pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0255831**
Wastewater Type	**Sewage**	APS ID	**1027461**
Facility Type	**SFTF**	Authorization ID	**1334413**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Robert W. Jones**	Facility Name	**Jones Properties SFTF**
Applicant Address	33 Emery Road	Facility Address	1116-1132 E National Pike
	Eighty Four, PA 15330-2109		Washington, PA 15301
Applicant Contact	Robert Jones	Facility Contact	Robert Jones
Applicant Phone	(724) 263-9103	Facility Phone	(724) 263-9103
Client ID	359693	Site ID	846275
SIC Code	6515	Municipality	Amwell Township
SIC Description	Fin, Ins & Real Est - Mobile Home Site Operators	County	Washington
Date Application Received	November 19, 2020	WQM Required	Yes
Date Application Accepted	November 24, 2020	WQM App. No.	6320405

Project Description: New 1980 GPD SFTF for existing apartments and trailers (septic, filtration, UV disinfection)

Summary of Review

The Department received a new application from Robert W. Jones on November 19, 2020 to construct and operate a new small flow sewage treatment facility (SFTF) in Amwell Township of Washington County. The application is for both NPDES and WQM Part II authorization. The discharge from the facility, Outfall 001, is to Little Chartiers Creek, designated in Chapter 93 as a High-Quality Warm Water Fishery (HQ-WWF).

The applicant proposes to add a series of pumps, dosing tanks and two parallel trains of Ecoflo EC7-1350 Coco Filters and Jet Model 952 UV disinfection to existing septic tanks to treat a total of 1980 GPD from apartments and trailers on the 3.7 acre parcel and 2.2 acre parcel property. The existing septic tanks system is a malfunctioning on-lot system serving 4.95 EDUs. WQM Permit 6320405 will be issued concurrently with this NPDES Permit. See the Internal Review and Recommendations document for more details about the system. Total earth disturbance for construction of the new equipment is 0.2 acres.

This new sewage treatment system is to replace a failing existing system. The Act 537 review determined that the best way to correct the malfunction was to replace the SFTF and is the Social and Economic Justice (SEJ) approval to allow for the discharge instead of a non-discharge alternative. Per *SOP No. BCW-PMT-003; New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications; Final, November 9, 2012; Revised, May 17, 2019; Version 1.8* for new, additional or increased discharges to HQ or EV waters, the Department is to conduct an anti-degradation analysis. The SOP recommends following the guidelines in the Department's "Water Quality Antidegradation Implementation Guidance" (391-0300-002) and to consult with Central Office as needed.

Appendix B of the antidegradation guidance recommends the following effluent limitations for small flow sewage discharges of less than 2,000 gpd: 10 mg/L CBOD5 (May 1 – Oct. 31), 20 mg/L CBOD5 (Nov. 1 – Apr. 30), 20 mg/L suspended solids,

Approve	Deny	Signatures	Date
X		Nicole H. Benoit, P.E. / Environmental Engineering Specialist	February 18, 2021
X		Donald J. Leone Donald J. Leone, P.E. / Environmental Engineer Manager	February 19, 2021

Summary of Review

5.0 mg/L ammonia-nitrogen (May 1 – Oct. 31) and 15.0 mg/L ammonia-nitrogen (Nov. 1 – Apr. 30). As this facility's design flow is 1,980 gpd and has the potential to impact the receiving stream these effluent limitations will be imposed.

Little Chartiers Creek is a part of the Chartiers Creek Watershed TMDL for impairments caused by metals. The TMDL was finalized on April 9, 2003. The impairments are attributed to acid mine drainage (AMD) and resource extraction. As this is a new facility the TMDL did not consider this source in the TMDL's allocation, but sewage is not expected to contain metals or a pH that would contribute a measurable impact on the receiving stream. Therefore, no monitoring or effluent limitations for aluminum, iron, manganese or pH will be imposed as a result of the TMDL.

The following effluent limitations and monitoring requirements will be considered in accordance with SOP No. BCW-PMT-003:

Parameter	Average	IMAX	Sample Type	Frequency
Flow (GPD)	Report	XXX	Measured	1/month
BOD5 (mg/L)	10	20	Grab	1/month
TSS (mg/L)	10	20	Grab	1/month
Fecal Coliform (No./100 mL)	200 Geometric Mean	XXX	Grab	1/month

UV disinfection will be used in lieu of chlorination, and so no total residual chlorine (TRC) limits or monitoring will be imposed. Per the SOP, it will not be necessary to require UV intensity or transmittance monitoring in the permit.

