pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0020532**
Facility Type	**Municipal**	APS ID	**1013668**
Major / Minor	**Major**	Authorization ID	**1309433**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Upper Montgomery Joint Authority**	Facility Name	**Upper Montgomery Joint Authority STP**
Applicant Address	1100 Mensch Dam Road	Facility Address	1100 Mensch Dam Road
	Pennsburg, PA 18073		Pennsburg, PA 18073
Applicant Contact	Jennifer Leister	Facility Contact	Jennifer Leister
Applicant Phone	(215) 679-5133	Facility Phone	(215) 679-5133
Client ID	52553	Site ID	449581
Ch 94 Load Status	Not Overloaded	Municipality	Upper Hanover Township
Connection Status	No Limitations	County	Montgomery
Date Application Received	March 9, 2020	EPA Waived?	No
Date Application Accepted		If No, Reason	DEP Discretion

Purpose of Application: Permit Renewal.

Summary of Review

The applicant requests renewal of a NPDES permit to discharge 2.0 MGD of treated sewage for the sewage treatment plant (STP) serving Upper Montgomery Joint Authority's WWTP located at 1100 Mensch Dam Road, Pennsburg, in Upper Hanover Township, Montgomery County. The treated effluent is being discharged to Green Lane Reservoir through Outfall 001. The stormwater runoff from the facility being discharged through Outfalls 002, 003, 004, 005, and 006 into Green Lane Reservoir. The receiving water at the point of discharge is classified as Warm Water Fisheries, Migratory Fisheries, and Public Water Supply. The STP serves Pennsburg Borough, Red Hill Borough, East Greenville Borough and Upper Hanover Township.

The STP consists of a Influent screen (2), Influent pumping station, Aerated grit chamber, Primary clarifiers (2), Biological nutrient removal tanks (2), Secondary clarifiers (3), Tertiary filtration, Chlorine contact tanks (3), Post-aeration tanks (3), and a Parshall flume. The solids management processes employed consist of Aerobic digesters (2), Centrifuge, and Sludge dryer. The existing WWTP is designed for an annual average flow of 2.0 MGD, an organic design capacity of 3,481 lbs/day of 5-day biochemical oxygen demand (CBOD5) and hydraulic design capacity of 2.77 MGD. The activated sludge biological nutrient removal treatment unit processes were phased into operation during 2019. The activated sludge was placed into operations in June 2019 and the tertiary filter was placed into operation in September 2019.

Green Lane Reservoir is a tributary to Perkiomen Creek, which, in turn, discharges to the Schuylkill River. On October 8, 2003, the U.S. Environmental Protection Agency, Region III (EPA), established the nutrient (Phosphorus) Total Maximum Daily Load (TMDL) in accordance with Section 303(d)(1)(c) and (2) of the Clean Water Act to address impairments of water quality as identified in Pennsylvania's 1996, 1998, and 2002 Section 303(d) lists. Green Lane Reservoir was not supporting its aquatic life use and was impaired by organic enrichment/low-dissolved oxygen due to agricultural sources. Organic enrichment impairments are typically addressed through the reduction of nutrient loading. Due to their cause-and-effect relationship, organic enrichment is generally spurred by excessive nutrient levels. The Phase I Clean Lake Report and the Trophic State Index (TSI) studies had documented elevated nutrient levels and algae blooms that impaired the designated

Approve	Deny	Signatures	Date
X		Ketan Thaker / Project Manager *Ketan Thaker*	12/1/2020
X		*Pravin Patel* Pravin C. Patel, P.E. / Environmental Engineer Manager	12/2/2020

Summary of Review

uses of Green Lane Reservoir, resulting in a hypereutrophic classification. However, these studies and water quality analyses indicated that the reservoir is not currently impaired due to low-dissolved oxygen (DO). The TMDL addresses the nutrient and excessive algal growth impairments.

Conventional Parameters:

Based on Monthly Discharge Monitoring Reports (DMRs), the discharge is generally in compliance with all conventional and nonconventional pollutant effluent limits. Since the receiving stream is impaired for nutrients, an approved TMDL effluent limitation for Phosphorus was included in the previous permit and has been continued in the renewal. Since there are no changes in the waste characteristics, receiving stream designation, or any regulatory requirements, the existing limits of all conventional parameters are carried over in this renewal. Effluent monitoring requirement for Total Nitrogen and Influent monitoring for CBOD5, BOD5 and Total Suspended Solids (TSS) will continue in this permit renewal.

