

Application Type Renewal
Facility Type Storm Water
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL INDUSTRIAL WASTE (IW)
AND IW STORMWATER**

Application No. PA0053538
APS ID 1134491
Authorization ID 1522044

Applicant and Facility Information

Applicant Name	<u>Merck Sharp & Dohme LLC</u>	Facility Name	<u>Merck Sharp & Dohme LLC - West Point Plant</u>
Applicant Address	<u>770 Sumneytown Pike</u> <u>West Point, PA 19486-8000</u>	Facility Address	<u>770 Sumneytown Pike</u> <u>West Point, PA 19486-8000</u>
Applicant Contact	<u>Mike Lorenz</u>	Facility Contact	<u>Mike Lorezn</u>
Applicant Phone	<u>(215) 652-4955</u>	Facility Phone	<u>(215) 652-4955</u>
Client ID	<u>294671</u>	Site ID	<u>245458</u>
SIC Code	<u>2833,2834,2836</u>	Municipality	<u>Upper Gwynedd Township</u>
SIC Description	<u>Manufacturing - Biological Products, Except Diagnostic, Manufacturing - Medicinals and Botanicals, Manufacturing - Pharmaceutical Preparations</u>	County	<u>Montgomery</u>
Date Application Received	<u>April 1, 2025</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u></u>	If No, Reason	<u></u>
Purpose of Application	<u>NPDES permit renewal application.</u>		


Summary of Review

The PA Department of Environmental Protection (PADEP/Department) received the NPDES permit renewal application from Merck Sharp & Dohme LLC (Merck/permittee) April 1, 2025 for Merck's West Point facility (facility). This is an individual industrial stormwater permit (NSIR) located in Upper Gwynedd Township, Montgomery County. The discharges are in UNTs to Wissahickon Creek (TSF, MF) and UNT to Perkiomen Creek (TSF, MF), in state watershed 3-E and 3-F. The existing permit will expire on September 30, 2025. The terms and conditions of the permit were automatically extended since the renewal application was received at least 180 days prior to the permit expiration date. Renewal NPDES permit applications under Clean Water program are not covered by DEP's PDG, per 021-2100-001.

This fact sheet is prepared per 40 CFR §124.56.

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.

Approve	Deny	Signatures	Date
√		Reza H. Chowdhury, E.I.T. / Project Manager 	May 19, 2025
X		Pravin Patel Pravin C. Patel, P.E. / Environmental Engineer Manager	05/19/2025

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0
Latitude	40° 12' 31.7"	Longitude	-75° 17' 54.9"
Quad Name	Lansdale	Quad Code	82201
Wastewater Description: Stormwater discharge from Detention Basin 4			
Receiving Waters	Unnamed Tributary to Wissahickon Creek (TSF, MF)	Stream Code	00894
NHD Com ID	25979062	RMI	0.27
Drainage Area	0.12 mi ²	Yield (cfs/mi ²)	
Q ₇₋₁₀ Flow (cfs)	0.00212	Q ₇₋₁₀ Basis	
Elevation (ft)	329.95	Slope (ft/ft)	
Watershed No.	3-F	Chapter 93 Class.	TSF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	CAUSE UNKNOWN, FLOW REGIME MODIFICATION, FLOW REGIME MODIFICATION, PATHOGENS, SILTATION		
Source(s) of Impairment	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION, SOURCE UNKNOWN, URBAN RUNOFF/STORM SEWERS		
TMDL Status	Final, October 2003	Name	TMDL for Sediment and Nutrients, Wissahickon TMDL
Nearest Downstream Public Water Supply Intake	Philadelphia Water Dept.- Queen Lane		
PWS Waters	Schuylkill River	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	Appr. 20 miles

Changes Since Last Permit Issuance: None

Note: North Wales Water Authority operates 500 feet deep well 4600 ft. downstream of Outfall 001

