pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0008443**
Facility Type	**Industrial**	APS ID	**1082973**
Major / Minor	**Major**	Authorization ID	**1430266**

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

Applicant and Facility Information

Applicant Name	**Montour LLC**	Facility Name	**Montour LLC**
Applicant Address	PO Box 128	Facility Address	18 McMichael Road
	Washingtonville, PA 17884-0128		Washingtonville, PA 17884-0128
Applicant Contact	Jake Mccabe	Facility Contact	Jake Mccabe
Applicant Phone	(570) 437-1362	Facility Phone	(570) 437-1362
Client ID	144600	Site ID	247875
SIC Code	1795,2999,4911	Municipality	Derry Township
SIC Description	Construction - Wrecking And Demolition Work,Manufacturing - Petroleum And Coal Products, Nec,Trans. & Utilities - Electric Services	County	Montour
Date Application Received	March 7, 2023	EPA Waived?	No
Date Application Accepted		If No, Reason	Major Facility, Significant CB Discharge

Purpose of Application: Renewal of Existing NPDES application

Summary of Review

The above permittee has submitted an NPDES renewal application for discharges at the above facility covered under NPDES PA0008443. The facility is a 1525-megawatt steam electric generating facility consisting of two units (1 & 2). The units were formerly coal-fired units. However, on July 1, 2024, the facility has ceased burning coal and has switched to burning natural gas. Oil will also periodically be burned for power production or auxiliary purposes. The switch from coal to natural gas produces less by products and is expected to significantly reduce the overall pollutant load of the site wastewater.

The facility utilizes a 36 MGD intake from the West Branch of the Susquehanna River, with Lake Chillisquaque being a backup water source. A detailed description of all outfalls and the intake will be provided within this fact sheet, along with justification for all effluent limitations and conditions that will appear in the draft permit.

Based on the following review, it is recommended that the permit be drafted and published in the Pennsylvania Bulletin for the required 30-day comment period.

Unless otherwise noted, all applicable Department Standard Operating Procedures (SOPs) were followed during the review of this application.

Approve	Deny	Signatures	Date
X		*Chad A. Fabian* Chad A. Fabian / Project Manager	8/5/25
X		*Nicholas W. Hartranft, P.E.* Nicholas W. Hartranft, P.E./ Environmental Engineer Manager	8/5/25

Section 1.0 – Phasing

The permit will utilize a two phased approach, as many changes to the facility have occurred and will occur with the conversion of coal to natural gas. This section is meant to highlight some of the site changes that have occurred during the existing Phase 1 and that will occur by the start of Phase 2.

Phase 1

Phase 1 consists of the immediate changes to the facility after the cessation of burning coal took place on June 30, 2024. These changes include:

-Sluicing of bottom ash and pyrite out of the combustion units using cooling tower blowdown (CTBD) will cease. CTBD will now be routed directly to the existing detention basin from the condensers.
-Intermittent discharge of air heater will be less frequent and will now be routed to the detention basin instead of Ash Basin 1.
-Ash Basin 1 discharges will consist of stormwater that directly hits the basin. There no longer will be any bottom ash transport water.
-The existing Flue Gas Desulfurization (FGD) is no longer needed with burning natural gas. Approximately 1 million gallons of FGD wastewater remains onsite from cleaning out the FGD system. This wastewater will be treated in batches in the existing FGD wastewater treatment plant throughout Phase 1 of the permit.
-The facility will utilize the water recirculation spray system in the FGD unit to cool the air temperature in the exhaust stacks. The FGD system will now be referred to as the Flue Gas Cooling System. Water from the detention basin will continue to be used as makeup water.
-Coal pile runoff will continue to drain to the detention basin until the coal pile area is fully reclaimed.

It should be noted that Phase 1 might be completed by time of final issuance of this NPDES permit. If this occurs, all Phase 1 portions of the NPDES permit will be eliminated.

Phase 2

Changes to occur in Phase 2 of the project include:

-Scrubber blowdown will no longer be generated and all FGD associated wastewater will have been treated. The FGD wastewater treatment plant (WWTP) will no longer be needed. The WWTP will be taken offline and no more discharges from internal monitoring points 253 and 353 will occur. These internal monitoring points will be removed from the permit.
-Intermittent wastewater from the Flue Gas Cooling System (cooling tower blowdown) will be routed directly back to the detention basin.
-The coal pile area will be reclaimed by Phase 2 of the permit. Stormwater from the area will continue to flow to the detention basin but will no longer be considered coal pile runoff.

Section 2.0 – Receiving Waters and Water Supply Information

Discharge Outfalls

Outfall No. 050 – Chillisquaque Creek - Discharge, Receiving Waters and Water Supply Information

Outfall No.	050	Design Flow (MGD)	0.0
Latitude	41º 4' 9.99"	Longitude	-76º 40' 29.85"
Quad Name	Washingtonville	Quad Code	4-17.3
Wastewater Description:	IW Process Effluent with ELG (see below)		

Receiving Waters	Chillisquaque Creek	Stream Code	18712
NHD Com ID	66918191	RMI	18.76
Drainage Area	17.25 mi^2	Yield (cfs/mi^2)	0.21
Q_{7-10} Flow (cfs)	4.64	Q_{7-10} Basis	Stream delineation
Elevation (ft)	515	Slope (ft/ft)	n/a
Watershed No.	10-D	Chapter 93 Class.	WWF
Existing Use	WWF	Existing Use Qualifier	n/a
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	Other Habitat Alterations, Siltation		
Source(s) of Impairment	Agriculture, Industrial Point Source		
TMDL Status	None	Name	None
Nearest Downstream Public Water Supply Intake	Sunbury Municipal Water Authority approximately 26 miles downstream on the West Branch Susquehanna River		

Changes from last issuance: Outfall 050 is no longer used as a discharge point. The outfall structure remains as an emergency discharge point for the existing detention basin in the event of high-water episodes. All wastewater that previously discharged at Outfall 050 is now discharged via Outfall 053.

Outfall No. 052 – Chillisquaque Creek - Discharge, Receiving Waters and Water Supply Information			
Outfall No.	052	Design Flow (MGD)	1.68
Latitude	41º 4' 15.68"	Longitude	-76º 40' 24.83"
Quad Name	Washingtonville	Quad Code	4-17.3
Wastewater Description:	See below		
Receiving Waters	Chillisquaque Creek	Stream Code	18712
NHD Com ID	66918191	RMI	18.92
Drainage Area	17	Yield (cfs/mi^2)	0.21
Q_{7-10} Flow (cfs)	3.57	Q_{7-10} Basis	Stream delineation
Elevation (ft)	510	Slope (ft/ft)	n/a
Watershed No.	10-D	Chapter 93 Class.	WWF
Existing Use	WWF	Existing Use Qualifier	n/a
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	Other Habitat Alterations, Siltation		
Source(s) of Impairment	Agriculture, Industrial Point Source		
TMDL Status	None	Name	n/a
Nearest Downstream Public Water Supply Intake	Sunbury Municipal Water Authority approximately 26 miles downstream on W. Br. Susquehanna River		

Changes from last issuance: None

Other Comments:

Wastewater from 052 consists of the following:

Contribution	Phases 1 & 2
Stormwater from plant drains,	052
Sewage treatment plant,	052
Overflow from the Unit 1 and Unit 2 cooling tower basins,	052
Leachate collection drain flow from ash basin #1,	052
Stormwater from Pond 5A near the ash basin.	052

All wastewater is collected in the “stormwater basin” prior to discharge to Chillisquaque Creek. Treatment in the basin consists of flow equalization, neutralization (if needed), oil skimming (if needed), and sedimentation settling.

Outfall 052 has 3 IMPs associated with it. They are as follows:

IMPs 151 (0.046 MGD) and 152 (0.02 MGD): These IMPs are for the cooling water basins. Cooling water is pumped to the basins from the West Branch Susquehanna River intake. Lake Chillisquaque is also used for storage of the cooling water. The cooling system is a closed loop cycle. However, the basins need drained on occasion to the Outfall 052 stormwater basin for maintenance. Cooling water basin overflow also goes to the Outfall 052 basin but is an uncommon occurrence.

IMP 153 (0.02 MGD): The IMP is for the sewage treatment plant effluent prior to going to the stormwater basin associated with Outfall 052. The treatment plant serves the facility only. The system consists of screening and grit removal, mixing, flow equalization, activated sludge, sedimentation, disinfection and outfall to the stormwater basin that is discharged at Outfall 052.

Outfall No. 053 – West Branch Susquehanna River - Discharge, Receiving Waters and Water Supply Information

Outfall No.	053	Design Flow (MGD)	4.92
Latitude	41º 4' 5.96"	Longitude	-76º 51' 18.98"
Quad Name	Milton	Quad Code	4-16.2
Wastewater Description:	See below		
Receiving Waters	West Branch Susquehanna River	Stream Code	18668
NHD Com ID	66918973	RMI	14.76
Drainage Area	6650 mi^2	Yield (cfs/mi^2)	0.12
Q_{7-10} Flow (cfs)	798	Q_{7-10} Basis	Basin delineation from USGS Stream Gauge 01553500 on W. Br. Susquehanna River.
Elevation (ft)	440	Slope (ft/ft)	n/a
Watershed No.	10-D	Chapter 93 Class.	WWF
Existing Use	WWF	Existing Use Qualifier	n/a
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	PCB		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final	Name	West Branch Susquehanna
Nearest Downstream Public Water Supply Intake	PA American Water Company approximately 4 river miles downstream on the W. Br. Susquehanna River		

Other Comments:

Wastewater contributed to Outfall 053 consists of the following:

Contribution	Phase 1	Phase 2
FGD wastewater treatment system	Treated scrubber wastewater from FGD treatment plant during cleaning out of the units	FGD WWTP will be decommissioned. Intermittent Flue Gas Cooling System return and air heater wash water
Boiler blowdown	Yes	Yes
miscellaneous plant drains	Yes	Yes
demineralizer regenerants	Yes	Yes
bottom ash and pyrite	No longer exists	No longer exists
Ash Basin #1	Stormwater and previously placed wastewaters	Stormwater and previously placed wastewaters
sluice from ash basin #1	No longer exists	No longer exists
leachate runoff basin (Ash Areas 2 and 3)	Yes	Yes
Flue Gas Cooling System Return	No	Yes, intermittently. Most expected to evaporate.
coal pile runoff	Yes	No longer exists

Flue gas desulfurization (FGD) wastewater from the scrubber, which is an air pollution control device. The FGD wastewater is treated in a dedicated treatment plant onsite and is discharged through a pipeline that extends

approximately 12 miles to the West Branch of the Susquehanna River. The FGD treatment system consists of equalization, desaturation, coagulation/precipitation, flocculation, sedimentation, pH control, and sludge thickening and filtration. Sludge cake is deposited in the onsite landfill.

Stormwater Outfalls

The following table details the existing stormwater outfalls and provides a crosswalk to the new outfall number of each stormwater outfall. The stormwater outfalls are as follows:

Outfall	Description of Activities	Receiving Stream	Latitude/Longitude
001	Ash area #2	Mud Creek	41º03'45"/-76º38'45"
002	Ash area #2	Mud Creek	41º03'45"/-76º39'00"
003	Ash area #3	Mud Creek	41º03'45"/-76º39'30"
004*	Detention basin area	Chillisquaque Creek	41º04'15"/-76º40'30"
005	Ash basin #1	Chillisquaque Creek	41º04'30"/-76º40'15"
006	Ash basin #1	Chillisquaque Creek	41º04'30"/-76º40'15"
007	Ash basin #1	Chillisquaque Creek	41º04'30"/-76º40'15"
008	Ash basin #1	Chillisquaque Creek	41º04'45"/-76º40'00"
009	Closed ash basin and area around Pond 2A	Chillisquaque Creek	41º05'45"/-76º39'45"
010	Closed ash basin and area around Pond 4A	Chillisquaque Creek	41º04'45"/-76º39'15"

*Outfall 004 remains to be the representative outfall for all stormwater sampling.
Previously permitted stormwater Outfalls 011 and 012 no longer exist.

Mud Creek and Chillisquaque Creek are both classified as Warm Water Fishes (WWF) & Migratory Fishes (MF) according to the Department's Chapter 93 Regulations. On May 6, 2011, the Department finalized a Total Maximum Daily Load (TMDL) for Mud Creek. Mud Creek is impaired by organic enrichment, low dissolved oxygen, and sediment from agricultural land use practices. The permittee is not an agricultural source and therefore is not a designated source of impairment to Mud Creek, and therefore no waste load allocation (WLA) is required.

Part A of the permit will require sampling of outfall 004 as representative of site runoff. Additional sampling may be performed at the permittee's discretion. The permit will require a documented annual inspection of each stormwater outfall per the supplemental Annual Inspection Form for NPDES Permits for Discharges of Stormwater Associated with Industrial Activities.

Compliance History	
Summary of eDMRs**:**	A review of the previous 12 months of eDMRs was evaluated. Three effluent exceedances have occurred during this period. The exceedances can be found in effluent violations table following this section of the report.
Summary of Inspections:	The most recent inspection was performed on 7/16/2025. The only violations found were the exceedances noted above and found below.

A WMS query shows that no open violations exist at the facility.

Effluent Violations for Outfall 053, from: July 1, 2024 To: May 31, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Total Iron	01/31/25	Daily Max	12.6	mg/L	7.5	mg/L

Effluent Violations for Outfall 353, from: July 1, 2024 To: May 31, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
TSS	01/31/25	Avg Mo	31.7	mg/L	30.0	mg/L
TSS	02/28/25	Avg Mo	44.5	mg/L	30.0	mg/L

Development of Water Quality Based Effluent Limitations (WQBELs)

The Department evaluates Water Quality Based Effluent Limitations (WQBELs), technology-based limits, and Best Professional Judgement (BPJ) and implements the most stringent limitation.

Toxic Management Spreadsheet Modeling (WQBELs)

The Department's Toxic Management Spreadsheet (TMS) was performed for each industrial wastewater discharge (052 and 053) to determine if WQBELs are needed for toxics in the NPDES permit. The maximum concentration of each parameter was chosen from the application sampling and effluent data. A copy of each reasonable potential analysis spreadsheet and model run is attached.

Outfall 050

A TMS was not performed since Outfall 050 exists only for emergency situations to protect infrastructure consistent with the bypass provisions of the permit. Infrastructure of Outfall 050 to Chillisquaque Creek is intended to remain in place. Influences at Outfall 050 may include stormwater runoff from major events, generally storm events greater than a 25-year event. There will be no monitoring or reporting required in Part A of the NPDES permit. The permittee will need to report any emergency discharge that occurs to the Department.

Outfall 052

Outfall 052 will remain the same during both Phase 1 and Phase 2 of the permit. Effluent data for Outfall 052 provided in the application was used for the TMS. This effluent sampling data was taken while the facility operated burning coal, as effluent results during the burning of natural gas from this outfall were not available at the application submittal date.

The attached TMS results require monitoring and reporting for total values of antimony, arsenic, cadmium, copper, manganese, nickel, selenium, and thallium. Effluent limitations will be required for total aluminum and Bis(2-Ethylhexyl)Phthalate. The permittee may resample Outfall 052 during the draft comment period to get a more representative sampling of 052 while burning of natural gas.

Outfall 053

Phase 1

During Phase 1 of the permit, the existing effluent limitations at the facility will remain in effect since onsite FGD wastewater stored in tanks will still need to be treated. These existing limitations incorporated the Effluent Limitation Guidelines of 40 CFR Part 423 along with water quality-based effluent limitations previously determined through modeling during the last renewal cycle. No remodeling during this short Phase 1 of the permit will be performed. The previous model run has been attached and labeled "Phase 1 Outfall 053 TMS". Justification of the existing ELG related effluent can be found in the previous fact sheet and addendums from the last permit cycle.

Phase 2

Since there was not any representative onsite sampling of the outfall while operating with natural gas upon submittal of the renewal application, sampling results from a similar natural gas fired steam electric facility (Martins Creek Steam Election Station, PA0012823) were used for the TMS. The TMS shows that limits for total copper, Hexachlorobutadiene, 1,2,4-Trichlorobenzene will be required along with report and monitor for total aluminum and acrolein. Please refer to the proposed effluent limitations table and TMS for results. The permittee may perform onsite sampling for the above parameters during the draft comment period so the Department can remodel the discharge to determine if these WQBELs limitations are appropriate. A copy of the Phase 2 TMS can be found attached, label "Phase 2 Outfall 053 TMS."

Since these Phase 2 limitations are WQBELs, they will also be implemented immediately in Phase 1 along with the current existing limitations.

Outfall 052

Outfall 052 remains the same during both Phase 1 and Phase 2 of the permit. Effluent data for Outfall 052 provided in the application was used for the TMS. This effluent sampling data was taken while the facility operated burning coal, as effluent results during the burning of natural gas from this outfall were not available at the application submittal date.

The attached TMS results require monitoring and reporting for total values of antimony, arsenic, cadmium, copper, manganese, nickel, selenium, and thallium. Effluent limitations will be required for total aluminum and Bis(2-Ethylhexyl)Phthalate. The permittee may resample Outfall 052 during the draft comment period to get a more representative sampling of 052 while burning of natural gas.

WQM 7.0 Model for sewage discharges (IMP 153)

The Department's WQM7.0 model allows the Department to evaluate point source discharges of dissolved oxygen (DO), carbonaceous BOD ($CBOD_5$), and ammonia-nitrogen (NH_3-N) into free-flowing streams and rivers for sewage discharges. To accomplish this, the model simulates two basic processes: the mixing and degradation of NH_3-N in the stream and the mixing and consumption of DO in the stream due to the degradation of $CBOD_5$ and NH_3-N. Previously, WQM7.0 modeling was performed (see attached) for the discharge to the Chillisquaque Creek. Per the Department's SOP of reissuance of NPDES permits, remodeling of IMP 153 is not necessary since no changes to the existing sewage STP, discharge, or receiving stream have occurred since the last evaluation. The results of this modeling are attached.

Temperature Limitations

Temperature limitations for 053 were evaluated using the Department's *Thermal Discharge Limit Calculation Spreadsheet*. The spreadsheet is designed to calculate the appropriate thermal discharge limits for facilities discharging effluent above the ambient temperature, assuming complete mix between the discharge flow and the receiving stream flow. The design stream flow is based on the $Q_{7,10}$ flow of the receiving stream, but the flow is adjusted for each monthly or semi-monthly intervals according to the Department's Implementation Guidance for Temperature Criteria (#391-2000-017). The results of the model show no waste load allocation (WLA) is necessary for temperature.

The spreadsheet indicates the existing public safety-based maximum temperature limit of 110 °F is protective of the Susquehanna River. The discharge pipe travels approximately 12 miles underground prior to discharge, which will cool the discharge significantly. Due to this, no temperature conditions in the permit will be required.

Chemical Additives

The facility uses several chemical additives, all of which are on the Department's approved list of chemical additives. The proposed usage rates are within the guidelines of the approved list. The Department also approved the use of additional chemical additives on December 11, 2024. The approval letter for the use of the chemical additives is attached.

Section 4.0 – Technology Based Effluent Limitations and Requirements

The facility is subject to 40 CFR Part 423—Steam Electric Power Generating Point Source Category and the following PA Code Regulations.

Parameter	Limit (mg/l)	SBC	Federal Regulation	Waste Stream	State Regulation
pH	6.0	Minimum	423.12(b)(2), 423.13(a),	All	95.2(1)
	9.0	IMAX	423.12(b)(2), 423.13(a),	All	95.2(1)
Total PCBs (µg/L)(3)	Non-detect	IMAX	423.12(b)(2), 423.13(a),	All	
Free Available Chlorine	0.2	Average Monthly	423.12(b)(2), 423.13(a),	Cooling tower blowdown, low volume waste	
	0.5	IMAX	423.12(b)(2), 423.13(a),	Cooling tower blowdown	
Priority Pollutants, Appendix A (1)	Non-detect	IMAX	423.13(d)(1)	Cooling tower blowdown	
Total Chromium	0.2	Average Monthly	423.13(d)(1)	Cooling tower blowdown	
	0.2	Daily Maximum	423.13(d)(1)	Cooling tower blowdown	
Total Zinc	1.0	Average Monthly	423.13(d)(1)	Cooling tower blowdown	
	1.0	Daily Maximum	423.13(d)(1)	Cooling tower blowdown	
Oil and Grease	15	Daily Maximum	§423.12(b)(11)	All	95.2(2)
	20	IMAX	§423.12(b)(11)	All	95.2(2)
Dissolved Iron (2)	7	IMAX		All	95.2(4)
Arsenic	8 µg/l	Average Monthly	§423.13(I)(2)(i)(A)	Combustion Residual Leachate	
	11 µg/l	Daily Maximum	§423.13(I)(2)(i)(A)	Combustion Residual Leachate	
Mercury	356 ng/l	Average Monthly	§423.13(I)(2)(i)(A)	Combustion Residual Leachate	
	788 ng/l	Daily Maximum	§423.13(I)(2)(i)(A)	Combustion Residual Leachate	
TSS	30	Average Monthly	§423.12(b)(11)	Low volume wastewater	
	100	Daily Maximum	§423.12(b)(11)	Low volume wastewater	

(1) This requirement will be satisfied by establishing a Part C condition as follows, "Cooling tower blowdown discharges shall contain no detectable amounts of the 126 Priority Pollutants listed in 40 CFR Part 423, Appendix A, that are contained in chemicals added for cooling tower maintenance, except for Total Chromium and Total Zinc. On an annual basis, the permittee shall conduct monitoring or submit engineering calculations to demonstrate compliance with 40 CFR 423.15(b)(10)(i)."

(2) WQBELs are already imposed for total iron at concentrations at less than the cited regulation.

(3) PCBs have not been detected at the facility in decades. Therefore, no reasonable potential exists for the discharge of PCBs. However, the Department will require the existing 1/year monitoring of PCBs at Outfall 053 to remain in the permit to demonstrate compliance.

316(b) - Cooling Water Intakes

The facility has an existing submerged offshore Clean Water Intake Structure (CWIS) with a maximum capacity of 36 MGD. The intake structure is located on the West Branch Susquehanna River at latitude 41º 04' 07" and longitude -76º 51' 18". The water is used in its cooling towers in a closed loop system.

The existing CWIS is subject to 40 CFR 125.94. Specifically, the Best Technology Available (BTA) standards for impingement mortality under 40 CFR 125.94(c) and the BTA for entrainment under 40 CFR §125.94(d). Per 40 CFR §125.94(c)(1), the intake structure meets BTA for impingement because it is a closed loop system.

The existing NPDES permit contains a special Part C condition that required an extensive entrainment study to assure BTA for entrainment is being met under 40 CFR §125.94(d). The permittee submitted the results of this entrainment study to the Department via email on 2/3/2023. Biologists in the Department's Clean Water Program (Williamsport), reviewed the study and have determined that entrainment was effective and meets the standards set forth in 40 CFR §125.94(d). No further evaluation is required at this time.

Chesapeake Bay Requirements

A portion of the Chesapeake Bay and many of its tidal tributaries have been listed as impaired under Section 303(d) of the Water Pollution Control Act, 33 U.S.C. §1313(d). Total Nitrogen and Total Phosphorus cap loads have been established for significant dischargers in Pennsylvania in order to reduce the total nutrient load to the Bay and meet State of Maryland Water Quality Standards. The facility is considered a Chesapeake Bay Significant Industrial Discharger (SID) within the Chesapeake Bay WIP. Nutrient cap loadings have been established within the WIP for this facility.

These respective nutrient waste loads allocations are:

Total Nitrogen (TN) (lbs/year)	Total Phosphorus (TP) (lbs/year)	TN Delivery Ratio	TP Delivery Ratio
72,749	1200	0.941	0.436

Stormwater Requirements

The facility has a SIC code of 4911 (Steam Electric Generating Facilities) and the draft permit will contain Part C stormwater requirements consistent with Appendix H of the Department's PAG03 general permit.

PFAS

To help further characterize the wastewater, DEP has proposed to establish annual sampling for four PFAS parameters; PFOA, PFOS, HFPO-DA, and PFBS. The permittee may discontinue monitoring for PFOA, PFOS, HFPO-DA, and PFBS if the results in four consecutive monitoring periods indicate non-detect results at or below Quantitation Limits of 4.0 ng/L for PFOA, 3.7 ng/L for PFOS, 3.5 ng/L for PFBS and 6.4 ng/L for HFPO-DA. When monitoring is discontinued, permittees must enter a No Discharge Indicator (NODI) Code of "GG" on the discharge monitoring reports.

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 004, 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	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: 004

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 052, 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	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Aluminum	16.0	24.9	XXX	1.1	1.8	XXX	1/week	24-Hr Composite
Total Antimony (ug/L)	Report	Report	XXX	Report	Report	XXX	1/week	24-Hr Composite
Total Arsenic (ug/L)	Report	Report	XXX	Report	Report	XXX	1/week	24-Hr Composite
Total Cadmium (ug/L)	Report	Report	XXX	Report	Report	XXX	1/week	24-Hr Composite
Total Copper (ug/L)	Report	Report	XXX	Report	Report	XXX	1/week	24-Hr Composite
Total Manganese	Report	Report	XXX	Report	Report	XXX	1/week	24-Hr Composite
Total Nickel (ug/L)	Report	Report	XXX	Report	Report	XXX	1/week	24-Hr Composite
Total Selenium (ug/L)	Report	Report	XXX	Report	Report	XXX	1/week	24-Hr Composite
Total Thallium (ug/L)	Report	Report	XXX	Report	Report	XXX	1/week	24-Hr Composite
Bis(2-Ethyl-hexyl)Phthalate (ug/L)	0.043	0.068	XXX	3.1	4.8	XXX	1/week	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	15	20	30	1/week	Grab
TSS	XXX	XXX	XXX	30.0	100.0	XXX	1/week	24-Hr Composite

Compliance Sampling Location: 052

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 053, Effective Period: September 1, 2026 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	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/day	Grab
Total Aluminum	Report	Report	XXX	Report	Report	XXX	1/week	24-Hr Composite
Total Copper (ug/L)	1.6	2.5	XXX	39.2	61.2	XXX	1/week	24-Hr Composite
Acrolein (ug/L)	Report	Report	XXX	Report	Report	XXX	1/week	24-Hr Composite
1,2,4-Trichloro-benzene (ug/L)	0.07	0.11	XXX	1.7	2.7	4.3	1/week	24-Hr Composite
Hexachloro-butadiene (ug/L)	0.045	0.07	XXX	1.1	1.7	XXX	1/week	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	15	20	30	1/week	Grab
TSS	XXX	XXX	XXX	30.0	100.0	100.0	1/week	24-Hr Composite
Arsenic (µg/l)	XXX	XXX	XXX	8 µg/l	11 µg/l	XXX	1/week	24-Hr Composite
Mercury (ng/l)	XXX	XXX	XXX	356 ng/l	788 ng/l	XXX	1/week	24-Hr Composite

Compliance Sampling Location: 053

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 053, Effective Period: Permit Effective Date through August 31, 2026.

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	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/day	Grab
Total Dissolved Solids	Report	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	15	20	30	1/week	Grab
TSS	XXX	XXX	30.0	100.0	XXX	100.0	1/week	24-Hr Composite
Nitrate-Nitrite	XXX	XXX	XXX	Report	Report	XXX	2/week	24-Hr Composite
Nitrate-Nitrite (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
Total Nitrogen (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Ammonia	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
Ammonia (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
TKN	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
TKN (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite

Outfall 053 , Continued (from Permit Effective Date through August 31, 2026)

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	Average Monthly	Daily Maximum	Instant. Maximum		
Total Phosphorus (lbs)	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Boron	XXX	XXX	XXX	17.4	34.8	43	1/week	24-Hr Composite
Total Cadmium (ug/L)	XXX	XXX	XXX	4.6	9.2	11.5	1/week	24-Hr Composite
Hexavalent Chromium (ug/L)	XXX	XXX	XXX	35.0	70.0	87.5	1/week	24-Hr Composite
Total Copper (ug/L)	1.6	2.5 Daily Max	XXX	39.2	61.2	98	2/month	24-Hr Composite
TRC	XXX	XXX	XXX	0.2	0.5	0.5	2/month	24-Hr Composite
Total Iron	XXX	XXX	XXX	5.0	7.5	10	1/week	24-Hr Composite
Total Lead	XXX	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Total Selenium (ug/L)	XXX	XXX	XXX	86.7	173.4	XXX	1/week	24-Hr Composite
Total Silver (ug/L)	XXX	XXX	XXX	8.1	16.2	20.2	1/week	24-Hr Composite
Sulfate	Report	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Total Thallium (ug/L)	XXX	XXX	XXX	2.9	5.8	7.2	1/week	24-Hr Composite
Chloride	Report	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Bromide	Report	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Acrolein (ug/L)	Report	Report	XXX	Report	Report	XXX	1/week	24-Hr Composite
1,2,4-Trichloro-benzene (ug/L)	0.07	0.11	XXX	1.7	2.7	4.3	1/week	24-Hr Composite
Hexachloro-butadiene (ug/L)	0.045	0.07	XXX	1.1	1.7	XXX	1/week	24-Hr Composite
Total Aluminum	Report	Report	XXX	Report	Report	XXX	1/week	24-Hr Composite

Compliance Sampling Location: 053

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 053, 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	Average Monthly	Maximum	Instant. Maximum		
Total Nitrogen (lbs) Effluent Net	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total Phosphorus (lbs) Effluent Net	Report Total Mo	XXX	XXX	XXX	XXX	XXX	1/month	Calculation
Total PCBs (ug/L)	XXX	XXX	XXX	XXX	XXX	1.75	1/year	24-Hr Composite

Compliance Sampling Location: 053

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 150, 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	Average Monthly	Maximum	Instant. Maximum		
Total Chromium	XXX	XXX	XXX	0.2	0.2 Daily Max	XXX	1/month	Grab
Total Zinc	XXX	XXX	XXX	1.0	1.0 Daily Max	XXX	1/month	Grab

Compliance Sampling Location: 150

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 151, 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	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/day	Estimate
Free Available Chlorine	XXX	XXX	XXX	0.2 Daily Max	XXX	0.5	1/day	Grab
Total Chromium (III)	XXX	XXX	XXX	0.2	0.2	0.5	1/week	24-Hr Composite
Total Zinc	XXX	XXX	XXX	1.0	1.0	2.5	1/week	24-Hr Composite

Compliance Sampling Location: 151

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 152, 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	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/day	Estimate
Free Available Chlorine	XXX	XXX	XXX	0.2 Daily Max	XXX	0.5	1/day	Grab
Total Chromium (III)	XXX	XXX	XXX	0.2	0.2	0.5	1/week	24-Hr Composite
Total Zinc	XXX	XXX	XXX	1.0	1.0	2.5	1/week	24-Hr Composite

Compliance Sampling Location: 152

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 153, 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	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/day	Weir
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
TRC	XXX	XXX	XXX	Report	XXX	XXX	5/week	Grab

Outfall 153, Continued (from 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	Average Monthly	Maximum	Instant. Maximum		
CBOD5	XXX	XXX	XXX	25.0	XXX	50	1/month	8-Hr Composite
TSS	XXX	XXX	XXX	30.0	XXX	60	1/month	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab

Compliance Sampling Location: 153

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 253, Effective Period: Permit Effective Date through August 31, 2026.

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	Average Monthly	Daily Maximum	Instant. Maximum		
TSS	XXX	XXX	XXX	10.0	20.0	30	1/week	24-Hr Composite
Nitrate-Nitrite	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Total Arsenic	XXX	XXX	XXX	Report	Report	XXX	1/week	24-Hr Composite
Total Mercury	XXX	XXX	XXX	0.027	0.043	XXX	1/week	24-Hr Composite
Total Selenium	XXX	XXX	XXX	3.4	5.3	XXX	1/week	24-Hr Composite

Compliance Sampling Location: 253

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 353, Effective Period: Permit Effective Date through August 31, 2026.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Average Monthly	Daily Maximum	Maximum	Instant. Maximum		
TSS	XXX	XXX	30.0	100.0	XXX	125.0	1/week	24-Hr Composite

Compliance Sampling Location: 353

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, to comply with Pennsylvania's Chesapeake Bay Tributary Strategy.

Outfall 053, 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
	Monthly	Annual	Monthly	Monthly Average	Maximum	Instant. Maximum		
Total Nitrogen (lbs) Effluent Net	XXX	72749 Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Nitrogen (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Ammonia (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Phosphorus (lbs)	XXX	Report Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation
Total Phosphorus (lbs) Effluent Net	XXX	1200 Total Annual	XXX	XXX	XXX	XXX	1/year	Calculation

Compliance Sampling Location: 053

Special Part C Conditions

The following is a summary of Special Conditions that will be included in Part C of the draft permit:

1) ELG reopener clause
2) Chesapeake Bay Requirements
3) Chemical Additives Condition
4) Limits below detection levels
5) Stormwater Requirements (Annual Inspection Report & PPC Plan)

Additional Considerations

Rounding of Limitations

Limitations have been rounded in accordance with the Department's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits* (#362-0400-001). There are situations where additional decimal places are required.

Sample Frequencies and Types

For most of the parameters, the sample type and minimum measurement frequencies have been derived from the Department's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits* (#362-0400-001). An exception to the guidance has been made for Oil & Grease, relaxing it from 1/day to 1/week to conform to the frequencies of the majority of parameters in this permit.

WETT

No Whole Effluent Toxicity testing is required by the existing NPDES permit.

It is recommended the permit be drafted as described above.


Phase 2 Outfall 053 TMS.pdf


Phase 1 Outfall 053 TMS.pdf


2024.12.11.ChemicalAdditivesApproval.p


153.pdf


Water Balance Diagrams.pdf


TMS 052.pdf


Temperature Model 053.pdf


Montour_122.21r Report_Final_toTale


Notice of Planned Participation.pdf