project requires access to/proximity to/siting	III wai	<u>CI</u> .		
	resources and no practicable alternatives exist and is therefore water depende	<u>nt.</u>			
d.	Is project the least environmentally damaging alternative?	\boxtimes			
	List alternatives considered and provide rationale that the least damaging alternative has been selected.				
	The applicant relied heavily on co-locating the lines with other SPLP gaslines	or, if			
	necessary, other utility ROWs. This is based on the Governor's pipeline task	force.			
	SPLP has provided an alternatives analysis. The analysis consists primarily of	$\underline{\mathbf{f}}$			
	"shortest route deviations" that could potentially avoid impacts. While it app	<u>eared</u>			
	that some alternatives exist, the applicant states that such alternatives are not	<u>feasible</u>	2		
	due to cost, logistics, and the other "greenfield" necessary for route deviation	s (also			
	as recommended by the Governor's pipeline taskforce). The Bureau has dete	rmined	:		
	that the alternatives analysis adequately demonstrates that other potential alternatives				
	are not practicable.				
		<u>YES</u>	<u>NO</u>		
e.	Will project violate a State water quality standard?		\boxtimes		
	Explain: Temporary impacts, revegetating ROWs, implementing E&S Plan	1 & PF	<u>'C</u>		
	<u>Plan</u>				
f.	Will project contribute to the pollution of groundwater or surface water or diminution of resources sufficient to interfere with their uses?				
	with their uses:				
	Explain: Temporary impacts, revegetating ROWs, implementing E&S Plan	— 1 & PF	<u>'C</u>		
		— 1 & PF	<u>PC</u>		

E38-194

Explain: <u>Based on the submission, review and special conditions, adverse impacts</u> are not anticipated. Therefore, this project should not contribute to a cumulative impairment to wetland resources.

h. Explain how wetlands have been replaced in accordance with 105.20a and list which compensatory replacement method was used.

Explain and List: The project cumulatively does not result in the loss of wetland area and results in 0.4 acre of PFO to PEM conversion. A total of 0.016 acre of PFO wetland is converted to PEM in Lebanon County. The wetland within the ROW will not be mowed. SPLP is mitigating at greater than 1.5:1 by converting an existing PEM wetland to PFO. The mitigation site is in the Doubling Gap Creek watershed in Cumberland County. Additional information is in the narrative of the ROD.

2. Other Wetlands

a. Describe the primary function(s) or value(s) of the wetland: Refer to the <u>Pennsylvania Pipeline Project Other Wetland Function and Values Assessment in</u> <u>Attachment 11</u>

b.	Will the project have an adverse impact on the wetland's functions or values?		\boxtimes
	Explain: The majority of impacts are temporary and, provided that the a	applican	<u>1t</u>
	implements E&S BMPs and resource agency avoidance measures, segregates	s topsoi	<u>l,</u>
	restores grades, restores vegetative community composition to the maximum	m exter	<u>1</u> t
	practicable, and complies with all general and special conditions of Pe	rmit, n	0
	adverse impact is anticipated.		
c.	Will the project have a significant adverse impact on the wetland's functions or values? Explain: Based on the applicant's assessment.		\boxtimes
	If Yes, has applicant affirmatively demonstrated that project is necessary to abate a substantial threat to the public health and safety?		
d.	Have adverse impacts been avoided or reduced to maximum extent possible?	\boxtimes	
	Explain: Many wetlands have been avoided. Impacts associated with open	<u>trench</u>	

are reduced by: eliminating construction ROW and only working in permanent ROW,

E38-194 - 10 -

restoration, and plantings where encountered. YES NO e. Is project the least environmentally damaging alternative? \boxtimes List alternatives considered and provide rationale that the least damaging alternative has been selected. The applicant relies mainly on co-location of the lines with other SPLP gaslines or, if necessary, other utility ROWs. This is based on the Governor's pipeline taskforce. SPLP has provided an alternatives analysis. The analysis consists primarily of "shortest route deviations" that could potentially avoid impacts. While it appears that some alternatives exist, the applicant states that such alternatives are not feasible due to cost, logistics, and the other "greenfield" necessary for route deviations (also as recommended by the Governor's pipeline taskforce). The Bureau has determined that the alternatives analysis adequately demonstrates that other potential alternatives are not practicable. f. Will project violate a State water quality standard? \bowtie Explain: Most impacts are temporary impacts, revegetating ROWs is proposed, and through special conditions, the applicant is required implement E&S Plan & PPC Plan. g. Will project contribute to the pollution of groundwater or surface water or diminution of resources sufficient to interfere with their uses? \bowtie Explain: Most impacts are temporary impacts, revegetating ROWs is proposed, and through special conditions, the applicant is required implement E&S Plan & PPC Plan. h. Will the cumulative effect of this project and other projects result in impairment to wetland resources? \boxtimes Explain: Based on the submission, review and special conditions, adverse impacts are not anticipated. Therefore, this project should not contribute to a cumulative impairment to wetland resources. Explain how wetlands have been replaced in accordance with 105.20a and list which

topsoil restoration, use of wooden pads to limit compaction, monitoring to ensure