Other Comments: None

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	002	Design Flow (MGD)	0
Latitude	40° 12' 59.2"	Longitude	-75° 18' 27.5"
Quad Name	Lansdale	Quad Code	82201
Wastewater Description: Stormwater discharge through Detention Basin 2			
Receiving Waters	Unnamed Tributary to Towamencin Creek (TSF)	Stream Code	01079
NHD Com ID	25979388	RMI	1.0
Drainage Area	0.051 mi ²	Yield (cfs/mi ²)	
Q ₇₋₁₀ Flow (cfs)		Q ₇₋₁₀ Basis	
Elevation (ft)	326.68	Slope (ft/ft)	
Watershed No.	3-E	Chapter 93 Class.	TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	FLOW REGIME MODIFICATION, SILTATION		
Source(s) of Impairment	SITE CLEARANCE (LAND DEVELOPMENT OR REDEVELOPMENT), URBAN RUNOFF/STORM SEWERS		
TMDL Status	Final April 2005 for Siltation	Name	Skippack Creek Watershed TMDL
Nearest Downstream Public Water Supply Intake	Aqua Pennsylvania, Inc. – Wetherill Dam		
PWS Waters	Perkiomen Creek	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	Apprx. 14.5 miles

Changes Since Last Permit Issuance: None

Other Comments:

Discharge, Receiving Waters and Water Supply Information

Outfall No.	<u>003</u>	Design Flow (MGD)	<u>0</u>
Latitude	<u>40° 13' 1.6"</u>	Longitude	<u>-75° 17' 39.6"</u>
Quad Name	<u>Lansdale</u>	Quad Code	<u>82201</u>
Wastewater Description: <u>Stormwater</u>			
Receiving Waters	<u>Wissahickon Creek (TSF, MF)</u>	Stream Code	<u>00844 (secondary stream)</u>
NHD Com ID	<u>25979060</u>	RMI	<u>20.900</u>
Drainage Area		Yield (cfs/mi ²)	
Q ₇₋₁₀ Flow (cfs)		Q ₇₋₁₀ Basis	
Elevation (ft)	<u>355.03</u>	Slope (ft/ft)	
Watershed No.	<u>3-F</u>	Chapter 93 Class.	<u>TSF, MF</u>
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>CAUSE UNKNOWN, FLOW REGIME MODIFICATION, HABITAT ALTERATIONS, NUTRIENTS, PATHOGENS, SILTATION</u>		
Source(s) of Impairment	<u>HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION, MUNICIPAL POINT SOURCE DISCHARGES, SOURCE UNKNOWN, URBAN RUNOFF/STORM SEWERS</u>		
TMDL Status	<u>Final, October 2003</u>	Name	<u>TMDL for Sediment and Nutrients, Wissahickon TMDL</u>
Nearest Downstream Public Water Supply Intake	<u>Philadelphia Water Dept. – Queen Lane</u>		
PWS Waters	<u>Schuylkill River</u>	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	<u>Appr. 20 miles</u>

Changes Since Last Permit Issuance: None

Existing Limits

For Outfalls 001, 002, and 003

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs./day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Semi-Annual Average	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Estimate
pH (S.U.)	XXX	XXX	Report Inst Min	XXX	XXX	Report	1/6 months	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Aluminum, Total	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs./day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Semi- Annual Average	Daily Maximum	Instant. Maximum		
Lead, Total	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite

Facility Description

The permittee requests renewal of their NPDES permit to continue discharge of stormwater associated with industrial activities at their West Point facility, located at 770 Sumneytown Pike. Activities at the site include research and manufacturing of pharmaceutical and biological medicinal products. Manufacturing activities include biological fermentation process, mixing and compounding of raw materials for drug formulation, capsule and tablet formulation and coating, and packaging of these products. There are six detention basins at the site. Detention basins 1, 5, and 6 receive stormwater from parking lots and garages only. This permit covers detention basins 2, 3, and 4. The activities for the catchment areas of each of the basins are listed below:

Basin no.	Outfall no.	Area (ft ²)	% impervious	Activities
DB4	001	5,777,798	57	Pharmaceutical and vaccine research buildings, vaccine manufacturing buildings, laboratory buildings, powerhouse and oil storage tank areas, water treatment and handling buildings, maintenance and utility buildings, warehousing, chemical storage tanks, parking lots, sidewalks, lawns, and other undeveloped space.
DB2	002	4,135,151	64	Pharmaceutical and vaccine research buildings, vaccine manufacturing buildings, laboratory buildings, powerhouse and oil storage tank areas, water treatment and handling buildings, maintenance and utility buildings, warehousing, chemical storage tanks, parking lots, sidewalks, lawns, and other undeveloped space.
DB3	003	695,218	65	Pharmaceutical and vaccine research buildings, vaccine manufacturing buildings, laboratory buildings, powerhouse and oil storage tank areas, water treatment and handling buildings, maintenance and utility buildings, warehousing, chemical storage tanks, parking lots, sidewalks, lawns, and other undeveloped space.

