Pennsylvania Department of Environmental Protection

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0033162**
Facility Type	**Non-Municipal**	APS ID	**1095098**
Major / Minor	**Minor**	Authorization ID	**1460167**

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Centre MHC LLC**	Facility Name	**Martha's Furnace**
Applicant Address	3824 Trythall Street	Facility Address	100 Peppermint Lane
	Bethlehem, PA 18020-2925		Julian, PA 16844
Applicant Contact	Madhuri Gorrepati	Facility Contact	Andrew Meloy
Applicant Phone	(973) 960-2425	Facility Phone	(814) 329-8811
Client ID	378328	Site ID	237607
Ch 94 Load Status	Not Overloaded	Municipality	Huston Township
Connection Status	No Limitations	County	Centre
Date Application Received	October 30, 2023	EPA Waived?	Yes
Date Application Accepted	November 13, 2023	If No, Reason	

Purpose of Application: Renewal and transfer of an existing NPDES permit for the discharge of treated sewage.

Summary of Review

Overview

The permittee has requested to transfer the NPDES permit from Centre County MHC, LLC d/b/a Martha's Furnace MHP to Centre MHC LLC. The transfer of ownership occurred on May 30, 2023. Shortly after receiving the transfer application, the permittee also submitted an application to renew the existing NPDES permit. The renewed NPDES permit will be issued under the new permittee. The facility's WQM permit (1400403) will also be transferred when the NPDES permit is renewed.

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
X		Derek S. Garner / Project Manager	January 23, 2025
X		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	January 24, 2025

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.0072
Latitude	40º 50' 20.66"	Longitude	-77º 59' 28.73"
Quad Name	Julian	Quad Code	1222
Wastewater Description:	Sewage Effluent		

Receiving Waters	UNT to Bald Eagle Creek [1]	Stream Code	22412
NHD Com ID	67179980	RMI	42.93
Drainage Area	n/a	Yield (cfs/mi^2)	n/a
Q_{7-10} Flow (cfs)	n/a	Q_{7-10} Basis	n/a
Elevation (ft)	n/a	Slope (ft/ft)	n/a
Watershed No.	9-C	Chapter 93 Class.	TSF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Not Assessed		
Cause(s) of Impairment	n/a		
Source(s) of Impairment	n/a		
TMDL Status	n/a	Name	n/a

Nearest Downstream Public Water Supply Intake	PA American Water		
PWS Waters	West Branch Susquehanna River	Flow at Intake (cfs)	682
PWS RMI	10.6	Distance from Outfall (mi)	98

[1] The UNT to Bald Eagle Creek is a dry swale. Bald Eagle Creek has historically been treated as the Point of First Use (POFU). Previous assessments of the discharge have concluded that the effluent does not reach Bald Eagle Creek during low-flow conditions.

Treatment Facility Summary

The Martha's Furnace Mobile Home Park treatment plant and collection system was constructed in 1971 under WQM Permit No. 1471409. A separate WQM permit (No. 1400403) was issued in 2000 for the addition of a new aerobic digester and has since been used as the facility's main permit for upgrades.

Treatment at the facility generally consists of:

- One (1) 1,300-gal settling tank w/ two effluent filters,
- One (1) 3,000-gal EQ tank,
- One (1) 926-gal anoxic tank,
- One (1) 2,160-gal aerated membrane bioreactor tank,
- One (1) 400-gal chlorine contact tank,
- One (1) 1,800-gal sludge holding tank, and
- One (1) emergency sand filter bed

Disinfected effluent is ultimately discharged via Outfall 001 to an unnamed tributary to Bald Eagle Creek.

Wasted sludge is hauled to another wastewater treatment plant by a contractor.

No hauled-in wastes were accepted within the past three years and receipt of hauled-in wastes is not anticipated over the next five years.

Compliance History

The facility was most recently inspected by DEP on February 1, 2024. At the time of inspection, all treatment units were operational, and no impact was noted at Outfall 001. The inspection report noted numerous late eDMR submissions and effluent violations since the previous inspection.

The following effluent violations occurred during the existing permit's term:

Noncompliance Date	Noncompliance Description	Parameter	Sample Value	Violation Condition	Permit Value	Units	SBC
7/24/2021	Violation of permit condition	Ammonia-Nitrogen	3.3	>	3	mg/L	Average Monthly
7/24/2021	Violation of permit condition	Ammonia-Nitrogen	6.106	>	6	mg/L	Instantaneous Maximum
7/24/2021	Violation of permit condition	Fecal Coliform	2417.6	>	1000	No./100 ml	Instantaneous Maximum
8/25/2021	Violation of permit condition	Ammonia-Nitrogen	10.6	>	6	mg/L	Instantaneous Maximum
8/25/2021	Violation of permit condition	Ammonia-Nitrogen	8.5	>	3	mg/L	Average Monthly
12/20/2022	Violation of permit condition	Total Suspended Solids	11.2	>	10	mg/L	Average Monthly
2/1/2024	Violation of permit condition	Fecal Coliform	4839	>	2000	No./100 ml	Geometric Mean
8/28/2023	Violation of permit condition	Fecal Coliform	1203.3	>	1000	No./100 ml	Instantaneous Maximum
10/5/2023	Late DMR Submission						
10/5/2023	Violation of permit condition	Fecal Coliform	1046.2	>	1000	No./100 ml	Instantaneous Maximum
10/29/2023	Late DMR Submission						
11/29/2023	Late DMR Submission						
11/29/2023	Violation of permit condition	Ammonia-Nitrogen	15.4	>	3	mg/L	Average Monthly
11/29/2023	Violation of permit condition	Ammonia-Nitrogen	30.69	>	6	mg/L	Instantaneous Maximum
1/19/2024	Violation of permit condition	Total Suspended Solids	13.8	>	10	mg/L	Average Monthly
1/19/2024	Violation of permit condition	Total Suspended Solids	26	>	20	mg/L	Instantaneous Maximum
3/29/2024	Late DMR Submission						
8/26/2024	Violation of permit condition	Fecal Coliform	1302	>	1000	No./100 ml	Instantaneous Maximum
8/26/2024	Violation of permit condition	Fecal Coliform	335	>	200	No./100 ml	Geometric Mean
8/26/2024	Violation of permit condition	Total Suspended Solids	12.2	>	10	mg/L	Average Monthly
8/26/2024	Violation of permit condition	Total Suspended Solids	20.4	>	20	mg/L	Instantaneous Maximum
9/27/2024	Violation of permit condition	Fecal Coliform	935	>	200	No./100 ml	Geometric Mean
9/27/2024	Violation of permit condition	Fecal Coliform	9678.4	>	1000	No./100 ml	Instantaneous Maximum

The Operations Section is aware of the above chronic noncompliance and has been in contact with the permittee.

A Consent Order and Agreement was entered into on December 12, 2023 by and between DEP and the permittee for a failure to submit a timely NPDES renewal application.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0072
Latitude 40º 50' 20.66" **Longitude** -77º 59' 28.73"
Wastewater Description: Sewage Effluent

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$ (1)	10	Average Monthly	-	-
	20	Average Weekly	-	-
Total Suspended Solids (1)	10	Average Monthly	-	-
	20	Average Weekly	-	-
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)

(1) See BPJ determination below

Water Quality-Based Limitations

As noted on page two, the discharge does not reach what would be considered the point of first use, Bald Eagle Creek. Accordingly, a water quality analysis was not conducted.

Best Professional Judgment (BPJ) Limitations

The existing limits for CBOD5 and TSS are technology-based recommendations taken from the *Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers* (391-2000-014). Seasonal limits for CBOD5 were previously applied in accordance with the previous version of the intermittent stream guidance. DEP recommends that existing limits for CBOD5 and TSS remain in the permit.