E38-194

compensatory replacement method was used.

Explain and List: The project cumulatively does not result in the loss of wetland area and results in 0.4 acre of PFO to PEM conversion. The Compensatory Wetland Mitigation Plan is proposed to mitigate for conversion of 0.016 acre Palustrine Forested (PFO) wetlands to Palustrine Emergent (PEM) wetlands in Lebanon County. SPLP is mitigating at greater than 1.5:1 by converting an existing PEM wetland to PFO. The mitigation site is in the Doubling Gap Creek watershed in Cumberland County. Additional information is in the narrative of the ROD.

		County.	Additional	HOIMAGON 13 III	the harrance of the i	(COD)			
3.	Wa	atercourse	s (check all th	nat apply)					
	Σ	▼ TSF	□ HQ	⊠ CWF	Wild Trout	☐ EV		WWF	
	a.	Name of	watercourse	see attached ta	<u>ble</u>				
	b.	Will the the envir	A <i>U</i>	an impact on th	e following values of	f			
			Natural						\boxtimes
			Scenic					\boxtimes	
			Histori	c					\boxtimes
			Aesthe	tic				\boxtimes	
							·	YES	<u>NO</u>
	c.	Have im	pacts been av	oided and mini	mized?			\boxtimes	
		Explain:	Stream cros	sings are gener	ally not avoidable as	s streams mu	st be c	crossed	<u>at</u>
		some po	int. Impacts a	are minimized	by reducing the limit	of disturban	ce, res	toring t	<u>he</u>
		stream o	channel bank	s with topsoi	l, matting, tree/shru	ıb planting	and s	treamb	<u>ed</u>
		material	restoration.	The Bureau has	s directed a special co	ondition be d	rafted	to ensu	<u>re</u>
		that strea	am dimension	s are restored b	oack to original pre-c	onstruction c	onditio	ons.	
	d.	Is projec	t the least env	vironmentally d	lamaging alternative?	>		\boxtimes	
				dered and prov	ide rationale that the selected.				
		The app	lication indica	ates that an atte	mpt was made to col	locate the lin	es witl	n other	
		SPLP ga	ıs lines or, if r	necessary, other	utility ROWs. This	is based on t	the Go	vernor'	<u>s</u>
		pipeline	taskforce rec	ommendation.	The applicant has pr	ovided an alt	ernativ	ves	
		analysis.	. The analysi	s consists prima	arily of "shortest rout	te deviations'	' that c	<u>could</u>	

E38-194 - 12 -

	potentially avoid impacts. While it appeared that some alternatives exist, the						
	applicant states that such alternatives are not feasible due to cost, logistics, and the						
	other "greenfield" necessary for route deviations (also as recommended by the						
	Governor's pipeline taskforce). The Bureau has determined that the alternatives						
	analysis adequately demonstrates that other potential alternatives are not practicable.						
	The Bureau/Program Management indicated the alternatives analysis is sufficient for						
	this project.						
e.	Has the applicant demonstrated that the public benefits of the proposed project out weigh the harm to the environment? Public benefits include:	\boxtimes					
	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: items 4, 6 & 7 are relevant based on the information provided.						
f.	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?		\boxtimes				
g.	Is the project located in or within 100 feet of a Federal wilderness area?		\boxtimes				
h.	Is the project located within an area which serves as a habitat of a threatened or endangered species?		\boxtimes				
i.	Is the project located in waters classified as exceptional value in Chapter 93?		\boxtimes				
		YES	<u>NO</u>				
j.	If yes to any "f" thru "i", has the applicant demonstrated that the project will not have an adverse impact upon the public natural resource?						

