

Application Type	Renewal	- NPDES PERMIT FACT SHEET	Application No.	PAI130078
Facility Type	MS4	- MS4s	APS ID	953007
Permit Type	Individual		Authorization ID	1203084
		Applicant and Facility Information		

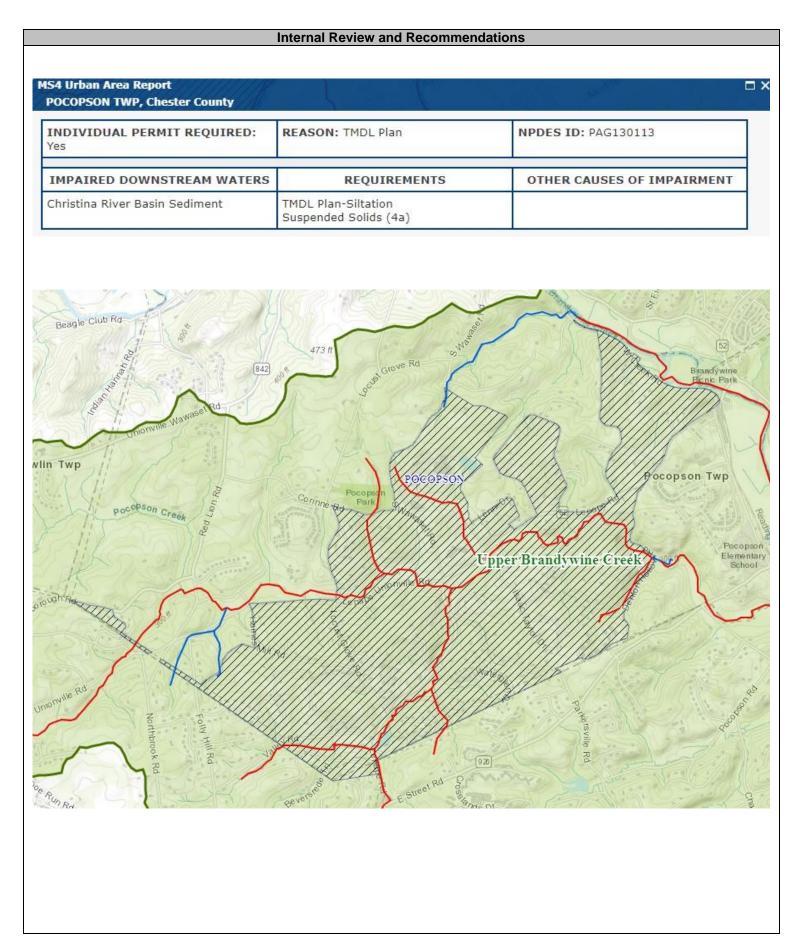
Applicant Name	Poco	pson Township Chester County	Facility Name	Pocopson Township MS4 UA
Applicant Address PO Box		ox 1	Facility Address	PO Box 1 Pocopson Twp Muni Bldg
	Poco	pson, PA 19366-0001		Pocopson, PA 19366-0001
Applicant Contact	Susa	n Simone	Facility Contact	Susan Simone
Applicant Phone	(610)	793-2151	Facility Phone	(610) 793-2151
Client ID	1103	02	Site ID	613613
SIC Code	9199		Municipality	Pocopson Township
SIC Description	Elect	ric, Gas And Sanitary Services	County	Chester
Date Application Rec	eived	September 18, 2017		
Date Application Acc	epted	April 8, 2024		
Purpose of Applicatic	n	Formerly PAG130113.		