The more stringent of the antidegradation requirements and SOP guidance will be imposed. See Proposed Effluent Limitations and Monitoring Requirements for the pollutants that will be included in Part A of the NPDES permit. The analytical method for BOD5 includes both CBOD5 (carbonaceous) as well as nitrogenous BOD5 and so only BOD5 limits will be imposed.

Current policy does not require eDMR to be used for SFTFs but it may be used optionally.

Act 537 approval was provided by the Department on September 15, 2020.

Act 14 notifications dated October 21, 2020 were sent via certified mail to both Washington County Commissioners and Amwell Township. No comments have been received.

The facility has no non-compliances or open violations.

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.	001	Design Flow (MGD)	0.00198
Latitude	40º 7' 33"	Longitude	-80º 8' 17"
Quad Name	Washington East	Quad Code	1704
Wastewater Description:	Sewage Effluent		

Receiving Waters	Chartiers Creek (HQ-WWF)	Stream Code	36943
NHD Com ID	99694780	RMI	14.93
Drainage Area	2.09 sq. mi.	Yield (cfs/mi^2)	0.00995
Q_{7-10} Flow (cfs)	0.0208	Q_{7-10} Basis	U.S.G.S. StreamStats
Elevation (ft)	1060	Slope (ft/ft)	0.01
Watershed No.	20-F	Chapter 93 Class.	HQ-WWF
Existing Use	Not attaining	Existing Use Qualifier	Aquatic Life
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	NUTRIENTS, NUTRIENTS, PATHOGENS, SILTATION, SILTATION, SILTATION		
Source(s) of Impairment	REMOVAL OF RIPARIAN VEGETATION, REMOVAL OF RIPARIAN VEGETATION, RURAL (RESIDENTIAL AREAS), RURAL (RESIDENTIAL AREAS), SITE CLEARANCE (LAND DEVELOPMENT OR REDEVELOPMENT)		
TMDL Status	Final	Name	Chartiers Creek Watershed

Background/Ambient Data		Data Source
pH (SU)	7.0	Default
Temperature (°F)	Ambient	Default
Hardness (mg/L)	100	Default
Other:	N/A	N/A

Nearest Downstream Public Water Supply Intake		West View Water Authority	
PWS Waters	No	Flow at Intake (cfs)	N/A
PWS RMI	35.3 (Ohio River)	Distance from Outfall (mi)	44

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)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (GPD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Measured
BOD_5 (mg/L)	XXX	XXX	XXX	10.0	XXX	20.0	1/month	Grab
Total Suspended Solids	XXX	XXX	XXX	10.0	XXX	20.0	1/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/month	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	15.0	XXX	30.0	1/month	Grab
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	5.0	XXX	10.0	1/month	Grab

Compliance Sampling Location: 001

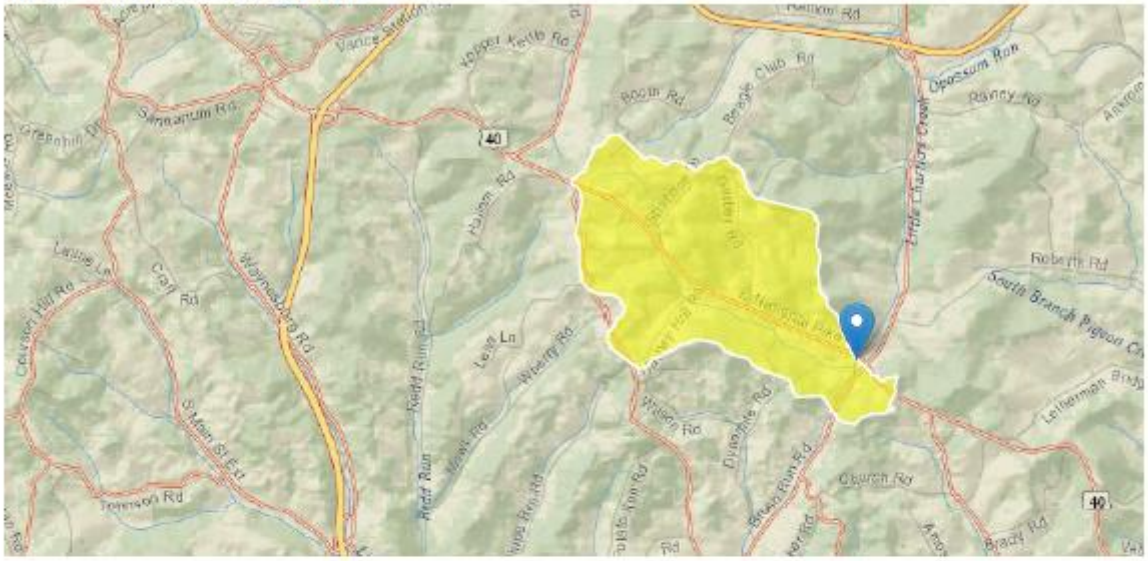
Appendices

U.S.G.S StreamStats

Chapter 93 Stream Designation

StreamStats Report

Region ID: PA
Workspace ID: PA20210207214556441000
Clicked Point (Latitude, Longitude): 40.12592, -80.13825
Time: 2021-02-07 16:46:14 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	2.09	square miles
ELEV	Mean Basin Elevation	1244	feet

Low-Flow Statistics Parameters[Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.09	square miles	2.26	1400
ELEV	Mean Basin Elevation	1244	feet	1050	2580

Low-Flow Statistics Disclaimers[Low Flow Region 4]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

Low-Flow Statistics Flow Report[Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.067	ft^3/s
30 Day 2 Year Low Flow	0.125	ft^3/s
7 Day 10 Year Low Flow	0.0208	ft^3/s
30 Day 10 Year Low Flow	0.0423	ft^3/s

Statistic	Value	Unit
90 Day 10 Year Low Flow	0.0842	ft^3/s

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Application Version: 4.4.0

Stream	Zone	County	Water Uses Protected	Exceptions To Specific Criteria
3—Reservoir No. 2	Basin	Washington	HQ-WWF	None
3—Catfish Creek	Basin	Washington	WWF	None
3—Georges Run	Basin	Washington	WWF	None
3—Chartiers Run	Basin	Washington	WWF	None
3—Brush Run	Basin	Washington	WWF	None
3—Little Chartiers Creek	Basin, Source to Alcoa Dam	Washington	HQ-WWF	None
3—Little Chartiers Creek	Basin, Alcoa Dam to Mouth	Washington	WWF	None
3—McPherson Creek	Basin	Washington	WWF	None
3—Brush Run	Basin	Washington	WWF	None
3—Coal Run	Basin	Allegheny	WWF	None
3—Millers Run	Basin	Allegheny	WWF	None
3—Thoms Run	Basin	Allegheny	TSF	None
3—McLaughlin Run	Basin	Allegheny	WWF	None
3—Painters Run	Basin	Allegheny	WWF	None
3—Scrubgrass Run	Basin	Allegheny	WWF	None
3—Georges Run	Basin	Allegheny	WWF	None
3—Robinson Run	Basin	Allegheny	WWF	None
3—Campbells Run	Basin	Allegheny	WWF	None
3—Whiskey Run	Basin	Allegheny	WWF	None
2—Jacks Run	Basin	Allegheny	WWF	None
2—Spruce Run	Basin	Allegheny	WWF	None
2—Lowries Run	Basin	Allegheny	TSF	None
2—Toms Run	Basin	Allegheny	WWF	None
2—Kilbuck Run	Basin	Allegheny	CWF	None
2—Moon Run	Basin	Allegheny	WWF	None
2—Montour Run	Basin	Allegheny	TSF	None
2—McCabe Run	Basin	Allegheny	WWF	None
2—Thorn Run	Basin	Allegheny	WWF	None
2—Narrows Run	Basin	Allegheny	WWF	None
2—Little Sewickley Creek	Basin	Allegheny	HQ-TSF	None
2—Flaugherty Run	Basin	Allegheny	WWF	None
2—Shouse Run	Basin	Allegheny	WWF	None
2—Big Sewickley Creek	Basin	Allegheny	TSF	None
2—Logtown Run	Basin	Beaver	WWF	None
2—Legionville Run	Basin	Beaver	WWF	None
2—Tevebau Run	Basin	Beaver	WWF	None
2—Crows Run	Basin	Beaver	WWF	None
2—Elkhorn Run	Basin	Beaver	WWF	None
2—Dutchman Run	Basin	Beaver	WWF	None
2—Fosburg Run	Basin	Beaver	WWF	None
2—Lacock Run	Basin	Beaver	WWF	None
2—Beaver River				
3—Mahoning River (OH)				