Historically, seasonal ammonia-n effluent limitations and dissolved oxygen monitoring requirements have been applied to the discharge. DEP is unaware of any changes to the characteristics of the effluent or receiving water that would impact the previous BPJ determinations. Accordingly, DEP recommends that the existing season ammonia-n effluent limitations and dissolved oxygen monitoring requirements remain in the permit.

An annual reporting requirement for E. Coli is proposed per the 2017 Triennial Review of Water Quality Standards, published in the PA Bulletin on July 11, 2020.

Chesapeake Bay Requirements

Pennsylvania's Phase 3 Watershed Implementation Plan ("WIP") Wastewater Supplement (Revised, July 29, 2022) identifies the Martha's Furnace STP as a Phase 5 facility (> 0.002 MGD and < 0.2 MGD). Phase 5 facilities are required to report total nitrogen ("TN") and total phosphorus ("TP") on an annual basis unless the facility has already completed at least two years of nutrient monitoring. The fact sheet developed for the 2018 renewal summarized the previous permit term's TN and TP monitoring data as averaging 20.6 mg/l TN and 5.51 mg/l TP.

Since the facility has already completed the WIP's nutrient monitoring requirements, DEP is not proposing to reestablish

requirements for TN or TP.

Anti-Backsliding

In accordance with 40 CFR 122.44(l)(1) and (2), this permit does not contain effluent limitations, standards, or conditions that are less stringent than the previous permit.

Site-Specific Part C Condition

The following existing site-specific condition is proposed to remain in Part C of the permit:

A bypass of the Membrane Bioreactor (MBR) treatment portion of the treatment plant is authorized only when, (1) it is in accordance with the provision of 40 CFR § 122.41(m), and (2) the flow rate to the treatment plant exceeds 0.0072 MGD. Bypasses that occur when the flow at the time of the bypass is less than the above specified flow rate are not authorized under this condition.

In the event of a bypass authorized under this condition, the permittee shall minimize the discharge of pollutants to the receiving water. The bypass may not cause the effluent from the treatment plant either to exceed the effluent limits contained in its permit or to cause or contribute to a violation of water quality standards. The permittee shall monitor the sewage effluent discharge(s) for the effluent parameters identified in the Part A limitations table(s) during all bypass events to the sand filter at the facility, using the sample types that are specified in the limitations table(s). The results shall be reported on the Daily Effluent Monitoring supplemental form (3800-FM-BCW0435) and be incorporated into the calculations used to report self-monitoring data on Discharge Monitoring Reports (DMRs). Authorization of bypasses under this provision may be modified or terminated when there is a substantial change in the volume or character of pollutants being introduced to the treatment plant or in the bypassed flow.

Existing Effluent Limitations and Monitoring Requirements

The existing effluent limitations and monitoring requirements are as follows:

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum 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	Weir
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
Dissolved Oxygen	XXX	XXX	Report Daily Min	XXX	XXX	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5) Nov 1 - Apr 30	XXX	XXX	XXX	20.0	XXX	40.0	2/month	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5) May 1 - Oct 31	XXX	XXX	XXX	10.0	XXX	20.0	2/month	Grab
Total Suspended Solids	XXX	XXX	XXX	10.0	XXX	20.0	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	9.0	XXX	18.0	2/month	Grab
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6.0	2/month	Grab

Compliance Sampling Location: Outfall 001

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)		Concentrations (mg/L)				Minimum\ 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	Weir
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	Report Daily Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5 Nov 1 - Apr 30	XXX	XXX	XXX	20.0	XXX	40.0	2/month	Grab
CBOD5 May 1 - Oct 31	XXX	XXX	XXX	10.0	XXX	20.0	2/month	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	9.0	XXX	18.0	2/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6.0	2/month	Grab

Compliance Sampling Location: Outfall 001