

Application Type

Renewal

Facility Type

MS4

Permit Type

Individual

NPDES PERMIT FACT SHEET
MS4s

Application No.

PAI130503

APS ID

951626

Authorization ID

1200784

Applicant and Facility Information

Applicant Name London Grove Township Chester County
 Applicant Address 372 Rosehill Road Suite 100
West Grove, PA 19390-9701
 Applicant Contact Ken Battin
 Applicant Phone (610) 345-0100
 Client ID 159730
 SIC Code 9199
 SIC Description Public Admin. - Genral Government, Nec
 Date Application Received September 15, 2017
 Date Application Accepted
 Purpose of Application Permit Renewal.

Facility Name London Grove Township MS4 UA

Facility Address 372 Rosehill Road Suite 100

Facility Contact Ken Battin

Facility Phone (610) 345-0100

Site ID 613637

Municipality London Grove Township

County Chester

Internal Review and Recommendations



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.

LONDON GROVE TWP	PAI130503	East Branch White Clay Creek, Middle Branch White Clay Creek, Upper White Clay Creek	Christina River Basin Nutrients, Christina River Basin Sediment, East Branch White Clay Creek, Indian Run, Middle Branch White Clay Creek, White Clay Creek	Appendix B-Pathogens, TMDL Plan-Nutrients, Organic Enrichment/Low D.O., Siltation, Suspended Solids
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Approve	Deny	Signatures	Date
X		<i>Carrie Konnovitch</i> Carrie M Konnovitch, P.E. / Environmental Engineer Trainee	August 15, 2024
X		<i>Elizabeth Mahoney</i> Elizabeth A Mahoney / Environmental Group Manager	10/03/2024

Internal Review and Recommendations

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 ^{2b}	MS4 Allocation ^{2d}	MS4 Load Reduction ^{2m}	% Reduction ^{2m}
Brandywine Creek Watershed												
LONDON GROVE TWP	13616.33	4,842.81	8773.52	64.43%	262.76	128.47	134.29	51.11%	25.875	7.965	17.91	69.22%

Table 3 - 1995 Land Use Baseline Load Calculations.

SOURCE	AREA	TOTAL SEDIMENT LOADING RATE	TOTAL SEDIMENT	TOTAL NITROGEN LOADING RATE	TOTAL NITROGEN	TOTAL PHOSPHORUS LOADING RATE	TOTAL PHOSPHORUS
UNITS	ACRES	LBS/ACRE	LBS	LBS/ACRE	LBS	LBS/ACRE	LBS
Hay/Pasture	0	181.72	0	0.94	0.00	0.26	0
Cropland	875	1,499.30	1,311,494	5.96	5,213	1.57	1,373
Forest	214	111.43	23,799	0.15	32	0.04	9
Water/Wetland	1	97.86	72	0.05	0	0.04	0
Disturbed	0	140.64	0	0.19	0	0.08	0
Turfgrass	0	185.70	0	0.00	0	0.00	0
Open Land	11	230.82	2,520	1.13	12	0.12	1
Bare Rock	0	0.00	0	0.00	0	0.00	0
Sandy Areas	0	0.00	0	0.00	0	0.00	0
Unpaved Roads	0	0.00	0	0.00	0	0.00	0
Ld Mixed	0	600.90	0	1.47	0	0.23	0
Md Mixed	4	1,450.93	5,908	6.25	25	0.81	3
Hd Mixed	10	2,055.61	21,052	6.83	70	0.95	10
Ld Residential	511	616.19	315,031	1.64	838	0.25	128
Md Residential	3	1,464.34	3,981	6.83	19	0.89	2
Hd Residential	1	2,067.89	2,397	7.49	9	1.04	1
TOTAL	1,629		1,686,254		6,219		1,528

Table 4 - 2012 Land Use Load Calculations.

SOURCE	AREA	TOTAL SEDIMENT LOADING RATE	TOTAL SEDIMENT	TOTAL NITROGEN LOADING RATE	TOTAL NITROGEN	TOTAL PHOSPHORUS LOADING RATE	TOTAL PHOSPHORUS
UNITS	ACRES	LBS/ACRE	LBS	LBS/ACRE	LBS	LBS/ACRE	LBS
Hay/Pasture	0.00	183.12	0	1.12	0	0.33	0
Cropland	286.07	1,491.81	426,764	5.84	1,671	1.50	429
Forest	134.68	163.18	21,977	0.17	23	0.05	7
Water/Wetland	5.56	148.61	826	0.48	3	0.05	0
Disturbed	264.45	225.70	59,687	0.27	71	0.12	32
Turfgrass	25.70	185.70	4,772	1.32	34	0.70	18
Open Land	0.00	303.30	0	1.40	0	0.14	0
Bare Rock	0.00	0.00	0	0.00	0	0.00	0
Sandy Areas	0.00	0.00	0	0.00	0	0.00	0
Unpaved Roads	0.00	0.00	0	0.00	0	0.00	0
Ld Mixed	0.86	594.85	510	1.46	1	0.23	0
Md Mixed	1.94	1,353.62	2,625	6.83	13	0.87	2
Hd Mixed	14.85	1,906.23	28,304	7.56	112	1.01	15
Ld Residential	887.88	600.45	533,131	1.57	1,394	0.24	213
Md Residential	0.94	1,347.59	1,272	6.34	6	0.82	1
Hd Residential	0.00	1,905.55	0	7.56	0	0.99	0
TOTAL	1,629		1,079,867		3,328		717

Table 5 – Revised Load Reduction Calculation.

Revised (1995) Baseline Load	Required Reduction	TMDL Load Reduction Required	2012 Baseline Load	Land Conversion Load Reduction
lbs./yr.	Percent	lbs./yrs.	lbs./yr.	lbs./yr.
1,686,254	64.43%	1,086,453	1,079,867	606,387

Internal Review and Recommendations

Table 6 – Revised 2012 Load Reduction Calculation

2012 Baseline Load	Existing BMP Load Reduction	Revised 2012 Baseline Load
lbs./yr.	lbs./yr.	lbs./yr.
1,079,867	120,284	959,583

Table 7 – Revised Required Load Reduction Calculation

Revised (1995) Baseline Load	Required Reduction	TMDL Load Reduction Required	Land Conversion Reduction	TMDL Reduction Required after Land Conversion	Existing BMP Load Reduction	Remaining TMDL Load Reduction Required
lbs./yr.	Percent	lbs./yrs.	lbs./yr.	lbs./yr.	lbs./yr.	lbs./yr.
1,686,254	64.43%	1,086,453	606,387	480,066	120,284	359,782

E. Analysis of TMDL Objectives.

1. Long-Term Reduction – According to the section above (D.) which presents details regarding existing load calculations (baseline load), land conversion reduction (1995 – 2012 land use) and existing BMP credit, the long-term reduction requirement equals **359,782 lbs./yr.** of sediment.
2. Short-Term Reduction – London Grove Township decided to reduce existing load by 10% (sediment) using the presumptive approach to assume that sediment reduction will satisfy TP reduction requirements. The required reduction, without credit for all existing BMPs, for this initial five (5) year permit cycle is ten percent (10%) of the required existing TMDL load reduction (959,583 lbs./yr.) or **95,958 lbs./yr.**

5.0 Conclusion

Based upon the analysis of the sediment loads being generated from the sewersheds to the designated MS4 outfalls, it was determined that the required 10% sediment reduction will be achieved through the implementation of the proposed BMPs. Near the end of the permit cycle, the Township will evaluate sediment reduction credit to date and develop a proposed scope of work to achieve the remaining long-term sediment reduction obligation.