

ELIGIBILITY INFORMATION		
1. Stormwater discharges from the project site will not drain to surface waters, including wetlands, that are classified for special protection.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
2. The applicant is not in violation of any DEP or EPA enforceable document, including any permit, schedule of compliance, consent assessment of civil penalty, or order at the project site or other sites or facilities owned or operated by the applicant in Pennsylvania, and has not shown a lack of ability or intention to comply with laws administered by DEP or EPA as indicated by past or continuing violations.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
3. The PNDI receipt indicates either 1) "No Impact", or 2) "Conservation Measures", or 3) "Avoidance Measures" that have been agreed to by the applicant, or 4) "Potential Impact" or "Avoidance Measures" not agreed to by the applicant but clearance letters from jurisdictional agencies are attached to the NOI or otherwise will be submitted prior to General Permit coverage.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
4. Soils in the area of the earth disturbance are not contaminated at levels exceeding residential or non-residential medium-specific concentrations (MSCs) in 25 Pa. Code Chapter 250 at residential or non-residential construction sites, respectively, unless a site-specific standard has been met or evidence is provided that the contamination is naturally occurring or the result of widespread atmospheric deposition.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
5. Stormwater will not be discharged to MS4 or CSO systems or will be discharged to MS4 or CSO systems with no net change in volume, rate or water quality or will be discharged to MS4 or CSO systems with a net change (increase) and written consent of the MS4 or CSO permittee.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
6. All fill material imported to the project site will be clean fill or will be regulated fill that has been authorized for use on the project site by DEP's Waste Management Program or will be used on an Act 2 site in accordance with standards established by DEP's Land Recycling and Environmental Remediation Standards Program.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
7. Stormwater discharges will not occur that would contain toxic or hazardous pollutants as defined in sections 307 and 311 of the Clean Water Act (33 U.S.C. §§ 1317 and 1321) or any other substance that – because of its quantity, concentration, or physical, chemical or infectious characteristics – may cause or contribute to an increase in mortality or morbidity in either an individual or the total population, or pose a substantial present or future hazard to human health or the environment when discharged into surface waters.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
8. Stormwater will not be discharged to impaired waters caused by siltation, suspended solids, turbidity, water/flow variability, flow modifications/alterations, or nutrients, or stormwater will be discharged to impaired waters but the applicant will implement non-discharge alternative(s) or ABACT BMPs.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False
9. Stormwater will not be discharged to waters with an EPA-approved or established TMDL for siltation, suspended solids, or nutrients, or will be discharged to TMDL waters (including the Chesapeake Bay) but the applicant will implement non-discharge alternative(s) or ABACT BMPs and any applicable wasteload allocation (WLA) will be achieved.	<input checked="" type="checkbox"/> True	<input type="checkbox"/> False

EXISTING PERMITS

Identify all environmental permits issued by DEP/CCD or EPA or are pending for this facility/project site within the past 5 years.

Type of Permit	Permit No.	Date Issued	Issued By
GP-05 Utility Line Crossing	GP050901220-031	Pending	PADEP Southeast Office

PROJECT SITE INFORMATION

1. Project Site Name 14-Inch Twin Oaks to Newark Jacobs Creek Pipeline Relocation Project 2. Total Project Site Area 4.904 acres

3. Project Site Impervious Area – Pre-Construction 0.079 acres Percent of Total 1.61 %

4. Project Site Impervious Area – Post-Construction 0.079 acres Percent of Total 1.61 %

5. Hydric soils or other wetland features are present within the Project Site. Yes No
 If Yes, the wetland determination is attached to the NOI.

6. County Name Bucks Municipality Name Upper Makefield City Boro Twp State PA

7. County Name _____ Municipality Name _____ City Boro Twp State PA

8. Site Location Address 106 OAKDALE AVE

9. Site Location City WASHINGTON CROSSING State PA ZIP+4 18977-1430

OPERATOR INFORMATION

1. Operator Name: _____ 2. Contact Name: _____

3. Operator Address: _____ 4. Operator Phone: _____

5. Operator City, State, Zip: _____

6. Operator's Role in Project: General Contractor Consultant Excavation Contractor Other

7. Operator's Responsibilities: _____

1. Operator Name: _____ 2. Contact Name: _____

3. Operator Address: _____ 4. Operator Phone: _____

5. Operator City, State, Zip: _____

6. Operator's Role in Project: General Contractor Consultant Excavation Contractor Other

7. Operator's Responsibilities: _____

EARTH DISTURBANCE INFORMATION

1. Total Earth Disturbance Area 4.904 acres 213,618 sf

2. Pre-Construction Impervious Area: 3,437 sf

3. Post-Construction Impervious Area: 3,427 sf

4. Pre-Construction/Present Land Use(s):

<u>meadow</u>	<u>98.4</u>	<u>%</u>
<u>impervious</u>	<u>1.6</u>	<u>%</u>
_____	_____	_____ %
_____	_____	_____ %

5. Post-Construction Land Use(s):

<u>meadow</u>	<u>98.4</u>	<u>%</u>
<u>impervious</u>	<u>1.6</u>	<u>%</u>
_____	_____	_____ %
_____	_____	_____ %

6. Plan Drawings within E&S Plans and PCSM Plans showing topography, project site and LOD boundaries, surface waters, discharge points, E&S and PCSM BMPs, and drainage patterns are attached.

7. Report latitude and longitude at the center of the proposed disturbed area (decimal degrees).
 Latitude: 40.277600 Longitude: 74.860380

8. Horizontal Reference Datum: NAD of 1927 NAD of 1983 WGS of 1984 Unknown

STORMWATER DISCHARGE INFORMATION

1. List all stormwater discharge points during construction and provide the information requested below (see instructions). Not Applicable

Discharge Point No.	LATITUDE	LONGITUDE	RECEIVING WATERS					
	Degrees	Degrees	Name of Receiving Waters	Ches. Bay?	Non-Surface Waters	Ch. 93 Class.	Impaired?	TMDL?
				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

2. List all stormwater discharge points after construction and stabilization are complete and provide the information requested below. Not Applicable

Discharge Point No.	LATITUDE	LONGITUDE	RECEIVING WATERS					
	Degrees	Degrees	Name of Receiving Waters	Ches. Bay?	Non-Surface Waters	Ch. 93 Class.	Impaired?	TMDL?
				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

3. Will any of the points identified above discharge to a storm sewer system? Yes No Is the storm sewer an MS4 or CSS? Yes No
 Name of storm sewer owner/operator: _____ Discharge points discharging to storm sewer: _____

4. Identify and describe all non-stormwater discharges that are expected to occur during permit coverage. Describe the frequency and volume of all such discharges.

No non-stormwater discharges are anticipated.

5. Will there be any new or increased discharge to non-surface waters prior to reaching surface waters? Yes No

If Yes, the applicant is expected to 1) secure legal authority for the non-surface water discharge if the discharge will be to property not owned by the applicant, and 2) provide for adequate E&S controls to prevent accelerated erosion.