Internal Review and Review	ecommendations
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The following dates outline Pocopson Township's Public Participation:

Post on Website/Hard Copy Available at Township Office:	1-17-2024 to 2-27-2024
Advertise in Daily Local News:	1-18-2024
Public Comment Period:	1-18-2024 to 2-27-2024
Public Meeting / Board of Supervisors Meeting:	2-26-2024
Comment Period Closes:	2-27-2024
Submit to PA DEP:	4-8-2024

Approve	Deny	Signatures	Date
x		Ian Quinlan / Environmental Engineer	April 9, 2024
x		Elízabeth Mahoney Elizabeth Mahoney / Environmental Group Manager	April 11, 2024



## Internal Review and Recommendations

Step T1 – Revised (1995) Christina TMDL Baseline Load

	Mainstem Brandywine to Pocopson Confluence (B15)			
Source	Area (Acre)	Total Sediment Loading Rate (lbs/acre)	Sediment (lbs)	
Cropland	53.2	1,727.47	91,901.40	
Disturbed	-	164.73	-	
Forest	12.4	136.22	2,915.11	
HD Mixed Urban	0.2	2,492.67	498.53	
MD Mixed Urban	-	1,741.77	-	
HD Residential	0.2	2,495.94	499.19	
MD Residential	-	2,495.94	-	
LD Residential	50.7	730.55	37,038.89	
Turf/Golf	-	-	-	
Water	-	-	-	
Open Land	8.9	296.97	2,643.03	

Totals

134.6

135,496.15

	Pocopson Creek Subshed (B31)			
Source	Area (Acre)	Total Sediment Loading Rate (lbs/acre)	Sediment (lbs)	
Cropland	166.80	1,727.47	288,142.00	
Disturbed	-	164.73	-	
Forest	120.10	136.22	16,360.02	
HD Mixed Urban	-	2,492.67	-	
MD Mixed Urban	-	1,741.77	-	
HD Residential	-	2,495.94	-	
MD Residential	-	2,495.94	-	
LD Residential	337.10	730.55	246,268.41	
Turf/Golf	-	-	-	

		Internal Review and Re	ecommendations
Water	0.30	_	_
Open Land	3.40	296.97	1,009.70
Totals	627.70		551,780.12
<u>Step T3 – 2012 L</u>		95) Christina TMDL B	aseline Load = 687,276.27 lb
	Mainstem Brandywine to Pocopson Confluence (B15)		
Source	Area (Acre)	Total Sediment Loading Rate (lbs/acre)	Sediment (lbs)
Cropland	32.70	1,818.62	59,468.87
Disturbed	-	228.93	-
Forest	19.30	174.45	3,366.89
	19.30 3.30	174.45 2,184.96	3,366.89 7,210.37
HD Mixed Urban			
HD Mixed Urban MD Mixed Urban		2,184.96 1,548.50	
HD Mixed Urban MD Mixed Urban HD Residential		2,184.96	
HD Mixed Urban MD Mixed Urban HD Residential MD Residential		2,184.96 1,548.50 2,182.85 1,547.69	7,210.37 - - -
HD Mixed Urban MD Mixed Urban HD Residential MD Residential LD Residential	3.30 - - -	2,184.96 1,548.50 2,182.85	
Forest HD Mixed Urban MD Mixed Urban HD Residential MD Residential LD Residential Turf/Golf Water	3.30 - - -	2,184.96 1,548.50 2,182.85 1,547.69 686.92	7,210.37 - - -

	Pocopson Creek Subshed (B31)			
Source	Area (Acre)	Total Sediment Loading Rate (lbs/acre)	Sediment (lbs)	
Cropland	89.70	1,818.62	163,130.21	
Disturbed	55.80	228.93	12,774.29	
Forest	94.30	174.45	16,450.64	

#### **Internal Review and Recommendations** HD Mixed Urban 3.70 2,184.96 8,084.35 MD Mixed Urban 1.00 1,548.50 1,548.50 HD Residential 2,182.85 MD Residential 20.70 1,547.69 32,037.18 LD Residential 361.70 686.92 248,458.96 Turf/Golf 202.10 Water 0.80 Open Land 220.20 627.70

Totals

482,484.14

Revised (1995) Christina TMDL Baseline Load = 607,003.03 lbs

## Step T4 – Land Conversion Load Reduction

Revised (1995) TMDL Baseline Load	687,276.27	lbs sediment
=		
2012 Load =	607,003.03	lbs sediment
Land Conversion Load Reduction =	80,273.25	lbs sediment

## <u>Step T5 – Existing BMP Reduction (Urban BMPs)</u>

There are no existing BMPs; therefore the TSS reduction is 0.0 lbs.