Nonconventional Parameters:

Based on the current approved TMDL, an existing Phosphorus limit of 0.5 mg/l is continued in the renewal. The previous permit had a limit of 20 mg/l for Ammonia as Nitrogen (NH_3-N). Based on the DMR data, the facility is discharging under 10 mg/l; therefore, the NH_3-N limit had been reduced to 10 mg/l and was included in the last permit and will continue in this permit renewal. Also, the facility was not monitoring for Nitrate-Nitrogen and Nitrite Nitrogen. Since the facility is discharging into the reservoir, which is a source of potable water for the downstream users, monitoring of NO_2-N and NO_3-N was included in the last renewal and will in the next permit renewal. Also, the facility is located in the Delaware River Basin groundwater protection area; a Total Dissolved Solids limit of 1,000 mg/l was included in the last renewal as per the Delaware River Basin Commission (DRBC) recommendation and will continue in this renewal.

Toxic Parameters:

A Toxic Management Spreadsheet (TMS) was used to identify toxic pollutant of concern.
Two pollutants (Total Cooper, Dissolved Iron) are determined to be parameters of concern based on Priority Pollutant Screening. TMS is used to calculate WQBEL for these parameters. For Dissolved Iron, the average effluent concentration reported was at 160 micrograms/liter (ug/l) and only one effluent concentration was reported at 710 ug/l. Therefore, quarterly monitoring will continue for Dissolved Iron. As maximum reported concentration for Total Copper is between 10% -50% of the WQBEL, quarterly monitoring will continue in the permit which is consistent with SOP.

Following are the effluent limits:

PARAMETER	EFFLUENT LIMIT (AV.MO in mg/l)	BASIS
CBOD5	25	25 Pa Code 92a.47
Ammonia-Nitrogen	10	BPJ
Total Suspended Solids	30	25 Pa Code 92a.47
pH (S.U.)	6.0 to 9.0 SU	25 Pa Code 92a.47, 95.2
Dissolved Oxygen	5.0 Minimum	BPJ
Total Residual Chlorine	0.5	25 Pa Code 92a.47-48
Fecal Coliform (#/100 ml)	200 #/100 ml Geo Mean	25 Pa Code 92a.47
Total Phosphorus	0.5	TMDL – Green Lane Reservoir
Total Nitrogen	Report	25 Pa Code 92a.61 & BAT
Total Dissolved Solids	1000	DRBC
Nitrite-Nitrate as N	Report	Downstream Drinking Water use
Copper, Total	Report	Need additional data for evaluation
Dissolved Iron	Report	Need additional data for evaluation
Chronic Toxicity (TUc)	Report	WET Summary Report

Summary of Review

Whole Effluent Toxicity Test:

The applicant was required to conduct four chronic whole effluent toxicity test using dilution series 7%, 15%, 29%, 65%, and 100%. All tests were performed using Ceridaphnia Dubia for survival and reproduction and Pimephales Promelas for survival and growth. The TIWC is 29%. Attached WET Summary and Evaluation Spreadsheet shows all the WET tests passed, therefore, reasonable potential has not been demonstrated. Therefore, annual monitoring for Chronic WET testing will continue in this permit renewal with dilution series for the test is 7%, 15%, 29%, 65%, and 100%.

Pretreatment Program:

The Titanium Finishing Company is only the Industrial User (IUs) contributing 5098 GPD (2294 GPD Process and 2804 GPD of NCCW) into the UMJA system.

The facility does not have SIUs, therefore it is not required to have an approved EPA Pretreatment Program.

Inflow/Infiltration:

The facility experiences high flow during wet weather conditions. The permittee is required to update and implement their High-Flow Management Plan (HFMP) to manage the wastewater during high flow to achieve compliance with the effluent limitations. The permittee is required to minimize/eliminate bypass during high-flow conditions.

The sewage treatment plant is operated under a two-tiered, hydraulic capacity rating of 2.0 MGD annual average and monthly average of 2.5 MGD. Storm water flows of up to 5.5 MGD are captured and treated at the plant utilizing a combination of physical, chemical and biological processes to treat the wastewater. Flows above 5.5 MGD are diverted into storm water overflow basins and chlorinated. The stormwater is then combined with the wastewater treatment plant effluent and discharged into Green Lane Reservoir. Mr. Paul Jardel from our Operations Section had conversation with Plant Operator recently who informed that they no longer bypass and they permanently removed all bypass piping and pumps at the plant.

Act – 14 Notifications:

Upper Hanover Township	January 8, 2020
Montgomery County Planning Commission	October 15, 2019

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.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	2
Latitude	40Âº 23' 2.70"	Longitude	-75Âº 30' 6.12"
Quad Name		Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Perkiomen Creek (TSF) – Green Lane Reservoir	Stream Code	01017
NHD Com ID	25971736	RMI	25.1
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-E	Chapter 93 Class.	TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake			
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0
Latitude	40Âº 23' 5.48"	Longitude	-75Âº 30' 4.72"
Quad Name		Quad Code	
Wastewater Description:	Stormwater		
Receiving Waters	Perkiomen Creek (TSF) – Green Lane Reservoir	Stream Code	
NHD Com ID	25971674	RMI	
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-E	Chapter 93 Class.	TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake			
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	003	Design Flow (MGD)	0
Latitude	40Âº 23' 5.03"	Longitude	-75Âº 30' 5.00"
Quad Name		Quad Code	
Wastewater Description:	Stormwater		
Receiving Waters	Perkiomen Creek (TSF) – Green Lane Reservoir	Stream Code	
NHD Com ID	25971674	RMI	
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-E	Chapter 93 Class.	TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake			
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	004	Design Flow (MGD)	0
Latitude	40Âº 23' 3.01"	Longitude	-75Âº 30' 6.02"
Quad Name		Quad Code	
Wastewater Description:	Stormwater		
Receiving Waters	Perkiomen Creek (TSF) – Green Lane Reservoir	Stream Code	
NHD Com ID	25971736	RMI	
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-E	Chapter 93 Class.	TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake			
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	005	Design Flow (MGD)	0
Latitude	40Âº 23' 2.11"	Longitude	-75Âº 30' 6.32"
Quad Name		Quad Code	
Wastewater Description:	Stormwater		
Receiving Waters	Perkiomen Creek (TSF) – Green Lane Reservoir	Stream Code	
NHD Com ID	25971736	RMI	
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-E	Chapter 93 Class.	TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake			
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	006	Design Flow (MGD)	0
Latitude	40Âº 23' 8.77"	Longitude	-75Âº 30' 13.03"
Quad Name		Quad Code	
Wastewater Description:	Stormwater		
Receiving Waters	Perkiomen Creek (TSF) – Green Lane Reservoir	Stream Code	
NHD Com ID	25971734	RMI	
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-E	Chapter 93 Class.	TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake			
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Treatment Facility Summary				
Treatment Facility Name: Upper Montgomery Joint Authority STP				
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Tertiary	Activated Sludge With Solids Removal	Gas Chlorine	2
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
2.77	3481	Not Overloaded	Aerobic Digestion	Land Application

Compliance History

DMR Data for Outfall 001 (from October 1, 2019 to September 30, 2020)

Parameter	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19
Flow (MGD) Average Monthly	0.811	1.189	1.04	0.926	1.056	1.632	1.436	1.51	1.469	1.755	1.172	1.342
Flow (MGD) Weekly Average	1.128	2.559	1.515	1.045	1.307	2.332	1.809	2.159	1.861	2.394	1.633	2.948
pH (S.U.) Instantaneous Minimum	7.6	7.66	7.45	7.55	7.43	7.25	7.32	7.37	6.98	7.18	6.89	7.6
pH (S.U.) Instantaneous Maximum	8.09	8.05	8.08	7.97	8.1	7.87	7.93	7.83	7.79	7.87	7.93	8.03
DO (mg/L) Instantaneous Minimum	8.75	8.15	8.29	9.14	9.49	9.41	9.79	9.06	8.34	10.08	6.04	7.58
TRC (mg/L) Average Monthly	0.3	0.3	0.28	0.35	0.44	0.33	0.33	0.38	0.38	0.34	0.37	0.33
TRC (mg/L) Instantaneous Maximum	0.82	0.75	0.7	0.88	1.77	0.59	0.72	0.88	0.69	0.86	0.56	0.64
CBOD5 (lbs/day) Average Monthly	8	18	8	13	8	10	12	138	17	48	20	< 15.0
CBOD5 (lbs/day) Raw Sewage Influent Average Monthly	1049	971	926	912	837	968	942	963	954	1344	997	881.0
CBOD5 (lbs/day) Weekly Average	16	21	10	24	10	15	22	197	110	58	51	< 28.0
CBOD5 (mg/L) Average Monthly	1	2	1	2	1	1	1	1	2	3	2	< 2.0
CBOD5 (mg/L) Raw Sewage Influent Average Monthly	155.5	126.3	144.9	138.6	115.7	87	87.8	100.4	91.4	82.7	129.7	130.6
CBOD5 (mg/L) Weekly Average	2	3	2	2	1	1	1	1	7	3	4	4.0

BOD5 (lbs/day) Raw Sewage Influent Average Monthly	1378	1298	1309	1226	1209	1229	1211	1400	1268	1652	1390	1246
BOD5 (mg/L) Raw Sewage Influent Average Monthly	209.4	169.4	202.4	186.4	167.3	111.2	114.5	145.1	121.7	102.1	177	183.6
TSS (lbs/day) Average Monthly	18	25	14	14	9	28	22	17	19	< 51	53	< 23.0
TSS (lbs/day) Raw Sewage Influent Average Monthly	1330	1480	1548	1379	1274	1530	38392	1458	1422	1993	1467	1340
TSS (lbs/day) Weekly Average	23	42	21	21	11	51	58	35	46	97	164	< 31.0
TSS (mg/L) Average Monthly	3	4	2	2	1	2	2	2	1	< 3	3	< 3.0
TSS (mg/L) Raw Sewage Influent Average Monthly	225	218	244	210	166	123.9	115.8	150.8	115.9	136.1	145.6	180
TSS (mg/L) Weekly Average	4	5	4	3	2	3	4	3	3	4	6	4.0
Total Dissolved Solids (lbs/day) Average	4145			3210			5930			2563.4		
Total Dissolved Solids (lbs/day) Daily Maximum	4145			3210			5930			2563.4		
Total Dissolved Solids (mg/L) Average	392			392			369			313		
Total Dissolved Solids (mg/L) Daily Maximum	392			392			369			313		
Fecal Coliform (No./100 ml) Geometric Mean	6	11	7	4	< 1	6	2	8	29	57	34	< 12.0
Fecal Coliform (No./100 ml) Instantaneous Maximum	1553.1	111.2	30.5	104.6	1	488.4	4.1	488.4	461.1	686.7	166.4	> 2419.6

Nitrate-Nitrite (mg/L) Average Monthly	4.19	4.31	2.86	5.52	5.47	3.31	4.09	4.29	4.65	< 7.05	15.6	6.32
Total Nitrogen (lbs/day) Average Monthly	35	428	38	39	66	35	44	135	130	< 217	110	63.0
Total Nitrogen (mg/L) Average Monthly	5.55	5.66	3.62	6.79	6.2	4.32	5.35	5.5	8.07	< 7.89	16.98	8.09
Ammonia (lbs/day) Average Monthly	7	8	0.3	2	0.2	0.7	5	8	7	14	4	3.0
Ammonia (mg/L) Average Monthly	1.1	1.0	0.04	0.2	0.03	0.1	0.3	0.9	0.5	0.8	0.3	0.30
Total Phosphorus (lbs/day) Average Monthly	1.31	1.54	0.80	1.06	1.39	1.86	2.33	2.55	2.04	5.51	6.59	1.61
Total Phosphorus (mg/L) Average Monthly	0.227	0.233	0.136	0.151	0.163	0.148	0.212	0.251	0.154	0.305	0.419	0.169
Total Copper (mg/L) Average Monthly	0.01			0.006			0.006			0.007		
Dissolved Iron (mg/L) Average Monthly	0.03			0.04			0.06			0.03		
Chronic WET - Ceriodaphnia Survival (TUc) Daily Maximum										3.45		
Chronic WET - Ceriodaphnia Reproduction (TUc) Daily Maximum										3.45		
Chronic WET - Pimephales Survival (TUc) Daily Maximum										3.45		
Chronic WET - Pimephales Growth (TUc) Daily Maximum										3.45		

DMR Data for Outfall 002 (from October 1, 2019 to September 30, 2020)

Parameter	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19

pH (S.U.) Minimum										8.49		
pH (S.U.) Maximum										8.49		
CBOD5 (mg/L) Daily Maximum										14.9		
COD (mg/L) Daily Maximum										331		
TSS (mg/L) Daily Maximum										1700		
Oil and Grease (mg/L) Daily Maximum										< 5		
TKN (mg/L) Daily Maximum										5.34		
Total Phosphorus (mg/L) Daily Maximum										6.99		
Dissolved Iron (mg/L) Daily Maximum										< 0.02		

DMR Data for Outfall 003 (from October 1, 2019 to September 30, 2020)

Parameter	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19
pH (S.U.) Minimum										8.49		
pH (S.U.) Maximum										8.49		
CBOD5 (mg/L) Daily Maximum										14.9		
COD (mg/L) Daily Maximum										331		
TSS (mg/L) Daily Maximum										1700		
Oil and Grease (mg/L) Daily Maximum										< 5		
TKN (mg/L) Daily Maximum										5.34		
Total Phosphorus (mg/L) Daily Maximum										6.99		
Dissolved Iron (mg/L) Daily Maximum										< 0.02		

DMR Data for Outfall 004 (from October 1, 2019 to September 30, 2020)