STORMWATER DISCHARGE INFORMATION (CONTINUED)

6. For each discharge to an impaired water (with or without a TMDL, including Ches. Bay) complete the information below.

Discharge Point No.:

Stormwater will be managed using: Non-discharge alternative ABACT BMP(s)

Description of E&S BMP(s):

Description of PCSM BMP(s):

WLA(s) in a TMDL apply to this discharge: Yes No

If Yes, describe how the discharge will comply with the WLA(s):

Discharge Point No.:

Stormwater will be managed using: Non-discharge alternative ABACT BMP(s)

Description of E&S BMP(s):

Description of PCSM BMP(s):

WLA(s) in a TMDL apply to this discharge: Yes No

If Yes, describe how the discharge will comply with the WLA(s):

Discharge Point No.:

Stormwater will be managed using: Non-discharge alternative ABACT BMP(s)

Description of E&S BMP(s):

Description of PCSM BMP(s):

WLA(s) in a TMDL apply to this discharge: Yes No

If Yes, describe how the discharge will comply with the WLA(s):

Discharge Point No.:

Stormwater will be managed using: Non-discharge alternative ABACT BMP(s)

Description of E&S BMP(s):

Description of PCSM BMP(s):

WLA(s) in a TMDL apply to this discharge: Yes No

If Yes, describe how the discharge will comply with the WLA(s):

Discharge Point No.:

Stormwater will be managed using: Non-discharge alternative ABACT BMP(s)

Description of E&S BMP(s):

Description of PCSM BMP(s):

WLA(s) in a TMDL apply to this discharge: Yes No

If Yes, describe how the discharge will comply with the WLA(s):

CERTIFICATION FOR PAG-02 APPLICANTS

I certify under penalty of law that this application and all related attachments were prepared by me or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my own knowledge and on inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. The responsible official's signature also verifies that the activity is eligible to participate in the NPDES permit, and that BMP's, E&S Plan, PPC Plan, PCSM Plan, and other controls are being or will be, implemented to ensure that water quality standards and effluent limits are attained. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment or both for knowing violations pursuant to Section 309(c)(4) of the Clean Water Act and 18 Pa. C.S.A. § 4904.

I grant permission to the agencies responsible for the permitting of this work, or their duly authorized representative to enter the project site for inspection purposes. I will abide by the conditions of the permit if issued and will not begin work prior to permit issuance.

(For individuals no indication of title is necessary, choose the box below. All others proceed to the next paragraph)

Individual; proceed to signature portion.

I hereby certify that I am the signatory pursuant to 25 Pa, Code § 92a.22 and 40 CFR §122.22 and that I am the person who is responsible for decision-making regarding environmental compliance functions for Enter Entity name, the manager of one or more manufacturing, production, or operating facilities of the applicant and am authorized to make management decisions which govern the operation of regulated facility including having explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure the applicant's long term environmental compliance with environmental laws and regulations; and I am responsible for ensuring that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements.

(choose one of the following; not applicable for individuals):

- The responsible corporate officer president vice president secretary treasurer of _____
Corporation/Company Entity name
- The person either holding a position designated or individually listed on a "Certificate of Limited Liability Company Authority" filed with the Pennsylvania Department of State as a position/person with the authority to bind the company OR the person listed in the LLC's most current and active operating agreement as having the authority to bind the company. Please attach the applicable "Certificate of Limited Liability Company Authority" or operating agreement. If the operating agreement is attached, please identify the page and paragraph containing the applicable information.
- The general partner of _____ partnership/LP/LLP
Entity name
- The principal executive officer or ranking elected official of _____ Municipality/State/Federal/other public agency
Entity name
- Power of Attorney/delegation of contractual authority (documentation supporting delegation of contracting authority must be provided) for Sunoco Pipeline, L.P.
Entity name

Nicholas J. Bryan

Applicant Name (type or print legibly)



Applicant Signature

Sr. Director - E&C Environmental

Official Title

01/12/2021

Date Signed

CERTIFICATION FOR OPERATORS

I understand that I am assuming joint and severable responsibility, coverage, and liability under the permit for all duties, responsibilities, and non-compliance with the Chapter 102 permit, as a co-permittee of this permit coverage. I certify that I will implement the requirements of the permit and the approved design plans and will notify the permittee and the agency that issued permit coverage prior to implementing changes to the plans.

Operator Name (type or print legibly)

Official Title

Operator Signature

Date Signed

Operator Name (type or print legibly)

Official Title

Operator Signature

Date Signed

RECEIVED

JAN 15 2021

3800-PM-BCW0406a Rev. 12/2019
E&S Module 1

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF CLEAN WATER



**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES
EROSION AND SEDIMENT CONTROL (E&S) MODULE 1**

Applicant: Sunoco Pipeline LP

Project Site Name: 14 Inch Twin Oaks to Newark Jacobs
Creek Pipeline Relocation

Surface Water Name(s): Delaware River, Hough's
Creek

Surface Water Use(s): WWF, MF

E&S PLAN INFORMATION

1. Describe the existing topographic features of the project site and the immediate surrounding area.

The Existing project site is a suburban residential area that has less than a 5% slope throughout, with the exception of the stream banks to Hough's creek and the stream banks to the Delaware river.

2. Complete the following table for soils present at the project site.

Map Unit Symbol	Map Unit Name	Acres	HSG	% of Disturbed Area	Depth (ft)	Hydric
AIA	Alton Gravelly Loam, 0 to 3 percent slopes	3.97	A	80.66%	5.2	<input type="checkbox"/>
Bo	Bowmansville - Knauers Silt Loams	0.31	C/D	6.37%	5.4	<input checked="" type="checkbox"/>
DaA	Delaware Fine Silty Loam, 0 to 3 percent Slopes	0.64	A	12.96%	7.25	<input checked="" type="checkbox"/>

Discuss any soil limitations and how the E&S Plan was designed to address those limitations.

Flooding & Ponding

Dewater areas of water using pumped water filter bags. In times of high flooding risk or increased rainfall work should stop to avoid flooding risk. In areas where ponding becomes a persistent problem, use mud mats when construction is necessary.

Unstable Excavation Walls

The instability of steep excavation side slopes and walls is anticipated due to the composition of the soils within the project area. Trench boxes and sloping-back of the trench walls will be performed at the discretion of the contractor in accordance with OSHA regulations.

Shallow Depth to Saturated Zone

Excavation shall be dewatered as necessary using pumped water filter bags surrounded by compost filter socks on a flat, vegetated area. The down slope side of the dewatering sites will be located an ample distance from drainage channels to allow for natural filtering of the water by the existing vegetation.

Dust

Disturbed workspace will be minimized and if construction takes place during significant dry periods, heavily traveled areas will be sprinkled with water to dampen the surface. Alternative methods, such as mulching, can be used in certain areas.

If Hydric soils are present, is a wetland determination attached to this module? Yes No N/A

If soils are known to be contaminated, 1) identify the pollutants exceeding Act 2 standards in the space provided below, 2) identify the extent of soil contamination on an E&S Plan Drawing that is attached to this module, and 3) describe the methods that will be used to avoid or minimize disturbance of the contaminated soils in the space provided below.

N/A

3. Describe the characteristics of the earth disturbance activity, including the past, present and proposed land uses and the proposed alteration to the project site.

The past and present land uses of the property are residential in nature and include the installing of the existing pipeline. Earth disturbance activity will be the installing of the relocated section of 14-inch pipeline via trenchless Horizontal directional drilling, with limited traditional trench methods.

4. Describe the volume and rate of runoff from the project site and its upstream watershed area.

N/A

5. Check boxes to indicate all BMPs that will be installed or implemented, identify plan numbers for the BMPs, and describe any deviations from the E&S Manual.

E&S BMPs	Plan No(s). Identified	Plan No(s). for O&M	Deviation(s) from E&S Manual
<input checked="" type="checkbox"/> Rock Construction Entrance	701, 702	705	N/A
<input type="checkbox"/> Rock Construction Entrance with Wash Rack			
<input type="checkbox"/> Rumble Pad			
<input type="checkbox"/> Wheel Wash			
<input type="checkbox"/> Temporary and Permanent Access Roads			
<input type="checkbox"/> Waterbar			
<input type="checkbox"/> Broad-based Dip			
<input type="checkbox"/> Open-top Culvert			
<input type="checkbox"/> Water Deflector			
<input type="checkbox"/> Roadside Ditch			
<input type="checkbox"/> Ditch Relief Culvert			
<input type="checkbox"/> Turnout			
<input type="checkbox"/> Compost Sock Sediment Trap			
<input type="checkbox"/> Temporary Stream Crossing			
<input type="checkbox"/> Temporary Wetland Crossing			
<input type="checkbox"/> Turbidity Barrier (Silt Curtain)			
<input type="checkbox"/> Dewatering Work Areas			
<input checked="" type="checkbox"/> Pumped Water Filter Bag	703	705	
<input type="checkbox"/> Sump Pit			
<input type="checkbox"/> Waste Management			
<input type="checkbox"/> Concrete Washout			
<input checked="" type="checkbox"/> Compost Filter Sock	702	705	N/A
<input type="checkbox"/> Compost Filter Berm			
<input type="checkbox"/> Weighted Sediment Filter Tube			
<input type="checkbox"/> Rock Filter Outlet			
<input type="checkbox"/> Silt Fence (Filter Fabric Fence)			
<input type="checkbox"/> Reinforced Silt Fence			
<input type="checkbox"/> Super Silt Fence (Super Filter Fabric Fence)			

E&S BMPs	Plan No(s). Identified	Plan No(s). for O&M	Deviation(s) from E&S Manual
<input type="checkbox"/> Sediment Filter Log (Fiber Log)			
<input type="checkbox"/> Wood Chip Filter Berm			
<input type="checkbox"/> Straw Bale Barrier			
<input type="checkbox"/> Rock Filter			
<input type="checkbox"/> Vegetative Filter Strip			
<input type="checkbox"/> Inlet Filter Bag			
<input type="checkbox"/> Stone Inlet Protection			
<input type="checkbox"/> Runoff Conveyance (Channel)			
<input type="checkbox"/> Bench			
<input type="checkbox"/> Top-of-Slope Berm			
<input type="checkbox"/> Temporary Slope Pipe			
<input type="checkbox"/> Sediment Basin			
<input type="checkbox"/> Sediment Trap			
<input type="checkbox"/> Riprap Apron			
<input type="checkbox"/> Flow Transition Mat			
<input type="checkbox"/> Stilling Basin (Plunge Pool)			
<input type="checkbox"/> Stilling Well			
<input type="checkbox"/> Energy Dissipater			
<input type="checkbox"/> Drop Structure			
<input type="checkbox"/> Earthen Level Spreader			
<input type="checkbox"/> Structural Level Spreader			
<input type="checkbox"/> Surface Roughening			
<input type="checkbox"/> Vegetative Stabilization			
<input checked="" type="checkbox"/> Erosion Control Blanket	707	705	N/A
<input type="checkbox"/> Soil Binders			
<input type="checkbox"/> Sodding			
<input type="checkbox"/> Cellular Confinement Systems			
<input type="checkbox"/> Alternative:			
<input type="checkbox"/> Alternative:			

Table 1 – For PAG-01 applicants, complete the requested information for each selected E&S BMP, where applicable.

Site Access BMPs									
BMP Name	No.	Length (ft)	Width (ft)	% Slope	Spacing (ft)	Length of Upslope Drainage (ft)	Culvert Diameter (in)	Soil Type in Ditch	E&S Manual Figure/Detail No.
Rock Construction Entrance (RCE)	5	50	20						#3-1
RCE with Wash Rack									
Temporary and Permanent Access Roads – Crowned Roadway									
Temporary and Permanent Access Roads – Insloped Roadway									
Waterbar									
Broad-based Dip									
Open-top Culvert									
Water Deflector									
Roadside Ditch									
Ditch Relief Culvert									
Sediment Barriers / Filters									
BMP Name	DA (ac)	Diameter (in)	Storage Capacity (cf)	Trap Height (in)	% Slope	Slope Length Above Barrier (ft)	Barrier Height (in)	E&S Manual Figure/Detail No.	
Compost Sock Sediment Trap									
Compost Filter Sock		12			1	350	12	#4-1	
Compost Filter Berm									
Silt Fence (Filter Fabric Fence)									
Super Silt Fence									
Sediment Filter Log									
Weighted Sediment Filter Tube									
Straw Bale Barrier									
Wood Chip Filter Berm									
Toe-of-Slope Berm									

Table 1 – For PAG-01 applicants, complete the requested information for each selected E&S BMP, where applicable.

Runoff Conveyance BMPs													
BMP Name	Temporary	Design Storm	DA (ac)	Multiplier	Qr (cfs)	Q (cfs)	Manning's n	Va (fps)	V (fps)	D (ft)	d (ft)	Flow Depth Ratio	E&S Manual Figure/Detail No.
Vegetated Channel	<input type="checkbox"/>												
Sodded Channel	<input type="checkbox"/>												
Riprap Channel	<input type="checkbox"/>												
Energy Reduction BMPs													
BMP Name	Downstream Distance to Drainage Course (ft)		Downstream % Slope	DA (ac)	Discharge (cfs)	Manhole Depth (ft)	Inflow Pipe Diameter (in)	Outlet Pipe Diameter (in)	E&S Manual Figure/Detail No.				
Level Spreader													
Drop Structure													
Stilling Basins / Wells													
BMP Name	Pipe Diameter (in)	Discharge (cfs)	Well Diameter (in)	Depth of Well Below Invert (ft)	Basin Depth (ft)	Median Riprap Size (in)	Distance from Discharge Pipe to Basin Center (ft)	E&S Manual Figure/Detail No.					
Stilling Basin													
Stilling Well													
Other BMPs													
BMP Name	DA (ac)	Pipe Diameter (in)	Berm Height (in)	Length (ft)	% Slope	Vertical Spacing (ft)	Channel Depth (ft)	Riprap Size	Riprap Thickness (in)	Initial Width (ft)	Terminal Width (ft)	E&S Manual Figure/Detail No.	
Temporary Slope Pipe													
Bench													
Rock Filter													
Riprap Apron													

For selected BMPs not identified in Table 1, report the name of the BMP and the Figure or Detail No. from the E&S Manual that will be used for design and implementation (PAG-01 only).

BMP Name	E&S Manual Figure/Detail No.	BMP Name	E&S Manual Figure/Detail No.
Trench Plug	#13-4		
Pumped Water Filter Bag	#3-16		

6. All applicable Standard E&S Worksheets from Appendix B of the E&S Manual have been completed and are attached.
7. Other worksheets or calculations equivalent to Appendix B of the E&S Manual have been completed and are attached.
8. Identify the E&S Plan Drawing number(s) that describes the sequence of BMP installation and removal in relation to the scheduling of earth disturbance activities, prior to, during and after earth disturbance activities that ensure the proper functioning of all BMPs.
706
9. Supporting E&S calculations have been completed and are available upon request (PAG-01 only).
10. Supporting E&S calculations are attached to the NOI/application.
11. Plan drawings consist of standard Figures/Construction Details in E&S Manual (PAG-01 only).
12. Plan drawings have been developed for the project and are attached to the NOI/application.
13. BMPs will be inspected on a weekly basis and after measurable storm events (i.e., at least 0.25 inch).
14. Identify the following information relating to temporary stabilization measures on an E&S Plan Drawing and identify the Drawing No. below: 1) vegetative species, 2) % pure live seed, 3) seed application rate, 4) fertilizer type, 5) fertilizer application rate, 6) mulch type, 7) mulching rate, and 8) liming rate.
E&S Plan Drawing No(s).: **704**
15. Identify the following information relating to permanent stabilization measures on an E&S Plan Drawing and identify the Drawing No. below: 1) vegetative species, 2) % pure live seed, 3) seed application rate, 4) fertilizer type, 5) fertilizer application rate, 6) mulch type, 7) mulching rate, 8) liming rate, 9) anchor material, 10) anchoring method, 11) rate of anchor material application, 12) topsoil placement depth, and 13) seeding season dates.
E&S Plan Drawing No(s).: **704**
16. Describe the procedures that will be taken to ensure that recycling or disposal of materials associated with or from the project site will be conducted properly.
Operator/permittee shall insure that proper mechanisms are in place to control waste materials. Construction wastes include, but are not limited to, excess soil materials, building materials, concrete wash water, sanitary wastes, etc. that could adversely impact water quality. Measures should be planned and implemented for housekeeping, materials management, and litter control. Wherever possible, recycling of excess materials is preferred, rather than disposal. Off-site transport of materials requires that the receiving facility have its own approved, active permit to receive such materials.
Hazardous or pollutant materials, including but not limited to chemicals, fuels, and lubricating oils shall not be stored within 100 feet of a wetland or waterbody according to PADEP.
17. Identify the presence of any naturally occurring geologic formations or soil conditions that may have the potential to cause pollution during earth disturbance activities. If such formations or conditions exist, identify BMPs that will be implemented to avoid or minimize potential pollution.
No naturally occurring geologic formations or soil conditions have been identified that will cause pollution during earth moving disturbance. Typically, the only earth moving will be stripping of topsoil and shallow trenching activities. Major grading is not proposed as a part of this Project.
18. Identify whether the potential exists for thermal impacts to surface waters from the earth disturbance activity. If such potential exists, identify BMPs that will be implemented to avoid, minimize, or mitigate potential thermal impacts.