## Step T6 – Revised 2012 Load

2012 Lo	ad =	607,003.03	lbs sediment
Existing BMP Reduct	ion -		lbs sediment
=		607,003.03	
			lbs sediment

Revised 2012 Load =

## Step T7 – Existing 2017 Load

2012 Load = Existing 2017 Load = 607,003.03 Ibs sediment

## **Internal Review and Recommendations**

## <u>Step T8 – Remaining TMDL Reduction Required after land use conversion and Existing</u> <u>BMP Load Reductions</u>

TMDL Load Reduction Required (STEP T2) =	418,826.16	lbs sediment
Load Reduction from Land Conversion (STEP T4) =	80,273.25	lbs sediment
Existing BMP Reduction (STEP T5) =	-	lbs sediment
Remaining TMDL Load Reduction still to be achieved	338,552.91	lbs sediment

## <u>Step T9 – TMDL Load Reduction Required this Permit Period (Must Choose A or B)</u>

A. Achieve 100% reduction of Remaining TMDL Reduction Required (for sediment, phosphorus, and/or nitrogen) (see Step T8)

338,552.91 lbs of sediment must be reduced in this 5 YR permit period.

## Not feasible, use Option B

B. The following reductions from the Existing 2017 Load are required (see Step T7) 10%

reduction for sediment.

Existing 2017 Load = 607,003.03 lbs sediment

10% Reduction = 60,700.30 lbs sediment reduction required in this 5 YR permit perio

<u>Step T10 - Remaining Long-term Reduction Required to be Achieved (if T9.B was chosen)</u>

From T9.B =	60,700.30	lbs sediment reduction to be achieved in 5 YR permit period
From T8 =	338,552.91	lbs sediment

277,852.61 lbs sediment reduction to be achieved in future permit terms

Step T11 - Proposed Urban BMP Load Reduction Calculations:

TMDL Subbasin

B31

Description Stream Bank Restoration to

		Inte	rnal Review	and Recommendati	ions	
Name	BMP Type	Ye	ear Installed	Stream Restoration Length (ft)	T	SS Reduction (lbs/yr)
Pocopson Cree	ek Stream Restoration		2024	450		51,750.00
Sł	Pocopson Townshi nort-Term BMP Sedir				ropo	sed
1	BMP Data		Length of BMP (LF)	BMP Effectiveness Va	lue	Reduction (Length x Rate)
ID	<b>D</b> 001	ΠT	450	(LBS/LF/YR) 115		(LBS/YR) 51,750
ID	P-001	Ιŀ	450	110		51,750
Name	Stream Bank Restoration	⊢⊢				
Efficiency*	115 lbs/ft/yr	╎┝				
TMDL Subbasin	B31	$\vdash$				
	Stream Bank Restoration to					
stabilize and vegetate eroded banks.				Total Reduction (BMP) I	LBS/Y	R 51,750.00
	Pocopson Creek, below Pocopson Township Administration Building, North of Lenape Unionville Road					
Date of 2023/2 Implementation	024					
I	BMP Data		Length of BMP (LF)	BMP Effectiveness Val (LBS/LF/YR)	lue	Reduction (Length x Rate) (LBS/YR)
ID	P-002		600	115		69,000
Name	Stream Bank Restoration					
Efficiency*	115 lbs/ft/yr					

		Interna	I Review	and Recommendations	
	stabilize and vegetate eroded banks.			Total Reduction (BMP) LBS/Y	7R 69,000.00
Locatio	n Pocopson Creek, below				
	Pocopson Township Administration Building, South of Lenape Unionville Road				
Date of 202' mplementation	7/2028				
				Total Short-Term Reduction (LBS/YR)	120,750.00
	Poconson Townshi	n - Bra	ndywine	Creek Watershed Propo	sed
	Pocopson Townshij			Creek Watershed Propo s (LBS/YR)	osed
]					osed
I		nent Re	Length of BMP		Dised Reduction (Length x Rate)
]	Long-Term BMP Sedin	nent Re	Length	s (LBS/YR)	Reduction (Length x Rate) (LBS/YR)
ID	Long-Term BMP Sedin BMP Data P-003	nent Re	Length of BMP	S (LBS/YR) BMP Effectiveness Value	Reduction (Length x Rate)
	Long-Term BMP Sedin	nent Re	Length of BMP (LF)	S (LBS/YR) BMP Effectiveness Value (LBS/LF/YR)	Reduction (Length x Rate) (LBS/YR)
ID	BMP Data P-003 Stream Bank Restoration	nent Re	Length of BMP (LF)	S (LBS/YR) BMP Effectiveness Value (LBS/LF/YR)	Reduction (Length x Rate) (LBS/YR)
ID Name	BMP Data P-003 Stream Bank Restoration 115 lbs/ft/yr	nent Re	Length of BMP (LF)	S (LBS/YR) BMP Effectiveness Value (LBS/LF/YR)	Reduction (Length x Rate) (LBS/YR)
ID Name Efficiency * TMDL Subbasin	BMP Data P-003 Stream Bank Restoration 115 lbs/ft/yr B31 Stream Bank Restoration to	nent Re	Length of BMP (LF)	S (LBS/YR) BMP Effectiveness Value (LBS/LF/YR)	Reduction (Length x Rate) (LBS/YR)
ID Name Efficiency * TMDL	BMP Data P-003 Stream Bank Restoration 115 lbs/ft/yr B31	nent Re	Length of BMP (LF)	S (LBS/YR) BMP Effectiveness Value (LBS/LF/YR)	Reduction    (Length x Rate)    (LBS/YR)    57,500
ID Name Efficiency * TMDL Subbasin	BMP Data P-003 Stream Bank Restoration 115 lbs/ft/yr B31 Stream Bank Restoration to stabilize and vegetate eroded	nent Re	Length of BMP (LF)	BMP Effectiveness Value (LBS/LF/YR) 115	Reduction    (Length x Rate)    (LBS/YR)    57,500

BMP Data	Length of BMP (LF)	BMP Effectiveness Value (LBS/LF/YR)	Reduction (Length x Rate)
		, , , , , , , , , , , , , , , , , , ,	(LBS/YR)
ID P-004	350	115	40,250
Name Stream Bank Restoration			

#### NPDES Permit Fact Sheet Pocopson Township MS4 UA

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	Internal	Review ar	nd Recommendations	
Efficiency* 115 lbs/ft/yr TMDL Subbasin B31 Description stabilize and ve eroded banks. Location Pocopson Creel Works Garage, Road	t estoration to egetate k, Public	1	Fotal Reduction (BMP) LBS/Y	R 40,250.00
Date of 2034/2035 Implementation				
BMP Data		ngth of MP (LF)	BMP Effectiveness Value (LBS/LF/YR)	Reduction (Length x Rate) (LBS/YR)
ID P-00	05	450	115	51,750
	k Restoration			
TMDL Subbasin B	15			
Description Stream Bank to stabilize ar eroded banks.	nd vegetate	1	Total Reduction (BMP) LBS/Y	R 51,750.00
	Creek, operty on oad near			
Date of 2037/2038 Implementation				
BMP Data		ngth of MP (LF)	BMP Effectiveness Value (LBS/LF/YR)	Reduction (Length x Rate) (LBS/YR)
ID P-00	06	600	115	69,000
	k Restoration			
Efficiency* 115 lbs/ft/y	r			

to stabilize and vegetate eroded banks. Location Unnamed Tributary to Brandywine Creek, Riverside property below Winston Lane Date of 2040/2041 mplementation Total Long-Term Reduction 218,500,00	eroded banks. Location Unnamed Tributary to Brandywine Creek, Riverside property below Winston Lane Date of 2040/2041 Implementation			Internal Review and Recommendations
Brandywine Creek, Riverside property below Winston Lane Date of 2040/2041 mplementation	Brandywine Creek, Riverside property below Winston Lane Date of 2040/2041 Implementation		to stabilize and vegetate eroded banks.	Total Reduction (BMP) LBS/YR 69,000.00
		Location	Brandywine Creek, Riverside property below	
Total Long-Term Reduction 218 500.00 (LBN/YR)	Total Long-Term Reduction 218,500,00 (T.B.S./YR)	Date of 2040/20 Implementation	041	
Total Long-Term Reduction 218,500,00 (LBN/YR)	Total Long-Term Reduction 218,500,00 (LBN/YR)			
				Total Long-Term Reduction 218,500,00 (LBS/YR)