Parameter	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19
pH (S.U.) Minimum										8.49		
pH (S.U.) Maximum										8.49		
CBOD5 (mg/L) Daily Maximum										14.9		
COD (mg/L) Daily Maximum										331		
TSS (mg/L) Daily Maximum										1700		
Oil and Grease (mg/L) Daily Maximum										< 5		
TKN (mg/L) Daily Maximum										5.34		
Total Phosphorus (mg/L) Daily Maximum										6.99		
Dissolved Iron (mg/L) Daily Maximum										< 0.02		

DMR Data for Outfall 005 (from October 1, 2019 to September 30, 2020)

Parameter	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19
pH (S.U.) Minimum										8.49		
pH (S.U.) Maximum										8.49		
CBOD5 (mg/L) Daily Maximum										14.9		
COD (mg/L) Daily Maximum										331		
TSS (mg/L) Daily Maximum										1700		
Oil and Grease (mg/L) Daily Maximum										< 5		
TKN (mg/L) Daily Maximum										5.34		

Total Phosphorus (mg/L) Daily Maximum										6.99		
Dissolved Iron (mg/L) Daily Maximum										< 0.02		

DMR Data for Outfall 006 (from October 1, 2019 to September 30, 2020)

Parameter	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19
pH (S.U.) Minimum										8.49		
pH (S.U.) Maximum										8.49		
CBOD5 (mg/L) Daily Maximum										14.9		
COD (mg/L) Daily Maximum										331		
TSS (mg/L) Daily Maximum										1700		
Oil and Grease (mg/L) Daily Maximum										< 5		
TKN (mg/L) Daily Maximum										5.34		
Total Phosphorus (mg/L) Daily Maximum										6.99		
Dissolved Iron (mg/L) Daily Maximum										< 0.02		

WET Summary and Evaluation

Facility Name	Upper Montgomery Joint Authority STP
Permit No.	PA0020532
Design Flow (MGD)	2
Q_{7-10} Flow (cfs)	7.57
PMF_a	1
PMF_c	1

		Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Species	**Endpoint**	11/26/19	10/30/18	5/9/17	5/2/16
Ceriodaphnia	Survival	Pass	Pass	Pass	Pass

		Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Species	**Endpoint**	11/26/19	10/30/18	5/9/17	5/2/16
Ceriodaphnia	Reproduction	Pass	Pass	Pass	Pass

		Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Species	**Endpoint**	10/8/19	10/30/18	5/9/17	5/3/16
Pimephales	Survival	Pass	Pass	Pass	Pass

		Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Species	**Endpoint**	10/8/19	10/30/18	5/9/17	5/3/16
Pimephales	Growth	Pass	Pass	Pass	Pass

Reasonable Potential? NO

Permit Recommendations

Test Type	**Chronic**
TIWC	**29** % Effluent
Dilution Series	**7, 15, 29, 65, 100** % Effluent
Permit Limit	**None**
Permit Limit Species	

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" (362-0400-001), 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	Weekly Average	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Recorded Daily Flow
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.2	1/day	Grab
CBOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
CBOD5	417	667	XXX	25	40 Wkly Avg	50	2/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
TSS	500	750	XXX	30	45 Wkly Avg	60	2/week	24-Hr Composite
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
Total Dissolved Solids	16680 Avg Qrtly	33360 Daily Max	XXX	1000.0 Avg Qrtly	2000.0	2500	1/quarter	24-Hr Composite
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/week	Grab
Nitrate-Nitrite	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Nitrogen	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Ammonia	167	XXX	XXX	10.0	XXX	20	2/week	24-Hr Composite

Outfall 001, 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	Weekly Average	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Phosphorus	8.34	XXX	XXX	0.5	XXX	1	2/week	24-Hr Composite
Total Copper	XXX	XXX	XXX	Report Avg Qrtly	Report	XXX	1/quarter	24-Hr Composite
Dissolved Iron	XXX	XXX	XXX	Report Avg Qrtly	Report	XXX	1/quarter	24-Hr Composite
Chronic WET - Ceriodaphnia Survival (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite
Chronic WET - Ceriodaphnia Reproduction (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite
Chronic WET - Pimephales Survival (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite
Chronic WET - Pimephales Growth (TUc)	XXX	XXX	XXX	XXX	Report	XXX	See Permit	24-Hr Composite

Proposed Effluent Limitations and Monitoring Requirements

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Outfalls 002, 003, 004, 005, and 006 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	Report Inst Min	XXX	XXX	Report	1/year	Grab
CBOD5	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
TKN	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Dissolved Iron	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab