

Application Type

Renewal

Facility Type

MS4

Permit Type

Individual

NPDES PERMIT FACT SHEET
MS4s

Application No.

PAI130529

APS ID

957547

Authorization ID

1210852

Applicant and Facility Information

Applicant Name	<u>Wallace Township</u>	Facility Name	<u>Wallace Township MS4 UA</u>
Applicant Address	PO Box 670 1250 Creek Road	Facility Address	PO Box 670 1250 Creek Road
	Glenmoore, PA 19343-0670		Glenmoore, PA 19343-1710
Applicant Contact	<u>Betty Randzin</u>	Facility Contact	<u>Betty Randzin</u>
Applicant Phone	<u>(610) 942-2880</u>	Facility Phone	<u>(610) 942-2880</u>
Client ID	<u>34890</u>	Site ID	<u>613959</u>
SIC Code	<u>9199</u>	Municipality	<u>Wallace Township</u>
SIC Description	<u>Executive, Legislative And General</u>	County	<u>Chester</u>
Date Application Received	<u>December 14, 2017</u>		
Date Application Accepted			
Purpose of Application	<u>Permit Renewal.</u>		

Internal Review and Recommendations

In the interest of issuing this permit in a timely manner, DEP has made the decision to issue this permit with a compliance schedule.

Pollutant Aggregation Suggestions for MS4 Requirements Table (Municipal)

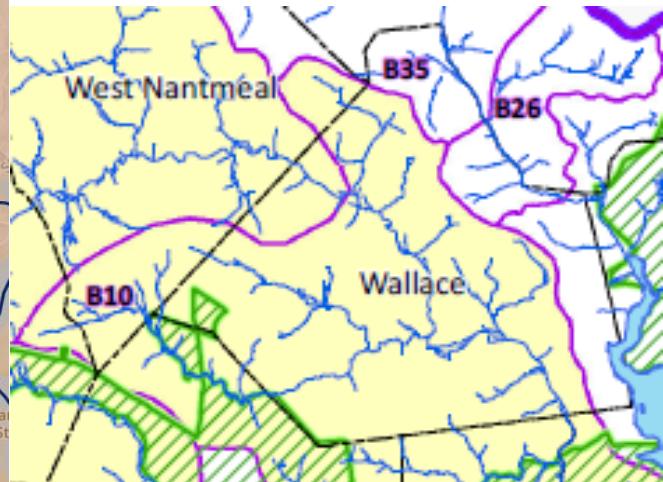
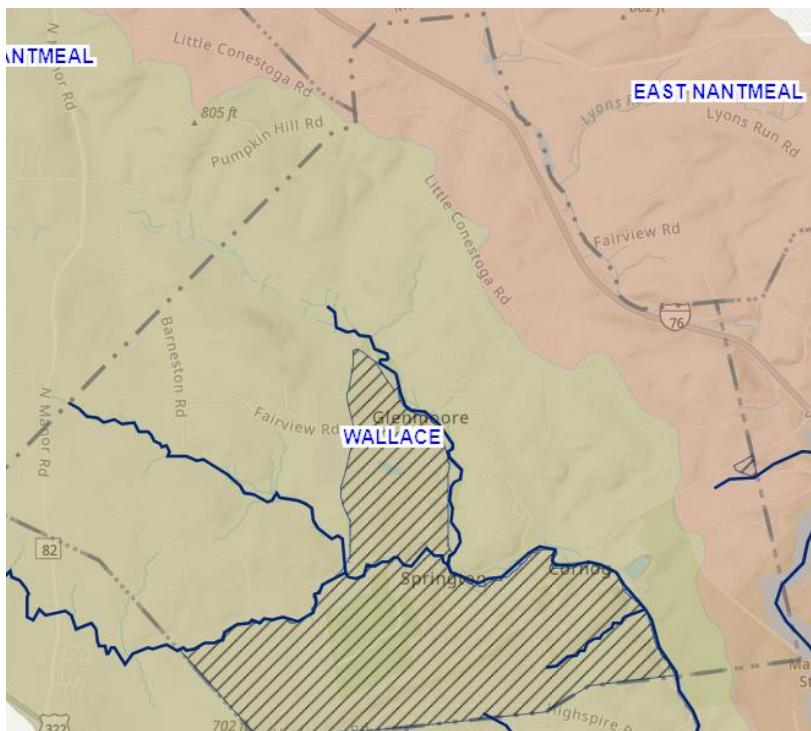
Anticipated Obligations for Subsequent NPDES Permit Term

MS4 Name	Permit Number	HUC 12 Name	Impaired Downstream Waters or Applicable TMDL Name	Requirement(s)
WALLACE TWP	PAI130529	Lower East Branch Brandywine Creek, Marsh Creek, Upper East Branch Brandywine Creek	Christina River Basin Nutrients, Christina River Basin Sediment	TMDL Plan-Nutrients, Organic Enrichment/Low D.O., Siltation, Suspended Solids