## Pocopson Township - Brandywine Creek Watershed BMP Estimated Costs and Potential Funding

	Short Term BMP Implementation								
ID	Туре	TMDL Subbasin	Estimated Cost (design, permitting, construction)	Funding Sources	Project Sponsors/Partners				
P-001	Stream Bank Restoration			American Recovery Plan	Township Volunteers				
P-002	Stream Bank Restoration B31		\$400,000.00	Stormwater/Watershed Grants Township General Funds	Brandywine Conservancy Brandywine Red Clay Alliance Township Volunteers				

Long Term BMP Implementation

#### **Internal Review and Recommendations** Estimated Cost TMDL (design, D **Funding Sources Project Sponsors/Partners** Type permitting, Subbasin construction) Stormwater/Watershed **Brandywine Conservancy** Stream Bank Grants P-003 **B31** \$332,500.00 **Brandywine Red Clay Alliance** Restoration **Township General Township Volunteers** Funds Stormwater/Watershed **Brandywine Conservancy** Stream Bank Grants P-004 B31 \$235,000.00 **Brandywine Red Clay Alliance Township General** Restoration **Township Volunteers** Funds Stormwater/Watershed **Brandywine Conservancy** Stream Bank Grants P-005 B15 \$300,000.00 **Brandywine Red Clay Alliance** Restoration **Township General Township Volunteers** Funds Stormwater/Watershed Brandywine Conservancy Stream Bank Grants P-006 B15 \$400,500.00 **Brandywine Red Clay Alliance** Restoration **Township General Township Volunteers** Funds

# Section F - Responsible Parties for Operation & Maintenance (O&M) of BMP's

Operations and Maintenance (O&M) activities associated with each BMP, as well as the anticipated party responsible for O&M of each BMP are included below.

	Short Term BMP Implementation								
ID	Туре	TMDL Subbasin	Anticipated Party Responsible for O&M	O&M Activities					
P- 001	Stream Bank Restoration	B31	Pocopson Township	Inspect annually and 48 hrs after major storm events and make required repairs Inspect and maintain vegetation Mow surrounding areas to control invasive species Remove sediment and debris					
P- 002	Stream Bank Restoration	B31	Pocopson Township	Avoid excess use of pesticides and other chemicals Inspect annually and 48 hrs after major storm events and make required repairs Inspect and maintain vegetation Mow surrounding areas to control invasive species Remove sediment and debris Avoid excess use of pesticides and other chemicals					
	Long Term BMP Implementation								
Ю	Туре	TMDL Subbasin	Anticipated Party Responsible for O&M	O&M Activities					

Internal Review and Recommendations							
					-		
P- 003	Stream Bank Restoration	B31	Pocopson Township	Inspect annually and 48 hrs after major storm events and make required repairs Inspect and maintain vegetation Mow surrounding areas to control invasive species Remove sediment and debris Avoid excess use of pesticides and other chemicals			
P- 004	Stream Bank Restoration	B31	Pocopson Township	Inspect annually and 48 hrs after major storm events and make required repairs Inspect and maintain vegetation Mow surrounding areas to control invasive species Remove sediment and debris Avoid excess use of pesticides and other chemicals			
P- 005	Stream Bank Restoration	B15	Pocopson Township	Inspect annually and 48 hrs after major storm events and make required repairs Inspect and maintain vegetation Mow surrounding areas to control invasive species Remove sediment and debris Avoid excess use of pesticides and other chemicals			
Р- 006	Stream Bank Restoration	B15	Pocopson Township	Inspect annually and 48 hrs after major storm events and make required repairs Inspect and maintain vegetation Mow surrounding areas to control invasive species Remove sediment and debris Avoid excess use of pesticides and other chemicals			

## Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.