

Application Type Renewal
Facility Type Municipal
Major / Minor Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0054780
APS ID 1102540
Authorization ID 1464825

Applicant and Facility Information

Applicant Name	<u>Concord Township Delaware County</u>	Facility Name	<u>Riviera At Concord STP</u>
Applicant Address	<u>43 S Thornton Road</u> <u>Glen Mills, PA 19342-1325</u>	Facility Address	<u>49 North Valentine Drive</u> <u>Garnet Valley, PA 19060</u>
Applicant Contact	<u>Amanda Serock</u>	Facility Contact	<u>James Saunders</u>
Applicant Phone	<u>(610) 459-8911</u>	Facility Phone	<u>(610) 558-0578</u>
Client ID	<u>71374</u>	Site ID	<u>451639</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Concord Township</u>
Connection Status		County	<u>Delaware</u>
Date Application Received	<u>December 11, 2023</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted		If No, Reason	
Purpose of Application	<u>Permit Renewal.</u>		

Summary of Review

Permittee requests renewal of an NPDES permit to discharge treated sewage from Riviera at Concord STP.

The STP consists of an equalization tank, aeration tank, clarifier, digester and chlorine contact tank. The treated sewage exits the facility to the Green Creek. No changes or upgrades are proposed to the treatment facilities over the next five years.

There are no industrial dischargers to this system. There were no process changes since last renewal, therefore the previous permit limits have been rolled over to this renewal.

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)	.0635
Latitude	39° 52' 1.74"	Longitude	-75° 28' 30.28"
Quad Name	Marcus Hook	Quad Code	2042
Wastewater Description: Sewage Effluent			
Receiving Waters	Green Creek (CWF, MF)	Stream Code	00546
NHD Com ID	133072451	RMI	1.0
Drainage Area	3.43 mi ²	Yield (cfs/mi ²)	
Q ₇₋₁₀ Flow (cfs)	0.65	Q ₇₋₁₀ Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	3-G	Chapter 93 Class.	CWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	CAUSE UNKNOWN, FLOW REGIME MODIFICATION, HABITAT ALTERATIONS, SILTATION		
Source(s) of Impairment	HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS		

Treatment Facility Summary				
Treatment Facility Name: Riviera At Concord STP				
WQM Permit No.		Issuance Date		
2392414		12/19/2011		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	Chlorine With Dechlorination	0.0635
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0635	132.4	Not Overloaded		

Changes Since Last Permit Issuance: There are no process changes to the facility since last permit issuance.

Compliance History

DMR Data for Outfall 001 (from December 1, 2022 to November 30, 2023)

Parameter	NOV-23	OCT-23	SEP-23	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23	DEC-22
Flow (MGD) Average Monthly	0.024	0.020	0.021	0.020	0.019	0.019	0.020	0.020	0.021	0.021	0.025	0.027
Flow (MGD) Daily Maximum	0.038	0.031	0.028	0.032	0.033	0.032	0.031	0.032	0.029	0.036	0.042	0.037
pH (S.U.) Instantaneous Minimum	7.5	6.9	7.4	7.6	7.3	7.4	7.4	7.3	7.2	7.5	7.2	6.5
pH (S.U.) Instantaneous Maximum	8.3	8.1	8.2	8.1	8.2	8.2	8.0	7.8	7.9	7.9	7.9	8.2
DO (mg/L) Instantaneous Minimum	6.8	6.3	6.3	5.8	6.3	4.9	6.9	6.3	6.1	6.7	6.7	6.8
TRC (mg/L) Average Monthly	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG
TRC (mg/L) Instantaneous Maximum	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG
CBOD5 (lbs/day) Average Monthly	< 0.54	0.90	< 0.57	< 0.77	< 0.43	0.77	1.01	< 0.72	0.46	0.69	1.52	1.10
CBOD5 (lbs/day) Raw Sewage Influent Average Monthly	64.71	55.89	40.69	50.73	54.16	60.9	66.31	58.12	57.78	75.69	104.07	62.80
CBOD5 (mg/L) Average Monthly	< 2.70	5.75	< 3.50	5.05	< 2.95	5.65	6.80	< 4.50	2.85	3.95	6.60	4.80
CBOD5 (mg/L) Raw Sewage Influent Average Monthly	325.50	357.50	259.50	336.00	364.50	443.75	451.50	371.00	360.00	431.50	433.50	278.00
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	68.91	63.56	43.45	54.43	59.43	65.53	70.90	33.05	62.11	83.39	114.23	69.26

**NPDES Permit Fact Sheet
Riviera At Concord STP**

NPDES Permit No. PA0054780

BOD5 (mg/L) Raw Sewage Influent Average Monthly	348.00	406.50	276.00	360.00	400.00	477.50	482.50	226.50	387.00	475.00	474.50	306.50
TSS (lbs/day) Average Monthly	1.33	0.97	1.53	< 0.99	1.48	1.70	< 0.83	1.46	1.22	1.31	2.28	< 1.39
TSS (lbs/day) Raw Sewage Influent Average Monthly	74.41	60.44	69.57	47.71	60.92	46.93	43.42	52.81	46.42	49.57	102.39	80.53
TSS (mg/L) Average Monthly	7.30	6.20	9.70	< 6.50	9.90	12.40	< 5.60	9.40	7.60	7.50	9.80	< 6.20
TSS (mg/L) Raw Sewage Influent Average Monthly	406.00	389.00	417.00	314.00	413.00	342.00	292.00	339.00	289.00	282.00	429.00	346.00
Fecal Coliform (CFU/100 ml) Geometric Mean	49	108	< 12	169	123	81	109	183	129	134	34	127
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	96	117	133	187	131	140	179	187	140	158	81	248
Ammonia (lbs/day) Average Monthly	< 0.05	0.03	< 0.03	0.07	0.09	0.10	0.14	0.08	0.06	0.07	0.10	0.11
Ammonia (mg/L) Average Monthly	< 0.34	0.20	< 0.20	0.47	0.64	0.71	0.93	0.51	0.36	0.41	0.43	0.48
Total Phosphorus (lbs/day) Average Monthly	0.14	0.07	0.20	0.20	0.14	0.10	0.14	0.08	0.11	0.10	0.08	0.10
Total Phosphorus (mg/L) Average Monthly	0.79	0.5	1.50	1.4	0.9	0.7	0.9	0.49	0.71	0.54	0.33	0.43

Development of Effluent Limitations

Outfall No. 001 Design Flow (MGD) 0.0635
 Latitude 39° 52' 4.00" Longitude 75° 28' 31.00"
 Wastewater Description: Treated sewage

Effluent Parameter	Technology Based Limits			Water Quality Based Limits			Basis for Limits
	% Removal	Monthly Ave. Conc (mg/l)	Weekly Ave Conc. (mg/l)	Monthly Ave. Conc (mg/l)	Weekly Ave Conc. (mg/l)	Inst. Max. (mg/l)	
CBOD ₅	85	25	40	25		50	Previous WQM 7.0
Total Suspended Solids	85	30	45	30		60	DRBC
NH ₃ -N (5/1 TO 10/31)				6.0		12.0	Previous WQM 7.0
NH ₃ -N (11/1 TO 4/30)				18.0		36.0	
Phosphorus as P (5/1 to 10/31)				1.0		2.0	existing
Phosphorus as P (11/1 to 4/30)				2.0		4.0	
Dissolved Oxygen						3.0 (Inst. Min.)	Previous WQM 7.0
Total Residual Chlorine		0.5	1.2	0.5		1.6	spreadsheet
Fecal Coliform		<200/100 ml		200/100 ml		1000/100ml	Ch. 93
PH	6.0 to 9.0 STD units all the times			6.0 to 9.0 std. units			Ch. 93

Comments: all existing limits are carried over to the new 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	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	4.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
CBOD5	13	XXX	XXX	25	XXX	50	2/month	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
TSS	16	XXX	XXX	30	XXX	60	2/month	24-Hr Composite
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Fecal Coliform (CFU/100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Ammonia Nov 1 - Apr 30	9.5	XXX	XXX	18.0	XXX	36	2/month	24-Hr Composite

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		
Ammonia May 1 - Oct 31	3.0	XXX	XXX	6.0	XXX	12	2/month	24-Hr Composite
Total Phosphorus Nov 1 - Apr 30	1.0	XXX	XXX	2.0	XXX	4	2/month	24-Hr Composite
Total Phosphorus May 1 - Oct 31	0.5	XXX	XXX	1.0	XXX	2	2/month	24-Hr Composite

Approve	Deny	Signatures	Date
X		<i>Christian French</i> Christian French / Environmental Engineering Specialist	January 5, 2024
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	01/06/2024