Thermal Impact Analysis

The linear nature of this pipeline project inherently minimizes thermal impacts. First, some work will take place within an existing, cleared right-of-way. There is minimal clearing for this project and approximately 2500 feet consists of the Delaware River trenchless HDD crossing. Additionally, all disturbed areas will be restored to their original conditions.

19. The E&S Plan has been planned, designed, and will be implemented to be consistent with the PCSM Plan.

20. If applicable, identify existing and proposed riparian forest buffers on E&S and PCSM Plan Drawings and identify the Drawing No(s) below (select N/A if not applicable).

E&S Plan Drawing No(s): N/A

PCSM Plan Drawing No(s):

E&S PLAN DEVELOPER

I am trained and experienced in E&S control methods. I am a licensed professional.

Name: Christopher Antoni

Title: Sr. Vice President

Company: STV Energy Services, Inc.

Phone No.: 610-698-9772

Address: 205 West Welsh Drive

Email: Christopher.Antoni@Stvinc.com

City, State, ZIP: Douglassville, PA, 19518

License No.: PE-057385-E

License Type: Professional Engineer

Exp. Date: 9/30/2021


E&S Plan Developer Signature

01/14/2021
Date

PAG-02
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
GENERAL PERMIT FOR DISCHARGES OF
STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES
NOI CHECKLIST

Applicant Name:	Sunoco Pipeline LP		
Project Site Name:	14-Inch Twin Oaks to Newark Jacobs Creek Pipeline Relocation		
NOI Type:	<input checked="" type="checkbox"/> New <input type="checkbox"/> Renewal <input type="checkbox"/> Major Amendment <input type="checkbox"/> Minor Amendment		
Place a checkmark in the box provided for all items completed and/or provided. Failure to provide all required information will delay the processing of the NOI. ENCLOSE THIS CHECKLIST WITH YOUR COMPLETED NOI.			
	NOI REQUIREMENTS ¹	Check <input checked="" type="checkbox"/> If Included	Check <input checked="" type="checkbox"/> If Not Applicable
1.	One original and one copy of the complete NOI form (3800-PM-BCW0405b)	<input checked="" type="checkbox"/>	
2.	Administrative Filing Fee (\$500 plus any additional CCD-specific fees, if applicable)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.	One copy of the completed NOI form to DEP (if CCD will review NOI)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.	Disturbed Acreage Fee (\$100 x disturbed acres)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.	Two copies of the County Notification Form (3800-FM-BCW0271b) ²	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.	Two copies of the Municipal Notification Form (3800-FM-BCW0271c) ²	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7.	Two copies of the proof of county and municipal receipt of Notification Forms (required if Notification Forms are not signed by county and/or municipality) ²	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.	One original and one copy of the PNDI Receipt ³	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9.	Two copies of the PNDI clearance letter(s) from jurisdictional agencies ³	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10.	One original and one copy of E&S Module 1 (3800-PM-BCW0406a)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11.	Two copies of E&S Plan Drawings ⁴	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12.	Two copies of E&S Standard Worksheets (or equivalent) and supporting calculations	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13.	One original and one copy of PCSM Module 2 (3800-PM-BCW0406b)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14.	Two copies of PCSM Plan Drawings ⁴	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15.	Two copies of PCSM Supporting Calculations – BMP Design	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16.	Two copies of PCSM Supporting Calculations – Stormwater Analysis (required where DEP PCSM Spreadsheet not used)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17.	Two copies of the DEP PCSM Spreadsheet – Volume Worksheet (optional)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18.	Two copies of the DEP PCSM Spreadsheet – Rate Worksheet (optional)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19.	Two copies of the DEP PCSM Spreadsheet – Quality Worksheet	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20.	Two copies of soil/geologic test results (where BMPs relying on infiltration will be installed)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21.	Other: Municipal and County Act 14 Letters with Receipts	<input checked="" type="checkbox"/>	

- 1 The table below identifies the items in an application package (corresponding to the item numbers in the checklist) that must be submitted to a delegated county conservation district (CCD) or to the appropriate DEP regional office, based on NOI type.

NOI Type	Where CCD is the initial recipient ⁵		Where DEP is the recipient ⁵
	Submit to CCD:	Submit to DEP:	Submit to DEP:
New	Items 1, 2, and 4-25 (as applicable).	Item 3.	Items 1, 2 (\$500 only), and 4-25 (as applicable).
Renewal ⁶	Items 1 and 2, and a letter indicating that the previously approved E&S and PCSM Plans have not been revised and explaining what work has been completed and what work remains on the project site.		Items 1 and 2 and a letter indicating that the previously approved E&S and PCSM Plans have not been revised and explaining what work has been completed and what work remains on the project site.
Major Amendment ⁶	Items 1, 2, 3-9 (only for new earth disturbance), 10-12 (where applicable, only for revisions to the E&S Plan), 13-20 (where applicable, only for revisions to the PCSM Plan), and 21 (only where applicable). New or updated information must be bold/highlighted.		Items 1, 2, 3-9 (only for new earth disturbance), 10-12 (where applicable, only for revisions to the E&S Plan), 13-20 (where applicable, only for revisions to the PCSM Plan), and 21 (only where applicable). New or updated information must be bold/highlighted.
Minor Amendment ⁶	Items 1, 3-9 (only for new earth disturbance), 10-12 (where applicable, only for revisions to the E&S Plan), 13-20 (where applicable, only for revisions to the PCSM Plan), and 21 (only where applicable). New or updated information must be bold/highlighted.		Items 1, 3-9 (only for new earth disturbance), 10-12 (where applicable, only for revisions to the E&S Plan), 13-20 (where applicable, only for revisions to the PCSM Plan), and 21 (only where applicable). New or updated information must be bold/highlighted.

- 2 Applicants may submit the completed County and Municipal Notification Forms with the NOI or, if the county and/or municipality has not returned the completed form to the applicant 30 days following receipt by the county and municipality, the applicant may submit copies of the forms submitted to the county/municipality along with proof that the county/municipality received the form(s). County and Municipal Notification Forms are not required for renewal NOIs and are required for major and minor amendment NOIs only if new earth disturbance is proposed.
- 3 All applicants for new permits must attach a PNDI receipt. If the PNDI receipt indicates a Potential Impact, the applicant may submit clearance letters from jurisdictional agencies with the application or, if the clearance letters have not been received by the time of application submission, the applicant may submit clearance letters during the NOI review period. DEP/CCD will not authorize coverage under the general permit prior to the receipt of such letters, if applicable. PNDI receipts are not required for renewal NOIs and are required for major and minor amendment NOIs only if new earth disturbance is proposed.
- 4 E&S and/or PCSM Plan Drawings must present project site and limit of disturbance boundaries, topography, surface waters (including wetlands), discharge points, BMPs, off-site support activities (if applicable), and all other features required by the application.
- 5 For projects located solely in Beaver, Forest, and Philadelphia counties, the DEP Regional Office is the recipient. For projects that span two (2) counties, the county with the greatest amount of earth disturbance will be the recipient (unless that county is Beaver, Forest, or Philadelphia, in which the DEP Regional Office will be the recipient). For projects that span three (3) or more counties within one (1) DEP Region, the DEP Regional Office is the recipient. For projects that span three (3) or more counties within two (2) or more DEP Regions, the DEP Regional Permit Coordination Office (RPCO) is the recipient. For projects that span two (2) or more counties, additional copies of the items may be required. Additionally, where certain types of PCSM BMPs, including floodplain restoration and gravity stormwater wells (i.e., Class V Injection Wells), are proposed, DEP RPCO will take responsibility for the review.
- 6 Renewal NOIs must use form 3800-PM-BCW0405b (the General Information, Eligibility Information, Compliance History, and Certification for PAG-02 Applicants must be completed at a minimum). For major and minor amendment NOIs, previously submitted forms and attachments may be used, with updated information, and submitted if the original application was not submitted using form 3800-PM-BCW0405b. If form 3800-PM-BCW0405b is used for a major amendment, the form must be completed in its entirety. If form 3800-PM-BCW0405b is used for a minor amendment, the General Information, Eligibility Information, Compliance History, and Certification for PAG-02 Applicants must be completed at a minimum.

1. PROJECT INFORMATION

RECEIVED
JAN 15 2021
BCCD

Project Name: **Jacobs Creek Pipeline Replacement**

Date of Review: **5/22/2019 10:11:39 AM**

Project Category: **Energy Storage, Production, and Transfer, Energy Transfer, Pipeline (e.g., gas, oil) -- NEW (construction of new line in a new location)**

Project Area: **9.93 acres**

County(s): **Bucks**

Township/Municipality(s): **UPPER MAKEFIELD**

ZIP Code: **18977**

Quadrangle Name(s): **PENNINGTON**

Watersheds HUC 8: **Middle Delaware-Musconetcong**

Watersheds HUC 12: **Buck Creek-Delaware River; Jacobs Creek-Delaware River**

Decimal Degrees: **40.277867, -74.856544**

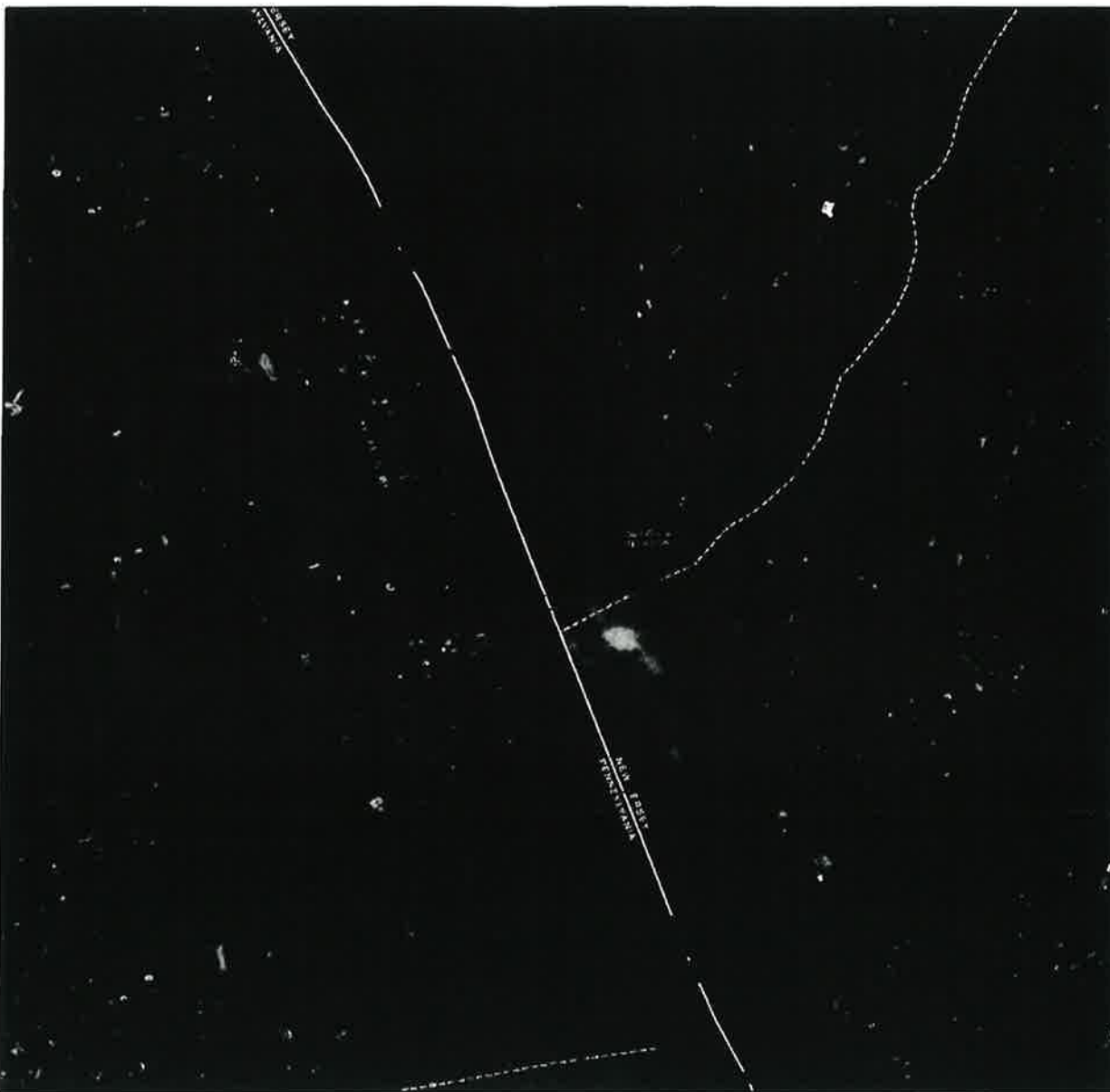
Degrees Minutes Seconds: **40° 16' 40.3210" N, 74° 51' 23.5590" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	Potential Impact	FURTHER REVIEW IS REQUIRED, See Agency Response
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

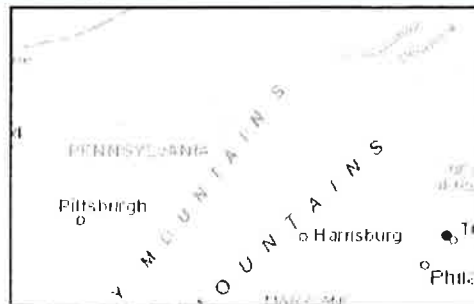
As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

Jacobs Creek Pipeline Replacement

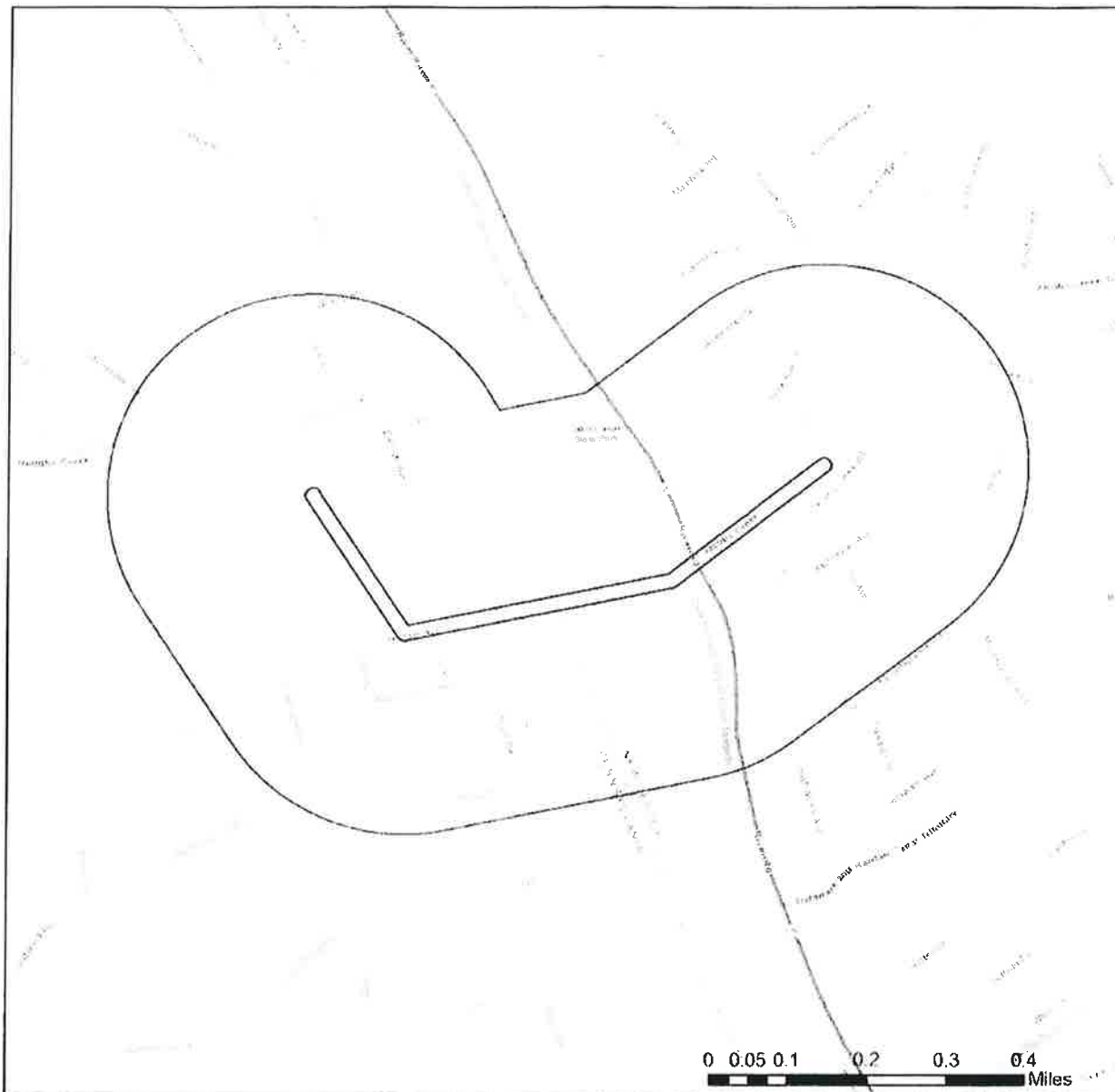


- Project Boundary
- Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

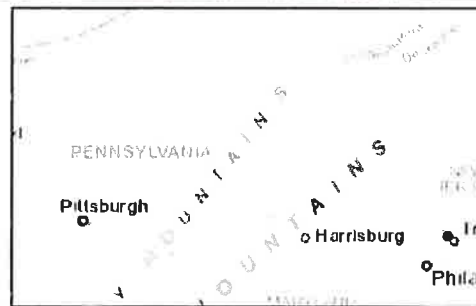


Jacobs Creek Pipeline Replacement



- Project Boundary
- Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS,



RESPONSE TO QUESTION(S) ASKED

Q1: Accurately describe what is known about wetland presence in the project area or on the land parcel. "Project" includes all features of the project (including buildings, roads, utility lines, outfall and intake structures, wells, stormwater retention/detention basins, parking lots, driveways, lawns, etc.), as well as all associated impacts (e.g., temporary staging areas, work areas, temporary road crossings, areas subject to grading or clearing, etc.). Include all areas that will be permanently or temporarily affected -- either directly or indirectly -- by any type of disturbance (e.g., land clearing, grading, tree removal, flooding, etc.). Land parcel = the lot(s) on which some type of project(s) or activity(s) are proposed to occur.

Your answer is: Someone qualified to identify and delineate wetlands has investigated the site, and determined that NO wetlands are located in or within 300 feet of the project area. (A written report from the wetland specialist, and detailed project maps should document this.)

Q2: The proposed project is in the range of the Indiana bat. Describe how the project will affect bat habitat (forests, woodlots and trees) and indicate what measures will be taken in consideration of this. Round acreages up to the nearest acre (e.g., 0.2 acres = 1 acre).

Your answer is: No forests, woodlots or trees will be affected by the project.

Q3: Aquatic habitat (stream, river, lake, pond, etc.) is located on or adjacent to the subject property and project activities (including discharge) may occur within 300 feet of these habitats?

Your answer is: Yes

Q4: Is tree removal, tree cutting or forest clearing of 40 acres or more necessary to implement all aspects of this project?

Your answer is: No

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

PFBC Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

Scientific Name	Common Name	Current Status
Sensitive Species**		Endangered
Sensitive Species**		Endangered
Sensitive Species**		Endangered
Sensitive Species**		Threatened

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.

** Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.

WHAT TO SEND TO JURISDICTIONAL AGENCIES

If project information was requested by one or more of the agencies above, upload* or email* the following information to the agency(s). Instructions for uploading project materials can be found [here](#). This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies. Alternatively, applicants may email or mail their project materials (see AGENCY CONTACT INFORMATION).

***Note:** U.S.Fish and Wildlife Service requires applicants to mail project materials to the USFWS PA field office (see AGENCY CONTACT INFORMATION). USFWS will not accept project materials submitted electronically (by upload or email).

Check-list of Minimum Materials to be submitted:

___ Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.

___ A map with the project boundary and/or a basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)

In addition to the materials listed above, USFWS REQUIRES the following

___ **SIGNED** copy of a Final Project Environmental Review Receipt

The inclusion of the following information may expedite the review process.

___ Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)

___ Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.

5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
NO Faxes Please

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

PA Game Commission

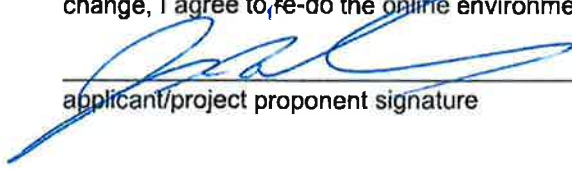
Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: James McGinley
Company/Business Name: STV Energy Services
Address: 205 West Walsh Dr
City, State, Zip: Doylestown, PA 19518
Phone: (610) 655-7654 Fax: ()
Email: jim.mcginley@stvinc.com

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.


applicant/project proponent signature

6/5/19
date



**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES
POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) MODULE 2**

Applicant: **Sunoco Pipeline LP**

Project Site Name: **14-Inch Twin Oaks to Newark Pipeline Relocation Project Jacobs Creek**

Surface Water Name(s): **Delaware River, Hough's Creek**

Surface Water Use(s): **WWF, MF**

PCSM PLAN INFORMATION

1. Identify all structural and non-structural PCSM BMPs that have been selected and provide the information requested.

Discharge Point(s)	BMP ID	BMP Name	BMP Manual	Latitude	Longitude	DA Treated (ac)

Undetained Areas: acre(s)

The Project Qualifies as a Site Restoration Project (25 Pa. Code §102.8(n))

2. Describe the sequence of PCSM BMP implementation in relation to earth disturbance activities and a schedule of inspections for the critical stages of PCSM BMP installation.