D. Sources Utilized for Review

E38-194 - 13 -

1.	Quad Sheet:				\bowtie
2.	National Wetlands Inventory Map			<u>.</u> .	
3.	Special Protection Watersheds Map			\boxtimes	
4.	Scenic Rivers Candidates Map				\boxtimes
5.	Coastal Zone Management Map				\boxtimes
6.	County Soil Survey				\boxtimes
7.	P.N.D.I. (Search Area ())			\boxtimes	
. 8.	State Water Plan			\boxtimes	
9.	Other Agencies' Reviews (See E)			\boxtimes	
10.	Environmental Review Committee (See F)				\boxtimes
11.	Other: ()				
12.	Site Inspection: none				\boxtimes
13.	Jurisdictional Determination from ACOE				\boxtimes
14.	Applicants Environmental Assessment			\boxtimes	
				•	
			Recommo	endations	
		Approve	*Approve		No
E. Oth	ner Agencies' Comments	<u>Approve</u>			No
E. <u>Oth</u>		Approve	*Approve		No
	Pennsylvania Fish & Boat Commission	Approve	*Approve <u>w/Conditions</u>		No
1.	Pennsylvania Fish & Boat Commission Pennsylvania Game Commission	Approve	*Approve w/Conditions		No
1. 2.	Pennsylvania Fish & Boat Commission Pennsylvania Game Commission Pennsylvania Historical & Museum Commission	Approve	*Approve w/Conditions		No Comments
1. 2. 3.	Pennsylvania Fish & Boat Commission Pennsylvania Game Commission Pennsylvania Historical & Museum Commission U.S. Fish & Wildlife Service	Approve	*Approve w/Conditions		No Comments
1. 2. 3. 4.	Pennsylvania Fish & Boat Commission Pennsylvania Game Commission Pennsylvania Historical & Museum Commission U.S. Fish & Wildlife Service	Approve	*Approve w/Conditions		No Comments
1. 2. 3. 4. 5.	Pennsylvania Fish & Boat Commission Pennsylvania Game Commission Pennsylvania Historical & Museum Commission U.S. Fish & Wildlife Service U.S. Army Corps of Engineers	Approve	*Approve w/Conditions		No Comments
1. 2. 3. 4. 5.	Pennsylvania Fish & Boat Commission Pennsylvania Game Commission Pennsylvania Historical & Museum Commission U.S. Fish & Wildlife Service U.S. Army Corps of Engineers National Marine Fisheries Environmental Protection Agency	Approve Approve	*Approve w/Conditions		No Comments
1. 2. 3. 4. 5. 6. 7.	Pennsylvania Fish & Boat Commission Pennsylvania Game Commission Pennsylvania Historical & Museum Commission U.S. Fish & Wildlife Service U.S. Army Corps of Engineers National Marine Fisheries Environmental Protection Agency	Approve Approve	*Approve w/Conditions		No Comments
1. 2. 3. 4. 5. 6. 7. 8.	Pennsylvania Fish & Boat Commission Pennsylvania Game Commission Pennsylvania Historical & Museum Commission U.S. Fish & Wildlife Service U.S. Army Corps of Engineers National Marine Fisheries Environmental Protection Agency County Conservation District Other: (*Approve w/Conditions	**Deny	No Comments
1. 2. 3. 4. 5. 6. 7. 8. 9.	Pennsylvania Fish & Boat Commission Pennsylvania Game Commission Pennsylvania Historical & Museum Commission U.S. Fish & Wildlife Service U.S. Army Corps of Engineers National Marine Fisheries Environmental Protection Agency County Conservation District Other: (*Approve w/Conditions	**Deny	No Comments
1. 2. 3. 4. 5. 6. 7. 8. 9.	Pennsylvania Fish & Boat Commission Pennsylvania Game Commission Pennsylvania Historical & Museum Commission U.S. Fish & Wildlife Service U.S. Army Corps of Engineers National Marine Fisheries Environmental Protection Agency County Conservation District Other: (addressed,	*Approve w/Conditions	**Deny	No Comments
1. 2. 3. 4. 5. 6. 7. 8. 9.	Pennsylvania Fish & Boat Commission Pennsylvania Game Commission Pennsylvania Historical & Museum Commission U.S. Fish & Wildlife Service U.S. Army Corps of Engineers National Marine Fisheries Environmental Protection Agency County Conservation District Other: (addressed,	*Approve w/Conditions	**Deny	No Comments

E38-194 - 14 -

F.	Environmental Review Committee Comments Date Presented N/A
	☐ Minutes attached Do minutes accurately reflect discussion? ☐ Yes ☐ No
G.	Attach Meeting Minutes if available or provide a Summary of Preapplication Meeting - Include dates and attendees
	SPECIAL CONDITIONS
	ttee shall be responsible for compliance with each of the following special conditions. The Pennsylvania tment of Environmental Protection shall be referred to hereinafter as either "DEP" or the "Department."
W	ater Supplies:
a.	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.
	i. 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.
b.	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.
c.	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.
d.	The permittee shall notify such downstream water users immediately of any pollution event or inciden 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.
e.	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.
PH	HMC General Conditions:
f.	The permittee and its agents shall visually inspect for archaeological artifacts and shall immediately cease earth disturbance activities upon discovery of archaeological artifacts.

E38-194 - 15 -

- g. 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.
- h. 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.

PHMC Areas Subject to Phase I or Phase II Surveys:

i. The permittee shall not begin work in areas subject to Phase I or Phase II archeological investigations recommended by the PHMC until the permittee secures the necessary clearances for these areas from PHMC. (Permit specific condition as applicable. Specify location in each permit).

Submerged Lands License Agreements:

j. 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 (identification of crossing), which is incorporated herein by reference. (This condition is permit-specific. Add when applicable and attach finalized SLLA to permit).

Temporary Road Crossings:

- k. All temporary road crossings of streams and wetlands must meet all of the following conditions:
 - i. The permittee shall restore and stabilize all temporary crossing sites, except fords, within five (5) days after termination of its permitted use.
 - ii. 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.
 - iii. 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.
 - iv. The permittee is prohibited from skidding across fords.
 - v. 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.
 - vi. 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.

E38-194 - 16 -

- vii. 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.
- viii. 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.
- ix. Road and causeway embankments shall only consist of clean rock material to prevent stream channel sedimentation during placement, removal, and periods of overtopping.
- x. Bridges shall be single span from top of bank to top of bank, and must be structurally stable.
- xi. 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.
- xii. Causeways shall not extend streamward a distance greater than one-half the width of the stream channel.
- xiii. Temporary road crossings shall be kept open and functioning at all times by maintaining the crossings free of debris and other obstructions.
- xiv. 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.
- xv. If permittee cannot avoid a wetland crossing, the crossing is permissible if it is located at the narrowest practicable point of the wetland.
- xvi. 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.
- xvii. Temporary embankments for roads across wetlands shall be installed to maintain the hydrology of the wetland.
- xviii. Pollution of any waterway with harmful chemicals, fuels, oils, greases, bituminous material, acid, or other harmful or polluting materials, is prohibited.
 - xix. 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.
 - xx. 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.

E38-194 - 17 -

xxi. 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.

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.
- m. 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.
- n. 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.
 - i. 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.
 - ii. 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.
 - iii. 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.
 - iv. The permittee shall implement the DEP-approved plan within 90 days of receiving written approval from DEP, unless DEP extends that timeframe in writing.
 - v. 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

E38-194 - 18 -

- mitigation plan within 90 days of receiving written approval from DEP, unless DEP extends that timeframe in writing.
- o. Wetland excavation shall segregate the soil horizons and replace the soil horizons to match preconstruction 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.
- p. Topsoil shall be segregated from subsoil in all wetland areas.
- q. 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.
- r. 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.
- s. 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.
- t. 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.
- u. 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.
- v. 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.
- w. 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

E38-194 - 19 -

- of 6-inches of streambed material. The restored streambed elevation shall not exceed the pre-existing streambed elevation.
- x. 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.
- y. 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.
 - i. 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.
- z. 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.
- aa. 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.
- bb. 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.

Wetland Compensatory Mitigation and Monitoring:

- cc. 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.
- dd. 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

E38-194 - 20 -

Mitigation Plan and shall not plant in the areas identified as saturated in the present condition in the Compensatory Wetland Mitigation Plan.

- ee. 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 "asbuilt" 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.
 - i. 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.
 - ii. 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.
- ff. Restored and enhanced habitats shall be considered successful when they meet the design objectives.
- gg. Wetland compensation construction shall occur prior to or concurrently with wetland impacts requiring compensation as authorized by this permit.
- hh. 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 asbuilt conditions are significantly different from the original approved plans.
- ii. 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.

Horizontal Directional Drilling:

- jj. 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.
- kk. The permittee shall take measures to avoid mine voids and utilities.

E38-194 - 21 -

- II. 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.
- mm. 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.
- nn. 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.

Habitat Conservation Plans and Threatened and Endangered Species Protection:

- oo. 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.
- pp. 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.
- qq. 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.
- rr. 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).
- ss. 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.

E38-194 - 22 -

- tt. The permittee shall comply with all protocols set forth by the USFWS for protection of the Rusty Patch Bumble Bee.
- uu. 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).

Seasonal Restrictions:

- vv. 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.
- www. 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.
- xx. 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).
- yy. 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.

Miscellaneous:

- zz. 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.
- aaa. 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.
- bbb. The permittee may not commence construction activities on Pennsylvania Game Commission (PGC) lands without prior written approval from PGC.
- ccc. 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.

E38-194 - 23 -

- ddd. 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.
- eee. Trench plugs shall be placed at each of the following locations:
 - i. At ten (10) feet from the top of each bank of a stream
 - ii. At fifty (50) feet from the top of each bank of a stream
 - iii. At ten (10) feet from the edge of a wetland
 - iv. At fifty (50) feet from the edge of a wetland
- fff. 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.
- ggg. If during excavation, a groundwater seep is encountered, a trench plug shall be placed at ten (10) feet from each side of the seep.
- hhh. Any french drains installed as part of de-watering for construction activities shall be removed or otherwise rendered inoperable prior to final site restoration.
- iii. 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.
- jij. 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.
 - i. 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.
 - ii. 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.
- kkk. 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.

E38-194 - 24 -

- Ill. 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.
- mmm. 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.
- nnn. 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.
- ooo. 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.
- ppp. 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.
- qqq. 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.
- rrr. The permittee shall follow the measures specified in the Preparedness, Prevention, and Contingency Plan during construction.
- sss. The permittee shall maintain a copy of the Preparedness, Prevention, and Contingency Plan is 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.

E38-194 - 25 -

DATE:

June 16, 2016

SUBJECT:

Permit No. E38-194

TO:

Jay Patel

FROM:

Andrew McDonald

APPLICATION FOR:

Sunoco Pipeline, LP (SPLP), 535 Fritztown Road, Sinking Spring, PA 19608. Mariner East II Pennsylvania Pipeline Project, in Cornwall Borough, South Londonderry, South Annville, South Lebanon, West Cornwall, and Heidelberg Townships, Lebanon County, ACOE Baltimore District. The proposed project starts at South Londonderry Township, PA Quadrangle Palmyra N: 40°, 15', 13"; W: 76°, 35', 30" and ends at Heidelberg

Township, PA Quadrangle Richland N: 40°, 17', 8"; W: 76°, 13', 44"

PLEASE REVIEW THIS APPLICATION TO DETERMINE IF 401 WATER QUALITY CERTIFICATION CAN BE GRANTED.

Project Description

The project consists of the installation and maintenance of approximately 19.7 miles long, 20-inch pipeline, a second up to 20-inch pipeline, and appurtenant structures. The proposed project impacts in Lebanon County include a total of 2171 linear feet of permanent impacts to Gingrich Run (TSF), Bachman Run (TSF), Beck Creek (TSF), Snitz Creek (TSF), UNT to Snitz Creek (TSF), UNT to Quittapahilla Creek (TSF), 7 unnamed tributaries to Killinger Creek (TSF), 5 unnamed tributaries to Buckholder Run (TSF), 4 unnamed tributaries to Gingrich Run, 4 unnamed tributaries to Spring Creek (WWF), Middle Creek (WWF), 4 unnamed tributaries to Middle Creek (WWF), Hammer Creek (CWF), and 6 unnamed tributaries to Hammer Creek (CWF), and 5.2 acres of floodway impacts, zero acres of temporary impacts to wetlands and 1.19 acres of permanent impacts to PEM, PFO, and PuB wetlands. No mitigation to regulated waters of this Commonwealth is being proposed by the applicant to compensate for the proposed permanent project impacts in Lebanon County. The proposed project impacts in this permit application are associated with a proposed transmission pipeline project extending approximately 306 miles and 255 miles in Pennsylvania between Houston Borough, Washington County, PA and Marcus Hook Borough, Delaware County, PA.

Comments:	cw Hydrostatic Test peinits are	
•	and to the sugar to 121.	and a lest

Dams/Forms/F&E	3 - Form (02/12/08)		
SUBJECT:	Sunoco Pipeline LP Lebanon County	Date Received By PFBC: 9/14/2015	
Cornwall, Borough of; Heidelberg, Township of; South Annville, Township of; South Lebanon, Township of; South Londonderry, Township of; West Cornwall, Township of		Permit No.: E38-194	
	Pennsylvania Fish and Boat Commission-	Permit Type: Encroachment	
(DES) 450 Robinson Lane Bellefonte, PA 16823 FROM: (check one) NWRO SWRO NERO Central NCRO X SCRO SERO Office		Contact Information: DEP-Reviewing Biologist: Andrew McDonald PFBC Reviewer: Gary Smith	
	Project Descr	iption	
Type of wo	ork: Pipeline project with multiple counties on CD's		

NOTE: Please review the attached application for a Water Obstruction and Encroachment Permit for the project described above, and return comments to this office within 30 days.

Project Location/PFBC Stream Management:

Latitude	Longitude	Primary Water	Receiving Water	Stocked	Wild
40.271300	-76.517900	Gingrich Run	Killinger Creek	No	No
40.278000	-76.487600	Bachman Run	Quittapahilla Creek	Yes	No
40.290300	-76.427500	Snitz Creek	Quittapahilla Creek	Yes	No
40.284400	-76.460100	Beck Creek	Quittapahilla Creek	No	No
40.287100	-76.350100	Hammer Creek	Cocalico Creek	Yes	Yes
40.286500	-76.329500	Hammer Creek	Cocalico Creek	No	Yes
40.286200	-76.315600	Unt To Hammer Creek	Hammer Creek	No	Yes
40.285300	-76.308600	Unt To Hammer Creek	Hammer Creek	No	Yes
40.285100	-76.240400	Middle Creek	Cocalico Creek	Yes	No

Specific Project Comments:

The Pennsylvania Fish and Boat Commission manages Hammer Creek and an UNT to Hammer Creek as naturally reproducing, wild trout streams. The PFBC recommends an instream construction restriction for crossings on these streams and tributaries listed in the table below from October 1 through December 31 to protect spawning and egg deposition behavior of the wild trout population. The PFBC recommends that the applicant and contractor understand the implications of this restriction and plan any and all instream construction work accordingly. The PFBC will not issue seasonal restriction waivers for crossings on these streams. The PFBC recommends directional boring or similar technology if the applicant finds it necessary to cross these streams during the seasonal restriction periods.

The PFBC surveyed Snitz Creek in 2006 and found that this stream supported a naturally reproducing wild trout population. This stream is in the process of being added to the list of streams that support naturally reproducing wild trout. The PFBC recommends an instream construction restriction for the Snitz Creek crossing listed in the table below

from October 1 through December 31 to protect spawning and egg deposition behavior of the wild trout populations. The PFBC recommends that the applicant and contractor understand the implications of this restriction and plan any and all instream construction work accordingly. The PFBC recommends directional boring or similar technology if the applicant finds it necessary to cross these streams during the seasonal restriction periods.

The PFBC manages Bachman Run, Snitz Creek, Hammer Creek, and Middle Creek as stocked trout streams. The PFBC recommends an instream construction restriction period for the Snitz Creek crossing listed in the table below from March 1 through June 15 to avoid interference with recreational angling activities. The PFBC recommends that the applicant and contractor understand the implications of this restriction and plan any and all instream construction work accordingly. The PFBC will not issue seasonal restriction waivers for crossings on these streams. The PFBC recommends directional boring or similar technology if the applicant finds it necessary to cross these streams during the seasonal restriction periods. The PFBC will not require a stocked trout instream construction restriction period for crossings on Bachman Run, Hammer Creek, and Middle Creek and their tributaries, because those crossings are located greater than 0.5 miles upstream of the stocked trout sections and should not impact the stocked trout fisheries.

Stream ID	Stream Name	Coordinates	Instream Construction Restriction Period
S-A17	Snitz Creek	-76.4275, 40.2903	March 1 to June 15 October 1 to December 31
S-A24	Hammer Creek	-76.3501, 40.2871	October 1 to December 31
S-A25	Hammer Creek	-76.3295, 40.2865	October 1 to December 31
S-A23	UNT to Hammer Creek	-76.3601, 40.2869	October 1 to December 31
S-A27	UNT to Hammer Creek	-76.3156, 40.2862	October 1 to December 31
S-A28	UNT to Hammer Creek	-76.3086, 40.2853	October 1 to December 31
S-H7	UNT to Hammer Creek	-76.2914, 40.2855	October 1 to December 31

Dory a. Smith	Approved X Approved	
(PFBC Division of Environmental Services)	See10/13/2015	
	Comments Withdrawn Date (Date)	
	(Approved)	

Pennsylvania Fish & Boat Commission