pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0233234**
Wastewater Type	**Sewage**	APS ID	**1059903**
Facility Type	**SFTF**	Authorization ID	**1390273**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Forest House Hotel**	Facility Name	**Forest House Hotel**
Applicant Address	10410 Buffalo Road	Facility Address	10410 Buffalo Road
	Mifflinburg, PA 17844-7873		Mifflinburg, PA 17844-7873
Applicant Contact	Melanie Page	Facility Contact	Melanie Page
Applicant Phone	(570) 966-0349	Facility Phone	(570) 966-0349
Client ID	65784	Site ID	270441
SIC Code	4952	Municipality	Mifflinburg Borough
SIC Description	Trans. & Utilities - Sewerage Systems	County	Union
Date Application Received	March 29, 2022	WQM Required	Yes
Date Application Accepted	April 8, 2022	WQM App. No.	6022401

Project Description: Replace an existing conventional system with a septic tank, with a SFTF with stream discharge.

Summary of Review

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.

This application is for a new individual NPDES permit for the discharge of treated sewage from a commercial restaurant that will replace a malfunctioning onlot system. The annual average design flow for this facility is 1,306 GPD based on planning approval of 4.5 EDUs. The proposed treatment system is designed for a peak hydraulic capacity of 2,000 GPD. An individual Small Flow permit is required due to the receiving stream and the use of an alternative design that is not covered in the *Small Flow Treatment Facilities Design Manual* (Document 362-0300-002.) This system is not listed in the *Alternate System Guidance* (Document 362-0300-007), it is approved under the Onlot Alternate Technology Listings. This system is listed as a Premier Tech Aqua Ecoflo Coco Biofilter and classified under Alternate technology (A2017-0029-0001).

Approval of this facility under the Act 537 Official Sewage Facilities Plan of West Buffalo Township was provided by the Department in a letter dated 12/28/21. Act 14 notifications have been provided as required.

Approve	Deny	Signatures	Date
X		*Jonathan P. Peterman* Jonathan P. Peterman / Project Manager	May 10, 2022
X		*Nicholas W. Hartranft* Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	May 11, 2022

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.002
Latitude	40º 59' 13.28"	Longitude	-77º 4' 24.82"
Quad Name	Mifflinburg	Quad Code	1129
Wastewater Description:	Sewage Effluent		
Receiving Waters	Rapid Run (HQ-CWF, MF)	Stream Code	19004
NHD Com ID	66920557	RMI	0.5300
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.	10-C	Chapter 93 Class.	HQ-CWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Attaining Use(s)		
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	Sunbury Municipal Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	2610
PWS RMI	74	Distance from Outfall (mi)	23

Changes Since Last Permit Issuance: N/A

Other Comments: None.

Treatment Facility Summary				
Treatment Facility Name: Forest House Hotel				
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Design Flow (MGD)**
Sewage	Tertiary	ECOFLO Coco Filter	Ultraviolet Light	0.002
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.002	--	Not Overloaded	None.	Other WWTP.

Proposed Treatment System Components for Outfall 001:
- One (1) 500-gallon grease trap.
- One (1) 3,500-gallon septic tank.
- One (1) pre-cast distribution box.
- One (1) Effluent filter.
- Two (2) Ecoflo ECP-970-P- Coco filters.
- Two (2) UV Disinfection Systems.
- One (1) Outfall.

Changes Since Last Permit Issuance: N/A.
Other Comments: None.

TMDL Impairment

The Department's Geographic Information System (GIS) shows that the Rapid Run is attaining its use and no TMDL exists for this stream segment.

Anti-Degradation Analysis

Given that this facility is replacing a malfunctioning onlot system, which would be considered an existing source and this treatment method is designed to meet the ABACT treatment process performance expectations for wastewater discharges, it is expected that this discharge will not degrade the receiving stream.

Chesapeake Bay Requirements

Facilities that are designed based on a flow of less than 2,000 GPD (400 GPD design flow for this facility) are not a part of Pennsylvania's Chesapeake Bay Tributary Strategy. Accordingly, it is not practicable to require the permittee to perform nutrient monitoring.

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 the abovementioned 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) and/or BPJ.

Proposed Limits - Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date

	Limitations							
	Mass (lb/day)		Concentration (mg/L)				Monitoring	
Discharge Parameter	Monthly Average	Daily Maximum	Minimum	Average Monthly	Average Weekly	Instantaneous Maximum	Minimum Frequency	Sample Type
Flow (MGD)	Report						1/ Month	Estimate
BOD_5				10		20	1/ Month	Grab
TSS				10		20	1/ Month	Grab
UV				----		----	----	----
Fecal Coliforms	200 No./100 ml as a geometric mean						1/ Month	Grab

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.002 MGD.

Development of Effluent Limitations and Monitoring Frequencies

BOD_5 (10 mg/L) and TSS (10mg/L) are technology-based limits stipulated in the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001). The fecal coliform limits correspond with 25 PA Code § 92a.47 (a)(4). pH monitoring is not required for SRSTPs. The design engineer, Randall Kent Webster, P.E., has indicated that the final design will incorporate UV disinfection. No monitoring is required for UV disinfection systems at SFTFs.

All of the monitoring frequencies sample types correspond with the policies and procedures stipulated in the SOP in lieu of the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001).

Compliance History

WMS Query Summary - A WMS Query was run at *Reports - Violations & Enforcements – Open Violations for Client Report* to determine whether there are any unresolved violations associated with the client that will affect issuance of the permit (per CSL Section 609). This query revealed that there were no unresolved violations.

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☐	PENTOXSD for Windows Model (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Toxics Screening Analysis Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☒	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
☐	Pennsylvania CSO Policy, 385-2000-011, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
☒	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
☐	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 391-2000-019, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 391-2000-022, 3/1999.
☒	Design Stream Flows, 391-2000-023, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 391-2000-024, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
☒	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☒	SOP: New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications
☒	Other: Small Flow Treatment Facilities Manual (362-0300-002)