MS4 Name	NPDES ID	Individual Permit Required?	Reason	Impaired Downstream Waters or Applicable TMDL Name	Requirement(s)	Other Cause(s) of Impairment
Chester County						
WALLACE TWP	PAI130529	Yes	TMDL Plan, SP, IP	Christina River Basin Nutrients	TMDL Plan-Nutrients, Organic Enrichment/Low D.O. (4a)	
				Christina River Basin Sediment	TMDL Plan-Siltation, Suspended Solids (4a)	
				East Branch Brandywine Creek		Cause Unknown (4a), Other Habitat Alterations, Water/Flow Variability (4c)

Approve	Deny	Signatures	Date
X		 Ian M. Quinlan / Environmental Engineer	July 26, 2024
X		Elizabeth Mahoney Elizabeth A Mahoney / Environmental Group Manager	08/08/2024

Internal Review and Recommendations



Within Wallace Township there are five (5) Christina River subbasins including B09, B10, B26, B27, and B35. Of these subbasins, one (1), B09 has a sediment WLA, and two (2) B09 and B10, have nutrient WLAs assigned in the EPA TMDL reports. Because subbasin B09 does not contain any urbanized area (UA), no sediment reductions are required. The only subbasin that contains 2010 UA is subbasin B10 which has a WLAs for Total Nitrogen (TN) and Total Phosphorus (TP) but none for sediment. Therefore, Wallace Township is only required to address Nitrogen and Phosphorous reduction as part of this plan.

Brandywine-Christina Watershed (HUC # 02040205)
EPA TMDL MS4 Baseline Pollutant Loadings, MS4 Allocations, and Reductions

MUNICIPALITIES LISTED IN TMDL REPORTS	Sediment (tons/year)				Total Nitrogen (kg/day)				Total Phosphorus (kg/day)			
	Baseline MS4 Load ^{1a}	MS4 Load Allocation ^{1b}	MS4 Load Reduction ^{1c}	% Reduction ^{1b}	Baseline MS4 Load ^{2a}	MS4 Allocation ^{2a}	MS4 Load Reduction ^{2m}	% Reduction ^{2m}	Baseline MS4 Load ^{3a}	MS4 Allocation	MS4 Load Reduction ^{3m}	% Reduction ^{3m}
Brandywine Creek Watershed												
VALLEY TWP	485.14	164.04	320.50	66.06%	57.57	43.75	13.82	24.01%	6.941	4.726	2.215	31.91%
WALLACE TWP	21.74	17.41	4.33	19.92%	126.53	103.76	22.77	16.00%	1.923	1.582	0.347	17.99%
WEST BRADFORD TWP	283.22	121.6	161.62	57.07%	17.25	12.08	5.17	29.97%	3.532	2.473	1.059	29.98%

Appendix C – Figure 2
Urbanized Area Nutrient Loading – 1995-2012

	1995		2012	
	Nitrogen	Phosphorus	Nitrogen	Phosphorus
Forest	124.8	25.0	126.9	37.3
Cropland	3887.7	1008.1	883.8	138.4
Low-Density Residential	631.1	100.8	2338.2	614.3
Open Land	13.6	1.9	15.4	5.9
Medium-Density Mixed Urban	63.1	8.9	182.8	25.3
Water	0.0	0.0	0.0	0.0
High-Density Mixed Urban	11.4	1.7	6.1	3.4
Medium-Density Residential	8.8	1.2	35.0	4.5
	lbs/year		3741.1	866.9
	4740.5	1147.6		

Appendix C – Figure 3
Summary of Modified CMS Approach

	Nitrogen	Phosphorus	
T1	4740.516	1147.618	lbs/year
T2	853.293	206.571	lbs/year
T3	3741.143	866.922	lbs/year
T4	999.373	280.696	lbs/year
T5	0.000	0.000	lbs/year
T6	3741.143	866.922	lbs/year
T7	3741.143	866.922	lbs/year
T8	-146.080	-74.125	lbs/year

Internal Review and Recommendations

Due to the recalculation of land use the necessary reduction has been achieved. However, Wallace Township acknowledges the importance of the MS4 program and proposes a bioswale that will further reduce nitrogen by 152 lbs/year and phosphorus by 43 lbs/year.

If necessary, Wallace Township has identified another BMP capable of providing a further reduction of 153 lbs/year of nitrogen and 43 lbs/year of phosphorus.

Proposed BMP 1 Effectiveness Calculation

The proposed BMP is located in Ray Park, on a parcel owned by Wallace Township. Despite the name, the parcel is currently leased to be farmed. The entire parcel is 34 acres, however, the drainage area for the BMP is 42 acres. Much of the additional acreage is forest. The proposed BMP would be a bioswale measuring approximately 300 feet long. The bioswale would allow treatment of a large portion of the nutrients coming off the township owned parcel before it reaches the storm inlet that crosses under Highspire Road.

Appendix D – Figure 1

BMP 1 Bioswale Calculations

BMP 1	Acres	Nitrogen	Phosphorus
Forest	12.700	2.159	0.635 lbs/year
Cropland	29.500	214.465	56.345 lbs/year
LD Res	0.100	0.166	0.026 lbs/year
Total Nutrients	216.79	216.79	57.006 lbs/year
BMP Reduction	151.753	42.755	42.755 lbs/year

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.