

Application Type Renewal  
 Facility Type Non-Municipal  
 Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0052744  
 APS ID 1098846  
 Authorization ID 1458312

**Applicant and Facility Information**

Applicant Name	<u>Concordville Hotel Inc.</u>	Facility Name	<u>Concordville Hotel STP</u>
Applicant Address	<u>780 Baltimore Pike P O Box 607</u> <u>Concordville, PA 19331-0607</u>	Facility Address	<u>780 Baltimore Pike P O Box 607</u> <u>Concordville, PA 19331</u>
Applicant Contact	<u>Alexander Hionis</u>	Facility Contact	<u>Alexander Hionis</u>
Applicant Phone	<u>(610) 558-0990</u>	Facility Phone	<u>(610) 558-0990</u>
Client ID	<u>86008</u>	Site ID	<u>451645</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Concord Township</u>
Connection Status		County	<u>Delaware</u>
Date Application Received	<u>September 26, 2023</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted		If No, Reason	
Purpose of Application	<u>Renewal</u>		

**Summary of Review**

The applicant requested approval for renewal of a NPDES permit to discharge an average monthly flow of 25,000 gpd of treated sewage from a sewage treatment plant serving Concordville Hotel to an unnamed tributary of the West Branch of Chester Creek. The average annual flow for each of the previous 3 years was approximately 0.012 mgd and the highest monthly average flow was 0.014 mgd, which occurred May 2022.

The STP consists of bar screens, an aerated flow equalization tank, an extended aeration treatment plant, a clarifier, a abandoned denitrification tank (currently unused, based on 1997 water quality protection report detailing site visits and biologist/hydrogeologist determinations that nitrite-nitrate limits were unnecessary to protect groundwater/drinking water), a sludge holding tank, a liquid hypochlorinator and chlorine contact tank including flow measurement, and a dichlorination tank including post aeration. The discharge from the STP is to a subsurface culvert that mixes with flow from a pond located on the site. A buried pipe then leads under Route 322 where the pipe discharges to the unnamed tributary to West Branch of Chester Creek.

Limits for CBOD5, TSS, NH3-N, TRC, fecal coliform, pH and DO remain unchanged from the current permit. The limits reflect either technology requirements for treated sewage or water quality modeling results (modeling results, from earlier analysis, are in microfiche). The current limits that will be rolled over for this permit for CBOD5, TSS, NH3-N, TRC, fecal coliform, pH and DO are, respectively, 20/25 mg/l, 30 mg/l, 3.0/9.0 mg/l, 0.13 mg/l, 200 col/100 ml, 6.0 – 9.0 standard units, and 5.0 mg/l.

Concord Township is currently upgrading their collection system in order to provide public sewer to residential, commercial, and institutional equivalent dwelling unit. In 2018, Concord Township as part of Rt. 322 widening project installed a sanitary sewer line to provide public sewer service to this section of the township including the Concordville Hotel and now is expected to complete the project by 2024. Part C has been updated accordingly. Therefore, the Concordville Hotel shall tie in their sewer line to Concord Township sewer system for treatment and disposal as soon as the system is available.

Approve	Deny	Signatures	Date
X		<i>Vasantha</i> Vasantha Palakurti / Environmental Engineering Specialist	October 18, 2023
		Pravin C. Patel, P.E. / Environmental Engineer Manager	

**Summary of Review**

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.	<u>001</u>	Design Flow (MGD)	<u>.025</u>
Latitude	<u>39° 52' 55.78"</u>	Longitude	<u>-75° 31' 26.83"</u>
Quad Name	<u></u>	Quad Code	<u></u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Webb Creek (TSF, MF)</u>	Stream Code	<u>00565</u>
NHD Com ID	<u>25621468</u>	RMI	<u>0.7</u>
Drainage Area	<u></u>	Yield (cfs/mi <sup>2</sup> )	<u></u>
Q <sub>7-10</sub> Flow (cfs)	<u></u>	Q <sub>7-10</sub> Basis	<u></u>
Elevation (ft)	<u></u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>3-G</u>	Chapter 93 Class.	<u>TSF, MF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>CAUSE UNKNOWN, FLOW REGIME MODIFICATION, HABITAT ALTERATIONS, SILTATION</u>		
Source(s) of Impairment	<u>HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS</u>		

Changes Since Last Permit Issuance: No changes to the facility since last renewal.

Compliance History

DMR Data for Outfall 001 (from September 1, 2022 to August 31, 2023)

Parameter	AUG-23	JUL-23	JUN-23	MAY-23	APR-23	MAR-23	FEB-23	JAN-23	DEC-22	NOV-22	OCT-22	SEP-22
Flow (MGD) Average Monthly	0.01112	0.01043	0.00989	0.01066	0.00892	0.00985	0.00749	0.00653	0.00819	0.00973	0.01417	0.01178
Flow (MGD) Daily Maximum	0.01980	0.01970	0.01800	0.02110	0.0140	0.02160	0.01300	0.01430	0.01690	0.01800	0.02110	0.01830
pH (S.U.) Instantaneous Minimum	7.00	7.03	7.06	7.01	7.03	7.10	7.14	7.13	7.14	7.10	6.24	6.84
pH (S.U.) Instantaneous Maximum	7.33	7.35	7.27	7.36	7.45	7.34	7.37	7.46	7.45	7.89	7.38	7.34
DO (mg/L) Instantaneous Minimum	6.5	6.5	7.0	6.8	7.0	7.0	7.0	7.0	7.0	6.5	6.8	6.8
TRC (mg/L) Average Monthly	0.030	0.017	0.018	0.018	0.023	0.022	0.020	0.022	0.024	0.025	0.022	0.021
TRC (mg/L) Instantaneous Maximum	0.08	0.04	0.04	0.04	0.05	0.06	0.05	0.05	0.05	0.05	0.06	0.05
CBOD5 (lbs/day) Average Monthly	< 0.15	< 0.194	< 0.113	< 0.13	0.166	< 0.238	< 0.159	0.119	< 0.117	< 0.139	< 0.254	< 0.316
CBOD5 (mg/L) Average Monthly	< 2.4	< 2	< 2	< 2	3.15	< 2.25	< 3.4	3.8	< 2.25	< 2	< 2.45	< 3.4
TSS (lbs/day) Average Monthly	< 0.176	0.22	< 0.056	0.362	0.649	0.72	0.198	0.229	0.289	< 0.07	0.814	0.236
TSS (mg/L) Average Monthly	< 2.5	4	< 1	5.5	13	9	3.5	8	5.5	< 1	8	2.5
Fecal Coliform (No./100 ml) Geometric Mean	< 6.8	< 3.7	< 7.9	< 3.2	< 25.7	17.5	< 2	5	< 18.7	< 4.7	< 2	< 2
Fecal Coliform (No./100 ml) Instantaneous Maximum	23	7	31	5	330	34	< 2	5	175	11	< 2	< 2
Total Nitrogen (lbs/day) Average Quarterly			2.43			0.85			1.04			< 1.47

**NPDES Permit Fact Sheet  
Concordville Hotel STP**

**NPDES Permit No. PA0052744**

Total Nitrogen (mg/L) Average Quarterly			49.5			23.06			16.27			< 18.2
Ammonia (lbs/day) Average Monthly	0.003	0.013	< 0.012	< 0.012	0.005	0.012	0.012	0.001	0.019	0.002	0.028	0.022
Ammonia (mg/L) Average Monthly	0.05	0.25	< 0.22	< 0.22	0.1	0.145	0.21	0.035	0.24	0.03	0.28	0.23
Total Phosphorus (lbs/day) Average Monthly	0.041	0.034	0.039	0.033	0.093	0.11	0.032	0.028	0.024	0.043	0.066	0.04
Total Phosphorus (mg/L) Average Monthly	0.545	0.615	0.69	0.555	1.673	1.08	0.64	0.815	0.425	0.615	0.705	0.42

**Compliance History**

During 5/10/2023 inspection, it was noted that the discharge contained floating materials, scum, sheen, oil & grease in receiving waters and Clarifier was covered by sludge

**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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> 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/week	Measured
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	0.13	XXX	0.3	1/day	Grab
CBOD5 Nov 1 - Apr 30	5.2	XXX	XXX	25	XXX	50	2/month	24-Hr Composite
CBOD5 May 1 - Oct 31	4.2	XXX	XXX	20	XXX	40	2/month	24-Hr Composite
TSS	6.3	XXX	XXX	30	XXX	60	2/month	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Total Nitrogen	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Ammonia Nov 1 - Apr 30	1.9	XXX	XXX	9.0	XXX	18	2/month	24-Hr Composite
Ammonia May 1 - Oct 31	0.6	XXX	XXX	3.0	XXX	6	2/month	24-Hr Composite

Outfall 001 , Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Total Phosphorus Nov 1 - Apr 30	0.42	XXX	XXX	2.0	XXX	4	2/month	24-Hr Composite
Total Phosphorus May 1 - Oct 31	0.21	XXX	XXX	1.0	XXX	2	2/month	24-Hr Composite