Detention basin 2 drains to an unnamed, intermittent tributary to Towamencin Creek. Detention basins 3 and 4 discharge to unnamed, intermittent tributaries to Wissahickon Creek. Per the previous permit fact sheet, flow for each of the basins is measured by a Sigma flow meter. The basins are equipped with gate valves that are opened during daytime work hours Sunday through Saturday and are normally closed at all other times of day unless a large precipitation event is forecasted. If, except for one site building 68/68A, which has separate BMPs, spilled material from industrial areas enters the storm water system, it will drain to one of the three basins, where procedures are in place to shut the outfall valve, if open, and contain the spill. The permittee provided Integrated Contingency Plan (ICP) V.4 with the application that was updated on June 11, 2024.

Chemical additives, specifically TRASAR 3DT230 and 93% and 98% Sulfuric Acid, are used in the facility's closed loop cooling system. Several releases have been reported from June 2019 to June 2024. Both of the chemicals are on DEP's Approved List of Chemical Additives. The existing language related to chemical additives will remain in the permit. The spills didn't cause a non-compliance by the operations section.

Sanitary and process wastewater generated is routed to Upper Gwynedd Township and Borough of Lansdale. The facility holds industrial wastewater discharge permits with each of the treatment plants.

Compliance History

DMR Data for Outfall 001 (from April 1, 2024 to March 31, 2025)

Parameter	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24
Flow (MGD) Average Monthly	0.185	0.080	0.022	0.183	0.111	0.009	0.018	0.230	0.188	0.133	0.094	0.198
Flow (MGD) Daily Maximum	1.645	1.268	0.347	1.412	1.392	0.055	0.173	3.154	1.970	1.603	0.653	2.259
pH (S.U.) IMIN				7.4						7.49		
pH (S.U.) IMAX				7.4						7.49		
COD (mg/L) Semi-Annual Average				< 75						< 75		
COD (mg/L) Daily Maximum				< 75						< 75		
TSS (mg/L) Semi-Annual Average				39						13		
TSS (mg/L) Daily Maximum				39						13		
Total Phosphorus (mg/L) Average Quarterly	0.11			0.11			< 0.10			< 0.10		
Total Aluminum (mg/L) Semi-Annual Average				1.3						0.33		
Total Aluminum (mg/L) Daily Maximum				1.3						0.33		
Total Lead (mg/L) Semi-Annual Average				0.0029						0.00091		
Total Lead (mg/L) Daily Maximum				0.0029						0.00091		

DMR Data for Outfall 002 (from April 1, 2024 to March 31, 2025)

Parameter	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24
Flow (MGD) Average Monthly	0.156	0.077	0.028	0.157	0.092	0.004	0.015	0.189	0.155	0.101	0.075	0.162
Flow (MGD) Daily Maximum	1.331	1.066	0.304	1.184	1.167	0.065	0.162	2.586	1.636	1.342	0.558	1.636
pH (S.U.) IMIN				7.3						7.53		
pH (S.U.) IMAX				7.3						7.53		

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COD (mg/L) Semi-Annual Average				85						< 75		
COD (mg/L) Daily Maximum				85						< 75		
TSS (mg/L) Semi-Annual Average				64.5						28		
TSS (mg/L) Daily Maximum				110						28		
Total Phosphorus (mg/L) Average Quarterly	< 0.10			0.10			0.10			< 0.10		
Total Aluminum (mg/L) Semi-Annual Average				1.3						0.36		
Total Aluminum (mg/L) Daily Maximum				1.3						0.36		
Total Lead (mg/L) Semi-Annual Average				0.0040						0.00082		
Total Lead (mg/L) Daily Maximum				0.0040						0.00082		

DMR Data for Outfall 003 (from April 1, 2024 to March 31, 2025)

Parameter	MAR-25	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24
Flow (MGD) Average Monthly	0.022	0.011	00	0.029	0.017	00	0.001	0.035	0.027	0.019	0.011	0.030
Flow (MGD) Daily Maximum	0.218	0.219	00	0.244	0.249	00	0.021	0.539	0.340	0.279	0.108	0.340
pH (S.U.) IMIN				7.2						6.65		
pH (S.U.) IMAX				7.2						6.65		
COD (mg/L) Semi-Annual Average				< 75						< 75		
COD (mg/L) Daily Maximum				< 75						< 75		
TSS (mg/L) Semi-Annual Average				23						16		
TSS (mg/L) Daily Maximum				23						16		
Total Phosphorus (mg/L) Average Quarterly	< 0.10			< 0.10			< 0.10			< 0.10		

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Merck Sharp & Dohme LLC - West Point Plant

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Total Aluminum (mg/L) Semi-Annual Average				0.17						0.038		
Total Aluminum (mg/L) Daily Maximum				0.17						0.038		
Total Lead (mg/L) Semi-Annual Average				< 0.00050						< 0.00050		
Total Lead (mg/L) Daily Maximum				< 0.00050						< 0.00050		

Summary of inspections

April 3, 2024: CEI conducted. The hydraulic fluid discharge on March 13, 2024 was constituted as unpermitted discharge and was a violation of CSL sections 301, 307, and 402(b). All the outfalls were inspected, and no violation was noted. The “powerhouse” and unloading area were also inspected and no issues were identified.

December 6, 2023: INCDT inspection conducted in response to an unpermitted discharge on December 1, 2023. The facility notified the Department of a silicone-based heat transfer fluid from rooftop HVAC equipment to the stormwater conveyance that impacted the stormwater swale and detention basin #2. Approximately 80 gallons of heat transfer fluid was discharged on the roof. The cause of the spill was unknown. The material traveled through the down spouts entering the stormwater conveyance system. The material traveled through the storm drains, into the stormwater swale and into detention basin #2. The outfall valve was closed during the incident and remained closed until cleanup was completed or the next rain event. The spill didn’t reach the stream.

June 28, 2022: FUI inspection conducted in response to a forcemain break discharging sewage and process water along a roadway in the facility’s complex. It was reported that the discharge had run down to several storm drains which feed into the detention basin #2. The gate valve was closed during the incident. No sheen or significant impact to the water in the retention basin was observed. The permittee contracted Upper Gwynedd WWTP to pump out the water in the retention basin to be treated at the WWTP.

May 7, 2021: CEI conducted. Overall, the facility appeared to be in compliance with the permit and practicing the recommended BMPs.

Development of effluent limitations for Outfalls 001, 002, and 003

The applicable SIC codes for this facility are 2834, 2836, and 2833. All three fall under PAG03 Appendix F (Chemicals and Allied Products). The Appendix F contains the following limits/monitoring requirements:

Parameter	Monitoring Requirements		Benchmark Values
	Minimum Measurement Frequency	Sample Type	
pH (S.U.)	1 / 6 months	Grab	XXX
Chemical Oxygen Demand (COD) (mg/L)	1 / 6 months	Grab	120
Total Suspended Solids (TSS) (mg/L)	1 / 6 months	Grab	100
Nitrate + Nitrite-Nitrogen (mg/L)	1 / 6 months	Grab	XXX
Total Phosphorus (mg/L)	1 / 6 months	Grab	XXX
Total Lead (mg/L)	1 / 6 months	Grab	XXX
Total Zinc (mg/L)	1 / 6 months	Grab	XXX
Total Iron (mg/L)	1 / 6 months	Grab	XXX
Total Aluminum (mg/L)	1 / 6 months	Grab	XXX

The 2009 permit removed the monitoring/limits requirements for Iron, Zinc, and Magnesium with the consideration of natural occurrence in regional soil and non-detect values. The sampling results submitted with the application indicated the following:

Pollutant	Maximum Concentration		
	Outfall 001	Outfall 002	Outfall 003
Oil & Grease (mg/l)	<5.5	<5.4	<5.4
BOD5 (mg/l)	<4.0	5.0	<4.0
COD (mg/l)	<75	<75	<75
TSS (mg/l)	25	14	5.8
Total Nitrogen (mg/l)	<2.5	<2.3	<1.7
Total Phosphorus (mg/l)	<0.1	<0.1	<0.1
pH (S.U.)	Min 7.1	Min 6.05	Min 7.29
Total Lead (ug/l)	2.8	1.2	0.8
Total Aluminum (ug/l)	860	520	300
Chloroform (ug/l)	<0.1	<0.1	<0.1
Chloromethane (ug/l)	<0.1	<0.1	<0.1
1,2-Dichloroethane (ug/l)	<0.1	<0.1	<0.1
1,1-Dichloroethene (ug/l)	<0.1	<0.1	<0.1
Cis-1,2-Dichloroethene (ug/l)	<0.1	<0.1	<0.1
Methylene Chloride (ug/l)	<0.1	<0.1	<0.1
Tetrachloroethene (ug/l)	<0.1	<0.1	<0.1
1,1,1-Trichloroethane (ug/l)	<0.1	<0.1	<0.1
Trichloroethene (ug/l)	<0.1	<0.1	<0.1
Vinyl Chloride (ug/l)	<0.1	<0.1	<0.1

Flow: Flow monitoring will remain in the permit and is required by 40 CFR § 122.44(i)(1)(ii).

Chemical Oxygen Demand (COD): Since the discharge concentration for COD at all outfalls are relatively higher, the monitoring requirement will be continued for all outfalls with a frequency of 1/6 months. The benchmark numerical limit will not be applied in the part A of the permit, however, it will be continued in Part C.

Total Suspended Solids (TSS): The existing monitoring requirements will be continued. The benchmark values will also be continued in Part C for all outfalls.

Total Phosphorus: The existing monitoring requirement will be carried over in this renewal due to the receiving stream being nutrient impaired and Appendix F requirement.

Total Lead: The sample results for all three outfalls came as detected, therefore, existing monitoring requirement will be continued.

Total Aluminum: The sample results for all three outfalls came as detected, therefore, existing monitoring requirement will be continued.

pH: The facility utilizes some chemical additives which may alter the pH of the influent water. Therefore, standard pH limits of 6.0~9.0 is recommended to be applied at all outfalls.

Other parameters: Sample results for other parameters (Chloroform, Chloromethane, 1,2-Dichloroethane, 1,1-Dichloroethene, Cis-1,2-Dichloroethene, Methylene Chloride, Tetrachloroethene, 1,1,1-Trichloroethane, Trichloroethene, and Vinyl Chloride) came as non-detect at 0.1 ug/l detection limit, therefore, are not a concern. Monitoring requirements will not be placed in the permit.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Semi-Annual Average	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Estimate
pH (S.U.)	XXX	XXX	Report Inst Min	XXX	XXX	Report	1/6 months	Grab
COD	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite
TSS	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Aluminum	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite
Total Lead	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite

Compliance Sampling Location: at Outfall 001 at the discharge point from Detention Basin No. 4

Other Comments: None

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 002, Effective Period: **Permit Effective Date** through **Permit Expiration Date**.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Semi-Annual Average	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Estimate
pH (S.U.)	XXX	XXX	Report Inst Min	XXX	XXX	Report	1/6 months	Grab
COD	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite
TSS	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Aluminum	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite
Total Lead	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite

Compliance Sampling Location: at Outfall 002 at the discharge point from Detention Basin No. 2

Other Comments: None

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 003, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Semi-Annual Average	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Estimate
pH (S.U.)	XXX	XXX	Report Inst Min	XXX	XXX	Report	1/6 months	Grab
COD	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite
TSS	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Aluminum	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite
Total Lead	XXX	XXX	XXX	Report	Report	XXX	1/6 months	24-Hr Composite

Compliance Sampling Location: at Outfall 003 at the discharge point from Detention Basin No. 3

Other Comments: None

Tools and References Used to Develop Permit	
<input type="checkbox"/>	WQM for Windows Model (see Attachment)
<input type="checkbox"/>	Toxics Management Spreadsheet (see Attachment)
<input type="checkbox"/>	TRC Model Spreadsheet (see Attachment)
<input type="checkbox"/>	Temperature Model Spreadsheet (see Attachment)
<input type="checkbox"/>	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
<input type="checkbox"/>	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
<input type="checkbox"/>	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
<input type="checkbox"/>	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
<input type="checkbox"/>	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
<input type="checkbox"/>	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
<input type="checkbox"/>	Pennsylvania CSO Policy, 386-2000-002, 9/08.
<input type="checkbox"/>	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
<input type="checkbox"/>	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
<input type="checkbox"/>	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
<input type="checkbox"/>	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
<input type="checkbox"/>	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
<input type="checkbox"/>	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
<input type="checkbox"/>	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
<input type="checkbox"/>	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
<input type="checkbox"/>	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
<input type="checkbox"/>	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
<input type="checkbox"/>	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
<input type="checkbox"/>	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
<input type="checkbox"/>	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
<input type="checkbox"/>	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 386-2000-020, 10/97.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
<input type="checkbox"/>	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 386-2000-010, 3/1999.
<input type="checkbox"/>	Design Stream Flows, 386-2000-003, 9/98.
<input type="checkbox"/>	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
<input type="checkbox"/>	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
<input type="checkbox"/>	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
<input type="checkbox"/>	SOP:
<input type="checkbox"/>	Other: