pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0098663**
Facility Type	**Non-Municipal**	APS ID	**1001347**
Major / Minor	**Minor**	Authorization ID	**1287782**

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Woodhouse Wallace J**	Facility Name	**R P Woodhouse STP**
Applicant Address	72 Donley Road	Facility Address	72 Donley Road
	Eighty-Four, PA 15330		Eighty-Four, PA 15330
Applicant Contact	David Woodhouse	Facility Contact	John Foris
Applicant Phone	(724) 228-7620	Facility Phone	412-445-9145
Client ID	301587	Site ID	248196
Ch 94 Load Status	Existing Hydraulic and Projected Organic	Municipality	Somerset Township
Connection Status	Dept. Imposed Connection Prohibitions	County	Washington
Date Application Received	September 9, 2019	EPA Waived?	Yes
Date Application Accepted	September 1, 2010	If No, Reason	
Purpose of Application	See below		

Summary of Review

The permittee has applied for a renewal of NPDES Permit No. PA0098663. NPDES Permit No. PA0098663 was previously issued by the PA Department of Environmental Protection (DEP) on May 24, 2013. That permit expired on May 31, 2018.

This draft permit is approved during the Coronavirus pandemic requiring DEP employees to telework. Electronic signatures are considered appropriate for the draft permit documents. An electronic copy of the communication that transmitted approval of the draft permit documents has been saved and is included with the file.

The permittee was asked by way of the draft permit cover letter to confirm if it was acceptable to electronically submit the final permit documents in case the office is still closed at that time. If they respond it is not acceptable, then DEP will have to arrange to mail the final permit documents via the US Postal Service.

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		David R. Ponchione David R. Ponchione / Project Manager	July 11, 2020
x		Christopher Kriley Christopher Kriley, P.E. / Program Manager for Donald J. Leone, P.E. / Environmental Engineer Manager	July 13, 2020

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.009
Latitude	40º 09' 9.00"	Longitude	-80º 07' 44"
Quad Name	Washington East	Quad Code	1704
Wastewater Description:	Sewage Effluent		

Receiving Waters	Opossum Run (HQ-WWF)	Stream Code	37081
NHD Com ID	99694606	RMI	0.2
Drainage Area	1.2	Yield (cfs/mi^2)	0.034
Q_{7-10} Flow (cfs)	0.041	Q_{7-10} Basis	Bulletin 12
Watershed No.	20-F	Chapter 93 Class.	HQ-WWF
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	TMDL Canonsburg Lake Watershed		

Changes Since Last Permit Issuance: None

Treatment Facility Summary

Treatment Facility Name: R P Woodhouse STP

WQM Permit No.	Issuance Date
6388414	July 27, 1988
6388414 A2 T1	May 24, 2013

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Septic Tank and Aeration	Chlorination	0.005

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0090	See below	Not Overloaded	Holding Tank	Municipal WWTP

Changes Since Last Permit Issuance: None

Other Comments: The STP consists of a septic tank, de-nitrification tank, aeration tank, final clarifier, dosing tank, intermittent sand filters and chlorination.

Organic Capacity

The office is currently closed due to the Coronavirus, and thus this writer is unable to pull the microfiche file of WQM Permit No. 6388414 to uncover the plants organic capacity. Assuming a design influent organic concentration of 200 mg/l, the organic capacity would be: 200 mg/l x 8.345 x 0.009 mgd = 15.02 lbs./day

Compliance History

DMR Data for Outfall 001 (from June 1, 2019 to May 31, 2020)

Parameter	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19
Flow (MGD) Average Monthly	0.003	0.0035	0.005	0.007	0.005	0.0045	0.006	0.005	0.005	0.0045	0.006	0.005
pH (S.U.) Minimum	7.26	7.26	6.97	7.36	7.19	7.35	7.18	7.6	6.96	6.86	7.25	7.06
pH (S.U.) Maximum	7.81	7.81	7.06	7.61	7.71	7.98	7.62	7.96	7.81	7.6	7.5	7.59
DO (mg/L) Minimum	7.61	8.93	8.09	8.98	9.11	8.81	8.12	7.6	7.05	6.58	6.96	7.03
TRC (mg/L) Average Monthly	0.17	0.17	0.15	0.15	0.22	0.27	0.28	0.36	0.065	0.075	0.16	0.12
TRC (mg/L) Instantaneous Maximum	0.18	0.21	0.19	0.18	0.24	0.29	0.33	0.41	0.11	0.09	0.23	0.2
CBOD5 (mg/L) Average Monthly	2.6	3.6	3.4	2.3	2.2	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	2.5
CBOD5 (mg/L) Instantaneous Maximum	2.9	5.2	4.8	2.6	2.4	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	2.9
TSS (mg/L) Average Monthly	7.0	7.5	< 5.0	< 5.0	6.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
TSS (mg/L) Instantaneous Maximum	7.0	8.0	< 5.0	< 5.0	7.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Fecal Coliform (CFU/100 ml) Geometric Mean	1	1	< 1	1	1	< 1	< 1	< 1	1.41	< 1	< 1	< 1
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	1	1	< 1	1	1	< 1	< 1	< 1	2	< 1	< 1	< 1
Total Nitrogen (mg/L) Daily Maximum						33.4						
Ammonia (mg/L) Average Monthly	0.6	0.2	0.15	0.15	2.2	0.1	< 0.1	< 0.1	< 0.1	0.1	0.15	0.6

Ammonia (mg/L) Instantaneous Maximum	0.6	0.2	0.2	0.2	2.9	0.1	< 0.1	< 0.1	< 0.1	0.1	0.2	1.0
Total Phosphorus (mg/L) Average Monthly	3.8	4.4	3.2	2.0	1.9	4.67	5.1	4.9	2.95	2.5	2.2	3.6
Total Phosphorus (mg/L) Instantaneous Maximum	4.1	4.5	3.8	2.6	2.4	7.1	6.1	7.0	3.0	2.9	2.6	4.3

Operations Compliance Check Summary Report

Facility: R.P. Woodhouse_STP

NPDES Permit No.: PA0098663

Compliance Review Period: 06/30/2015 – 06/30/2020

Open Violations by Client Summary: None.

Inspection Summary

INSP ID	INSPECTED DATE	INSP TYPE	AGENCY	INSPECTION RESULT DESC	# OF VIOLATIONS
2797285	11/01/2018	Administrative/File Review	PA Dept of Environmental Protection	Violation(s) Noted	1
2781481	04/20/2018	Compliance Evaluation	PA Dept of Environmental Protection	Pending	0
2533100	11/01/2016	Administrative/File Review	PA Dept of Environmental Protection	Violation(s) Noted	1
2416116	10/16/2015	Administrative/File Review	PA Dept of Environmental Protection	Violation(s) Noted	1

Violation Summary

VIOL ID	VIOLATION DATE	VIOLATION TYPE DESC	RESOLVED DATE
832276	11/01/2018	Operator Certification - Failure to submit annual system fee	11/05/2018
771442	11/01/2016	Operator Certification - Failure to submit annual system fee	11/21/2016
736925	10/16/2015	Operator Certification - Failure to submit annual system fee	11/21/2016

Enforcement Summary

No enforcement actions in eFACTs.

DMR Violation Summary

Current eDMR user.

Effluent limit violation summary 7/1/2018 – 7/1/2020:

MONITORING END DATE	OUTFALL	PARAMETER	SAMPLE VALUE	PERMIT VALUE	UNIT OF MEASURE	STATISTICAL BASE CODE
05/31/2019	001	Ammonia-Nitrogen	9.6	6	mg/L	Instantaneous Maximum
05/31/2019	001	Ammonia-Nitrogen	7.4	3	mg/L	Average Monthly
04/30/2019	001	Ammonia-Nitrogen	18.7	18	mg/L	Instantaneous Maximum

Compliance Status: Facility has no current compliance issues.

Completed by: David Roote

Completed date: 7/1/2020

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.009
Latitude 40º 09' 9.00" **Longitude** -80º 07' 44.00"
Wastewater Description: Sewage Effluent

Since there have been no changes to the receiving stream, the discharge, and because the WQM6.3 model computes the same results as the current WQM7.0 model, it is unnecessary to re-evaluate the effluent limitations to determine if WQ limits govern over Antidegradation Best Available Combination of Technologies (ABACT) limits.

Pollution Report

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
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 (Permit Effective Date - December 30, 2021)	0.5	Average Monthly	-	92a.48(b)(2)

Comments: The above effluent limitations are consistent with the previous NPDES permit, except for TRC which becomes more restrictive on January 1,2022.

Previous Effluent Limitations

Parameter	Limit (mg/l)	SBC
CBOD5 (May thru October)	15	Average Monthly
CBOD5 (November thru April)	20	Average Monthly
Total Suspended Solids)	30	Average Monthly
Dissolved Oxygen	6	Instantaneous Minimum
NH3-N (May thru October)	3	Average Monthly
NH3-N (November thru April)	9	Average Monthly

This permit writer is acknowledging the Water Quality Antidegradation Implementation Guidance that became effective November 29, 2003. ABACT requirements, such as those defined below for sewage discharges, are designed to help maintain existing water quality. All treatment facilities must be enhanced with pollution prevention technologies to meet the requirements.

ABACT for non-municipal sewage discharges.

Parameter Treatment Process Performance Expectations (Average monthly limits - mg/l) for plants rated between 2,000 to 50,000 gpd is defined below:

CBOD5 (May 1 - Oct. 31)	10
CBOD5 (Nov. 1 - Apr. 30)	20
Suspended Solids	10
NH3-N (May 1 - Oct. 31)	3.0
NH3-N (Nov. 1 - Apr. 30)	9.0

Disinfection should be accomplished using a method that leaves no detectable residual. Disinfection using ultra-violet light or other non-chlorine-based systems is encouraged and must be considered. The existing plant uses chlorine tablets for disinfection.

A comparison of the previous NPDES permit limits and the above ABACT limits reveal the ABACT CBOD5 average monthly limit of 10 mg/l for the period May 1 – Oct 31 is more stringent than the previous limit of 15 mg/l. The CBOD5 limits for the remainder of the year are the same (20 mg/l). The ABACT average monthly TSS limit of 10 mg/l is more stringent than the previous limit of 30 mg/l. The STP consistently meets the more stringent ABACT limits and therefore they will go into effect on the permits effective date.

The ABACT NH3-N limitations are consistent with the previous NPDES permit.

A BAT TRC limit of 0.5 was imposed in the previous permit. For this renewal permit, a more stringent TRC average monthly limit of 0.02 mg/l is being imposed, because available technology can detect to that value. The limit will go into effect on January 1, 2022, the same date proposed for TRC to be monitored daily as discussed below. This will give the permittee time to install a tablet de-chlorinator or another means that will leave no detectable residual. A schedule was incorporated in the permit. A WQM permit amendment application is due by July 1, 2021. To give DEP time to review and approve the permit application, construction is to begin by December 1, 2021 and completed by December 31, 2021.

Nutrients

A TMDL was conducted and approved in 2004 for the Canonsburg Lake Watershed. That TMDL recommended a Total Phosphorus limit of 6.0 mg/l on the RP Woodhouse STP. A review of that DMR data indicates the plant can and does achieve the limit of 6.0mg/l at times. The limit will be reapplied into this permit renewal. The plant achieves this limit. A once per year monitor and report requirement for Total Nitrogen was incorporated into the previous permit per Chapter 92.a.61 and will be continued.

TMDL Canonsburg Lake Watershed

Monitoring

DEP's current policy requires daily monitoring for Total Residual Chlorine, Dissolved Oxygen, and pH to ensure protection of surface waters. This is particularly important because the discharge is to a special protection stream. Instead of monitoring all sewage pollutants every day, these three parameters are used as indicators to ensure the plant is being operated properly. This will likely require the plant to be manned daily, including weekends, or require the permittee to incur additional costs to purchase automated sampling equipment. The permittee is being given until January 1, 2022 to monitor daily. A WQM permit amendment is not required to install monitoring facilities.

The following additional modifications have been made to be consistent with current DEP policy:

- Effluent limitations for pH and DO are to be reported as "Instantaneous Minimum" in lieu of "Minimum".
- The units for Fecal Coliform are now "No./100 ml" in lieu of "CFU/100 ml".

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: January 1, 2022 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		
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.02	XXX	0.04	1/day	Grab

Compliance Sampling Location: Outfall 001

Proposed Effluent Limitations and Monitoring Requirements

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Outfall 001, Effective Period: Permit Effective Date through December 30, 2021.

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		
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	2/month	Grab
DO	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	2/month	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.0	1/week	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" (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)	0.009	XXX	XXX	XXX	XXX	XXX	2/month	Measured
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
Total Nitrogen	XXX	XXX	XXX	XXX	Report Daily Max	XXX	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
Total Phosphorus	XXX	XXX	XXX	6.0	XXX	12.0	2/month	Grab

Compliance Sampling Location: Outfall 001