TETRA TECH

PITT-03-19-039

March 21, 2019

By FEDERAL EXPRESS

Mr. Edward J. Muzic, P.E.
Civil Engineer Manager
Department of Environmental Protection
Waterways and Wetlands – South Central Regional Office
909 Elmerton Avenue
Harrisburg, PA 17110

Re: Incompleteness Review Responses
E07-459 Major Amendment
Application No. E07-459
APS No. 879354
Woodbury Township, Blair County

Dear Mr. Muzic:

On behalf of our client, Sunoco Pipeline L.P. (SPLP), Tetra Tech, Inc. provides the following responses to the Pennsylvania Department of Environmental Protection (DEP) Incompleteness Review letter dated March 7, 2019, regarding the above-referenced Chapter 105 Major Amendment. The supporting attachments represent clarifications or revisions to the original modification request. We are providing three hard copies and three CDs containing this letter and supporting attachments.

For ease of your review, each DEP item is set forth verbatim below, followed by a narrative response with supporting attachments.

Comments and Responses to March 7, 2019 Incompleteness Review Letter
Incomplete Items

1.	Provide a completed Level 2 Rapid Assessment for the impacted watercourse. *[Environmental Assessment Instructions]*	**Attachment A** of this response provides the Level 2 Rapid Assessment for the impacted watercourses.
2.	The original project alignment has been modified to a new location. Provide notification letters (Acts 14/67/68/127) to the local municipality(s) and county(s) that the project affects. *[Instructions 3150-PM-BWEW0036, Section F.c]*	Notification letters were previously provided as Attachment I of the major modification submittal but are provided again to facilitate your review. **Attachment B** of this response provides the notification letters to the local municipalities.
3.	Provide a complete and the current Aquatic Resource Impact Table. *[Instructions 3150-PM-BWEW0036, Section F.j & Form 3150-PM-BWEW0557]*	**Attachment C** of this response provides the resource impacts for the major modification in the Department's current (new) Aquatic Resource Impact Table.
4.	Provide a profile view for each resource being crossed on the proposed alignment. *[Instructions 3150-PM-BWEW0036, Section F.h (3))*	**Attachment D** of this response provides the profile view for each of the stream resources crossed by the proposed modification/reroute.

Tetra Tech, Inc.
301 Ellicott Street, Buffalo, New York 14203
Tel 716.849.9419 Fax 716.849.9420 tetratech.com

5.	Provide a list of adjoining property owners whose properties adjoin the proposed alignment. *[Instructions 3150-PM-BWEW0036, Section H]*	A landowners list was provided in Attachment I of the original major modification submittal. However, the list has been expanded to include the adjacent properties in addition to those crossed by the reroute. **Attachment E** of this response provides the updated list of adjoining property owners.

Comments and Responses to March 7, 2019 Incompleteness Review Letter
Technical Items

1.	Provide consistency with your project description and detailed plans. The project description provided states 'all streams will be crossed via the open cut method with the appropriate dam and pump bypass installed to convey stream flow'. The provided Erosion and Sediment Control Detail Plans and details gives alternative designs for the crossing by use pump bypass & cofferdam, flumes or span with timber matting. Submit a project description that describes all methods on the Erosion and Sediment Control Detail Plans may be used or remove the methods from the detail plans not mentioned in the project description. *[25 Pa. Code §105. 13 (g)]*	**Attachment F** of this response provides a revised project description that identifies all the open cut, dry stream crossing construction methods presented in the Erosion and Sediment Control Plan. **Attachment G** of this response provides a revised/expanded Environmental Assessment that describes all the open cut, dry stream crossing construction methods identified in the Erosion and Sediment Control Plan.

SPLP appreciates your timely review of this response. Should you have questions regarding this correspondence, please do not hesitate to contact me at 412-921-8163 or via e-mail at Robert.Simcik@tetratech.com.

Sincerely,

Robert F. Simcik, P.E.
Project Manager
Tetra Tech, Inc.

Enclosures: Attachments A – G

cc: Debby Nizer, USACE-Baltimore District
Matthew Gordon, SPLP
Monica Styles, SPLP
Christopher Embry, SPLP
Larry Gremminger, SPLP
Brad Schaeffer, Tetra Tech, Inc.

ATTACHMENT A

Level 2 Rapid Assessment

Level 2 Rapid Assessment - E07-459 Major Amendment

Stream	Ch. 93 Class	Length (ft)	AA width (ft)	1. Channel/ Floodplain	2. Riparian Vegetation	3. Riparian ZOI	4. Instream Habitat	5. Channel Alteration	RCI
S-M33	HQ-CWF, MF	400	200	0.7	0.98	0.47	0.8	0.75	**0.74**
S8r	Drains to HQ-CWF, MF	311	100	0.55	0.83	0.6	n/a	0.6	**0.64**
S-M30	HQ-CWF, MF	1000	500	0.85	0.92	0.73	0.95	0.9	**0.87**

Riverine Assessment Form 1

Pennsylvania Riverine Condition Level 2 Rapid Assessment Protocol (Document No. 310-2137-003)

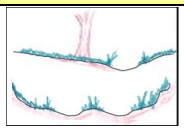
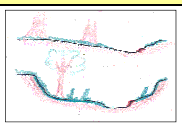
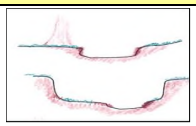
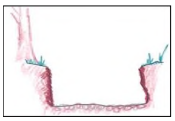
Pennsylvania Department of Environmental Protection

For use in intermittent or perennial watercourses with drainage areas ≤ 2,000 square mile drainage areas.

Project #	Project Name		Locality	Date	Ch 93 Classification	AA Id	Length
	PPP		Woobury Twp., Blair Co., PA	3/1/2019	Designated: HQ-CWF, MF	S-M33	843 ft.
Latitude	40.434253	**Longitude**	-78.269361	**FGM Level 1 Channel Classification**		Perennial	

Evaluator(s)	Stream Name and Information	Notes: Used 20x channel width to define AA limits.
K. Berend	S-M33 - UNT to Piney Creek	

1. CHANNEL/FLOODPLAIN: Assess the cross-section of the stream and prevailing conditions along the AA.

	Condition Category				
	Optimal	**Suboptimal**	**Marginal**	**Poor**	**Severe**
Channel / Floodplain	 **Channel Geometry:** These channels show very little incision or widening and little or no evidence of active erosion. Anastomosing channels may be present. **Channel Stability:** Visual indicators include: 1) the banks are not eroding along greater than 5% of the reach; 2) natural vegetative or rock stability features are present along greater than 80% of the banks; 2) stable point bars and bankfull benches may be present; 3) mid-channel bars and transverse bars are rare and if transient channel sediment deposition is present, it covers less than or equal to 10% of the stream bottom; 4) baseflow is connected to the rooting depths of vegetation in the active floodplain. **Active Floodplain Connection:** The bankfull stream flows have frequent access to the active floodplain and fully developed point bars or bankfull benches that are accessed at most flows greater than baseflow.	 **Channel Geometry:** These channels are slightly incised or overwidened and contain a few areas of active erosion. **Channel Stability:** Visual indicators include: 1) the banks are actively eroding along less than 25% of the reach; 2) depositional features such as point bars and bankfull benches are present and stable during high flows and occur along greater than 50% of the reach; 3) natural bank protection like vegetation or rock is providing stability along greater than 50% of the reach; 4) baseflow is connected to vegetated point bars and bankfull benches. **Active Floodplain Connection:** The bankfull stream flows frequently access bankfull benches, or point bars along portions of the reach and may frequently inundate the active floodplain.	 **Channel Geometry:** These channels are over-widened or incised, but to a lesser degree than the Severe and Poor channel conditions. **Channel Stability:** Visual indicators include: 1) the banks are eroding or severely undercut along greater than 25% and less than or equal to 50% of the reach; 2) depositional features like point bars or bankfull benches occur along greater than 25% and less than or equal to 50% of the reach; 3) the stream banks may consist of some vertical or undercut banks or nick points associated with head cuts; **Active Floodplain Connection:** The bankfull stream flows have infrequent connection to the active floodplain.	 **Channel Geometry:** These channels are over-widened or incised and eroding vertically and/or laterally. **Channel Stability:** Visual indicators include: 1) the banks are eroding or severely undercut along greater than 50% of the reach; 2) active or recent bank sloughing is present along greater than 50% of the reach; 3) natural bank protection like vegetation is not preventing bank erosion along the reach; 4) depositional features, such as point bars and bank full benches, are absent from the reach or newly developing along less than 25% of the reach; 5) bank full benches and point bars frequently scour during high flows; 6) baseflow is disconnected from plant rooting depths and the active floodplain. **Active Floodplain Connection:** The bankfull stream flows are not connected to the active floodplain.	 **Channel Geometry:** These channels are deeply incised and actively eroding vertically and/or laterally. Over widened channels may contain sections of unstable braided channels from aggradation. **Channel Stability:** Visual indicators include: 1) the banks are actively eroding or being undercut along greater than 80% of the reach; 2) active or recent bank sloughing is occurring along greater than 80% of the reach; 3) natural bank protection like vegetation is not preventing bank erosion or sloughing; 4) depositional features such as point bars and bankfull benches are absent; 5) flood flows are disconnected from the active floodplain. **Active Floodplain Connection:** The bankfull stream flows are never connected to the active floodplain.
SCORE	**20 19 18 17**	**16 15 14 13**	**12 11 10 9**	**8 7 6 5**	**4 3 2 1**

Comments:

CI = (Score)/20	CI
SCORE 14	**0.70**

2. RIPARIAN VEGETATION: Assess the floodplain along the entire AA (Visual estimates of areal coverage from aerial photos with field verification acceptable).

	Condition Category				
	Optimal	**Suboptimal**	**Marginal**	**Poor**	
Riparian Vegetation (Floodplain)	Riparian area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	**High Suboptimal:** Riparian area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory. **Low Suboptimal:** Riparian area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** Riparian area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover. **Low Marginal:** Riparian area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.	**High Poor:** Riparian area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition. **Low Poor:** Riparian area consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.
		High / **Low**	**High** / **Low**	**High** / **Low**	
SCORE	**20 19 18 17 16**	**15 14 13 12 11**	**10 9 8 7 6**	**5 4 3 2 1**	

Comments:

1. Identify Condition Category areas along the floodplain using the descriptors above.
2. Estimate the % area within each condition category.
3. Enter the % Riparian Area in in decimal form (0.00) and Score for each category in the blocks below. Ensure the sum of the % Riparian Area Blocks equal 100

								Side Sub-Index	
Right Side	Condition Category								
	% Riparian Area:	95%	5%	0%	0%	0%	0%	**0.96**	**Side Sub-Index = SUM(%Areas*Scores)/20**
	Score:	20	2	0	0	0	0		
	Total Sub-score:	**19.00**	**0.10**	**0.00**	**0.00**	**0.00**	**0.00**		
Left Side	Condition Category								
	% Riparian Area:	100%	0%	0%	0%	0%	0%	**1.00**	**CI = (Left Side CI + Right Side CI)/2** = **0.98**
	Score:	20	0	0	0	0	0		
	Total Sub-score:	**20.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		

Riverine Assessment Form 1 - Page 2

2/4/2017

3. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 feet from edge of floodplain into the upland along the entire AA. (rough measurements of length & width may be acceptable)

	Condition Category				Comments:
	Optimal	Suboptimal	Marginal	Poor	
Riparian ZOI	Riparian ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	**High Suboptimal:** Riparian ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory. **Low Suboptimal:** Riparian ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** Riparian ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover. **Low Marginal:** Riparian ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.	**High Poor:** Riparian ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition. **Low Poor:** Riparian ZOI area consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	
		High / Low	High / Low	High / Low	
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	

1. Identify Condition Category areas along the floodplain using the descriptors above.
2. Estimate the % area within each condition category.
3. Enter the % Riparian Area in decimal form (0.00) and Score for each category in the blocks below. Ensure the sums of % Riparian ZOI Blocks equal 100

	Condition Category							Side Sub-Index	
Right Side	% Riparian Area:	40%	50%	10%	0%	0%	0%	**0.47**	**Side Sub-Index = SUM(%Areas*Scores)/20**
	Score:	20	2	4	0	0	0		
	Total Sub-score:	**8.00**	**1.00**	**0.40**	**0.00**	**0.00**	**0.00**		
	Condition Category								
Left Side	% Riparian Area:	40%	10%	50%	0%	0%	0%	**0.47**	**CI = (Left Side CI + Right Side CI)/2** → **CI**
	Score:	20	4	2	0	0	0		**0.47**
	Total Sub-score:	**8.00**	**0.40**	**1.00**	**0.00**	**0.00**	**0.00**		

4. INSTREAM HABITAT: Varied substrate sizes, water velocity and depths, woody and leafy debris, stable substrate, low embeddedness, shade, undercut banks, root mats, SAV, macrophytes, emergent vegetation, riffle-pool complexes, stable features.

	Condition Category				Comments:	
	Optimal	Suboptimal	Marginal	Poor		
Instream Habitat/ Available Cover	Physical Elements that enhance a stream's ability to support aquatic organisms are present in greater than or equal to 50% of the reach. Substrate is favorable for colonization by a diverse and abundant epifaunal community, and there are many suitable areas for epifaunal colonization and/or fish cover.	Physical Elements that enhance a stream's ability to support aquatic organisms are present in greater than or equal to 30% and less than 50% of the reach. Conditions are mostly desirable and are generally suitable for full colonization by a moderately diverse and abundant epifaunal community.	Physical Elements that enhance a stream's ability to support aquatic organisms are present in greater than or equal to 10% and less than 30% of the reach. Conditions are generally suitable for partial colonization by epifaunal and/or fish communities.	Physical Elements that enhance a stream's ability to support aquatic organisms are present in less than 10% of the reach. Conditions are generally unsuitable for colonization by epifaunal and/or fish communities. The reach.		
					CI = (Score)/20	**CI**
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	**SCORE** 16	**0.80**

5. CHANNEL ALTERATION: Stream crossings, riprap, concrete, gabions, or concrete blocks, straightening of channel/channelization, embankments, spoil piles, constrictions, etc.

	Condition Category				Comments:	
	Negligible	Minor	Moderate	Severe		
Channel Alteration	Channel alterations listed above are absent in the SAR. The stream has unaltered pattern or has normalized.	**Minor High:** Less than or equal to 20% of the stream reach is disrupted by any of the channel alterations listed above. Alteration or channelization present, usually adjacent to structures, (such as bridge abutments or culverts); evidence of past alteration, (i.e., channelization) may be present, but stream pattern and stability have recovered; recent alteration is not present. **Minor Low:** Greater than 20% and less than or equal to 40% of the stream reach is disrupted by any of the channel alterations listed above. Alteration or channelization present, usually adjacent to structures, (such as bridge abutments or culverts); evidence of past alteration, (i.e., channelization) may be present, but stream pattern and stability have recovered; recent alteration is not present.	**Moderate High:** Greater than 40% and less than or equal to 60% of reach is disrupted by any of the channel alterations listed above. If the stream has been channelized, normal stable stream meander pattern has not recovered. **Moderate Low:** Greater than 60% and less than or equal to 80% of reach is disrupted by any of the channel alterations listed in the parameter guidelines. If the stream has been channelized, normal stable stream meander pattern has not recovered.	Greater than 80% of reach is disrupted by any of the channel alterations listed above. Greater than 80% of banks shored with gabion, riprap, or concrete.		
		High / Low	High / Low		**CI = (Score)/20**	**CI**
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	**SCORE** 15	**0.75**

RIVERINE CONDITION INDEX (RCI)	**RCI**
NOTE: **The CIs and RCI should be rounded to 2 decimal places.**	**RCI = (Sum of all CI's)/5** → **0.74**

If a CI is not applicable (e.g. due to use on intermittent watercourse or >100 sq. mile drainage area) in order to utilize the auto calculator feature the user will need to modify the RCI formula or enter the maximum score for that CI to achieve a CI of 1.0 which will offset the divisor difference.

General Comments:

Riverine Assessment Form 1

Pennsylvania Riverine Condition Level 2 Rapid Assessment Protocol (Document No. 310-2137-003)

Pennsylvania Department of Environmental Protection

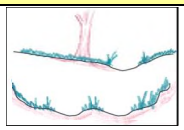
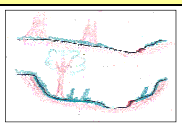
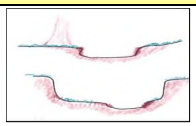
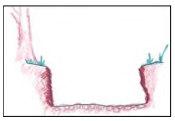
For use in intermittent or perennial watercourses with drainage areas ≤ 2,000 square mile drainage areas.

Project #	Project Name	Locality	Date	Ch 93 Classification	AA Id	Length
	PPP	Woodbury Twp., Blair Co., PA	3/11/2019	Drains to HQ-CWF, MF	S8r	311 ft.

Latitude	40.434489	Longitude	-78.269194	FGM Level 1 Channel Classification	Ephemeral

Evaluator(s)	Stream Name and Information	Notes: Used 100 ft. upstream and downstream limits to define AA.
K. Berend	S8r - UNT to Piney Creek	

1. CHANNEL/FLOODPLAIN: Assess the cross-section of the stream and prevailing conditions along the AA.

	Condition Category				
	Optimal	**Suboptimal**	**Marginal**	**Poor**	**Severe**
Channel / Floodplain	 **Channel Geometry:** These channels show very little incision or widening and little or no evidence of active erosion. Anastomosing channels may be present. **Channel Stability:** Visual indicators include: 1) the banks are not eroding along greater than 5% of the reach; 2) natural vegetative or rock stability features are present along greater than 80% of the banks; 2) stable point bars and bankfull benches may be present; 3) mid-channel bars and transverse bars are rare and if transient channel sediment deposition is present, it covers less than or equal to 10% of the stream bottom; 4) baseflow is connected to the rooting depths of vegetation in the active floodplain. **Active Floodplain Connection:** The bankfull stream flows have frequent access to the active floodplain and fully developed point bars or bankfull benches that are accessed at most flows greater than baseflow.	 **Channel Geometry:** These channels are slightly incised or overwidened and contain a few areas of active erosion. **Channel Stability:** Visual indicators include: 1) the banks are actively eroding along less than 25% of the reach; 2) depositional features such as point bars and bankfull benches are present and stable during high flows and occur along greater than 50% of the reach; 3) natural bank protection like vegetation or rock is providing stability along greater than 50% of the reach; 4) baseflow is connected to vegetated point bars and bankfull benches. **Active Floodplain Connection:** The bankfull stream flows frequently access bankfull benches, or point bars along portions of the reach and may frequently inundate the active floodplain.	 **Channel Geometry:** These channels are over-widened or incised, but to a lesser degree than the Severe and Poor channel conditions. **Channel Stability:** Visual indicators include: 1) the banks are eroding or severely undercut along greater than 25% and less than or equal to 50% of the reach; 2) depositional features like point bars or bankfull benches occur along greater than 25% and less than or equal to 50% of the reach; 3) the stream banks may consist of some vertical or undercut banks or nick points associated with head cuts; **Active Floodplain Connection:** The bankfull stream flows have infrequent connection to the active floodplain.	 **Channel Geometry:** These channels are over-widened or incised and eroding vertically and/or laterally. **Channel Stability:** Visual indicators include: 1) the banks are eroding or severely undercut along greater than 50% of the reach; 2) active or recent bank sloughing is present along greater than 50% of the reach; 3) natural bank protection like vegetation is not preventing bank erosion along the reach; 4) depositional features, such as point bars and bank full benches, are absent from the reach or newly developing along less than 25% of the reach; 5) bank full benches and point bars frequently scour during high flows; 6) baseflow is disconnected from plant rooting depths and the active floodplain. **Active Floodplain Connection:** The bankfull stream flows are not connected to the active floodplain.	 **Channel Geometry:** These channels are deeply incised and actively eroding vertically and/or laterally. Over widened channels may contain sections of unstable braided channels from aggradation. **Channel Stability:** Visual indicators include: 1) the banks are actively eroding or being undercut along greater than 80% of the reach; 2) active or recent bank sloughing is occurring along greater than 80% of the reach; 3) natural bank protection like vegetation is not preventing bank erosion or sloughing; 4) depositional features such as point bars and bankfull benches are absent; 5) flood flows are disconnected from the active floodplain. **Active Floodplain Connection:** The bankfull stream flows are never connected to the active floodplain.
SCORE	20 19 18 17	16 15 14 13	12 11 10 9	8 7 6 5	4 3 2 1

Comments:

CI = (Score)/20		CI
SCORE	**11**	**0.55**

2. RIPARIAN VEGETATION: Assess the floodplain along the entire AA (Visual estimates of areal coverage from aerial photos with field verification acceptable).

