

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

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0031887  
 APS ID 1029879  
 Authorization ID 1338681

**Applicant and Facility Information**

Applicant Name	<u>Green Hill MHC LLC</u>	Facility Name	<u>Green Hill MHP STP</u>
Applicant Address	<u>PO Box 677</u> <u>Morgantown, PA 19543-0677</u>	Facility Address	<u>210 Green Hill Drive</u> <u>Green Lane, PA 18054</u>
Applicant Contact	<u>James Perano</u>	Facility Contact	<u>Ronald Kratz</u>
Applicant Phone	<u>(610) 286-0490</u>	Facility Phone	<u>(610) 360-2562</u>
Client ID	<u>240713</u>	Site ID	<u>238481</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Marlborough Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Montgomery</u>
Date Application Received	<u>January 4, 2021</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u></u>	If No, Reason	<u></u>
Purpose of Application	<u>Permit Renewal</u>		

**Summary of Review**

The applicant requests renewal of an NPDES permit to discharge 0.03 MGD treated sewage from Green Hill MHP STP located in Marlborough Township, Montgomery County. The treated effluent discharges to Green Lane Reservoir. Green Lane Reservoir is located on Perkiomen Creek and is classified as TSF.

The treatment plant is extended aeration package plant consisting of comminutor, bar screen, aeration chamber, clarifiers, sand filter, chlorination tank, de-chlorination. Ferric chloride is used for phosphorus control.

On July 10, 2015 a Water Quality Management Part II Permit was issued for the modification to the WWTP to include the replacing of the antiquated UV disinfection system with a hypochlorite disinfection system that consists of a chemical feed pump and solution tank. The UV chamber was converted to the chlorine contact zone by adding three baffles. The contact zone would provide 78 minutes of contact time. A de-chlorination system consisting of a four (4) tube tablet dispenser was installed.

There are no changes in the waste stream qualities or quantities, and/or receiving water designation since last permit renewal. There were few violations for Fecal Coliform and Ammonia. Recent DMRs show improvement in effluent quality. The facility is in-compliance with the permit terms and condition. Therefore, all existing permit conditions are carried over in this renewal. We have added influent monitoring for CBOD5 and TSS for this permit renewal. We have also added monitoring requirements for Total Nitrogen and E. Coli in the permit renewal and is in consistent with SOP.

It was recommended by our operation section to include special condition "Engineer Evaluation" in the Part C of the permit. It was observed during the plant inspection that there were ongoing issues where excessive solids being transferred from final clarifier to sand filter and causing premature fouling of the sand filter media resulting in summertime vegetation growth. We have added this special condition in the permit.

Approve	Deny	Signatures	Date
X		<i>Ketan Thaker</i> Ketan Thaker / Project Manager	October 21, 2021
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	10/21/2021

**Summary of Review**

Following are the effluent limits:

<b>Parameter</b>	<b>Effluent Limit (mg/l) Av. Mo</b>	<b>Basis</b>
CBOD5	25	25 Pa Code 92a.47
Total Suspended Solids	30	25 Pa Code 92a.47
Dissolved Oxygen	5.0 minimum	BPJ previous permit & pollution report
Total Residual Chlorine	0.5	25 Pa Code 92a.47-48
pH (S.U.)	6.0 to 9.0 SU all the times	25 Pa Code 92a.47, 95.2
Fecal Coliform (No./100 ml)	200#/100 ml (Geo Mean)	25 Pa Code 92a.47
E. Coli (No./100 ml)	Report	25 Pa Code 92a.47
Phosphorus	0.5	25 Pa Code 92a.61
Total Nitrogen	Report	25 Pa Code 92a.61
Ammonia-Nitrogen	2.0	BPJ previous permit & pollution report

Sludge use and disposal description and location(s): Sludge is sent to Pottstown STP for treatment and disposal.

Act 14 Notification to Montgomery County Planning Commission on October 26, 2020.

Act 14 Notification to Marlborough Township on October 26, 2020.

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>0.03</u>
Latitude	<u>40° 20' 47.79"</u>	Longitude	<u>-75° 29' 15.28"</u>
Quad Name	_____	Quad Code	_____
Wastewater Description: <u>Sewage Effluent</u>			

Receiving Waters	<u>Perkiomen Creek (TSF, MF)</u>	Stream Code	<u>01017</u>
NHD Com ID	<u>25987446</u>	RMI	<u>21.19</u>
Drainage Area	_____	Yield (cfs/mi <sup>2</sup> )	_____
Q <sub>7-10</sub> Flow (cfs)	_____	Q <sub>7-10</sub> Basis	_____
Elevation (ft)	_____	Slope (ft/ft)	_____
Watershed No.	<u>3-E</u>	Chapter 93 Class.	<u>TSF, MF</u>
Existing Use	_____	Existing Use Qualifier	_____
Exceptions to Use	_____	Exceptions to Criteria	_____

Assessment Status Not Assessed

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: Green Hill MHP STP				
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Extended Aeration With Solids Removal	Hypochlorite	0.03
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.03	63	Not Overloaded		

**Compliance History**

**DMR Data for Outfall 001 (from September 1, 2020 to August 31, 2021)**

Parameter	AUG-21	JUL-21	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20
Flow (MGD) Average Monthly	0.005	0.004	0.005	0.007	0.005	0.009	0.01	0.011	0.011	0.01	0.012	0.009
Flow (MGD) Daily Maximum	0.015	0.008	0.011	0.014	0.009	0.024	0.023	0.034	0.028	0.018	0.026	0.014
pH (S.U.) Instantaneous Minimum	6.84	6.71	7.03	7.0	7.1	6.66	6.97	6.98	6.93	7.11	7.21	7.14
pH (S.U.) Instantaneous Maximum	8.12	7.66	7.82	7.76	7.9	7.8	7.92	8.46	8.52	8.56	8.28	8.36
DO (mg/L) Minimum	6.13	6.1	6.12	6.41	6.3	6.5	6.2	6.0	6.13	6.19	6.27	6.38
TRC (mg/L) Average Monthly	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
TRC (mg/L) Instantaneous Maximum	< 0.01	0.02	0.02	0.02	< 0.01	< 0.01	0.02	< 0.01	0.03	0.01	< 0.01	< 0.01
CBOD5 (mg/L) Average Monthly	13.5	19.9	9.8	5.4	3.6	2.8	3.2	4.4	4.3	4.1	5.8	< 2.3
TSS (mg/L) Average Monthly	< 4.3	9.4	< 5.8	< 4	< 4.2	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Fecal Coliform (CFU/100 ml) Geometric Mean	< 5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 1	< 1	< 1
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	28	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4	2	< 1	< 1
Ammonia (mg/L) Average Monthly	< 0.1	0.14	< 1.41	1.05	2.0	< 0.78	1.69	< 0.27	< 0.17	< 0.1	< 0.1	< 1.0
Total Phosphorus (lbs/day) Average Monthly	0.008	0.009	0.01	0.01	0.02	0.02	0.03	0.04	0.02	0.01	0.03	0.02
Total Phosphorus (mg/L) Average Monthly	0.27	0.44	0.3	0.34	0.46	0.29	0.31	0.46	0.34	0.21	0.23	0.3

**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) <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	Continuous	Recorded
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/week	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/week	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.2	1/week	Grab
CBOD5	XXX	XXX	XXX	25	XXX	50	2/month	24-Hr Composite
CBOD5 Raw Sewage Influent	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
TSS Raw Sewage Influent	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
TSS	XXX	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
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/month	Grab
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/month	Grab
Ammonia	XXX	XXX	XXX	2.0	XXX	4	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	0.13	XXX	XXX	0.5	XXX	1	2/month	24-Hr Composite