pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0255009**
Facility Type	**Municipal**	APS ID	**1015103**
Major / Minor	**Minor**	Authorization ID	**1311834**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**National Park Service**	Facility Name	**Flight 93 National Memorial**
Applicant Address	PO Box 911	Facility Address	6424 Lincoln Hwy #30
	Stoystown, PA 15560		Stoystown, PA 15560
Applicant Contact	Brad Thomas	Facility Contact	Brad Thomas
Applicant Phone	(814) 893-6322	Facility Phone	(814) 893-6322
Client ID	274966	Site ID	724399
Ch 94 Load Status	Not Overloaded	Municipality	Stonycreek Township
Connection Status	No Limitations	County	Somerset
Date Application Received	April 13, 2020	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: Renewal of existing NPDES permit

Summary of Review

The above permittee has submitted a renewal application for their existing 0.005 MGD Sewage Treatment Plant (STP) that serves the Flight 93 Memorial. Based on the following review, it is recommended the permit be drafted. Unless otherwise noted, all applicable Department Standard Operating Procedures (SOPs) were followed during the review of this application.

Sludge use and disposal description and location(s): Septage hauler to another STP.

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		*Chad A. Fabian* Chad A. Fabian / Project Manager	February 11, 2021
X		*Donald J. Leone, P.E.* Donald J. Leone, P.E. / Environmental Engineer Manager	February 12, 2021

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.005
Latitude	40° 3’ 56.40”	Longitude	78° 53’ 33.27”
Quad Name	Stoystown	Quad Code	1814
Wastewater Description:	Treated sewage generated from a National Park.		

Receiving Waters	Lamberts Run	Stream Code	45710
NHD Com ID	123723751	RMI	2.64
Drainage Area	0.47	Yield (cfs/mi^2)	0
Q_{7-10} Flow (cfs)	0	Q_{7-10} Basis	Stream Survey
Elevation (ft)	2275	Slope (ft/ft)	0.0080
Watershed No.	18-E	Chapter 93 Class.	CWF
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	Metals, pH		
Source(s) of Impairment	Abandoned Mine Drainage		
TMDL Status	Final, 01/29/2010	Name	Kiskiminetas-Conemaugh River Watersheds TMDL

Background/Ambient Data		Data Source	
pH (SU)	4.7	Former DEP Aquatic Biologist Stream Survey	

Nearest Downstream Public Water Supply Intake: Hooversville Municipal Authority located on Stony Creek

Changes Since Last Permit Issuance: None

Other Comments: There is a TMDL for metals in the Kiskiminetas River watershed. The contribution for metals from a sewage plant of this nature is expected to be less than water quality criteria and therefore not contributing to stream impairment. Furthermore, an aggregate waste load allocation was included in the TMDL for these types of facilities. 1/year monitoring is imposed for plants rated over 0.002 MGD and less than 0.499 MGD. Monitoring for Total Iron, Total Manganese, and Total Aluminum is required to establish data to ensure there are no impacts on the quality of the receiving stream.

Treatment Facility Summary

Treatment Facility Name: Flight 93 National Memorial STP

WQM Permit No.	Issuance Date
5615405	10/7/2015

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Activated Sludge	Chlorine With Dechlorination	0.0014

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.005	6	Not Overloaded	Aerobic Digestion	Septage Hauler

Changes Since Last Permit Issuance: None

Compliance History	
Summary of DMRs:	The facility utilizes the Department's eDMR program to report their sampling results. A table on the next page summarizes the effluent violations that have occurred over the past 12 months.
Summary of Inspections:	The Department performed an inspection on 12/22/2020. No violations were noted during the inspection

Compliance History

Effluent Violations for Outfall 001, from: January 1, 2020 To: November 30, 2020

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	07/31/20	Min	5.55	S.U.	6.0	S.U.
pH	10/31/20	Min	5.56	S.U.	6.0	S.U.
pH	02/29/20	Max	9.6	S.U.	9.0	S.U.
pH	11/30/20	Max	9.42	S.U.	9.0	S.U.
pH	01/31/20	Max	9.55	S.U.	9.0	S.U.
DO	09/30/20	Min	3.71	mg/L	4.0	mg/L
DO	07/31/20	Min	3.61	mg/L	4.0	mg/L
Fecal Coliform	08/31/20	IMAX	2420	CFU/100 ml	1000	CFU/100 ml
Fecal Coliform	07/31/20	IMAX	2419	CFU/100 ml	1000	CFU/100 ml
Ammonia	08/31/20	Avg Mo	31.9	mg/L	25	mg/L
Ammonia	10/31/20	Avg Mo	42.3	mg/L	25	mg/L
Ammonia	07/31/20	Avg Mo	40	mg/L	25	mg/L
Ammonia	08/31/20	IMAX	58.4	mg/L	50	mg/L
Ammonia	10/31/20	IMAX	53.2	mg/L	50	mg/L
Ammonia	07/31/20	IMAX	66.4	mg/L	50	mg/L

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .005
Latitude 40º 3' 56.40" **Longitude** -78º 53' 33.27"
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
$CBOD_5$	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
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)

Comments: None

Water Quality-Based Limitations

No “Reasonable Potential Analysis” was performed for toxics since they are not expected to be present in the wastewater nor are they required to be sampled for in the renewal application.

The Department’s WQM7.0 model allows the Department to evaluate point source discharges of dissolved oxygen (DO), carbonaceous BOD ($CBOD_5$), and ammonia-nitrogen (NH_3-N) into free-flowing streams and rivers. To accomplish this, the model simulates two basic processes: the mixing and degradation of NH_3-N in the stream and the mixing and consumption of DO in the stream due to the degradation of $CBOD_5$ and NH_3-N. WQM modeling was previously performed to determine the existing effluent limitations.

The Department’s chlorine demand spreadsheet previously determined the existing chlorine limitations.

New modeling is not required, according the Department’s SOP for reissuance of NPDES Permits, since there are not any changes to the receiving stream or effluent quality since the last permit issuance.

Best Professional Judgment (BPJ) Limitations

None

Anti-Backsliding

This draft permit does not propose to relax any of the existing effluent limitations.

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) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	1/day	Grab
DO	XXX	XXX	4.0	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	XXX	XXX	XXX	25	XXX	50	2/month	Grab
TSS	XXX	XXX	XXX	30	XXX	60	2/month	Grab
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	Report	XXX	Report	2/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	25	XXX	50	2/month	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Total Iron	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Total Manganese	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab

Other Comments: All of the proposed effluent limitations and monitoring frequencies are the same as in the existing permit.

It is recommended the permit be drafted as described above.