	Condition Category										**Comments:**
	Optimal	**Suboptimal**		**Marginal**		**Poor**					
Riparian Vegetation (Floodplain)	Riparian area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	**High Suboptimal:** Riparian area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	**Low Suboptimal:** Riparian area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** Riparian area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.	**Low Marginal:** Riparian area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.	**High Poor:** Riparian area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.	**Low Poor:** Riparian area consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.		
		High	**Low**	**High**	**Low**	**High**	**Low**				
SCORE	20 19 18 17 16	15 14 13	12 11	10 9 8	7 6	5 4 3	2 1				

1. Identify Condition Category areas along the floodplain using the descriptors above.
2. Estimate the % area within each condition category.
3. Enter the % Riparian Area in in decimal form (0.00) and Score for each category in the blocks below. Ensure the sum of the % Riparian Area Blocks equal 100

	Condition Category							Side Sub-Index	
Right Side	% Riparian Area:	60%	30%	10%	0%	0%	0%	**0.65**	**Side Sub-Index = SUM(%Areas*Scores)/20**
	Score:	20	2	4	0	0	0		
	Total Sub-score:	**12.00**	**0.60**	**0.40**	**0.00**	**0.00**	**0.00**		
Left Side	Condition Category								
	% Riparian Area:	100%	0%	0%	0%	0%	0%	**1.00**	**CI = (Left Side CI + Right Side CI)/2**
	Score:	20	0	0	0	0	0		**CI**
	Total Sub-score:	**20.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		**0.83**

Riverine Assessment Form 1 - Page 2

2/4/2017

3. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 feet from edge of floodplain into the upland along the entire AA. (rough measurements of length & width may be acceptable)

	Condition Category				Comments:
	Optimal	**Suboptimal**	**Marginal**	**Poor**	
Riparian ZOI	Riparian ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	**High Suboptimal:** Riparian ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory. **Low Suboptimal:** Riparian ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** Riparian ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover. **Low Marginal:** Riparian ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.	**High Poor:** Riparian ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition. **Low Poor:** Riparian ZOI area consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	
		High / **Low**	**High** / **Low**	**High** / **Low**	
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	

1. Identify Condition Category areas along the floodplain using the descriptors above.
2. Estimate the % area within each condition category.
3. Enter the % Riparian Area in decimal form (0.00) and Score for each category in the blocks below. Ensure the sums of % Riparian ZOI Blocks equal 100

	Condition Category							**Side Sub-Index**	
Right Side	% Riparian Area:	90%	10%	0%	0%	0%	0%	**0.19**	**Side Sub-Index = SUM(%Areas*Scores)/20**
	Score:	2	20	0	0	0	0		
	Total Sub-score:	**1.80**	**2.00**	**0.00**	**0.00**	**0.00**	**0.00**		
	Condition Category								
Left Side	% Riparian Area:	100%	0%	0%	0%	0%	0%	**1.00**	**CI = (Left Side CI + Right Side CI)/2** → **CI**
	Score:	20	0	0	0	0	0		**0.60**
	Total Sub-score:	**20.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		

4. INSTREAM HABITAT: Varied substrate sizes, water velocity and depths, woody and leafy debris, stable substrate, low embeddedness, shade, undercut banks, root mats, SAV, macrophytes, emergent vegetation, riffle-pool complexes, stable features.

	Condition Category				Comments:	
	Optimal	**Suboptimal**	**Marginal**	**Poor**		
Instream Habitat/ Available Cover	Physical Elements that enhance a stream's ability to support aquatic organisms are present in greater than or equal to 50% of the reach. Substrate is favorable for colonization by a diverse and abundant epifaunal community, and there are many suitable areas for epifaunal colonization and/or fish cover.	Physical Elements that enhance a stream's ability to support aquatic organisms are present in greater than or equal to 30% and less than 50% of the reach. Conditions are mostly desirable and are generally suitable for full colonization by a moderately diverse and abundant epifaunal community.	Physical Elements that enhance a stream's ability to support aquatic organisms are present in greater than or equal to 10% and less than 30% of the reach. Conditions are generally suitable for partial colonization by epifaunal and/or fish communities.	Physical Elements that enhance a stream's ability to support aquatic organisms are present in less than 10% of the reach. Conditions are generally unsuitable for colonization by epifaunal and/or fish communities. The reach.		**CI = (Score)/20** → **CI**
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	**SCORE** n/a	**0.00**

5. CHANNEL ALTERATION: Stream crossings, riprap, concrete, gabions, or concrete blocks, straightening of channel/channelization, embankments, spoil piles, constrictions, etc.

	Condition Category				Comments:	
	Negligible	**Minor**	**Moderate**	**Severe**		
Channel Alteration	Channel alterations listed above are absent in the SAR. The stream has unaltered pattern or has normalized.	**Minor High:** Less than or equal to 20% of the stream reach is disrupted by any of the channel alterations listed above. Alteration or channelization present, usually adjacent to structures, (such as bridge abutments or culverts); evidence of past alteration, (i.e., channelization) may be present, but stream pattern and stability have recovered; recent alteration is not present. **Minor Low:** Greater than 20% and less than or equal to 40% of the stream reach is disrupted by any of the channel alterations listed above. Alteration or channelization present, usually adjacent to structures, (such as bridge abutments or culverts); evidence of past alteration, (i.e., channelization) may be present, but stream pattern and stability have recovered; recent alteration is not present.	**Moderate High:** Greater than 40% and less than or equal to 60% of reach is disrupted by any of the channel alterations listed above. If the stream has been channelized, normal stable stream meander pattern has not recovered. **Moderate Low:** Greater than 60% and less than or equal to 80% of reach is disrupted by any of the channel alterations listed in the parameter guidelines. If the stream has been channelized, normal stable stream meander pattern has not recovered.	Greater than 80% of reach is disrupted by any of the channel alterations listed above. Greater than 80% of banks shored with gabion, riprap, or concrete.		
		High / **Low**	**High** / **Low**			**CI = (Score)/20** → **CI**
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	**SCORE** 12	**0.60**

RIVERINE CONDITION INDEX (RCI)	**RCI**
NOTE: **The CIs and RCI should be rounded to 2 decimal places.**	**RCI = (Sum of all CI's)/5** → **0.64**

If a CI is not applicable (e.g. due to use on intermittent watercourse or >100 sq. mile drainage area) in order to utilize the auto calculator feature the user will need to modify the RCI formula or enter the maximum score for that CI to achieve a CI of 1.0 which will offset the divisor difference.

General Comments:

Riverine Assessment Form 1

Pennsylvania Riverine Condition Level 2 Rapid Assessment Protocol (Document No. 310-2137-003)

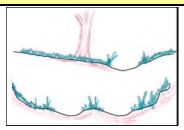
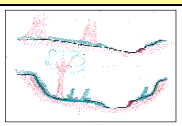
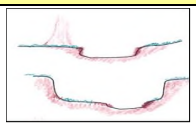
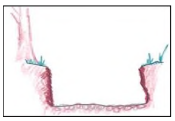
Pennsylvania Department of Environmental Protection

For use in intermittent or perennial watercourses with drainage areas ≤ 2,000 square mile drainage areas.

Project #	Project Name		Locality	Date	Ch 93 Classification		AA Id	Length
	PPP		Woodbury Twp., Blair Co., PA	3/11/2019	HQ-CWF, MF		S-M30	1000 ft.
Latitude	40.434994	**Longitude**	-78.264969	**FGM Level 1 Channel Classification**			Perennial	

Evaluator(s)	Stream Name and Information	Notes: Used 20x channel width to define AA limits.
K. Berend	S-M30 - Piney Creek	

1. CHANNEL/FLOODPLAIN: Assess the cross-section of the stream and prevailing conditions along the AA.

	Condition Category				
	Optimal	**Suboptimal**	**Marginal**	**Poor**	**Severe**
					
Channel / Floodplain	**Channel Geometry:** These channels show very little incision or widening and little or no evidence of active erosion. Anastomosing channels may be present. **Channel Stability:** Visual indicators include: 1) the banks are not eroding along greater than 5% of the reach; 2) natural vegetative or rock stability features are present along greater than 80% of the banks; 2) stable point bars and bankfull benches may be present; 3) mid-channel bars and transverse bars are rare and if transient channel sediment deposition is present, it covers less than or equal to 10% of the stream bottom; 4) baseflow is connected to the rooting depths of vegetation in the active floodplain. **Active Floodplain Connection:** The bankfull stream flows have frequent access to the active floodplain and fully developed point bars or bankfull benches that are accessed at most flows greater than baseflow.	**Channel Geometry:** These channels are slightly incised or overwidened and contain a few areas of active erosion. **Channel Stability:** Visual indicators include: 1) the banks are actively eroding along less than 25% of the reach; 2) depositional features such as point bars and bankfull benches are present and stable during high flows and occur along greater than 50% of the reach; 3) natural bank protection like vegetation or rock is providing stability along greater than 50% of the reach; 4) baseflow is connected to vegetated point bars and bankfull benches. **Active Floodplain Connection:** The bankfull stream flows frequently access bankfull benches, or point bars along portions of the reach and may frequently inundate the active floodplain.	**Channel Geometry:** These channels are over-widened or incised, but to a lesser degree than the Severe and Poor channel conditions. **Channel Stability:** Visual indicators include: 1) the banks are eroding or severely undercut along greater than 25% and less than or equal to 50% of the reach; 2) depositional features like point bars or bankfull benches occur along greater than 25% and less than or equal to 50% of the reach; 3) the stream banks may consist of some vertical or undercut banks or nick points associated with head cuts; **Active Floodplain Connection:** The bankfull stream flows have infrequent connection to the active floodplain.	**Channel Geometry:** These channels are over-widened or incised and eroding vertically and/or laterally. **Channel Stability:** Visual indicators include: 1) the banks are eroding or severely undercut along greater than 50% of the reach; 2) active or recent bank sloughing is present along greater than 50% of the reach; 3) natural bank protection like vegetation is not preventing bank erosion along the reach; 4) depositional features, such as point bars and bank full benches, are absent from the reach or newly developing along less than 25% of the reach; 5) bank full benches and point bars frequently scour during high flows; 6) baseflow is disconnected from plant rooting depths and the active floodplain. **Active Floodplain Connection:** The bankfull stream flows are not connected to the active floodplain.	**Channel Geometry:** These channels are deeply incised and actively eroding vertically and/or laterally. Over widened channels may contain sections of unstable braided channels from aggradation. **Channel Stability:** Visual indicators include: 1) the banks are actively eroding or being undercut along greater than 80% of the reach; 2) active or recent bank sloughing is occurring along greater than 80% of the reach; 3) natural bank protection like vegetation is not preventing bank erosion or sloughing; 4) depositional features such as point bars and bankfull benches are absent; 5) flood flows are disconnected from the active floodplain. **Active Floodplain Connection:** The bankfull stream flows are never connected to the active floodplain.
SCORE	**20 19 18 17**	**16 15 14 13**	**12 11 10 9**	**8 7 6 5**	**4 3 2 1**

Comments:

CI = (Score)/20		CI
SCORE	**17**	**0.85**

2. RIPARIAN VEGETATION: Assess the floodplain along the entire AA (Visual estimates of areal coverage from aerial photos with field verification acceptable).

	Condition Category										**Comments:**
	Optimal		**Suboptimal**		**Marginal**		**Poor**				
Riparian Vegetation (Floodplain)	Riparian area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.		**High Suboptimal:** Riparian area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.	**Low Suboptimal:** Riparian area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** Riparian area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.	**Low Marginal:** Riparian area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.	**High Poor:** Riparian area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.	**Low Poor:** Riparian area consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	
			High	**Low**	**High**	**Low**	**High**	**Low**			
SCORE	**20 19 18 17 16**		**15 14 13**	**12 11**	**10 9 8**	**7 6**	**5 4 3**	**2 1**			

1. Identify Condition Category areas along the floodplain using the descriptors above.
2. Estimate the % area within each condition category.
3. Enter the % Riparian Area in in decimal form (0.00) and Score for each category in the blocks below. Ensure the sum of the % Riparian Area Blocks equal 100

	Condition Category						**Side Sub-Index**	
Right Side	% Riparian Area:	80%	20%	0%	0%	0%	0%	**Side Sub-Index = SUM(%Areas*Scores)/20**
	Score:	20	7	0	0	0	0	**0.87**
	Total Sub-score:	**16.00**	**1.40**	**0.00**	**0.00**	**0.00**	**0.00**	
	Condition Category							
Left Side	% Riparian Area:	95%	5%	0%	0%	0%	0%	**CI = (Left Side CI + Right Side CI)/2**
	Score:	20	7	0	0	0	0	**0.97**
	Total Sub-score:	**19.00**	**0.35**	**0.00**	**0.00**	**0.00**	**0.00**	**CI 0.92**

Riverine Assessment Form 1 - Page 2

2/4/2017

3. RIPARIAN ZONE OF INFLUENCE: Assess land cover along both sides, 100 feet from edge of floodplain into the upland along the entire AA. (rough measurements of length & width may be acceptable)

	Condition Category				Comments:
	Optimal	**Suboptimal**	**Marginal**	**Poor**	
Riparian ZOI	Riparian ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	**High Suboptimal:** Riparian ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory. **Low Suboptimal:** Riparian ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.	**High Marginal:** Riparian ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover. **Low Marginal:** Riparian ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.	**High Poor:** Riparian ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition. **Low Poor:** Riparian ZOI area consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	
		High / **Low**	**High** / **Low**	**High** / **Low**	
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	

1. Identify Condition Category areas along the floodplain using the descriptors above.
2. Estimate the % area within each condition category.
3. Enter the % Riparian Area in decimal form (0.00) and Score for each category in the blocks below.

Ensure the sums of % Riparian ZOI Blocks equal 100

								Side Sub-Index	
	Condition Category								
Right Side	% Riparian Area:	45%	55%	0%	0%	0%	0%	**0.51**	**Side Sub-Index = SUM(%Areas*Scores)/20**
	Score:	20	2	0	0	0	0		
	Total Sub-score:	**9.00**	**1.10**	**0.00**	**0.00**	**0.00**	**0.00**		
	Condition Category								
Left Side	% Riparian Area:	95%	5%	0%	0%	0%	0%	**0.96**	**CI = (Left Side CI + Right Side CI)/2** — **CI**
	Score:	20	2	0	0	0	0		**0.73**
	Total Sub-score:	**19.00**	**0.10**	**0.00**	**0.00**	**0.00**	**0.00**		

4. INSTREAM HABITAT: Varied substrate sizes, water velocity and depths, woody and leafy debris, stable substrate, low embeddedness, shade, undercut banks, root mats, SAV, macrophytes, emergent vegetation, riffle-pool complexes, stable features.

	Condition Category				Comments:	
	Optimal	**Suboptimal**	**Marginal**	**Poor**		
Instream Habitat/ Available Cover	Physical Elements that enhance a stream's ability to support aquatic organisms are present in greater than or equal to 50% of the reach. Substrate is favorable for colonization by a diverse and abundant epifaunal community, and there are many suitable areas for epifaunal colonization and/or fish cover.	Physical Elements that enhance a stream's ability to support aquatic organisms are present in greater than or equal to 30% and less than 50% of the reach. Conditions are mostly desirable and are generally suitable for full colonization by a moderately diverse and abundant epifaunal community.	Physical Elements that enhance a stream's ability to support aquatic organisms are present in greater than or equal to 10% and less than 30% of the reach. Conditions are generally suitable for partial colonization by epifaunal and/or fish communities.	Physical Elements that enhance a stream's ability to support aquatic organisms are present in less than 10% of the reach. Conditions are generally unsuitable for colonization by epifaunal and/or fish communities. The reach.		
					CI = (Score)/20	**CI**
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	**SCORE** 19	**0.95**

5. CHANNEL ALTERATION: Stream crossings, riprap, concrete, gabions, or concrete blocks, straightening of channel/channelization, embankments, spoil piles, constrictions, etc.

	Condition Category				Comments:	
	Negligible	**Minor**	**Moderate**	**Severe**		
Channel Alteration	Channel alterations listed above are absent in the SAR. The stream has unaltered pattern or has normalized.	**Minor High:** Less than or equal to 20% of the stream reach is disrupted by any of the channel alterations listed above. Alteration or channelization present, usually adjacent to structures, (such as bridge abutments or culverts); evidence of past alteration, (i.e., channelization) may be present, but stream pattern and stability have recovered; recent alteration is not present. **Minor Low:** Greater than 20% and less than or equal to 40% of the stream reach is disrupted by any of the channel alterations listed above. Alteration or channelization present, usually adjacent to structures, (such as bridge abutments or culverts); evidence of past alteration, (i.e., channelization) may be present, but stream pattern and stability have recovered; recent alteration is not present.	**Moderate High:** Greater than 40% and less than or equal to 60% of reach is disrupted by any of the channel alterations listed above. If the stream has been channelized, normal stable stream meander pattern has not recovered. **Moderate Low:** Greater than 60% and less than or equal to 80% of reach is disrupted by any of the channel alterations listed in the parameter guidelines. If the stream has been channelized, normal stable stream meander pattern has not recovered.	Greater than 80% of reach is disrupted by any of the channel alterations listed above. Greater than 80% of banks shored with gabion, riprap, or concrete.		
		High / **Low**	**High** / **Low**		**CI = (Score)/20**	**CI**
SCORE	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	**SCORE** 18	**0.90**

RIVERINE CONDITION INDEX (RCI)	**RCI**
NOTE: **The CIs and RCI should be rounded to 2 decimal places.**	**RCI = (Sum of all CI's)/5** — **0.87**

If a CI is not applicable (e.g. due to use on intermittent watercourse or >100 sq. mile drainage area) in order to utilize the auto calculator feature the user will need to modify the RCI formula or enter the maximum score for that CI to achieve a CI of 1.0 which will offset the divisor difference.

General Comments:

ATTACHMENT B

Local and Municipal Notification Letters

- **Act 14 Notifications**
- **Act 167 Stormwater/Floodplain**

Supplemental Acts 14/67/68/127 Notifications

TETRA TECH

PITT-01-19-034

January 30, 2019

Project Number 212C-PB-00387

Blair County
423 Allegheny Street, Suite 142
Hollidaysburg, PA 16648

Reference: Sunoco Pipeline, L.P. (SPLP)
Pennsylvania Pipeline Project
Major Modification I

To Whom It May Concern:

This municipal notice, under the requirements of Acts 14, 67, 68, and 127, is to inform you that our client, Sunoco Pipeline, L.P. (SPLP), is applying for coverage under the Erosion and Sediment Control General Permit (ESCGP-3) for Earth Disturbance Associated with Oil and Gas Exploration, Production, Processing or Treatment Operations or Transmission Facilities and for coverage under Chapter 105 Joint Permit for Water Obstruction and Encroachment.

Project Name: Pennsylvania Pipeline Project

Applicant Name: Sunoco Pipeline, L.P.
525 Fritztown Road
Sinking Spring, PA 19608

Project Description: Sunoco Pipeline, L.P. (SPLP) proposes a Major Modification to the Pennsylviana Pipeline Project within Woodbury Township, Blair County. The Major Modification consists of a change in the route and installation method for the 16-inch diameter pipeline previously permitted as the Piney Creek Horizontal Directional Drill (HDD). This permit request is to convert the HDD to open cut methodolgy for the majority of the reroute, and a conventional auger bore under Piney Creek Road / High Street (State Route 866). The reroute will increase the limits-of-disturbance by 14.54 acres and contain one new stream crossing.

Site Location: Project crosses through High Street (SR 866) approximately 3.5 miles south of Williamsburg, PA.

Enclosed is a copy of the Notice of Intent (NOI) application for an ESCGP-3, General Information Form (GIF) for the Wetlands and Waterways permit application, and Location map of the proposed major modification route. Please submit any comments concerning this project within 30 days from date of receipt of this letter to:

Pennsylvania Department of Environmental Protection (PA DEP)
400 Waterfront Drive
Pittsburgh, Pennsylvania 15222
Phone: (412) 442-4000

Tetra Tech
661 Andersen Drive, Pittsburgh, PA 15220-2700
Tel 412.921.7090 Fax 412.921.4040 www.tetratech.com

Should you have questions regarding this correspondence, please do not hesitate to contact me at 412.921.8163 or via e-mail at Robert.Simcik@tetratech.com.

Sincerely,

Robert F. Simcik, P.E.
E&S Task Manager

RFS/clm

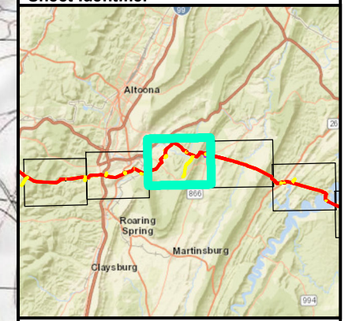
Enclosure: Site Location Maps; Notice of Intent; GIF

cc: File 212C-PB-00387

Legend

- Access Road
- Alignment Centerline
- Previously Approved LOD
- Major Modification I LOD
- Block Valve/Station

Sheet Identifier



N

0 1,000 2,000 Feet

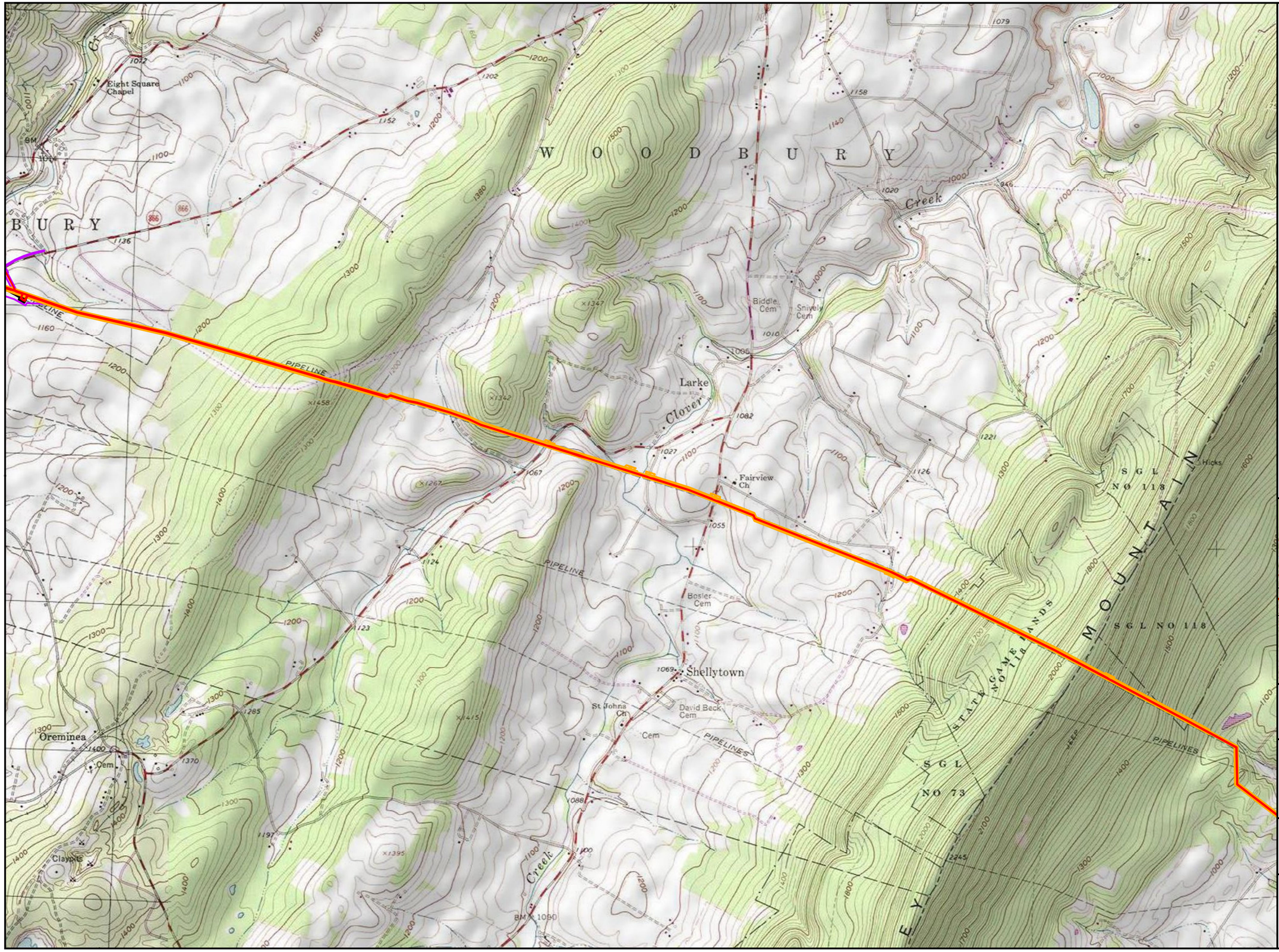
0 300 600 Meters

PROJECT LOCATION MAP
ATTACHMENT 1-3
PENNSYLVANIA PIPELINE PROJECT
JANUARY 18, 2019 ALIGNMENT
SUNOCO LOGISTICS, L.P.
BLAIR COUNTY,
PENNSYLVANIA

TETRA TECH

Notes:
1) Topographic map provided by ESRI's ArcGIS Online USA Topo Maps map service (© 2013 National Geographic Society, i-cubed).
2) Quadrangle(s) displayed are Hollidaysburg.

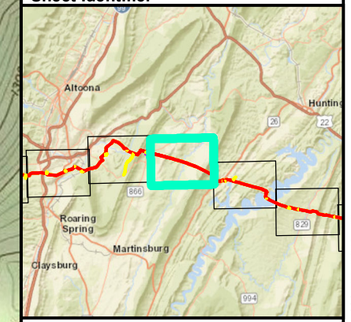
P:\GIS\SUNOCO\MARINER EAST 2\MXD\PPP ESCGP\PENNPIPELINE_PINEYCREEK_ESCGP_USGS.MXD 01/28/19 TT



Legend

- Access Road
- Alignment Centerline
- Previously Approved LOD
- Major Modification I LOD
- Block Valve/Station

Sheet Identifier



N

0 1,000 2,000 Feet

0 300 600 Meters

PROJECT LOCATION MAP
ATTACHMENT 1-4
PENNSYLVANIA PIPELINE PROJECT
JANUARY 18, 2019 ALIGNMENT
SUNOCO LOGISTICS, L.P.
BLAIR COUNTY,
PENNSYLVANIA

TETRA TECH

Notes:
1) Topographic map provided by ESRI's ArcGIS Online USA Topo Maps map service (© 2013 National Geographic Society, i-cubed).
2) Quadrangle(s) displayed are Frankstown, Williamsburg.

PGH P:\GIS\SUNOCO\MARINER EAST 2\MXD\PPP ESCGP\PENN\PIPELINE_PINEYCREEK_ESCGP_USGS.MXD 01/28/19 TT

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

GENERAL INFORMATION FORM – AUTHORIZATION APPLICATION

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This version of the General Information Form (GIF) must be completed and returned with any program-specific application being submitted to the Department.

Related ID#s (If Known)				DEP USE ONLY
Client ID#		**APS ID#**		Date Received & General Notes
Site ID#		**Auth ID#**		
Facility ID#				

CLIENT INFORMATION

DEP Client ID#	Client Type / Code
	NPACO

Organization Name or Registered Fictitious Name	Employer ID# (EIN)	Dun & Bradstreet ID#
Sunoco Pipeline L.P.	23-3102656	11-339-2331

Individual Last Name	First Name	MI	Suffix	SSN
NA				

Additional Individual Last Name	First Name	MI	Suffix	SSN
NA				

Mailing Address Line 1	Mailing Address Line 2
525 Fritztown Road	

Address Last Line – City	State	ZIP+4	Country
Sinking Spring	PA	19608	USA

Client Contact Last Name	First Name	MI	Suffix
Gordon	Matthew	L	

Client Contact Title	Phone	Ext
Senior Director	610-670-3284	

Email Address	FAX
MLGordon@sunocologistics.com	

SITE INFORMATION

DEP Site ID#	Site Name
	Pennsylvania Pipeline Project - Goldfinch Lane HDD Reroute

EPA ID# NA **Estimated Number of Employees to be Present at Site** 0

Description of Site
Installation of an approximately 1.1 mile 16-inch natural gas liquid pipeline through Jackson Township in Cambria County in southwestern PA.

County Name	Municipality	City	Boro	Twp	State
Cambria	Jackson Township	☐	☐	☒	
County Name	**Municipality**	**City**	**Boro**	**Twp**	**State**
		☐	☐	☐	

Site Location Line 1	Site Location Line 2
Refer to Attachment 8 (Location Map)	

Site Location Last Line – City	State	ZIP+4

Detailed Written Directions to Site
The proposed Project site begins approximately 0.1 mile to east of Mile Hill Road and 0.1 mile south of Benshoff Mill Road heading southeast for approximately 0.57 mile; then head northeast towards for approximately 0.43-mile towards the intersection of Benshoff Hill Road and William Penn Avenue (at the edge of a private driveway approximately 0.07 mile northwest of the Garnet Street/William Penn Avenue intersection).

Site Contact Last Name	First Name	MI	Suffix
Gordon	Matthew	L	

Site Contact Title	Site Contact Firm
Senior Director	

Mailing Address Line 1	Mailing Address Line 2
525 Fritztown Road	
Mailing Address Last Line – City	**State** **ZIP+4**
Sinking Spring	**PA** **19608**
Phone **Ext** **FAX**	**Email Address**
610-670-3284	
NAICS Codes (Two- & Three-Digit Codes – List All That Apply)	**6-Digit Code** (Optional)
23	493190
Client to Site Relationship	

FACILITY INFORMATION

Modification of Existing Facility **Yes** **No**

1. **Will this project modify an existing facility, system, or activity?** ☐ ☐
2. **Will this project involve an addition to an existing facility, system, or activity?** ☐ ☐

If "Yes", check all relevant facility types and provide DEP facility identification numbers below.

	Facility Type	DEP Fac ID#		Facility Type	DEP Fac ID#
☐	Air Emission Plant		☐	Industrial Minerals Mining Operation	
☐	Beneficial Use (water)		☐	Laboratory Location	
☐	Blasting Operation		☐	Land Recycling Cleanup Location	
☐	Captive Hazardous Waste Operation		☐	Mine DrainageTrmt/LandRecyProjLocation	
☐	Coal Ash Beneficial Use Operation		☐	Municipal Waste Operation	
☐	Coal Mining Operation		☐	Oil & Gas Encroachment Location	
☐	Coal Pillar Location		☒	Oil & Gas Location	0
☐	Commercial Hazardous Waste Operation		☐	Oil & Gas Water Poll Control Facility	
☐	Dam Location		☐	Oil & Gas Wastewater Storage Impoundment	
☐	Deep Mine Safety Operation -Anthracite		☐	Public Water Supply System	
☐	Deep Mine Safety Operation -Bituminous		☐	Radiation Facility	
☐	Deep Mine Safety Operation -Ind Minerals		☐	Residual Waste Operation	
☐	Encroachment Location (water, wetland)		☐	Storage Tank Location	
☐	Erosion & Sediment Control Facility		☐	Water Pollution Control Facility	
☐	Explosive Storage Location		☐	Water Resource	
			☐	Other:	

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	**Minutes**	**Seconds**	**Degrees**	**Minutes**	**Seconds**
Enters County at	78	52	31	40	25	0.5

Horizontal Accuracy Measure	Feet	NA	*--or--*	Meters
Horizontal Reference Datum Code	☐ North American Datum of 1927 ☒ North American Datum of 1983 ☐ World Geodetic System of 1984			
Horizontal Collection Method Code	SURVY, GPSDF, GISR			
Reference Point Code	CTROD			
Altitude	Feet	NA	*--or--*	Meters
Altitude Datum Name	☐ The National Geodetic Vertical Datum of 1929 ☐ The North American Vertical Datum of 1988 (NAVD88)			
Altitude (Vertical) Location Datum Collection Method Code				
Geometric Type Code	POINT			
Data Collection Date	2018 and 2019			
Source Map Scale Number	NA	Inch(es)	=	Feet
--or--		Centimeter(s)	=	Meters

PROJECT INFORMATION

Project Name

Pennsylvania Pipeline Project - Goldfinch Lane HDD Reroute

Project Description

SPLP proposes a Major Modification to the Pennsylvania Pipeline Project within Jackson Township, Cambria County. The modification is for the 16-inch pipeline and includes an approximately 1.1 mile reroute and the elimination of the Horizontal Directional Drill S2-0069-Goldfinch Lane. The reroute will increase the LOD by 10.83 acres and contains several new wetland and stream crossings. The pipeline will be installed using open cut methodology and a conventional bore crossing under Route 271.

Project Consultant Last Name	First Name	MI	Suffix
Schaeffer	Brad		

Project Consultant Title	Consulting Firm
Environmental Project Manager	Tetra Tech, Inc.

Mailing Address Line 1	Mailing Address Line 2
301 Ellicott Street	

Address Last Line – City	State	ZIP+4
Buffalo		14203

Phone	Ext	FAX	Email Address
716-849-9419	9227	716-849-9420	

Time Schedules	Project Milestone (Optional)

1. Have you informed the surrounding community and addressed any concerns prior to submitting the application to the Department? ☒ Yes ☐ No

2. Is your project funded by state or federal grants? ☐ Yes ☒ No

Note: If "Yes", specify what aspect of the project is related to the grant and provide the grant source, contact person and grant expiration date.

Aspect of Project Related to Grant

Grant Source: _____

Grant Contact Person: _____

Grant Expiration Date: _____

3. Is this application for an authorization on Appendix A of the Land Use Policy? (For referenced list, see Appendix A of the Land Use Policy attached to GIF instructions) ☒ Yes ☐ No

Note: If "No" to Question 3, the application is not subject to the Land Use Policy.

If "Yes" to Question 3, the application is subject to this policy and the Applicant should answer the additional questions in the **Land Use Information** section.

LAND USE INFORMATION

Note: Applicants are encouraged to submit copies of local land use approvals or other evidence of compliance with local comprehensive plans and zoning ordinances.

1. Is there an adopted county or multi-county comprehensive plan? ☒ Yes ☐ No

2. Is there an adopted municipal or multi-municipal comprehensive plan? ☒ Yes ☐ No

3. Is there an adopted county-wide zoning ordinance, municipal zoning ordinance or joint municipal zoning ordinance? ☒ Yes ☐ No

Note: If the Applicant answers "No" to either Questions 1, 2 or 3, the provisions of the PA MPC are not applicable and the Applicant does not need to respond to questions 4 and 5 below.

If the Applicant answers "Yes" to questions 1, 2 and 3, the Applicant should respond to questions 4 and 5 below.

4. Does the proposed project meet the provisions of the zoning ordinance or does the proposed project have zoning approval? If zoning approval has been received, attach documentation. ☒ Yes ☐ No

5. Have you attached Municipal and County Land Use Letters for the project? ☐ Yes ☒ No

COORDINATION INFORMATION

Note: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 and the accompanying Cultural Resource Notice Form.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 through 2.5 below.

If the activity will not be a mining project, skip questions 1.0 through 2.5 and begin with question 3.0.

1.0	**Is this a coal mining project?** If "Yes", respond to 1.1-1.6. If "No", skip to Question 2.0.	☐	Yes	☒	No
1.1	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be equal to or greater than 200 tons/day?**	☐	Yes	☐	No
1.2	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be greater than 50,000 tons/year?**	☐	Yes	☐	No
1.3	**Will this coal mining project involve coal preparation/ processing activities in which thermal coal dryers or pneumatic coal cleaners will be used?**	☐	Yes	☐	No
1.4	**For this coal mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
1.5	**Will this coal mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No
1.6	**Will this coal mining project involve underground coal mining to be conducted within 500 feet of an oil or gas well?**	☐	Yes	☐	No
2.0	**Is this a non-coal (industrial minerals) mining project?** If "Yes", respond to 2.1-2.6. If "No", skip to Question 3.0.	☐	Yes	☒	No
2.1	**Will this non-coal (industrial minerals) mining project involve the crushing and screening of non-coal minerals other than sand and gravel?**	☐	Yes	☐	No
2.2	**Will this non-coal (industrial minerals) mining project involve the crushing and/or screening of sand and gravel with the exception of wet sand and gravel operations (screening only) and dry sand and gravel operations with a capacity of less than 150 tons/hour of unconsolidated materials?**	☐	Yes	☐	No
2.3	**Will this non-coal (industrial minerals) mining project involve the construction, operation and/or modification of a portable non-metallic (i.e., non-coal) minerals processing plant under the authority of the General Permit for Portable Non-metallic Mineral Processing Plants (i.e., BAQ-PGPA/GP-3)?**	☐	Yes	☐	No
2.4	**For this non-coal (industrial minerals) mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
2.5	**Will this non-coal (industrial minerals) mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No

3.0	**Will your project, activity, or authorization have anything to do with a well related to oil or gas production, have construction within 200 feet of, affect an oil or gas well, involve the waste from such a well, or string power lines above an oil or gas well?** If "Yes", respond to 3.1-3.3. If "No", skip to Question 4.0.	☐	Yes	☒	No
3.1	**Does the oil- or gas-related project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)?**	☐	Yes	☐	No
3.2	**Will the oil- or gas-related project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or storm water system?** If "Yes", discuss in *Project Description*.	☐	Yes	☐	No
3.3	**Will the oil- or gas-related project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☐	No
4.0	**Will the project involve a construction activity that results in earth disturbance?** If "Yes", specify the total disturbed acreage. **4.0.1 Total Disturbed Acreage** 10.83 acres	☒	Yes	☐	No
5.0	**Does the project involve any of the following?** If "Yes", respond to 5.1-5.3. If "No", skip to Question 6.0.	☒	Yes	☐	No
5.1	**Water Obstruction and Encroachment Projects – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water?**	☒	Yes	☐	No
5.2	**Wetland Impacts – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a wetland?**	☒	Yes	☐	No
5.3	**Floodplain Projects by the commonwealth, a Political Subdivision of the commonwealth or a Public Utility – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a floodplain?**	☒	Yes	☐	No
6.0	**Will the project involve discharge of stormwater or wastewater from an industrial activity to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system?**	☐	Yes	☒	No
7.0	**Will the project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☒	No
8.0	**Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations?** If "Yes", indicate estimated proposed flow (gal/day). Also, discuss the sanitary sewer pipe sizes and the number of pumping stations/treatment facilities/name of downstream sewage facilities in the *Project Description*, where applicable. **8.0.1 Estimated Proposed Flow (gal/day)**	☐	Yes	☒	No
9.0	**Will the project involve the subdivision of land, or the generation of 800 gpd or more of sewage on an existing parcel of land or the generation of an additional 400 gpd of sewage on an already-developed parcel, or the generation of 800 gpd or more of industrial wastewater that would be discharged to an existing sanitary sewer system?**	☐	Yes	☒	No
	9.0.1 Was Act 537 sewage facilities planning submitted and approved by DEP? If "Yes" attach the approval letter. Approval required prior to 105/NPDES approval.	☐	Yes	☒	No
10.0	**Is this project for the beneficial use of biosolids for land application within Pennsylvania?** If "Yes" indicate how much (i.e. gallons or dry tons per year). **10.0.1 Gallons Per Year (residential septage)** _____ **10.0.2 Dry Tons Per Year (biosolids)**	☐	Yes	☒	No
11.0	**Does the project involve construction, modification or removal of a dam?** If "Yes", identify the dam. **11.0.1 Dam Name**	☐	Yes	☒	No

12.0	**Will the project interfere with the flow from, or otherwise impact, a dam?** If "Yes", identify the dam.	☐	Yes	☒	No
	12.0.1 Dam Name				
13.0	**Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)?** If "Yes", identify each type of emission followed by the amount of that emission.	☐	Yes	☒	No
	13.0.1 Enter all types & amounts of emissions; separate each set with semicolons. NA				
14.0	**Does the project include the construction or modification of a drinking water supply to serve 15 or more connections or 25 or more people, at least 60 days out of the year?** If "Yes", check all proposed sub-facilities.	☐	Yes	☒	No
	14.0.1 Number of Persons Served				
	14.0.2 Number of Employee/Guests				
	14.0.3 Number of Connections				
	14.0.4 Sub-Fac: Distribution System	☐	Yes	☐	No
	14.0.5 Sub-Fac: Water Treatment Plant	☐	Yes	☐	No
	14.0.6 Sub-Fac: Source	☐	Yes	☐	No
	14.0.7 Sub-Fac: Pump Station	☐	Yes	☐	No
	14.0.8 Sub Fac: Transmission Main	☐	Yes	☐	No
	14.0.9 Sub-Fac: Storage Facility	☐	Yes	☐	No
15.0	**Will your project include infiltration of storm water or waste water to ground water within one-half mile of a public water supply well, spring or infiltration gallery?**	☐	Yes	☒	No
16.0	**Is your project to be served by an existing public water supply?** If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project.	☒	Yes	☐	No
	16.0.1 Supplier's Name Jackson Township Water Authority Ebensburg Borough Highridge Water Authority				
	16.0.2 Letter of Approval from Supplier is Attached	☐	Yes	☒	No
17.0	**Will this project involve a new or increased drinking water withdrawal from a stream or other water body?** If "Yes", should reference both Water Supply and Watershed Management.	☐	Yes	☒	No
	17.0.1 Stream Name				
18.0	**Will the construction or operation of this project involve treatment, storage, reuse, or disposal of waste?** If "Yes", indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed.	☒	Yes	☐	No
	18.0.1 Type & Amount Non-hazardous/Construction related C&D waste will be disposed; Amount unknown				
19.0	**Will your project involve the removal of coal, minerals, etc. as part of any earth disturbance activities?**	☐	Yes	☒	No
20.0	**Does your project involve installation of a field constructed underground storage tank?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	20.0.1 Enter all substances & capacity of each; separate each set with semicolons.				
21.0	**Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	21.0.1 Enter all substances & capacity of each; separate each set with semicolons.				

22.0	**Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **22.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No
23.0	**Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **23.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No
24.0	**Will the intended activity involve the use of a radiation source?**	☐	Yes	☒	No

CERTIFICATION

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

Type or Print Name Matthew Gordon

Signature	Title	Date
	Senior Director	2-1-2019

January 31,2019

Dear Customer:

The following is the proof-of-delivery for tracking number **774354500621**.

Delivery Information:

Status:	Delivered	**Delivered to:**	Receptionist/Front Desk
Signed for by:	H.SHEPPLEY	**Delivery location:**	423 ALLEGHENY STREET HOLLIDAYSBURG, PA 16648
Service type:	FedEx Priority Overnight	**Delivery date:**	Jan 31, 2019 11:49
Special Handling:	Deliver Weekday Adult Signature Required		

Shipping Information:

Tracking number:	774354500621	**Ship date:**	Jan 30, 2019
		Weight:	0.5 lbs/0.2 kg

Recipient:
Commissioners
Blair County
423 Allegheny Street
HOLLIDAYSBURG, PA 16648 US

Shipper:
ADMIN OFFICE
Tetra Tech, Inc.
Foster Plaza Building 7
661 Andersen Drive
Pittsburgh, PA 15220 US

Reference
212IC-BF-00037.500
Purchase order number:
Carson/Morris

Thank you for choosing FedEx.

TETRA TECH

PITT-01-19-035

January 30, 2019

Project Number 212C-PB-00387

Woodbury Township
6385 Clover Creek Road
Willamsburg, PA 16693

Reference: Sunoco Pipeline, L.P. (SPLP)
Pennsylvania Pipeline Project
Major Modification I

To Whom It May Concern:

This municipal notice, under the requirements of Acts 14, 67, 68, and 127, is to inform you that our client, Sunoco Pipeline, L.P. (SPLP), is applying for coverage under the Erosion and Sediment Control General Permit (ESCGP-3) for Earth Disturbance Associated with Oil and Gas Exploration, Production, Processing or Treatment Operations or Transmission Facilities and for coverage under Chapter 105 Joint Permit for Water Obstruction and Encroachment.

Project Name: Pennsylvania Pipeline Project

Applicant Name: Sunoco Pipeline, L.P.
525 Fritztown Road
Sinking Spring, PA 19608

Project Description: Sunoco Pipeline, L.P. (SPLP) proposes a Major Modification to the Pennsylviana Pipeline Project within Woodbury Township, Blair County. The Major Modification consists of a change in the route and installation method for the 16-inch diameter pipeline previously permitted as the Piney Creek Horizontal Directional Drill (HDD). This permit request is to convert the HDD to open cut methodolgy for the majority of the reroute, and a conventional auger bore under Piney Creek Road / High Street (State Route 866). The reroute will increase the limits-of-disturbance by 14.54 acres and contain one new stream crossing

Site Location: Project crosses through High Street (SR 866) approximately 3.5 miles south of Williamsburg, PA.

Enclosed is a copy of the Notice of Intent (NOI) application for an ESCGP-3, General Information Form (GIF) for the Wetlands and Waterways permit application, and Location map of the proposed major modification route. Please submit any comments concerning this project within 30 days from date of receipt of this letter to:

Pennsylvania Department of Environmental Protection (PA DEP)
400 Waterfront Drive
Pittsburgh, Pennsylvania 15222
Phone: (412) 442-4000

Tetra Tech
661 Andersen Drive, Pittsburgh, PA 15220-2700
Tel 412.921.7090 Fax 412.921.4040 www.tetratech.com

Should you have questions regarding this correspondence, please do not hesitate to contact me at 412.921.8163 or via e-mail at Robert.Simcik@tetratech.com.

Sincerely,

Robert F. Simcik, P.E.
E&S Task Manager

RFS/clm

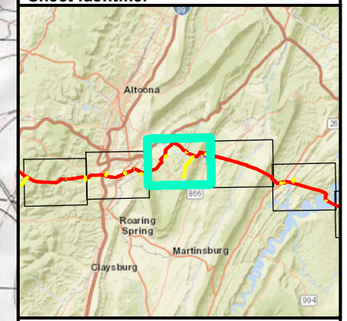
Enclosure: Site Location Maps; Notice of Intent; GIF

cc: File 212C-PB-00387

Legend

- Access Road
- Alignment Centerline
- Previously Approved LOD
- Major Modification I LOD
- Block Valve/Station

Sheet Identifier



N

0 1,000 2,000 Feet

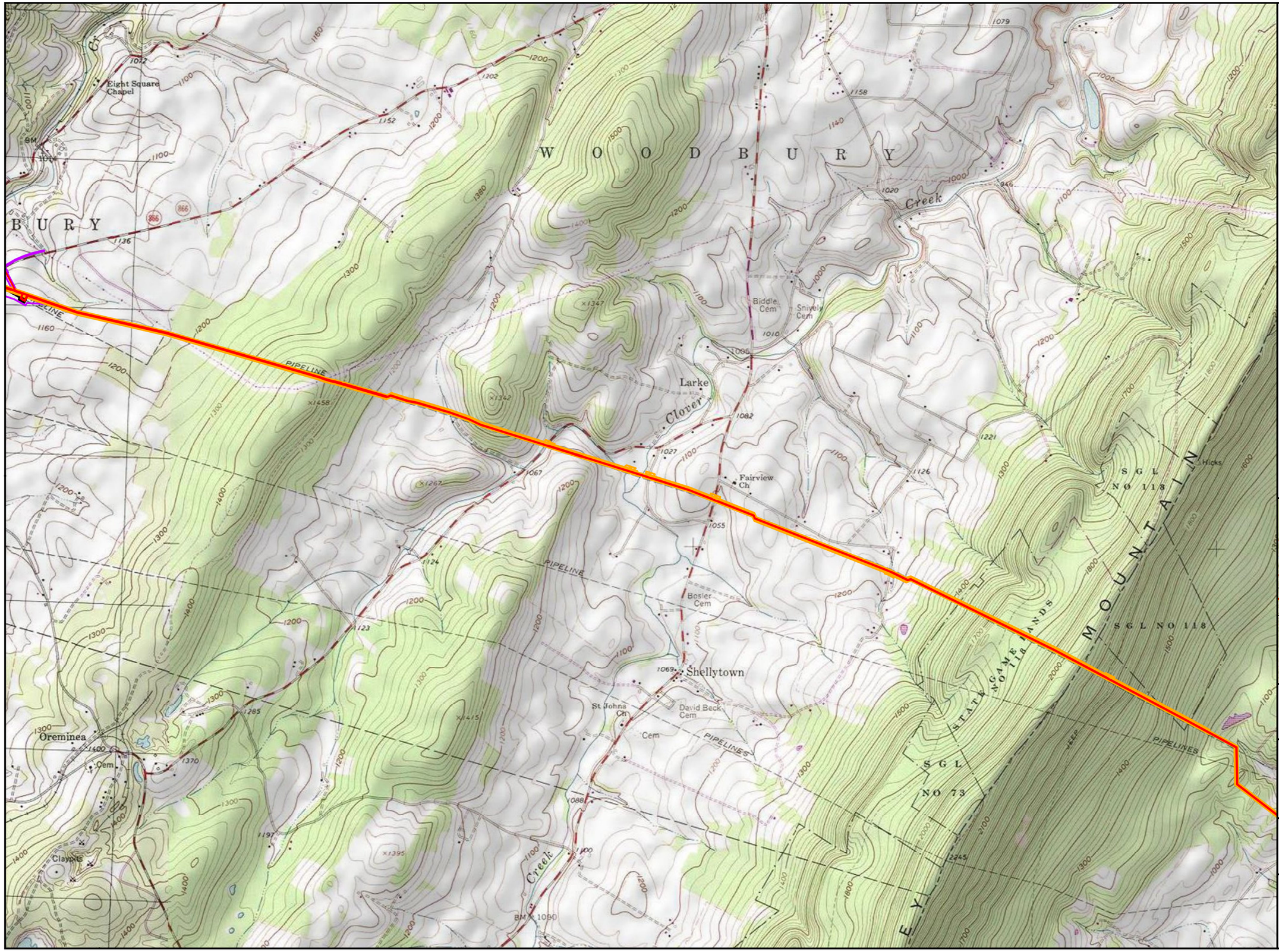
0 300 600 Meters

PROJECT LOCATION MAP
ATTACHMENT 1-3
PENNSYLVANIA PIPELINE PROJECT
JANUARY 18, 2019 ALIGNMENT
SUNOCO LOGISTICS, L.P.
BLAIR COUNTY,
PENNSYLVANIA

TETRA TECH

Notes:
1) Topographic map provided by ESRI's ArcGIS Online USA Topo Maps map service (© 2013 National Geographic Society, i-cubed).
2) Quadrangle(s) displayed are Hollidaysburg.

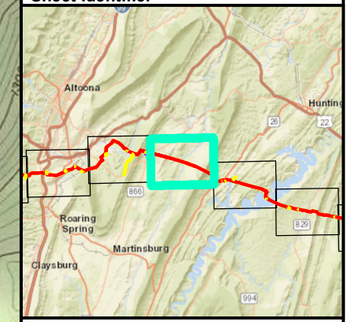
P:\GIS\SUNOCO\MARINER EAST 2\MXD\PPP ESCGP\PENNPIPELINE_PINEYCREEK_ESCGP_USGS.MXD 01/28/19 TT



Legend

- Access Road
- Alignment Centerline
- Previously Approved LOD
- Major Modification I LOD
- Block Valve/Station

Sheet Identifier



N

0 1,000 2,000 Feet

0 300 600 Meters

PROJECT LOCATION MAP
ATTACHMENT 1-4
PENNSYLVANIA PIPELINE PROJECT
JANUARY 18, 2019 ALIGNMENT
SUNOCO LOGISTICS, L.P.
BLAIR COUNTY,
PENNSYLVANIA

TETRA TECH

Notes:
1) Topographic map provided by ESRI's ArcGIS Online USA Topo Maps map service (© 2013 National Geographic Society, i-cubed).
2) Quadrangle(s) displayed are Frankstown, Williamsburg.

PGH P:\GIS\SUNOCO\MARINER EAST 2\MXD\PPP ESCGP\PENN\PIPELINE_PINEYCREEK_ESCGP_USGS.MXD 01/28/19 TT

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

GENERAL INFORMATION FORM – AUTHORIZATION APPLICATION

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This version of the General Information Form (GIF) must be completed and returned with any program-specific application being submitted to the Department.

Related ID#s (If Known)				DEP USE ONLY
Client ID#		**APS ID#**		Date Received & General Notes
Site ID#		**Auth ID#**		
Facility ID#				

CLIENT INFORMATION

DEP Client ID#	Client Type / Code
	NPACO

Organization Name or Registered Fictitious Name	Employer ID# (EIN)	Dun & Bradstreet ID#
Sunoco Pipeline L.P.	23-3102656	11-339-2331

Individual Last Name	First Name	MI	Suffix	SSN
NA				

Additional Individual Last Name	First Name	MI	Suffix	SSN
NA				

Mailing Address Line 1	Mailing Address Line 2
525 Fritztown Road	

Address Last Line – City	State	ZIP+4	Country
Sinking Spring	PA	19608	USA

Client Contact Last Name	First Name	MI	Suffix
Gordon	Matthew	L	

Client Contact Title	Phone	Ext
Senior Director	610-670-3284	

Email Address	FAX
MLGordon@sunocologistics.com	

SITE INFORMATION

DEP Site ID#	Site Name
	Pennsylvania Pipeline Project - Goldfinch Lane HDD Reroute

EPA ID# NA **Estimated Number of Employees to be Present at Site** 0

Description of Site
Installation of an approximately 1.1 mile 16-inch natural gas liquid pipeline through Jackson Township in Cambria County in southwestern PA.

County Name	Municipality	City	Boro	Twp	State
Cambria	Jackson Township	☐	☐	☒	
County Name	**Municipality**	**City**	**Boro**	**Twp**	**State**
		☐	☐	☐	

Site Location Line 1	Site Location Line 2
Refer to Attachment 8 (Location Map)	

Site Location Last Line – City	State	ZIP+4

Detailed Written Directions to Site
The proposed Project site begins approximately 0.1 mile to east of Mile Hill Road and 0.1 mile south of Benshoff Mill Road heading southeast for approximately 0.57 mile; then head northeast towards for approximately 0.43-mile towards the intersection of Benshoff Hill Road and William Penn Avenue (at the edge of a private driveway approximately 0.07 mile northwest of the Garnet Street/William Penn Avenue intersection).

Site Contact Last Name	First Name	MI	Suffix
Gordon	Matthew	L	

Site Contact Title	Site Contact Firm
Senior Director	

Mailing Address Line 1	Mailing Address Line 2
525 Fritztown Road	
Mailing Address Last Line – City	**State** **ZIP+4**
Sinking Spring	**PA** **19608**
Phone **Ext** **FAX**	**Email Address**
610-670-3284	
NAICS Codes (Two- & Three-Digit Codes – List All That Apply)	**6-Digit Code** (Optional)
23	493190
Client to Site Relationship	

FACILITY INFORMATION

Modification of Existing Facility **Yes** **No**

1. **Will this project modify an existing facility, system, or activity?** ☐ ☐
2. **Will this project involve an addition to an existing facility, system, or activity?** ☐ ☐

If "Yes", check all relevant facility types and provide DEP facility identification numbers below.

	Facility Type	DEP Fac ID#		Facility Type	DEP Fac ID#
☐	Air Emission Plant		☐	Industrial Minerals Mining Operation	
☐	Beneficial Use (water)		☐	Laboratory Location	
☐	Blasting Operation		☐	Land Recycling Cleanup Location	
☐	Captive Hazardous Waste Operation		☐	Mine DrainageTrmt/LandRecyProjLocation	
☐	Coal Ash Beneficial Use Operation		☐	Municipal Waste Operation	
☐	Coal Mining Operation		☐	Oil & Gas Encroachment Location	
☐	Coal Pillar Location		☒	Oil & Gas Location	0
☐	Commercial Hazardous Waste Operation		☐	Oil & Gas Water Poll Control Facility	
☐	Dam Location		☐	Oil & Gas Wastewater Storage Impoundment	
☐	Deep Mine Safety Operation -Anthracite		☐	Public Water Supply System	
☐	Deep Mine Safety Operation -Bituminous		☐	Radiation Facility	
☐	Deep Mine Safety Operation -Ind Minerals		☐	Residual Waste Operation	
☐	Encroachment Location (water, wetland)		☐	Storage Tank Location	
☐	Erosion & Sediment Control Facility		☐	Water Pollution Control Facility	
☐	Explosive Storage Location		☐	Water Resource	
			☐	Other:	

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	**Minutes**	**Seconds**	**Degrees**	**Minutes**	**Seconds**
Enters County at	78	52	31	40	25	0.5

Horizontal Accuracy Measure	Feet	NA	*--or--*	Meters
Horizontal Reference Datum Code	☐ North American Datum of 1927 ☒ North American Datum of 1983 ☐ World Geodetic System of 1984			
Horizontal Collection Method Code	SURVY, GPSDF, GISR			
Reference Point Code	CTROD			
Altitude	Feet	NA	*--or--*	Meters
Altitude Datum Name	☐ The National Geodetic Vertical Datum of 1929 ☐ The North American Vertical Datum of 1988 (NAVD88)			
Altitude (Vertical) Location Datum Collection Method Code				
Geometric Type Code	POINT			
Data Collection Date	2018 and 2019			
Source Map Scale Number	NA	Inch(es)	=	Feet
--or--		Centimeter(s)	=	Meters

PROJECT INFORMATION

Project Name

Pennsylvania Pipeline Project - Goldfinch Lane HDD Reroute

Project Description

SPLP proposes a Major Modification to the Pennsylvania Pipeline Project within Jackson Township, Cambria County. The modification is for the 16-inch pipeline and includes an approximately 1.1 mile reroute and the elimination of the Horizontal Directional Drill S2-0069-Goldfinch Lane. The reroute will increase the LOD by 10.83 acres and contains several new wetland and stream crossings. The pipeline will be installed using open cut methodology and a conventional bore crossing under Route 271.

Project Consultant Last Name	First Name	MI	Suffix
Schaeffer	Brad		

Project Consultant Title	Consulting Firm
Environmental Project Manager	Tetra Tech, Inc.

Mailing Address Line 1	Mailing Address Line 2
301 Ellicott Street	

Address Last Line – City	State	ZIP+4
Buffalo		14203

Phone	Ext	FAX	Email Address
716-849-9419	9227	716-849-9420	

Time Schedules	Project Milestone (Optional)

1. Have you informed the surrounding community and addressed any concerns prior to submitting the application to the Department? ☒ Yes ☐ No

2. Is your project funded by state or federal grants? ☐ Yes ☒ No

Note: If "Yes", specify what aspect of the project is related to the grant and provide the grant source, contact person and grant expiration date.

Aspect of Project Related to Grant

Grant Source: _____

Grant Contact Person: _____

Grant Expiration Date: _____

3. Is this application for an authorization on Appendix A of the Land Use Policy? (For referenced list, see Appendix A of the Land Use Policy attached to GIF instructions) ☒ Yes ☐ No

Note: If "No" to Question 3, the application is not subject to the Land Use Policy.

If "Yes" to Question 3, the application is subject to this policy and the Applicant should answer the additional questions in the **Land Use Information** section.

LAND USE INFORMATION

Note: Applicants are encouraged to submit copies of local land use approvals or other evidence of compliance with local comprehensive plans and zoning ordinances.

1. Is there an adopted county or multi-county comprehensive plan? ☒ Yes ☐ No

2. Is there an adopted municipal or multi-municipal comprehensive plan? ☒ Yes ☐ No

3. Is there an adopted county-wide zoning ordinance, municipal zoning ordinance or joint municipal zoning ordinance? ☒ Yes ☐ No

Note: If the Applicant answers "No" to either Questions 1, 2 or 3, the provisions of the PA MPC are not applicable and the Applicant does not need to respond to questions 4 and 5 below.

If the Applicant answers "Yes" to questions 1, 2 and 3, the Applicant should respond to questions 4 and 5 below.

4. Does the proposed project meet the provisions of the zoning ordinance or does the proposed project have zoning approval? If zoning approval has been received, attach documentation. ☒ Yes ☐ No

5. Have you attached Municipal and County Land Use Letters for the project? ☐ Yes ☒ No

COORDINATION INFORMATION

Note: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 and the accompanying Cultural Resource Notice Form.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 through 2.5 below.

If the activity will not be a mining project, skip questions 1.0 through 2.5 and begin with question 3.0.

1.0	**Is this a coal mining project?** If "Yes", respond to 1.1-1.6. If "No", skip to Question 2.0.	☐	Yes	☒	No
1.1	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be equal to or greater than 200 tons/day?**	☐	Yes	☐	No
1.2	**Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be greater than 50,000 tons/year?**	☐	Yes	☐	No
1.3	**Will this coal mining project involve coal preparation/ processing activities in which thermal coal dryers or pneumatic coal cleaners will be used?**	☐	Yes	☐	No
1.4	**For this coal mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
1.5	**Will this coal mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No
1.6	**Will this coal mining project involve underground coal mining to be conducted within 500 feet of an oil or gas well?**	☐	Yes	☐	No
2.0	**Is this a non-coal (industrial minerals) mining project?** If "Yes", respond to 2.1-2.6. If "No", skip to Question 3.0.	☐	Yes	☒	No
2.1	**Will this non-coal (industrial minerals) mining project involve the crushing and screening of non-coal minerals other than sand and gravel?**	☐	Yes	☐	No
2.2	**Will this non-coal (industrial minerals) mining project involve the crushing and/or screening of sand and gravel with the exception of wet sand and gravel operations (screening only) and dry sand and gravel operations with a capacity of less than 150 tons/hour of unconsolidated materials?**	☐	Yes	☐	No
2.3	**Will this non-coal (industrial minerals) mining project involve the construction, operation and/or modification of a portable non-metallic (i.e., non-coal) minerals processing plant under the authority of the General Permit for Portable Non-metallic Mineral Processing Plants (i.e., BAQ-PGPA/GP-3)?**	☐	Yes	☐	No
2.4	**For this non-coal (industrial minerals) mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters?**	☐	Yes	☐	No
2.5	**Will this non-coal (industrial minerals) mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet?**	☐	Yes	☐	No

3.0	**Will your project, activity, or authorization have anything to do with a well related to oil or gas production, have construction within 200 feet of, affect an oil or gas well, involve the waste from such a well, or string power lines above an oil or gas well?** If "Yes", respond to 3.1-3.3. If "No", skip to Question 4.0.	☐	Yes	☒	No
3.1	**Does the oil- or gas-related project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)?**	☐	Yes	☐	No
3.2	**Will the oil- or gas-related project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or storm water system?** If "Yes", discuss in *Project Description*.	☐	Yes	☐	No
3.3	**Will the oil- or gas-related project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☐	No
4.0	**Will the project involve a construction activity that results in earth disturbance?** If "Yes", specify the total disturbed acreage. **4.0.1 Total Disturbed Acreage** 10.83 acres	☒	Yes	☐	No
5.0	**Does the project involve any of the following?** If "Yes", respond to 5.1-5.3. If "No", skip to Question 6.0.	☒	Yes	☐	No
5.1	**Water Obstruction and Encroachment Projects – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water?**	☒	Yes	☐	No
5.2	**Wetland Impacts – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a wetland?**	☒	Yes	☐	No
5.3	**Floodplain Projects by the commonwealth, a Political Subdivision of the commonwealth or a Public Utility – Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a floodplain?**	☒	Yes	☐	No
6.0	**Will the project involve discharge of stormwater or wastewater from an industrial activity to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system?**	☐	Yes	☒	No
7.0	**Will the project involve the construction and operation of industrial waste treatment facilities?**	☐	Yes	☒	No
8.0	**Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations?** If "Yes", indicate estimated proposed flow (gal/day). Also, discuss the sanitary sewer pipe sizes and the number of pumping stations/treatment facilities/name of downstream sewage facilities in the *Project Description*, where applicable. **8.0.1 Estimated Proposed Flow (gal/day)**	☐	Yes	☒	No
9.0	**Will the project involve the subdivision of land, or the generation of 800 gpd or more of sewage on an existing parcel of land or the generation of an additional 400 gpd of sewage on an already-developed parcel, or the generation of 800 gpd or more of industrial wastewater that would be discharged to an existing sanitary sewer system?**	☐	Yes	☒	No
	9.0.1 Was Act 537 sewage facilities planning submitted and approved by DEP? If "Yes" attach the approval letter. Approval required prior to 105/NPDES approval.	☐	Yes	☒	No
10.0	**Is this project for the beneficial use of biosolids for land application within Pennsylvania?** If "Yes" indicate how much (i.e. gallons or dry tons per year). **10.0.1 Gallons Per Year (residential septage)** _____ **10.0.2 Dry Tons Per Year (biosolids)**	☐	Yes	☒	No
11.0	**Does the project involve construction, modification or removal of a dam?** If "Yes", identify the dam. **11.0.1 Dam Name**	☐	Yes	☒	No

12.0	**Will the project interfere with the flow from, or otherwise impact, a dam?** If "Yes", identify the dam.	☐	Yes	☒	No
	12.0.1 Dam Name				
13.0	**Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)?** If "Yes", identify each type of emission followed by the amount of that emission.	☐	Yes	☒	No
	13.0.1 Enter all types & amounts of emissions; separate each set with semicolons. NA				
14.0	**Does the project include the construction or modification of a drinking water supply to serve 15 or more connections or 25 or more people, at least 60 days out of the year?** If "Yes", check all proposed sub-facilities.	☐	Yes	☒	No
	14.0.1 Number of Persons Served				
	14.0.2 Number of Employee/Guests				
	14.0.3 Number of Connections				
	14.0.4 Sub-Fac: Distribution System	☐	Yes	☐	No
	14.0.5 Sub-Fac: Water Treatment Plant	☐	Yes	☐	No
	14.0.6 Sub-Fac: Source	☐	Yes	☐	No
	14.0.7 Sub-Fac: Pump Station	☐	Yes	☐	No
	14.0.8 Sub Fac: Transmission Main	☐	Yes	☐	No
	14.0.9 Sub-Fac: Storage Facility	☐	Yes	☐	No
15.0	**Will your project include infiltration of storm water or waste water to ground water within one-half mile of a public water supply well, spring or infiltration gallery?**	☐	Yes	☒	No
16.0	**Is your project to be served by an existing public water supply?** If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project.	☒	Yes	☐	No
	16.0.1 Supplier's Name Jackson Township Water Authority Ebensburg Borough Highridge Water Authority				
	16.0.2 Letter of Approval from Supplier is Attached	☐	Yes	☒	No
17.0	**Will this project involve a new or increased drinking water withdrawal from a stream or other water body?** If "Yes", should reference both Water Supply and Watershed Management.	☐	Yes	☒	No
	17.0.1 Stream Name				
18.0	**Will the construction or operation of this project involve treatment, storage, reuse, or disposal of waste?** If "Yes", indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed.	☒	Yes	☐	No
	18.0.1 Type & Amount Non-hazardous/Construction related C&D waste will be disposed; Amount unknown				
19.0	**Will your project involve the removal of coal, minerals, etc. as part of any earth disturbance activities?**	☐	Yes	☒	No
20.0	**Does your project involve installation of a field constructed underground storage tank?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	20.0.1 Enter all substances & capacity of each; separate each set with semicolons.				
21.0	**Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.	☐	Yes	☒	No
	21.0.1 Enter all substances & capacity of each; separate each set with semicolons.				

22.0	**Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **22.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No
23.0	**Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons?** If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. **23.0.1 Enter all substances & capacity of each; separate each set with semicolons.**	☐	Yes	☒	No
24.0	**Will the intended activity involve the use of a radiation source?**	☐	Yes	☒	No

CERTIFICATION

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

Type or Print Name Matthew Gordon

Signature	Title	Date
	Senior Director	2-1-2019

February 7,2019

Dear Customer:

The following is the proof-of-delivery for tracking number **774354565250**.

Delivery Information:

Status:	Delivered	**Delivered to:**	Receptionist/Front Desk
Signed for by:	E.HARCLERODE	**Delivery location:**	6622 CLOVER CREEK RD WILLIAMSBURG, PA 16693
Service type:	FedEx Priority Overnight	**Delivery date:**	Feb 7, 2019 13:55
Special Handling:			

Shipping Information:

Tracking number:	774354565250	**Ship date:**	Jan 30, 2019
		Weight:	0.5 lbs/0.2 kg

Recipient:
Supervisors
Woodbury Township
6385 Clover Creek Road
WILLIAMSBURG, PA 16693 US

Shipper:
ADMIN OFFICE
Tetra Tech, Inc.
Foster Plaza Building 7
661 Andersen Drive, Suite 200
Pittsburgh, PA 15220 US

Reference
212IC-BF-00037.500
Purchase order number:
Carson/Morris

Thank you for choosing FedEx.

Supplemental Stormwater and Floodplain Management Analysis

TETRA TECH

January 30, 2019

Mr. Craig Hamilton
Woodbury Township Supervisor
6385 Clover Creek Road
Williamsburg, PA 16693

Reference: **Sunoco Pipeline L.P. – Pennsylvania Pipeline Project**
Piney Creek HDD Reroute
Act 167 Stormwater/Floodplain Management Program Consistency Request-
UPDATED Project Workspaces

Dear Supervisor:

On behalf of Sunoco Pipeline, L.P., Tetra Tech, Inc. is writing to provide updated workspaces/floodplain maps associated with the Pennsylvania Pipeline Project's (PPP) Piney Creek HDD Reroute (Project) in Woodbury Township (Township). This letter is being sent as part of a Major Modification Request to our Chapter 105 Water Obstruction and Encroachment Permit Application and as part of Act 167 Stormwater/Floodplain Management Consistency requirements. The township previously provided a floodplain consistency letter for the PPP workspaces on December 9, 2015, and indicated the Township does not have a local Stormwater Management Plan effective in the Project area. We would like to request the Township's input again on the attached latest Project reroute in your township (updated workspaces are highlighted as additions and subtractions).

As shown, the Project reroute and changes to the workspace do not affect the Township's previous consistency determination. Although the Township does not have a stormwater management plan, the Project ROW remains located within Woodbury Township. The Project will be designed, constructed, and operated in compliance with all applicable provisions of 25 Pennsylvania Code, Chapter 102 Regulations (Erosion and Sediment Control) and Post Construction Stormwater Management Best Management Practices including the implementation of Antidegradation Best Available Combination of Technologies (ABACT methods) where applicable, to maintain the designated use of receiving waters in the area and no increase in stormwater runoff, rate or volume would occur.

Consistent with the letter we previously sent, no aboveground facilities or new access roads are proposed in FEMA designated floodways or 100-year floodplains. The Project reroute for the Project pipeline ROW would cross FEMA-designated 100-year floodplain/floodway but the entire pipeline will be buried and preconstruction contours and elevations will be restored to existing conditions following pipeline installation. Therefore, no changes or increases to the base flood elevation would occur.

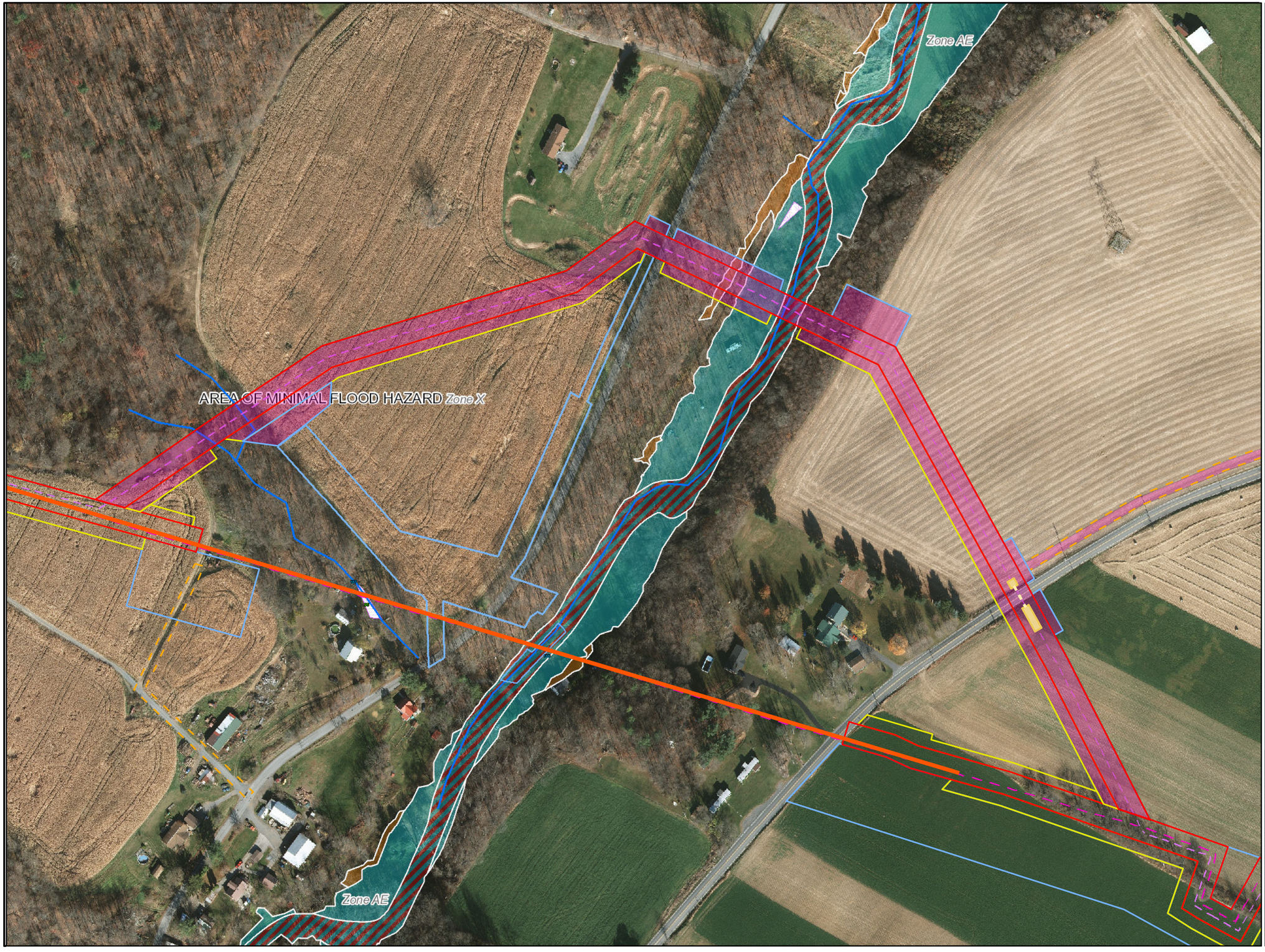
Based on the above information, we have determined that the new Project reroute and workspace changes do not affect the Township's previous consistency determination. If you have further questions/comments or disagree with this determination, please contact me, Ailene Batoon at (716) 849-9419 or via email at ailene.batoon@tetratech.com within 30 days of receipt of this letter. Thank you for your time.

Sincerely,

Ailene Batoon
Tetra Tech, Inc.

Enclosures: Updated Site Plan/Floodplain Maps

Tetra Tech
301 Ellicott St, Buffalo, New York 14203
Tel 716.849.9419 Fax 716.849.9420 www.tetratech.com



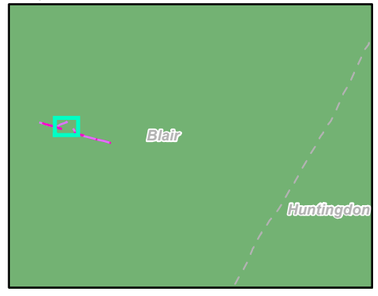
Legend

- Added Workspace
- Recently Installed PPP 20-inch Pipeline Corridor
- Proposed PPP 16-inch Pipeline Piney Creek Reroute
- HDD
- Bore
- Bore Pit
- ATWS
- Permanent ROW
- Temporary Access Road
- Temporary ROW
- Stream
- Wetlands

Flood Hazard Zones

- 1% Annual Chance Flood Hazard
- Floodway
- 0.2% Annual Chance Flood Hazard
- Reduced Risk Due to Levee

Project Location



N

0 100 200 400

1 inch = 200 feet

FEMA NFHL Designated Floodplains Along the Sunoco Pennsylvania Pipeline Project, Blair County, PA.
Sheet 1 of 1

Prepared By: TETRA TECH

Date: 01/2019

Base Map; SPLP 2014-2016, Roads from NRCS Geo-spatial Data Giveaway, 100-Year Floodplain from FEMA NFHL, downloaded 01/2019. Aquatics, TT 2013-2019.

Coordinate System: NAD 83 Stateplane, PA South, Feet

P:\GIS\projects\112C05958-PPP\MXD\Permits\PermitMods\Piney\FEMA.mxd JL

February 7,2019

Dear Customer:

The following is the proof-of-delivery for tracking number **774354364086**.

Delivery Information:

Status:	Delivered	**Delivered to:**	Receptionist/Front Desk
Signed for by:	E.HARCLERODE	**Delivery location:**	6622 CLOVER CREEK RD WILLIAMSBURG, PA 16693
Service type:	FedEx Priority Overnight	**Delivery date:**	Feb 7, 2019 13:55
Special Handling:	Deliver Weekday Adult Signature Required		

Shipping Information:

Tracking number:	774354364086	**Ship date:**	Jan 30, 2019
		Weight:	0.5 lbs/0.2 kg

Recipient:
Supervisors
Woodbury Township
6385 Clover Creek Road
WILLIAMSBURG, PA 16693 US

Shipper:
ADMIN OFFICE
Tetra Tech, Inc.
Foster Plaza Building 7
661 Andersen Drive, Suite 200
Pittsburgh, PA 15220 US

Reference
212IC-BF-00037.500
Purchase order number:
Carson/Morris

Thank you for choosing FedEx.

ATTACHMENT C

Aquatic Resource Impact Table

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATERWAYS ENGINEERING AND WETLANDS

Applicant's Name / Client Sunoco Pipeline LP

AQUATIC RESOURCE IMPACT TABLE
FOR PENNSYLVANIA CHAPTER 105 WATER OBSTRUCTION AND ENCROACHMENT APPLICATION / REGISTRATION

Project / Site Name: Pennsylvania Pipeline Project: Piney Creek 16'' Reroute Modification Date: 3/13/2019

DEP USE ONLY			Project Information									PADEP / 105		
PADEP Permit Number	Single Complete Crossing No.	Crossing Number	Fee	Structure / Activity unique identifier	Aquatic Resource Type	Latitude dd nad83	Longitude dd nad83	Waters Name	PA Code Chapter 93 Designation	Work Proposed	DEP Impact Type temp / perm	Watercourse Impact Top of Bank to Top of Bank Length and Width in feet	Floodway Impact Top of Bank Landward Length and Width in feet	Wetland Impact Dimension Length and Width in feet
			see supporting tables	S-M30	Perennial	40.4331	-78.2668	Piney Creek	HQ-CWF, MF	Excavation	Perm	50 - 30	47 - 50	N/A
			see supporting tables	S-M33	Perennial	40.4336	-78.2684	UNT to Piney Creek	HQ-CWF, MF	Excavation	Perm	54 - 10	N/A	N/A
			see supporting tables	S8r	Ephemeral	40.4345	-78.2692	UNT to Piney Creek	Drains to HQ-CWF, MF	Excavation	Perm	50 - 1	N/A	N/A
			see supporting tables	S8r	Ephemeral	40.4345	-78.2692	UNT to Piney Creek	Drains to HQ-CWF, MF	Fill	Temp	54 - 1	N/A	N/A
			see supporting tables	S-M33, S8r Ch. 105 Area	Floodway	40.4336	-78.2684	UNT to Piney Creek; UNT to Piney Creek	HQ-CWF, MF	Excavation	Perm	N/A	224 - 50	N/A
			see supporting tables	S-M33, S8r Ch. 105 Area	Floodway	40.4336	-78.2684	UNT to Piney Creek; UNT to Piney Creek	HQ-CWF, MF	Fill	Temp	N/A	192 - 70	N/A

PADEP Impact Type: temporary or permanent.

Permanent Impacts are those areas affected by a water obstruction or encroachment that consist of both direct and indirect impacts that result from the placement or construction of a water obstruction or encroachment and include areas necessary for the operation and maintenance of the water obstruction or encroachment located in, along or across, or projecting into a watercourse, floodway or body of water.

Temporary Impacts are those areas affected during the construction of a water obstruction or encroachment that consists of both direct and indirect impacts located in, along or across, or projecting into a watercourse, floodway or body of water that are restored upon completion of construction. This does not include areas that will be maintained as a result of the operation and maintenance of the water obstruction or encroachment located in, along or across, or projecting into a watercourse, floodway or body of water (these are considered permanent impacts).

Table 1. Waterbody Impact Summary for the Mariner East 2 Piney Creek 16'' Reroute Modification – Blair County – 03/13/2019

Stream ID	Stream Name	Coordinates	Stream Permanent Impact (sq. ft.)[1]	Stream Temporary Impact (sq. ft.)[1]	PADEP Permanent Floodway Disturbance (acre)[1, 2]	PADEP Temporary Floodway Disturbance (acre)[1, 2]
S-M30	Piney Creek	40.4331, -78.2668	1,500	-	0.052	0
S-M33	UNT to Piney Creek	40.4336, -76.2684	540	-	0.235	0.127
S8R	UNT to Piney Creek	40.4345, -76.2692	50	54		
3 Streams			**2090 sq. ft.**	**54 sq. ft.**	**0.287 acre**	**0.127 acre**

[1] Permanent and temporary impacts calculated in accordance with the PADEP impact calculation instructions. The presented acreage is the proposed impact for each resource calculated by GIS analysis, (rather than length x width) and provides a more accurate summation of impacts and therefore the fee calculation for Chapter 105 permitting.

[2] Floodway disturbance includes the stream impacts within the calculations, i.e. the floodway disturbance is the total proposed disturbance according to Chapter 105 regulations.

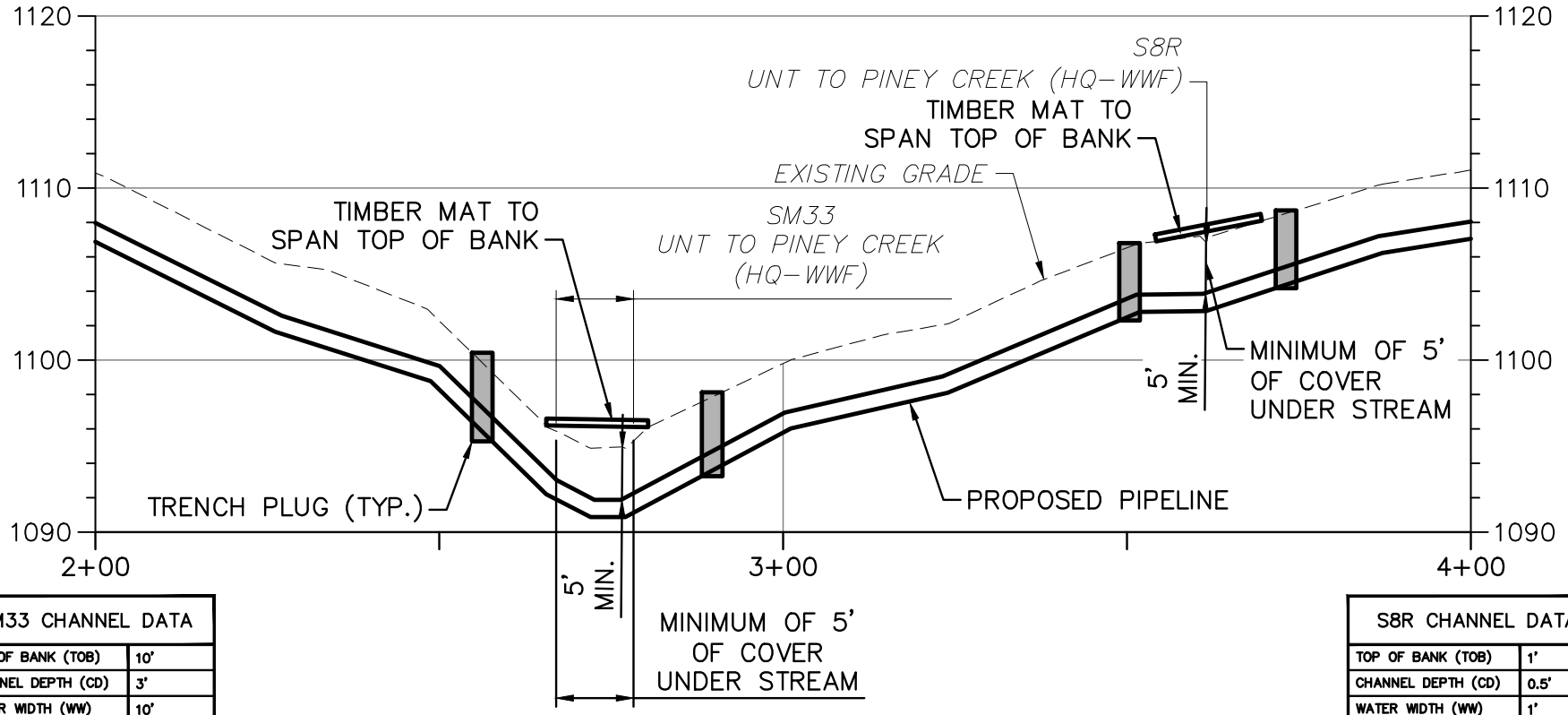
Table 2. Impact Fee Calculation for the Mariner East 2 Piney Creek 16'' Reroute Modification – Blair County – 03/13/2019

Component	Sum or Total (acre or dollars)
PADEP Permanent Impacts to Wetlands	0
PADEP Temporary Impacts to Wetlands	0
PADEP Permanent Impacts to Streams	0.287
PADEP Temporary Impacts to Streams	0.127
Total Proposed PADEP Permanent Impacts[1]	**0.287**
Total Proposed PADEP Temporary Impacts[1]	**0.127**
Permanent Impact Fee	$2,400
Temporary Impact Fee	$800
Chapter 105 Administrative Fee	$500
Total Chapter 105 Review Fee	**$3,700**

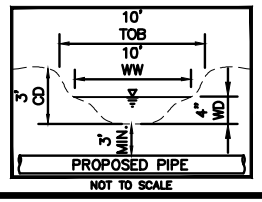
[1] This total is rounded up to the next tenth of an acre to calculate fees in accordance with PADEP guidance.

ATTACHMENT D

Stream Profile Drawings



SM33 CHANNEL DATA	
TOP OF BANK (TOB)	10'
CHANNEL DEPTH (CD)	3'
WATER WIDTH (WW)	10'
WATER DEPTH (WD)	4"

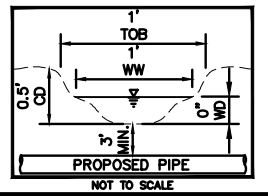


OPEN CUT PROFILE

0 25 50
HORIZONTAL SCALE IN FEET

0 10 20
VERTICAL SCALE IN FEET

S8R CHANNEL DATA	
TOP OF BANK (TOB)	1'
CHANNEL DEPTH (CD)	0.5'
WATER WIDTH (WW)	1'
WATER DEPTH (WD)	0"

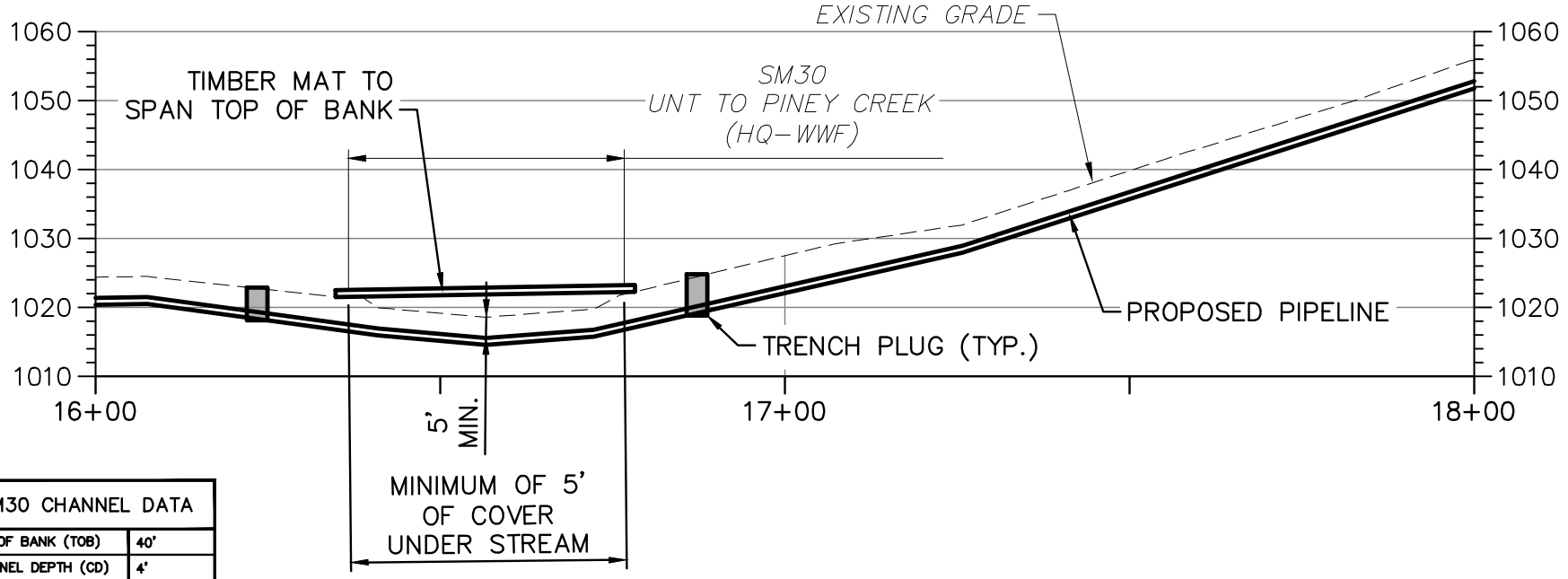


TETRA TECH
WWW.TETRATECH.COM
661 ANDERSEN DRIVE – FOSTER PLAZA 7
PITTSBURGH, PA 15220
T: (412) 921-7090 | F: (412) 921-4040

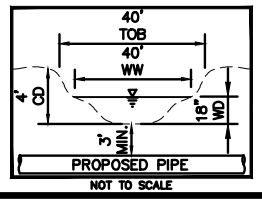
SUNOC PIPELINE, L.P.
SINKING SPRING, PENNSYLVANIA
PENNSYLVANIA PIPELINE PROJECT
BLAIR COUNTY CONSERVATION DISTRICT
STREAM SM33 & S8R CROSS-SECTION

DATE:	3/18/19
PROJECT NO.:	BF-00037
DESIGNED BY:	BH
DRAWN BY:	BH
CHECKED BY:	RS
SHEET: 1 OF 2	

FIGURE 1



SM30 CHANNEL DATA	
TOP OF BANK (TOB)	40'
CHANNEL DEPTH (CD)	4'
WATER WIDTH (WW)	40'
WATER DEPTH (WD)	18"



OPEN CUT PROFILE

0 25 50

SCALE IN FEET

TETRA TECH
WWW.TETRATECH.COM
661 ANDERSEN DRIVE – FOSTER PLAZA 7
PITTSBURGH, PA 15220
T: (412) 921-7090 | F: (412) 921-4040

SUNOC PIPELINE, L.P.
SINKING SPRING, PENNSYLVANIA

PENNSYLVANIA PIPELINE PROJECT
BLAIR COUNTY CONSERVATION DISTRICT
STREAM S-M30 CROSS-SECTION

DATE:	3/18/19
PROJECT NO.:	BF-00037
DESIGNED BY:	BH
DRAWN BY:	BH
CHECKED BY:	RS
SHEET: 2 OF 2	

FIGURE 2

ATTACHMENT E

Adjoining Property Owners List

Piney Creek Reroute Major Permit Modification

Adjacent Landowner List

Parcel #	Landowner(s)	Address	City/State
24.00-11..-002.03-000	Julie A. Rickabaugh	166 Shady Tree Ln	Williamsburg, PA 16693-8434
24.00-11..-002.04-000	Christopher W. Nash	125 Shady Tree Ln	Williamsburg, PA 16693-8434
24.00-07..-014.00-000	Wendell B. & Dorcas L. Hursh	2197 Spring Ln	Williamsburg, PA 16693
24.00-07..-015.00-000	Kenneth O. & Jill A. Stone	806 Lower Piney Creek Rd	Williamsburg, PA 16693-8030
24.00-11..-012.00-000	Steven C. & Angela M. Lynn	275 Lower Piney Creek Rd	Williamsburg, PA 16693-8415
24.00-11..-012.02-000	Commonwealth of Pennsylvania Pennsylvania Fish & Boat Commission c/o Real Estate Unit	450 Robinson Ln	Bellefonte, PA 16823
24.00-11..-002.01-000	John W. & Sondra J. Nash	433 Lower Piney Creek Rd	Williamsburg, PA 16693-8429
24.00-11..-002.02-000	John W. & Sondra J. Nash	2144 Spring Ln	Williamsburg, PA 16693-8435
24.00-11..-007.00-000	Sondra J. Nash	433 Lower Piney Creek Rd	Williamsburg, PA 16693
24.00-11..-008.00-000	Robert L. Gorsuch & Sandra J. Nash	477 Lower Piney Creek Rd	Williamsburg, PA 16693-8429
24.00-11..-006.00-000	Darrin McChessney	478 Lower Piney Creek Rd	Williamsburg, PA 16693-8428
24.00-11..-048.00-000	Gregory S. & Jamie L. Shultz	486 Lower Piney Creek Rd	Williamsburg, PA 16693-8428
24.00-11..-003.00-000	Wayne E. & Carolyn Criswell	261 Raspberry Ln	Williamsburg, PA 16693-8727
24.00-11..-004.00-000	Joseph M. & Deborah McChessney	4221 Piney Creek Rd	Williamsburg, PA 16693-8315
24.00-07..-017.00-000	Kenneth O. & Jill A. Stone	806 Lower Piney Creek Rd	Williamsburg, PA 16693-8030
24.00-12..-001.00-000	Ronald G. Leidy & Marshall R. Leidy	4618 Piney Creel Rd	Williamsburg, PA 16693-7938

ATTACHMENT F

Revised Project Description

Project Description

Sunoco Pipeline L.P. (SPLP) requests a major permit modification for a change in the route and installation method for the 16-inch diameter pipeline previously permitted as the Piney Creek Horizontal Directional Drill (HDD). This permit request is to convert the HDD to conventional open trench construction for the majority of the reroute, and a conventional auger bore under Piney Creek Road / High Street (State Route 866).

During the pilot hole drilling phase on the permitted Piney Creek HDD for the 20-inch pipeline installation through this area, there were several incidents in which drilling mud/fluid entered Waters of the Commonwealth, including Piney Creek and S-M33, and a local landowner's water well. In an attempt to address these incidences, SPLP received approval to implement a Direct Pipe construction method, but this method failed, and the 20-inch pipeline crossing was completed using the HDD method. Therefore, given the geologic conditions at this HDD location, the HDD evaluation staff cannot assure the Department that the 16-inch HDD will not have similar problems in this area. Therefore, SPLP has elected to abandon any future HDD attempts to install the 16-inch pipeline through this area and has sought an alternate route of installation agreeable to the landowners and that minimizes impacts to Waters of the Commonwealth.

This permit modification requests an approximate 0.57-mile reroute to the north of the current permitted pipeline right-of-way. The new route will avoid wetland M26 (PEM), an Exceptional Value (EV) wetland. The new route will cross 3 streams, including two that were crossed by the original route, and no wetlands (refer to *Attachments C and E* for additional information about these water resources). An open trench installation method across these resources will result in temporary, short term impacts to streams but will avoid all EV wetland impacts and eliminate the risk of uncontrolled discharges associated with HDD IRs.

All the streams will be crossed in accordance with PPP's original Chapter 105 Joint Permit Application, SPLP may utilize one or more of the following open-trench excavation methods for installation of the pipeline across waterbodies (refer to the E&S Plan standard typical drawings for details):

- **Dry Open Cut** - Minor waterbodies with no flow at the time of construction may be crossed using the open-cut crossing method.

- **Dry Flume** – A flumed crossing directs and contains the stream flow through an alternate mechanism across the stream channel to allow for the trenching and pipe installation to occur in dry conditions. Where practical, this allows for drier trenching, pipe installation, and restoration while maintaining continuous downstream flow.

- **Dry Pump Bypass** - The dam and pump bypass method may be used for crossings of waterbodies where pumps can adequately transfer stream flow volumes around the workspace. Similar to the flume crossing, this method allows for drier trenching, pipe installation, and restoration while maintaining continuous downstream flow.

- **Dry Cofferdam** – The cofferdam method, typically used on large streams/rivers, involves the installation of a cofferdam to isolate and divert flow around the workspace in two phases. The first phase consists of the cofferdam installation on one of the banks and approximately halfway into the river to allow safe and dry installation of the pipeline across the river. The second phase involves the same process but from the opposite bank. This method allows continuous flow around the workspace and eliminates concerns about sensitive species passage.

The selected open cut, dry stream crossing method will convey stream flow across the workspace and outlet downstream within the permitted limit-of-disturbance, such that work will be conducted in a dry stream channel. After the stream flow is contained and directed/conveyed across the work area, the trench will be excavated, and the 16-inch pipe will be installed via the open trench method through the streams in accordance with all permit conditions and requirements. In order to efficiently complete all construction

activities and minimize resource impacts, SPLP is proposing a 50-foot-wide limit of disturbance (LOD) across the two perennial streams (Piney Creek, S-M30 and UNT to Piney Creek, S-M33).

Timber mats and temporary bridges will be placed within the travel lane where the streams are crossed to avoid soil compaction, allow for trench excavation, stream substrate segregation, and stockpiling of excavated materials in adjacent upland areas. Once the pipe and appropriate trench plugs are installed, the trench will be backfilled, and the stream will be restored to pre-existing conditions. All work will be conducted in accordance with permit conditions/requirements as well as the revised/updated Erosion & Sediment and Restoration plan (refer to *Attachment D* of this permit modification). The reroute will not result in any loss of stream or wetland area or water quality/quantity, and the localized stream impacts are considered minor and temporary.

Refer to *Attachment C - Environmental Assessment* for a discussion of existing conditions, potential impacts, mitigation/restoration, antidegradation compliance, and agency coordination associated with this requested reroute and proposed construction method.

Alternatives Analysis

The crossing of stream resources is unavoidable due to the linear nature of the proposed PPP Project, and as described in the Environmental Assessment, S1.B – Water Dependency (refer to *Attachment C* of this permit modification). Therefore, to avoid direct impacts to these resources, SPLP originally planned to HDD under the entire wetland/stream complex. However, there were complications encountered during the HDD of the 20-inch and drilling fluid discharges resulted in unpermitted discharges to the Waters of the Commonwealth.

SPLP evaluated an open cut of the existing permitted right-of-way and determined this would impact an EV wetland. Subsequently, they considered a Direct Pipe construction method through the area but determined that this was likely to fail based on the previous attempts with the 20-inch pipeline.

SPLP evaluated other routes around the area but are limited due to the roads and residential properties to the south of the existing SPLP easement. In addition, a route to the south would likely impact more forested areas, possibly wetlands, and require a “greenfield”, or new, right-of-way through these areas resulting in more permanent forested impacts. The proposed route to the north avoids all wetlands, minimizes the number of residential and developed areas disturbed during construction, and reduces the amount of forested area crossed. In addition, the route to the north provides an open field for a perpendicular conventional bore under Piney Creek Road / High Street (State Route 866).

In conclusion, given the geologic conditions at the Piney Creek HDD locations and numerous incidents that occurred during the 20-inch HDD, the HDD evaluation staff cannot assure that the 16-inch HDD will not have similar problems in this area. Alternative construction methods including an open cut and/or bore of the resources within the existing permitted right-of-way are not considered desirable due to the EV wetland impacts, and unfeasible alternative construction methods. Therefore, SPLP has elected to abandon installing the 16-inch pipeline within their existing easement and has identified an alternate route north of the currently proposed right-of-way. Analysis of other potential routes to the south would result in potentially more environmental (forested area and wetlands), residential, and developed (roads) impacts. Consequently, the professional opinion of the HDD Reevaluation Team, consisting of the Geotechnical Evaluation Leader, Professional Geologists, Professional Engineers, and other construction specialists is that an open cut, dry stream crossing will have the least impact, as the work area and stream flow will be managed in accordance with all permit conditions and can completed in the most efficient and timely manner, including restoration/stabilization of all the streams.

ATTACHMENT G

Revised Environmental Assessment

Environmental Assessment (E.A. Form) Rev. 6/2017

Revised March 2019

Note: The EA provided herein provides information relevant to the major permit modification required at the Piney Creek Road/High Street (State Route 866) HDD Reroute in Blair County, Pennsylvania, and includes specific excerpts and information previously submitted by Sunoco Pipeline L.P. as part of the approved Pennsylvania Pipeline Project (PPP) Chapter 105 Joint Permit (E07-459).

Module S1: Project Summary

S1.A Overall Project Description

Sunoco Pipeline L.P. (SPLP) requests a major permit modification for a change in the route and installation method for the 16-inch diameter pipeline previously permitted as the Piney Creek Horizontal Directional Drill (HDD). This permit request is to convert the HDD to conventional open trench construction for the majority of the reroute, and a conventional auger bore under Piney Creek Road / High Street (State Route 866). During the pilot hole drilling phase on the permitted Piney Creek HDD for the 20-inch pipeline installation through this area, there were multiple inadvertent returns (IRs) in which drilling mud/fluid entered Waters of the Commonwealth, including Piney Creek and S-M33. In an attempt to address these incidents, SPLP received approval from the Pennsylvania Department of Environmental Protection (PADEP) to implement a Direct Pipe construction method. This method failed, however, and after receiving approval from PADEP, the 20-inch pipeline crossing was completed using the HDD method. During completion, the Piney Creek HDD continued to experience losses of circulation and IRs. Therefore, SPLP has elected to install the 16-inch pipeline through this area using an alternate route and method of installation that minimizes impacts to Waters of the Commonwealth.

The 0.57-mile reroute would involve conventional open trench excavation through three (3) streams including two that were crossed by the original route, and no wetlands (refer to *Attachments C and E* for additional information about these water resources): wetland M26 (PEM), an Exceptional Value (EV) wetland, crossed by the original route will be avoided. In accordance with PPP's original Chapter 105 Joint Permit Application, SPLP may utilize one or more of the following open-trench excavation methods for installation of the pipeline across waterbodies (refer to the E&S Plan standard typical drawings for details):

- **Dry Open Cut** - Minor waterbodies with no flow at the time of construction may be crossed using the open-cut crossing method.

- **Dry Flume** – A flumed crossing directs and contains the stream flow through an alternate mechanism across the stream channel to allow for the trenching and pipe installation to occur in dry conditions. Where practical, this allows for drier trenching, pipe installation, and restoration while maintaining continuous downstream flow.

- **Dry Pump Bypass** - The dam and pump bypass method may be used for crossings of waterbodies where pumps can adequately transfer stream flow volumes around the workspace. Similar to the flume crossing, this method allows for drier trenching, pipe installation, and restoration while maintaining continuous downstream flow.

- **Dry Cofferdam** – The cofferdam method, typically used on large streams/rivers, involves the installation of a cofferdam to isolate and divert flow around the workspace in two phases. The first phase consists of the cofferdam installation on one of the banks and approximately halfway into the river to allow safe and dry installation of the pipeline across the river. The second phase involves the same process but from the opposite bank. This method allows continuous flow around the workspace and eliminates concerns about sensitive species passage.

All work will be conducted in accordance with permit conditions/requirements as well as the E&S and restoration plans (refer to Appendix D of this permit modification). The crossing will not result in any loss of stream or wetland area or water quality/quantity, and the localized impacts are considered minor and temporary.

Please refer to *Attachment A* of this permit modification request packet for the Project Description and Alternatives Analysis for this proposed change in installation method and alignment.

CEA Requirements

Per PADEP Technical Policy Guidance Document No. 310-2137-006, a Comprehensive Environmental Assessment that analyzes the alternatives, impacts, mitigation and antidegradation for all structures and activities associated with the overall Project was included with the original PPP Chapter 105 Joint Permit Application submitted to PADEP (E07-459. APS 879354). Specifically, Attachment 11 EAF, Enclosure E Part 3 addresses alternatives; Part 2 includes impacts; Part 4 identifies impact avoidance minimization and mitigation; and, Part 5 discusses antidegradation.

Information applicable to this specific permit modification request are presented in this submittal as follows:

- Alternatives – Module S3, S3.F
- Impacts – Module S3, S3.B
- Avoidance, Minimization, and Mitigation – Module S4
- Antidegradation – Module S3, S3.E

S1.B Project Purpose, Need, Water Dependency, and Summary of Resources and Impacts

Project Purpose & Need

As presented in the original PPP Chapter 105 Joint Permit (E07-459), the overall Project will provide transportation service of natural gas liquids (NGLs) with the combined pipelines from the Utica and Marcellus Shale formations for both domestic and international markets. NGLs are separated from the natural gas stream before consumer ready (dry) natural gas is shipped on the natural gas pipeline network. Upstream shippers are currently limited by the shortage of NGL transport systems. In addition, the Project will provide various delivery points to local Pennsylvania distributors for supply of needed propane supplies, at affordable prices, for use as heating and/or cooking fuel by consumers in Pennsylvania and neighboring states, increasing these fuel access and supply during peak demand periods when supplies would otherwise become short. Butane will also be shipped to local markets as a component of gasoline to ensure gasoline suppliers can meet seasonal vapor pressure restrictions.

Water Dependency

As presented in the original PPP Chapter 105 Joint Permit (E07-459), constructing and operating a natural gas liquids pipeline is not, per se, a water-dependent project. However, because of Pennsylvania's abundant water and wetland resources, any project which travels approximately 300 miles west to east across the Commonwealth requires the crossing of, and therefore access to, waters and wetlands. The overall Project requires access and proximity to and siting in, on, over or under waters and wetlands in order to achieve its primary purpose to transport natural gas liquids from Houston, Washington County to SPLP's existing facility in Marcus Hook, Delaware

County. Therefore, the linear nature and approximately 300-mile length of the Project across 17 counties west to east in Pennsylvania makes the Project water-dependent.

Summary of Resources & Impacts

The impacts associated with the Piney Creek Reroute will total approximately 2,090 ft^2 (0.05 acre) of permanent impacts and 54 ft^2 (0.001 acre) temporary stream impacts, and approximately 12,496 ft^2 (0.29 acre) of permanent and 5,542 ft^2 (0.13 acre) of temporary floodway impacts, respectively. Although PADEP defines pipeline operation and maintenance activities as permanent impacts, the impacts are considered minor/localized and temporary as the entire disturbed area of the streams will be restored to preconstruction conditions (i.e., elevation, flow, stream substrate, stream banks, hydrologic conditions, etc.). Furthermore, the resource crossings will not involve any permanent fill; the streams will not be relocated, and there will be no permanent loss of streams or aquatic habitat associated with the reroute modification request. Please refer to *Attachment E* of this permit modification request packet for an updated Aquatic Resource Impact Table.

The proposed route would cross streams designated by the PAFBC as a Class A Trout and Trout Natural Reproduction (TNR) stream or Drains to Approved Trout Waters (ATW) streams. Therefore, SPLP will comply with timing window restrictions/limitations (i.e., 10/1 through 12/31 for TNR and 3/1 through 6/15 for ATW) during construction and will work with the appropriate agencies to avoid and minimize potential impacts to trout/spawning/migrating fish.

In addition, an updated PNDI review (PNDI-675711) identified the proposed Project reroute as located within the range of the thick-leaved meadow-rue (*Thalictrum coriaceum),* a state endangered plant, as well as habitat of the federally endangered Indiana bat (*Myotis sodalis)*. Therefore, SPLP will coordinate with the Pennsylvania Department of Conservation and Natural Resources (PADCNR) and conduct botanical surveys as required for the newly proposed Piney Creek Reroute. SPLP will also implement its *Myotis* Conservation Plan pre-, during, and post-construction to avoid and minimize potential impacts to the Indiana bat. Specifically, SPLP will implement tree clearing avoidance measures (restricted between April 1 and November 14) and the USFWS Forest Management Guidelines for Indiana Bat Swarming/Summer Habitat when conducting tree harvesting.

SPLP will update PADEP of future agency coordination/responses as it becomes available. Please refer to Module 2, S2.C of this Environmental Assessment and *Attachment G* of this permit modification request packet for the updated PNDI and agency coordination.

Module S2: Resource ID & Characterization

S2.A Location Map & Wetland Delineation Report.

The original location of the Project is provided in the Location Map prepared and submitted for the Project's Chapter 105 Joint Permit Application for Blair County. The applicable page from the original application is provided in Appendix S2.A-1, and has been modified to reflect the location of the Project with the proposed Piney Creek Reroute as well as the locations of the streams affected.

Similarly, an *Aquatic Resources Report* for Blair County was prepared in August 2015 and submitted as part of the PPP Chapter 105 Joint Permit Application. The Aquatic Resources Report presents the results and conclusions of wetland and stream identification activities completed for the entire Project right-of-way. An additional wetland and stream delineation survey was conducted along the Piney Creek Reroute on December 13, 2018 for this permit modification request. Excerpts from the Aquatic Resources Report (prepared in August 2015) including information on Streams S-M30 and S-M33 and a supplemental Aquatic Resources Report (prepared in January 2019) including information on Stream S8r is included as Appendix S2.A-2.

No public water suppliers (PWS) were identified within 0.5 mile of the proposed Piney Creek Reroute.

S2.B Aquatic Resources

For this permit modification request, SPLP identified all aquatic resources present within the Project reroute area and the resources that would be affected by the proposed reroute including three (3) streams.

The aquatic resources that would be affected have been identified as streams S-M30 (Piney Creek), S-M33 (an unnamed tributary to Piney Creek), and stream S8r (an unnamed tributary to Piney Creek). Stream S-M30 is identified as a perennial stream, with bank to bank width of approximately 30 feet; Stream S-M33 is identified as a perennial stream with a bank to bank width of approximately 10 feet; and Stream S8r is an ephemeral stream that drains into Stream S-M33, with a bank to bank width of 1 foot. Based on review of eMapPA maintained by the PADEP and a review of Drainage List A of Pennsylvania Code, Title 25, Chapter 93, SS 93.9h, the designated/protected uses and fisheries classification for Streams S-M30 and S-M33 are classified as High Quality-Cold Water Fishery (HQ-CWF) streams while Stream S8r is classified as Drains to HQ-CWF. All three (3) streams are also classified as Migratory Fishes (MF) streams. The Pennsylvania Fish and Boat Commission (PAFBC) designates Stream S-M30 as a Class A Trout Stream and a TNR stream and Streams S-M33 and Stream S8r as Drains to ATW. Activities within these streams are jurisdictional by the USACE and are considered activities in the waters of the U.S.

S2.C PNDI T&E plant and animal species or State T&E Species or Species of Special Concern Agency Coordination and Search Receipts

For this permit modification, a request was submitted to the Pennsylvania Natural Diversity Index on January 28, 2019 (PNDI-675711) regarding the potential of species of concern of unique habitat within the proposed reroute corridor. Based on the results of this search, the thick-leaved meadow-rue and Indiana Bat were identified as threatened and endangered (T&E) or species of

concern possibly located within the area of the proposed reroute: thick-leaved meadow-rue is listed as PA endangered, and the Indiana bat as State and Federally endangered.

As both T&E species were previously identified for the original Project route, SPLP has previously coordinated with the PADCNR and USFWS regarding these two species. Specifically, SPLP conducted a botanical survey of PADCNR identified areas of concern (up to/within 300 feet of the original proposed LOD) for thick-leaved meadow-rue between April 28, 2014 to September 16, 2015. Results of the 2015 botanical surveys identified no individual plants or suitable habitat for the species in the Project area. A courtesy copy of the negative results was sent to the PADCNR on November 4, 2015 and was included as part of the PPP Chapter 105 Joint Permit Application. The applicable excerpts from the survey are included herein as Appendix S2A-3. Nonetheless, in accordance with the latest PNDI results, SPLP will coordinate with PADCNR regarding the presence/absence of this species and/or suitable habitat for the proposed Piney Creek Reroute.

The latest PNDI review indicates that the USFWS recommends implementation of tree clearing avoidance measures (restricted between April 1 and November 14) and the USFWS Forest Management Guidelines for Indiana Bat Swarming/Summer Habitat when conducting tree harvesting for the Piney Creek Reroute. In accordance with these recommended measures, SPLP intends to conduct tree clearing between November 15 and March 31 as discussed in its *Myotis* Conservation Plan previously submitted as part of SPLP's original PPP Chapter 105 Joint Permit Application.

No other T&E plant and animal species, or State T&E Species, or Species of Special Concern were identified. However, as noted above, SPLP is aware of the timing window restriction associated with the designated trout streams (i.e., 10/1 through 12/31 for TNR and 3/1 through 6/15 for ATW) and will comply with timing window restrictions/limitations during construction and will work with the appropriate agencies to avoid and minimize potential impacts to trout/spawning/migrating fish. Again, SPLP will provide PADEP with future agency coordination/responses as they become available.

Please refer to *Attachment G* of this permit modification request packet for the updated PNDI request and agency submittal.

S2.D Resource Classification Information; Level 2 Rapid Condition Assessment Results, Resource Function, Riparian properties and any other relevant studies.

This permit modification request is for a change in route and installation method of the 16-inch diameter pipeline from an HDD to conventional open trench, and auger bore under Piney Creek Road/ High Street (State Route 866). Due to the proposed reroute and aquatic resources that would be directly or in directly impacted by the proposed reroute, a brief description of the streams and associated floodways are presented below for this permit modification request. Note, no wetlands will be affected by this permit modification request.

Piney Creek and the two other UNTs to Piney Creek are located within the physiographic province of the Ridge and Valley Appalachian Mountain section. The surrounding land uses are agricultural, and include open fields/pasture, rural housing and roads, and Piney Creek Road/High Street (State Route 866). There are existing trees or shrubs in the riparian buffer (refer to *Attachment B* of this permit modification for current photographs of the stream crossings).

Two (2) of the three (3) streams (S-M30 and S-M33) are identified as perennial streams. These streams provide potential habitat for seasonal spawning of game and non-game fish species.

These streams also have the potential to be used for resting by a variety of birds and mammals. However, wildlife is likely to utilize more remote and secluded areas that offer more protection/cover for resting. As these streams are perennial, these streams support a continuous flow of water with moderate rates of flushing and residence times. Stream S8r is an ephemeral stream and does not support a continuous flow of water. Stream S8r supports similar habitat as Streams S-M30 and S-M33, except for providing a year-round water source.

Although all three (3) streams are either classified as PAFBC Class A Trout/TNR stream or Drains to ATW streams, seasonal migration of trout during spawning would likely be limited to stream Streams S-M30 and S-M33 based on their perennial flow characteristics. Similarly, even though all three (3) streams are also designated HQ-CWF or drains to HQ-CWF, and MF streams, the potential for anadromous fish migration to occur is likely limited to Streams S-M30 and S-M33. Regardless, SPLP is aware of the timing window restriction associated with these streams (i.e., 10/1 through 12/31 for TNR and 3/1 to 6/15 for ATW) and will work with the appropriate agencies to avoid/minimize potential impacts to the streams' trout resources and comply with any agency restrictions or limitations. SPLP will provide PADEP with all future agency coordination/responses as they become available.

The streams also provide a food source for invertebrates, birds, reptiles, amphibians, and mammals. Growth of herbaceous plants constitute the food chain base that supports primary consumers such as invertebrates and small mammal herbivores. Secondary and tertiary consumers are supported by the diversity and abundance of prey in the wetland and stream ecosystems. In addition, most of the streams support photosynthetic algae, overhanging woody vegetation, and/or small aquatic vascular plants that support invertebrate herbivores. Such invertebrates are consumed by small reptiles and fish that can inhabit the streams. Both the wetland and streams likely support aquatic insects or amphibians that meet specific prey requirements of birds and mammals with an affinity for stream habitats such as raccoon (*Procyon lotor*). The streams are also likely utilized by a variety of wildlife species as a source of drinking water.

The water quality of the streams is considered good, as evidenced by their HQ-CWF and trout classifications. The area is relatively undeveloped with agricultural areas surrounding most of the streams. The stream designations offer high quality recreational and sport fishing opportunities; however, these opportunities may be limited due to property access issues (i.e., private property).

Module S3: Identification and Description of Potential Project Impacts

S3.A Impact Summary

Table S3.A-1 Summary of Project Impacts
Permit Modification Request for the Piney Creek Reroute
Open Cut Crossing Method

Resource Category	Corps 404		PADEP/105	
	Temporary (ft^2)	Permanent (ft^2)	Temporary (ft^2)	Permanent (ft^2)
Streams (S-M30, S-M33, S8r)	2,144	N/A	54	2,090
Floodway (S-M33, S8r)	N/A	N/A	5,542	12,496

S3B. Standard Information Responses

The requested permit modification for the Piney Creek Reroute will not impact any resources identified in Module S2, Part A with the exception of some Prime Farmland soils, Bicycle PA Route G, and the Canoe Creek Watershed Important Mammal Area (IMA #16) that are described below. The proposed reroute will also cross the Springfield Branch of the Pennsylvania Railroad, which is located within the Springfield Morrisons Cove Rural Historic District (a National Register of Historic Places (NRHP) eligible district) -- also discussed further below.

The proposed reroute is located near State Game Land 147 (0.23 mile to the west, the Piney Creek Woods Biological Diversity Area (0.19 mile to the south), and Lock Mountain Land Conservation Area #3 (0.03 mile to the west). However, the proposed reroute is not anticipated to result in direct or long-term impacts to the purpose/functions of these areas/habitats as there would be no change in existing land use. Project construction/schedule may overlap with the hunting season near these areas (for the Project reroute near State Game Lands), but SPLP will work to adhere to “no work” schedules prescribed by the Pennsylvania Game Commission to minimize conflicts with hunting activities. Similarly, SPLP will work with private landowners to avoid conflicts with hunting, to the extent possible and for safety reasons.

Prime Farmland

The proposed Piney Creek Reroute would cross a small amount of designated prime farmland soils. Specifically, the reroute would cross approximately 0.15-mile of Prime Farmland including approximately 0.81-acre within the permanent ROW and approximately 0.64-acre in temporary workspace. Therefore, SPLP will take precautions during construction and restoration to protect these unique soils. Potential short-term impacts to prime farmland soils associated with construction of the Project may include increased soil erosion and sedimentation due to the removal of vegetation; compaction of soils caused by construction vehicles and equipment; and, poor revegetation. However, SPLP will prevent and minimize impacts on prime farmland soils. Specifically, SPLP will segregate and conserve topsoil, utilize decompaction if necessary, and compensate landowners for temporary suspension of crop production during the construction period. Because SPLP will restore the Project ROW and most agricultural activities will be allowed to resume following installation of the 16-inch pipeline, the Project would not have long-term impacts on Prime Farmland soils.

Bicycle PA Route G

Similar to the original proposed route, the proposed Piney Creek Reroute would cross Bicycle PA Route G; however, no aquatic resources were identified on this bicycle trail. As previously noted, Project impacts to this trail would be short term and limited to the time needed for construction of the proposed reroute. The bike route is associated with State Route 866 and will be bored under; therefore, there will be no interruption to the use of this trail during Project construction. Operation of the Project will not impact the long-term use of this recreational trail.

Canoe Creek Watershed IMA

The proposed Piney Creek Reroute would also cross the Canoe Creek Watershed IMA, which is reported to support a core population of several bat species including the Indiana bat, Little brown bat (*Myotis lucifugus)*, and the silver-haired bat (*Myotis Lasionycteris noctivagans)*, as well as the Allegheny Woodrat (*Neotoma magister*). Based on previous agency coordination for the original Project ROW through this area and on the latest PNDI review for the proposed Piney Creek Reroute, the species of concern in this IMA are likely limited to the Indiana bat. Therefore, as discussed above, SPLP will implement its *Myotis* Conservation Plan which was submitted as part of SPLP's original PPP Chapter 105 Joint Permit Application. As discussed therein, as standard practice to avoid impacts to this bat species, SPLP will conduct tree clearing between November 15 and March 31 within the identified Indiana bat habitat area. With implementation of this avoidance measure and conservation plan, SPLP will avoid take of Indiana bat species and the proposed reroute is not likely to adversely affect the Indiana bat species within the Canoe Creek Watershed IMA

Springfield Morrisons Cove Rural Historic District - Springfield Branch of the Pennsylvania Railroad

Based on cultural and archaeological surveys conducted between December 13 and 16, 2018, no cultural or archaeological resources were identified along the proposed pipeline reroute. A historic survey of the propose reroute shows that the 16-inch pipeline would cross the Springfield Branch of the Pennsylvania Railroad which is not listed in the NRHP but is located within the Northern Morrisons Cove Rural Historic District, a NRHP-eligible district. Tracks are no longer present along the now defunct line, and only some former railroad grade remains. No other historic resources associated with the railroad are present in the Project vicinity. Furthermore, SPLP will restore the railroad bed to pre-construction conditions, including existing elevation, grades and contours. Please see Negative Survey Form (ER# 2013-1862-042) submitted to the Pennsylvania State Historic Preservation Office (SHPO) – Pennsylvania Historical and Museum Commission (PHMC) on January 30, 2019 (refer to *Attachment F*).

S3.C Subfacility Details

Information related to the proposed water obstruction, encroachment activities, and temporary/permanent impacts associated with the requested permit modification to open cut Piney Creek and associated streams was provided in the original PPP Chapter 105 Joint Permit Application (E07-459. APS 879354) and is summarized within this Environmental Assessment, as well as the other attachments comprising this permit modification packet.

S3.D Direct and Indirect Impacts

As discussed above, direct and indirect impacts for the overall Project were presented in Attachment 11, Enclosure E (Part 2) of the original PPP Chapter 105 Joint Permit Application (E07-459. APS 879354). Excerpts from the submittal relevant to the Piney Creek Reroute and this permit modification request are presented below.

The open cut (open trench) crossing of Streams S-M30, S-M33, and S8r (including floodways) will result in approximately 2,090 ft^2 (0.05 acre) of permanent and 54 ft^2 (0.001 acre) temporary impacts, and approximately 12,496 ft^2 (0.29 acre) of permanent and 5,542 ft^2 (0.13 acre) of temporary floodway impacts. As defined by PADEP, permanent impacts include direct and indirect impacts resulting from the placement or construction of the pipeline and impacts to those areas necessary for the operation and maintenance of the pipeline. Temporary impacts include areas affected during the construction of the Project that will be restored when construction is completed. All physical/ecological impacts are considered minor and temporary as the streams would be restored to their original condition (i.e., elevation, flow, stream substrate, hydrologic conditions, etc.). In addition, the Project would not involve any permanent fill and there would be no permanent loss of streams associated with the Project.

Impacts to the streams would occur as a result of in-stream construction activities and would result in a temporary localized increase in turbidity levels and downstream sediment deposition. Sediments that become suspended during the short period of in-stream disturbance are expected to settle out of the water column relatively quickly.

Temporary impacts would occur to aquatic life in the streams at or downstream from the construction site (pipe crossing), including potential degradation of benthic habitat due to direct disturbance to the bottom substrate in the trench zone, and associated disturbances to aquatic vegetation and invertebrates with the construction ROW. Indirect impacts from sedimentation may affect areas downstream, but generally conditions would be expected to resolve relatively quickly (e.g., dry crossing methods involving in-stream excavation would have a limited effect on downstream sedimentation for a period of 1 to 3 days).

Indirect, long-term impacts to fish spawning/migration could occur if substantial changes to Streams S-M30 and S-M33 (as these are perennial streams) substrate or current patterns result from Project construction. However substantial changes to stream substrate and current patterns are not anticipated because the native stream substrate will be replaced, and stream bed and banks will be restored as closely as possible to the original contours following construction. Furthermore, SPLP is aware of the timing window restriction associated with these streams (i.e., 10/1 through 12/31 for TNR streams and 3/1 to 6/15 for ATW) and will work with the appropriate agencies to avoid/minimize potential impacts to the streams' trout resources and comply with any agency restrictions or limitations. No impacts to fish spawning/migration are anticipated during Project operations.

Project construction will result in the clearing of areas located 100-150 feet landward of HQ streams (i.e., riparian buffer area), but the impacts have been minimized to the maximum extent practicable while allowing safe installation of the pipeline. In addition, riparian buffers and stream banks will be revegetated (seeded/planted) following construction as soon as practicable to facilitate vegetative growth along the stream channel in accordance with the included E&S Plan (*Attachment D* of this permit modification packet). For more information please refer to

Attachment 11, Enclosure E (Part 4) Impact Avoidance, Minimization and Mitigation Procedures of PPP's Chapter 105 Joint Permit Application.

In addition to the above, no fill, aboveground facilities or alteration of surface elevations/contours are proposed within the streams' floodways as they will be restored to pre-construction conditions. As such, the Project would not result in long-term impacts to the associated floodways.

Construction of the proposed Project is not expected to affect the flushing characteristics of the streams. SPLP has sited the ROW such that the stream crossings are generally perpendicular and thereby of minimal impact. In addition, the Project will not alter the volume of water or flow rates that the streams typically/naturally experience. Furthermore, the stream channels will be restored to pre-construction contours, thereby restoring pre-existing flushing characteristics and patterns within the streams crossed. Similarly, operation of the Project would not have any impact on natural drainage patterns.

Construction of the proposed Project is not expected to affect groundwater discharge that may be important for supporting stream baseflow or hydrology. Trench plugs will be installed in the trench at the entry and exit of all streams crossed to prevent draining of streams along the trench line. In addition, there are no groundwater control features or interceptor structures incorporated into the Project design. Topographic contours and drainage patterns will be restored following construction of the Project and impacts to groundwater discharge are not anticipated.

As there are no proposed aboveground facilities associated with this permit modification request, construction will not negatively impact the ability of the streams to either store or control storm and flood waters.

SPLP has designed the Project to avoid and minimize impacts to stream resources to the greatest extent possible. SPLP will conduct all activities in accordance with the Chapter 102 Permit requirements and will implement erosion and sediment control best management practices (BMPs) and ABACT measures, as necessary. Thus, this requested permit modification will not cause long-term degradation of water quality, alter flow volumes, or change the direction of flow.

S3.E Antidegradation Analysis

An Antidegradation Analysis was prepared for the overall Project and submitted as part of the PPP Chapter 105 Joint Permit Application (E07-459. APS 879354) in Attachment 11, Enclosure E (Part 5). The Antidegradation Analysis was prepared in accordance with 25 Pa. Code § 105.14(b)(11). Specifically, SPLP's Joint Permit Application for a Pennsylvania Water Obstruction and Encroachment Permit Application and U.S. Army Corps of Engineers (USACE) Section 404 Permit Application for the Project needed to ensure consistency with State antidegradation requirements contained in Chapters 93, 95 and 102 (relating to water quality standards; wastewater treatment requirements; and erosion and sediment control) and the Clean Water Act (CWA) (33 U.S.C.A. § § 1251—1376).

PADEP has implemented an Antidegradation Program to promote the maintenance and protection of existing water quality for High Quality (HQ) and Exceptional Value (EV) waters, and the protection of existing uses for all surface waters (PADEP 2003). Piney Creek (S-M30) and both UNTs to Piney Creek are classified as HQ-CWF streams/Drains to HQ-CWF streams, MF streams, Class A Trout/TNR and/or ATW streams. Therefore, the antidegradation requirements applicable to this permit modification include protection of existing instream water uses (93.4a(b)) and the level of water quality (93.4a(c)) of HQ streams.

- **Section 93.4a(b)** states that "Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." In order to reduce water use impacts, SPLP has reduced the construction right-of-way (ROW) to 50 feet across Streams S-M30, S-M33 and S8r; limited the land disturbance to the excavated trench line, and temporary minor grading of the stream banks at the travel lane crossing, as required; limited the time/duration of in-stream construction (typically less than 2 days); designed the crossings such that the pipeline will be 5 feet under the streams, as compared to the PADEP 3 foot depth requirement; and, implemented erosion and sediment control measures for all land disturbances in accordance with PADEP's Erosion and Sediment Pollution Control Program Manual (PADEP 2012) as demonstrated throughout the Project's ESCGP Permit applications. With the proper implementation and maintenance of these protective measures, construction-related Project impacts to water quality such as increased turbidity related to sedimentation and in-stream construction will be minor, temporary, and localized and will not adversely impact or degrade the water resources. Specifically, the water quality and designated/existing uses of streams S-L6, S-L7, and the floodways of S-Q69 and S-Q70 will be maintained and protected post-construction.

- **93.4a(c): Protection for High Quality Waters** states that **"**The water quality of High Quality Waters shall be maintained and protected". The proposed Project will protect and maintain the existing/designated stream uses and water quality of the HQ streams crossed by this requested permit modification. Specifically, SPLP has reduced the construction right-of-way (ROW) to 50 feet across the streams; limited the land disturbance to the excavated trench line and minor grading of the stream banks at the travel lane crossing, as required; limited the time/duration of in-stream construction; implemented the HDD crossing method for the 20-inch pipe and will implement a dry construction method for the 16-inch crossing; designed the crossings such that the pipeline will be 5 feet under and the streams, as compared to PADEP's 3 foot depth requirement; and, will implement erosion and sediment control measures for all land disturbances in accordance with PADEP's Erosion and Sediment Pollution Control Program Manual (PADEP 2012) as demonstrated throughout the Project's ESCGP Permit applications.

  In addition, SPLP has incorporated ABACT BMPs into their E&S Plan to further reduce potential erosion and sediment impacts to the HQ stream crossings. Specifically, standard and ABACT BMPs that SPLP will implement to control/manage erosion and sedimentation within the Project area include:

  - Use of wash racks at rock construction entrances;
  - Placement of compost filter socks on the downgradient side of the filter bags and/or dewatering structure;
  - Application of erosion control blanket within 100 feet of receiving waters and on slopes 3:1 (H:V) or steeper;
  - Installation of compost filter socks at slope breaker outlets to provide additional filtration prior to discharge to surface waters;
  - Installation of berms and trenches to promote infiltration and manage flow rate;

- Implementation of the PPC Plan; and,
- Application of permanent seeding for site restoration.

As previously stated, Project impacts to streams, including the HQ resources, will be minor, temporary, and localized. As further demonstrated above, Project implementation of the requested crossing method, PADEP-approved ABACT BMPs identified above, and the revised 102 drawings (*Attachment D* of this permit modification request packet) will ensure the maintenance and protection of the overall water quality of the HQ streams by reducing/controlling turbidity associated with sedimentation and in-stream construction activities.

Chapter 93.4c(a)(2) requires the protection of endangered or threatened species if PADEP has confirmed the presence, critical habitat, or critical dependence of endangered or threatened Federal or Pennsylvania species in or on a surface water. Accordingly, SPLP has coordinated and will continue to coordinate with Federal and State agencies to identify and ensure protection of any endangered and threatened species and/or their critical habitat, or dependence on the surface waters crossed by this requested permit modification. Please refer to Module 2, S2.C of this Environmental Assessment and *Attachment G* of this permit modification request packet for additional information related to the protection of endangered/threatened species (i.e., thick-leaved meadow-rue and Indiana bat) associated with the requested open cut dry crossing of Streams S-M30, S-M33, and S8r and associated floodways.

Chapter 93.6 states that a project will not introduce/discharge any substance "in concentrations or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant, or aquatic life," including actions that could produce turbidity. The requested permit modification will result in minor, temporary, and localized impacts to surface waters of the Commonwealth primarily associated with increased turbidity during construction activities. The requested permit modification does not involve any permanent structures/facilities that will discharge any treated or created industrial wastewater, nor will it alter the existing natural conditions (chemical, biological, or physical) of the water resources crossed by the Project. In addition, the Project does not involve the addition or discharge of any toxic (Section 93.8a) or harmful substances into the waters of the Commonwealth. All water resources will be restored to their pre-existing conditions following Project construction such that their designated/existing water uses are not impacted by the Project. Accordingly, the proposed Project does not have the potential to alter the water quality such that the existing water uses or aquatic life of the HQ and EV resources will be affected.

Please refer to the table below (red text indicates updates) and the complete *Antidegradation Analysis* for additional details/information.

Resource	HQ/EV	Cover Type Conversion	Antidegradation Requirement		ABACT Measure	Justification	Erosion & Sediment Sheet No.
			Non-Discharge	ABACT			
S-M33	HQ	Yes		X	Compost filter socks, immediate stabilization, PPC plan, RCE with Wash Rack & Erosion Control Blanket	Procedural BMPs such as immediate stabilization and the PPC plan are implemented for areas requiring ABACT and throughout the project. Compost filter sock, rock construction entrances with wash racks, and erosion control blanket for 100' from the top of stream bank are all approved ABACT measures to manage the potential for an increase in stormwater discharge during construction. The combination of these technologies ensures that when implemented properly the stormwater discharge will be a non-degrading discharge.	ES-3.57
S8r	HQ	Yes		X	Compost filter socks, immediate stabilization, PPC plan, RCE with Wash Rack& Erosion Control Blanket	Procedural BMPs such as immediate stabilization and the PPC plan are implemented for areas requiring ABACT and throughout the project. Compost filter sock, rock construction entrances with wash racks, and erosion control blanket for 100' from the top of stream bank are all approved ABACT measures to manage the potential for an increase in stormwater discharge during construction. The combination of these technologies ensures that when implemented properly the stormwater discharge will be a non-degrading discharge.	ES-3.57
S-M30	HQ	Yes		X	Compost filter socks, immediate stabilization, PPC plan, RCE with Wash Rack & Erosion Control Blanket	Procedural BMPs such as immediate stabilization and the PPC plan are implemented for areas requiring ABACT and throughout the project. Compost filter sock, rock construction entrances with wash racks, and erosion control blanket for 100' from the top of stream bank are all approved ABACT measures to manage the potential for an increase in stormwater discharge during construction. The combination of these technologies ensures that when implemented properly the stormwater discharge will be a non-degrading discharge.	ES-3.57-RR

S3.F Alternatives Analysis

An Alternatives Analysis was prepared and submitted as part of the PPP Chapter 105 Joint Permit Application (E07-459) in Attachment 11, Enclosure E (Part 3). For this permit modification request, an Alternatives Analysis specific to the Piney Creek Reroute has been prepared.

Please refer to *Attachment A* of this permit modification request packet for the updated Project Description and Alternatives Analysis for the Piney Creek Reroute.

S3.G Potential Secondary Impact Evaluation

A Resource ID and Project Impacts Report was prepared and submitted as part of the PPP Chapter 105 Joint Permit Application (E07-459) in Attachment 11, Enclosure E (Part 2). Potential secondary impacts to streams and the aquatic habitat, water quantity, and water quality resulting from the Project were discussed in Section 4.1 of the report. Excerpts applicable to the proposed permit modification for Streams S-M30, S-M33 and S8r are presented below.

Potential secondary impacts to stream habitats could result from the Project including short-term release of sediments into waterways and vegetation clearing, that could result in the temporary displacement of wildlife to adjacent areas. These short-term impacts adjacent to and downgradient of the LOD could temporarily alter substrate and make it less suitable for spawning and foraging, and may create temporary turbidity that could alter the feeding habits of local wildlife. In addition, the clearing of vegetation reduces the shelter and buffer capacity to adjacent habitats and creates new edge habitat when located through greenfield areas. SPLP has mitigated for these potential secondary impacts by minimizing/reducing the area of disturbance and clearing, and minimizing the duration of construction activities in stream and wetland areas, implementing the E&S BMPs (Attachment D) and appropriate ABACT measures, and restoring the disturbed areas with vegetation to avoid impacts off the ROW.

Potential secondary impacts on adjacent stream/aquatic habitat functions could result from the short-term release of turbid waters and vegetation clearing, resulting in the temporary displacement of wildlife that use adjacent areas for spawning, foraging, nesting, rearing, and resting. However, the potential secondary impacts from the release of turbid waters, at most, will be negligible in nature given the short duration of in-stream construction, the intermittent flow characteristics of the streams, and through implementation of temporary and permanent E&S controls (refer to Attachment D of this permit modification packet). As noted above, the streams are buffered by riparian areas which would be revegetated. Restoration of these areas with native plant species will minimize potential secondary impacts to adjacent habitat from the establishment of invasive or exotic vegetation.

Potential secondary impacts on water quantity or the hydrology of streams could result from changes in natural/current drainage patterns and alteration in flow and water levels from construction. However, the Project does not involve any stream relocations, enclosures, channel deepening/dredging activities, and addition of structures or impervious surfaces in the wetland/stream complex. Given that the Project does not involve direct impacts to natural and current drainage patterns, the Project will likewise not result in secondary impacts to natural and current drainage patterns. Temporary dam and flow bypass methods will be used to maintain a continuous downstream flow during construction.

Potential secondary impacts to stream water quality beyond the Project's limit of disturbance could result from: release of sediments/turbid waters from trenching, dewatering, clearing and

grading of adjacent land and stream banks, and post-construction stream bank subsidence; and, release of pollutants from construction equipment or activities adjacent to waters. However, in accordance with the Chapter 102 E&S requirements, trench dewatering will be monitored and directed into appropriate receiving structures located in well-vegetated uplands to allow for filtration. Released water will naturally infiltrate to prevent secondary impacts to water quality of streams outside the ROW. Potential secondary impacts from stream bank subsidence will be avoided by leaving roots/stumps in place, except for over the trench, and by stabilizing/revegetating stream banks as soon as possible after construction. Post-construction monitoring will ensure that successful restoration occurs, or necessary corrective actions are implemented to result in successful restoration, thereby avoiding potential secondary impacts from stream bank subsidence/subsequent downstream erosion and sedimentation. Additionally, aerial and ground inspections during Project operation will identify stream bank subsidence and soil erosion issues which will be rectified by repairs or installation of temporary erosion control devices until permanent erosion control measures become effective.

Potential secondary impacts to adjacent resources will be avoided and minimized to the extent possible such that there is no loss of aquatic habitat, water quantity, or water quality.

S3.H Potential Cumulative Impacts

A Cumulative Impact Analysis (CIA) was prepared for the overall Project and submitted as part of the PPP Chapter 105 Joint Permit Application (E07-459) in Attachment 11, Enclosure E (Part 6). The CIA addresses the cumulative impact for the entire Project and other potential or existing SPLP and other oil and gas projects within the Cumulative Impact Assessment Area (CIAA) of the Project.

Since there are no wetland impacts related to this permit modification request, the cumulative impacts to streams (including floodways) associated with the open cut crossing methodology proposed for the Piney Creek Reroute would be limited to the aggregate impacts of the Project (and other potential or existing SPLP projects, and other evaluated projects within the CIAA) on waterbodies. As reported in the CIA, implementation of the Project, including the addition of 208 linear feet associated with open cutting of the streams, and other potential or existing SPLP projects and other projects evaluated within the CIAA will result in a cumulative waterbody disturbance of approximately 65,783 linear feet. These disturbances will result in no loss of waters. As documented in the CIA, with the implementation of each potential or existing project in compliance with best management practices and permit conditions, all of the disturbances to streams are (existing projects) or are anticipated to be (potential projects) minor and temporary; therefore, no more than minimal and temporary individual and cumulative adverse environmental effects are anticipated.

Module S4: Mitigation Plan

S4.A Avoidance, Minimization and Unavoidable Impacts

The crossing of Streams S-M30, S-M33, S84 (as well as floodways) is unavoidable due to the linear nature of the proposed PPP Project and as described above in S1.B – Water Dependency. SPLP originally proposed an HDD installation of both the 20" and 16" pipe to avoid direct impacts to Piney Creek and Piney Creek Road/High Street (State Route 866). However, as described in the Project Description (Attachment A of this permit modification request), During the pilot hole drilling phase on the permitted Piney Creek HDD for the 20-inch pipeline installation through this area, there were multiple inadvertent returns (IRs) in which drilling mud/fluid entered Waters of the Commonwealth, including Piney Creek and S-M33. In an attempt to address these incidents, SPLP received approval from the Pennsylvania Department of Environmental Protection (PADEP) to implement a Direct Pipe construction method. This method failed, however, and after receiving approval from PADEP, the 20-inch pipeline crossing was completed using the HDD method. During completion, the Piney Creek HDD continued to experience losses of circulation and IRs. Therefore, SPLP has elected to install the 16-inch pipeline through this area using an alternate route and method of installation that minimizes impacts to Waters of the Commonwealth.

SPLP evaluated an open cut of the existing permitted right-of-way and determined this would impact an EV wetland. Subsequently, they considered a Direct Pipe construction method through the area but determined that this could fail based on the previous attempts with the 20-inch pipeline.

SPLP evaluated other routes around the area but are limited due to the roads and residential properties to the south of the existing SPLP easement. In addition, a route to the south would likely impact more forested areas, possibly wetlands, and require a "greenfield", or new, right-of-way through these areas resulting in more permanent forested impacts. The proposed route to the north avoids all wetlands, minimizes the number of residential and developed areas disturbed during construction, and reduces the amount of forested area crossed. In addition, the route to the north provides an open field for a perpendicular conventional bore under Piney Creek Road / High Street (State Route 866).

In conclusion, given the geologic conditions at the Piney Creek HDD location and numerous IRs that occurred during the 20-inch HDD, the HDD evaluation staff has elected to install the 16-inch pipeline through this area using an alternate route and method of installation. Alternative construction methods including an open cut and/or bore of the resources within the existing permitted right-of-way are not considered desirable due to the EV wetland impacts, and unfeasible alternative construction methods. Therefore, SPLP has elected to abandon installing the 16-inch pipeline within their existing easement and has identified an alternate route north of the currently proposed right-of-way. Analysis of other potential routes to the south would result in potentially more environmental (forested area and wetlands), residential, and developed (roads) impacts. Consequently, the professional opinion of the HDD Reevaluation Team, consisting of the Geotechnical Evaluation Leader, Professional Geologists, Professional Engineers, and other construction specialists is that an open cut, dry crossing will have the least impact, as the work area and stream flow will be managed in accordance with all permit conditions and can completed in the most efficient and timely manner, including restoration/stabilization of all the streams.

As demonstrated within SPLP's Chapter 105 Joint Permit Application (JPA), SPLP has avoided and minimized potential impacts to waters from the Project. In so doing, there is no practicable alternative to each of the crossings that would have less effect on each waterbody, and not have other significant adverse effects on the environment, taking into consideration construction costs, existing technology, safety, and logistics. Those remaining unavoidable impacts are outlined within the resource impact tables located within the Impact Avoidance, Minimization, and Mitigation Procedures provided in Attachment 11, Enclosure E, Part 4 of the PPP Chapter 105 Joint Permit Application (E07-459) and *Attachment E* of this permit modification request.

S4.B Repair, Rehab, and Restoration Actions/Proposed Preservation and Maintenance Operations

SPLP will construct the stream crossings in accordance with the Chapter 102 Permit requirements and will implement erosion and sediment control best management practices (BMPs) as required and presented throughout this permit modification request, during all construction and restoration activities. Please refer to *Attachment D* of this permit modification request packet for the updated E&S and Restoration plans specific to the requested open cut (open-trench) dry crossing of Streams S-M30, S-M33 and S8r, and the floodways of Streams S-M33 and S8r.

In addition, SPLP will implement all protective and/or preventative requirements required by the agencies with regard to wild trout resources and species of concern. Please refer to *Attachment G* of this permit modification request packet for the PNDI Update and Agency Coordination specific to the crossing of Streams S-M30, S-M33, and S8r, as well as the floodways of Streams S-M33 and S8r.

S4.C Compensatory Mitigation

This permit modification request for a construction methodology change to an open cut (open-trench) dry crossing at the Piney Creek Reroute would result in minor, short-term, and temporary impacts. No permanent fill or stream relocations would occur. The streams would be restored to their original conditions and there will be no loss of resource function; therefore, compensatory mitigation is not required or offered.

S4.D Project Monitoring Plan

Utility Inspection Program & Environmental Compliance Program

All aspects of construction, operation, and maintenance of the PPP Project are supervised by SPLP personnel. Utility or "Craft" inspectors working on behalf of SPLP are staffed throughout all phases of construction to ensure the facilities are constructed and installed in accordance with SPLP, state, local, and federal specifications and standards.

Supplemental to their Utility Inspection Program, SPLP has implemented a comprehensive Environmental Compliance Program (ECP). The ECP encompasses highly integrated and essential program elements designed to ensure compliance with the requirements of the E&S Plan, permit conditions, and approved mitigation measures and conditions. The primary elements of the ECP are environmental training; environmental inspection; biological and cultural resource monitoring/training; and, agency and Project team notification and documentation requirements. Each of these elements is incorporated into the single integrated ECP organization structure and execution plan.

Post-Construction Monitoring

Streams S-M30, S-M33 and S8r, as well as the floodways of S-M33 and S8r will be temporarily impacted and restored to original grade, stabilized, and vegetated in accordance with the E&S Plan (refer to *Attachment D* of this permit modification request packet). Post-construction, the streams will be monitored in accordance with the Project's Impact Avoidance, Minimization, and Mitigation Procedures provided in Attachment 11, Section E, Part 4 of the PPP Chapter 105 Joint Permit Application (E07-459. APS 879354) as well as all applicable permits and clearances, including any specific requirements/reporting associated with species of concern (i.e., thick-leaved meadow-rue and Indiana bat).