1. **Topsoil will be graded back to original location and the site will be returned to existing conditions.**
2. **All disturbed areas shall be returned to existing grade, permanently seeded and mulched. See permanent seeding details for typical permanent seeding and wetland seed mix.**
3. **Install erosion control matting as shown on the plans.**

<p>4. Upon stabilization, remove perimeter compost filter and all other erosion control measures.</p> <p>5. Remove exclusion fencing.</p> <p>6. Permanently seed and mulch all remaining areas disturbed while removing BMPs.</p> <p>7. All temporary Rock Construction Entrances (PA) and Stabilized Construction Accesses (NJ) shall be removed and immediately permanently seeded and mulched.</p>
<p>3. <input checked="" type="checkbox"/> Plan drawings have been developed for the project and will be available on-site.</p>
<p>4. <input checked="" type="checkbox"/> Plan drawings have been developed for the project and are attached to the NOI/application.</p>
<p>5. <input checked="" type="checkbox"/> Recycling and proper disposal of materials associated with PCSM BMPs are addressed as part of long-term operation and maintenance of the PCSM BMPs.</p>
<p>6. Identify naturally occurring geologic formations or soil conditions that may have the potential to cause pollution after earth disturbance activities are completed and PCSM BMPs are operational and the applicant's plan to avoid or minimize potential pollution and its impacts.</p> <p>No naturally occurring geologic formations or soil conditions have been identified that will cause pollution during earth moving disturbance. Typically, the only earth moving will be stripping of topsoil and shallow trenching activities. Major grading is not proposed as a part of this Project.</p>
<p>7. Identify whether the potential exists for thermal impacts to surface waters from post-construction stormwater. If such potential exists, identify BMPs that will be implemented to avoid, minimize, or mitigate potential thermal impacts.</p> <p>The linear nature of this pipeline project inherently minimizes thermal impacts. First, some work will take place within an existing, cleared right-of-way. There is minimal clearing for this project and approximately 2500 feet consists of the Delaware River trenchless HDD crossing. Additionally, all disturbed areas will be restored to their original conditions.</p>
<p>8. <input checked="" type="checkbox"/> The PCSM Plan has been planned, designed, and will be implemented to be consistent with the E&S Plan.</p>
<p>9. <input checked="" type="checkbox"/> A pre-development site characterization has been performed.</p>

STORMWATER ANALYSIS – RUNOFF VOLUME

Surface Water Name: Delaware River, Hough's Creek **Discharge Point(s):** 0

1. The design standard is based on volume management requirements in an Act 167 Plan approved by DEP within the past five years.
2. The design standard is based on managing the net change for storms up to and including the 2-year/24-hour storm.
3. An alternative design standard is being used.
4. A printout of DEP's PCSM Spreadsheet – Volume Worksheet is attached.
5. 2-Year/24-Hour Storm Event: _____ inches Source of precipitation data: _____
6. Stormwater Runoff Volume, Pre-Construction Conditions: _____ CF Calculations attached
7. Stormwater Runoff Volume, Post-Construction Conditions: _____ CF Calculations attached
8. Net Change (Post-Construction – Pre-Construction Volumes): _____ CF
9. Identify all selected structural PCSM BMPs and provide the information requested. Calculations attached

DP No.	BMP ID	Series	Vol. Routed to BMP (CF)	Inf. Area (SF)	Inf. Rate (in/hr)	Inf. Period (hrs)	Veg?	Media Depth (ft)	Storage Vol. (CF)	Inf. Credit (CF)	ET Credit (CF)
							<input type="checkbox"/>				
							<input type="checkbox"/>				
							<input type="checkbox"/>				
							<input type="checkbox"/>				
							<input type="checkbox"/>				
							<input type="checkbox"/>				
							<input type="checkbox"/>				
							<input type="checkbox"/>				
							<input type="checkbox"/>				
							<input type="checkbox"/>				
							<input type="checkbox"/>				

Total Infiltration & ET Credits (CF):

Non-Structural BMP Volume Credits (CF) (Attach Calculations):

Managed Release Credits (CF) (Attach MRC Design Summary):

Volume Required to Reduce/Manage (CF):

Total Credits (CF):

INFILTRATION INFORMATION	
BMP ID:	<input type="checkbox"/> Soil/geologic test results are attached.
1. No. of infiltration tests completed:	
2. Method(s) used for infiltration testing:	
3. Test Pit Identifiers (from PCSM Plan Drawings):	
4. Avg Infiltration Rate: in/hr	5. FOS: : 1
6. Infiltration rate used for design: in/hr	
7. Separation distance between the BMP bottom and bedrock: feet	
8. Separation distance between the BMP bottom and seasonal high-water table: feet	
9. Comments:	
BMP ID:	<input type="checkbox"/> Soil/geologic test results are attached.
1. No. of infiltration tests completed:	
2. Method(s) used for infiltration testing:	
3. Test Pit Identifiers (from PCSM Plan Drawings):	
4. Avg Infiltration Rate: in/hr	5. FOS: : 1
6. Infiltration Rate Used for Design: in/hr	
7. Separation distance between the BMP bottom and bedrock: feet	
8. Separation distance between the BMP bottom and seasonal high-water table: feet	
9. Comments:	
BMP ID:	<input type="checkbox"/> Soil/geologic test results are attached.
1. No. of infiltration tests completed:	
2. Method(s) used for infiltration testing:	
3. Test Pit Identifiers (from PCSM Plan Drawings):	
4. Avg Infiltration Rate: in/hr	5. FOS: : 1
6. Infiltration Rate Used for Design: in/hr	
7. Separation distance between the BMP bottom and bedrock: feet	
8. Separation distance between the BMP bottom and seasonal high-water table: feet	
9. Comments:	

STORMWATER ANALYSIS – PEAK RATE

Surface Water Name:

Discharge Point(s):

1. The design standard is based on rate requirements in an Act 167 Plan approved by DEP within the past five years.
2. The design standard is based on managing the net change for 2-, 10-, 50-, and 100-year/24-hour storms.
3. An alternative design standard is being used.
4. A printout of DEP's PCSM Spreadsheet – Rate Worksheet is attached.
5. Alternative rate calculations are attached.

6. Identify precipitation amounts. Source of precipitation data:

2-Year/24-Hour Storm:

10-Year/24-Hour Storm

50-Year/24-Hour Storm:

100-Year/24-Hour Storm

7. Report peak discharge rates, pre- and post-construction (without BMPs), based on a time of concentration analysis.

Design Storm	Pre-Construction Peak Rate (cfs)	Post-Construction Peak Rate (cfs)	Difference (cfs)
2-Year/24-Hour			
10-Year/24-Hour			
50-Year/24-Hour			
100-Year/24-Hour			

8. Identify all BMPs used to mitigate peak rate differences and provide the requested information.

BMP ID	Inflow to BMP (cfs)				Outflow from BMP (cfs)			
	2-Yr	10-Yr	50-Yr	100-Yr	2-Yr	10-Yr	50-Yr	100-Yr

9. Report peak rates for pre-construction and post-construction with BMPs and identify the differences.

Design Storm	Pre-Construction Peak Rate (cfs)	Post-Construction Peak Rate (with BMPs) (cfs)	Difference (cfs)
2-Year/24-Hour			
10-Year/24-Hour			
50-Year/24-Hour			
100-Year/24-Hour			

STORMWATER ANALYSIS – WATER QUALITY

A printout of DEP's PCSM Spreadsheet – Quality Worksheet is attached for all surface waters receiving discharges.

LONG-TERM O&M

Describe the long-term operation and maintenance (O&M) requirements for each selected PCSM BMP.

BMP ID	O&M Requirements

PCSM PLAN DEVELOPER

I am trained and experienced in PCSM methods. I am a licensed professional.

Name:	<u>Christopher Antoni</u>	Title:	<u>Sr. Vice President</u>
Company:	<u>STV Energy Services, Inc.</u>	Phone No.:	<u>610-698-9772</u>
Address:	<u>205 West Welsh Drive</u>	Email:	<u>Christioher.Antoni@Stvinc.com</u>
City, State, ZIP:	<u>Douglassville, PA 19518</u>	License No.:	<u>PE-057385-E</u>
License Type:	<u>Professional Engineer</u>	Exp. Date	<u>9/30/2021</u>


PCSM Plan Developer Signature

01/14/2021
Date



BUCKS COUNTY CONSERVATION DISTRICT

1456 FERRY ROAD, SUITE 704
DOYLESTOWN, PA 18901-5550
P (215)345-7577 F (215)345-7584

In Pursuit of Environmental Excellence

APPLICATION FOR CHAPTER 102 and/or NPDES REVIEW INFORMATION FORM

This form must be completed and submitted along with the required plans and fees for first time E&S reviews and resubmissions. Please see page 2 for instructions regarding the number of copies required for various submissions.

Application Type:

Plan Date OR Most Recent Revision Date: _____ NEW PLAN RESUBMISSION CORRECTIVE ACTION PLAN
 ADMINISTRATIVE INCOMPLETE (\$250.00 FEE) NPDES MINOR AMENDMENT (\$250.00 FEE)

14-Inch Twin Oaks to Newark Jacobs

Creek Pipeline Relocation

Project Municipality Upper Makefiled Township Project Name _____
Tax Parcel Number 47-024-001, 47-024-002-001, 47-024-023 Project Address 106 Oakdale Ave, Washington Crossing, PA 18977-1430

*TOTAL ACREAGE 4.902 ACRES TO BE DISTURBED 4.902 #Lots N/A #Units N/A

Watershed Delaware River Basin Receiving Stream Delaware River, Hough's Creek Stream Classification WWF, MF

APPLICANT INFORMATION

PLAN PREPARER

Applicant Name: Colleen Armstrong
Applicant Company: Sunoco Pipeline LP
Address: 100 Green St
City/State/Zip: Marcus Hook, PA, 19061-4800
Phone: 215-205-8199 Ext: _____
Email: Colleen.Armstrong@EnergyTransfer.com

Designer Name: Christopher Antoni
Company: STV Energy Services
Address: 205 West Welsh Dr
City/State/Zip: Douglasville, PA 19518
Phone: 610-698-9772 Ext: _____
Email: Christopher.Antoni@STVINC.com

Submitted By: Engineering Firm/Plan Designer Contractor Landowner Municipality

E&S Fee Exemptions and Exceptions: County Agencies Volunteer Fire Stations/ Ambulance Services Co-op Farmer, # _____
 Municipalities/ Public Schools (1/2 fee) Other: _____

**** FEE SCHEDULE FOR E&S REVIEWS (BASED ON DISTURBED ACRES ONLY) ****

INCLUDED WITH SUBMISSION ARE: PLANS/NARRATIVES FEE(S) NPDES/E&S PERMIT APPLICATION

SINGLE FAMILY HOME (1 RESIDENCE) WITH UNDER 1 ACRE OF DISTURBANCE = \$200.00

ALL OTHER EARTH DISTURBANCE:

- .02296 to 0.99 acres = \$650.00
- 1.0 to 1.99 acres = \$1,350.00
- 2.0 to 4.99 acres = \$2,000.00
- 5.0 to 9.99 acres = \$3,000.00
- 10.0 to 19.99 acres = \$5,000.00
- 20+ acres = \$6,000.00 +

- TIMBER HARVEST**
0.0-24.99 ACRES = \$200.00; ≥25.0 ACRES = E&S PERMIT
- E&S PERMIT**
≥25.0 ACRES = \$650 (PLUS FEES ASSOCIATED WITH NPDES INDIVIDUAL PERMIT, SEE PAGE 2, "NPDES INFORMATION")
- SMALL POND WORK E&S FEE = \$200.00 (MAY REQUIRE NPDES PERMIT, SEE PAGE 2, "NPDES INFORMATION")**

****FOR PROJECTS WITH EARTH DISTURBANCE OF ONE (1) ACRE OR MORE IT IS REQUIRED THAT AN NPDES APPLICATION (NOI) BE SENT WITH THE E&S SUBMISSION. ****
****PLEASE READ PAGE 2 OF THIS APPLICATION UNDER "EXEMPTIONS AND EXCEPTIONS"**

Additional \$100.00 per acre for each acre over 20
(Fractions of an acre are rounded up to the next whole acre.)

PLEASE SUBMIT FOLDED PLANS TO THE DISTRICT. ROLLED PLANS WILL NOT BE ACCEPTED.

BCCD USE ONLY BEYOND THIS POINT

ENTRY # 8252988
E&S FEE REC'D \$ 2000.00 CHECK# 118430
EXPEDITED FEES \$ _____ CHECK# _____
NPDES FEE \$ 500.00 CHECK# 118389

DATE SENT BACK _____
DEP CWF FEE \$ 500.00 CHECK# 118431
CAP/ADMIN/MA FEE \$ _____ CHECK# _____
NPDES # ASSIGNED PAC090431

RECEIVED

JAN 15 2021



Pennsylvania Fish & Boat Commission

Division of Environmental Services
Natural Gas Section
595 E Rolling Ridge Dr.
Bellefonte, PA 16823

June 12, 2019

IN REPLY REFER TO
SIR# 51347

STV, Inc.
James McGinley
205 W. Welsh Drive
Douglassville, Pennsylvania 19518

**RE: Species Impact Review (SIR) – Rare, Candidate, Threatened and Endangered Species
PNDI Search No. 683917_1
Jacobs Creek Pipeline Replacement
BUCKS County: Upper Makefield Township**

Dear James McGinley:

This responds to your inquiry about a Pennsylvania Natural Diversity Inventory (PNDI) Internet Database search “potential conflict” or a threatened and endangered species impact review. These projects are screened for potential conflicts with rare, candidate, threatened or endangered species under Pennsylvania Fish & Boat Commission jurisdiction (fish, reptiles, amphibians, aquatic invertebrates only) using the PNDI database and our own files. These species of special concern are listed under the Endangered Species Act of 1973, the Wild Resource Conservation Act, and the Pennsylvania Fish & Boat Code (Chapter 75), or the Wildlife Code.

Eastern Redbelly Turtle (*Pseudemys rubriventris*, PA threatened)

Based on the review of this information and the proximity of the project to known element occurrences of the Eastern Redbelly Turtle (Delaware River and Delaware Canal), nesting areas for the redbelly turtle could be present within the proposed disturbance area. Therefore, I recommended that no construction be conducted during the redbelly turtle nesting and hatching season, **May 15th to October 15th.**

Provided this stipulation is met, I do not foresee any adverse impacts to the Eastern Redbelly Turtle from the proposed project. **Should the above timing restriction not be feasible, conservation measures may be necessary to avoid impacts, therefore consultation should be reinitiated.**

This response represents the most up-to-date summary of the PNDI data and our files and is valid for two (2) years from the date of this letter. An absence of recorded species information does not necessarily imply species absence.

Our Mission:

www.fish.state.pa.us

To protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities.

Our data files and the PNDI system are continuously being updated with species occurrence information. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered, and consultation shall be re-initiated.

If you have any questions regarding this review, please contact Greg Lech at 610-847-8772 and refer to the SIR # 51347. Thank you for your cooperation and attention to this important matter of species conservation and habitat protection.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Lech". The signature is stylized with a large initial "G" and a long, sweeping underline.

Greg Lech
Natural Gas Section

GPL/dn