

Application Type Renewal  
Wastewater Type Sewage  
Facility Type SRSTP

## NPDES PERMIT FACT SHEET INDIVIDUAL SFTF/SRSTP

Application No. PA0255599  
APS ID 1119438  
Authorization ID 1495147

### Applicant, Facility and Project Information

Applicant Name	<u>Jeffrey Ihrig</u>	Facility Name	<u>320 Ross Road SRSTP</u>
Applicant Address	<u>320 Ross Road</u> <u>Eighty Four, PA 15330-2800</u>	Facility Address	<u>320 Ross Road</u> <u>Eighty Four, PA 15330-2800</u>
Applicant Contact	<u>Jeffrey Ihrig</u>	Facility Contact	<u>Same as Applicant</u>
Applicant Phone	<u>(412) 651-6012</u>	Facility Phone	<u>Same as Applicant</u>
Client ID	<u>351528</u>	Site ID	<u>837910</u>
SIC Code	<u>8800</u>	Municipality	<u>North Strabane Township</u>
SIC Description	<u>Private Households</u>	County	<u>Washington</u>
Date Application Received	<u>August 9, 2024</u>	WQM Required	<u>No</u>
Date Application Accepted	<u>August 13, 2024</u>	WQM App. No.	<u></u>
Project Description	<u>Application for renewal of a NPDES Permit for treated sewage.</u>		

### Summary of Review

Jeffery Ihrig has applied for a renewal of NPDES Permit No. PA0255599. PA0255599 was previously issued by the Pennsylvania Department of Environmental Protection (DEP) on October 25<sup>th</sup>, 2019. The permit expired October 31, 2024.

WQM permit number 6319409 was issued on October 25<sup>th</sup>, 2019, authorizing the construction of a single residence sewage treatment plant (SRSTP) with stream discharge to treat an existing 3-bedroom single family home with on-lot malfunction. The facility is consisting of:

- Norweco Singulair 960-500 & Hydro-Kinetic Bio-Film Reactor.
- Norweco Model AT 1500 Ultraviolet disinfection.

The receiving stream, Tributary 36960 Chartiers Creek is currently classified as a high-quality warm water fishery (HQ-WWF), located in State Watershed No. 20-F

The SRSTP was installed in June of 2023. No AMRs have been received to date. Operations has been made aware of this missing document.

A new AMR for the permittee to fill up and submit to DEP will be issued with the permit.

The permittee has complied with Act 14 notifications as evidenced by undated letters sent to North Strabane Township and Washington County.

Approve	Deny	Signatures	Date
X		<i>Fahmida Amin</i> Fahmida Amin / Environmental Engineering Trainee	January 28, 2025
X		<i>MAHBUBA IASMIN</i> Mahbuba Iasmin, Ph.D., P.E./ Environmental Engineering Manager	March 3, 2025

### Summary of Review

#### Anti-Backsliding

Section 402(o) of the Clean Water Act (CWA), enacted in the Water Quality Act of 1987, establishes anti-backsliding rules governing two situations. The first situation occurs when a permittee seeks to revise a Technology-Based effluent limitation based on BPJ to reflect a subsequently promulgated effluent guideline which is less stringent. The second situation addressed by Section 402(o) arises when a permittee seeks relaxation of an effluent limitation which is based upon a State treatment standard of water quality standard.

Previous limits can be used pursuant to EPA's anti-backsliding regulation 40 CFR 122.44 ***(I) Reissued permits. (1) Except as provided in paragraph (I)(2) of this section when a permit is renewed or reissued. Interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under §122.62). (2) In the case of effluent limitations established on the basis of Section 402(a)(1)(B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.***

#### 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 and Stream Data – 2 - Receiving Waters and PWS

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.0005</u>
Latitude	<u>40° 13' 57.82"</u>	Longitude	<u>-80° 6' 34.79"</u>
Quad Name	<u>Hackett</u>	Quad Code	<u>40080B1</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Tributary 36960 of Chartiers Creek (HQ-WWF)</u>	Stream Code	<u>36960</u>
NHD Com ID	<u>99693578</u>	RMI	<u>1.21</u>
Drainage Area	<u>1.19</u>	Yield (cfs/mi <sup>2</sup> )	<u>0.00837</u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.00997</u>	Q <sub>7-10</sub> Basis	<u>USGS StreamStats</u>
Elevation (ft)	<u></u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>20-F</u>	Chapter 93 Class.	<u>HQ-WWF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>NUTRIENTS, NUTRIENTS, SILTATION</u>		
Source(s) of Impairment	<u>HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION, HABITAT MODIFICATION - OTHER THAN HYDROMODIFICATION, URBAN RUNOFF/STORM SEWERS</u>		
TMDL Status	<u>Final, Final</u>	Name	<u>Chartiers Creek, Chartiers Creek Watershed</u>
Background/Ambient Data		Data Source	
pH (SU)	<u></u>		<u></u>
Temperature (°F)	<u></u>		<u></u>
Hardness (mg/L)	<u></u>		<u></u>
Other:	<u></u>		<u></u>
Nearest Downstream Public Water Supply Intake	<u>West View Water Authority</u>		
PWS Waters	<u>Ohio River</u>	Flow at Intake (cfs)	<u>40 MGD</u>
PWS RMI	<u>975.9</u>	Distance from Outfall (mi)	<u>34.99</u>

Changes Since Last Permit Issuance: None

Other Comments: None

Treatment Facility Summary				
<b>Treatment Facility Name:</b> Ihrig Properties SRSTP				
<b>WQM Permit No.</b>	<b>Issuance Date</b>	<b>Purpose</b>		
6319409	October 25, 2019	Permit issued by DEP to Jeffrey Ihrig approving construction of a SRSTP including: <ul style="list-style-type: none"> <li>• A Norweco Singulair Model 960-500-HKBFR combo package treatment plant.</li> <li>• A Norweco Model AT 1500 Ultraviolet Disinfection System</li> <li>• Four-inch diameter outfall pipe</li> </ul>		
<b>Waste Type</b>	<b>Degree of Treatment</b>	<b>Process Type</b>	<b>Disinfection</b>	<b>Avg Annual Flow (MGD)</b>
Sewage	Secondary	Contact Stabilization	Ultraviolet	0.0004
<b>Hydraulic Capacity (MGD)</b>	<b>Organic Capacity (lbs/day)</b>	<b>Load Status</b>	<b>Biosolids Treatment</b>	<b>Biosolids Use/Disposal</b>
0.0005	0.68	Not Overloaded	Holding Tank	Pumped and Hauled

Changes Since Last Permit Issuance: None

Other Comments: None

Compliance History

## Operations Compliance Check Summary Report

**Facility:** IHRIG PROP SRSTP

**NPDES Permit No.:** PA0255599

**Compliance Review Period:** 12/1/19-12/18/24

**Inspection Summary:**

INSPECTED DATE	INSP TYPE	AGENCY	INSPECTION RESULT DESC
08/29/2022	Administrative/File Review	PA Dept of Environmental Protection	No Violations Noted

**Violation Summary:**

No violations noted during review period

**Open Violations by Client ID:**

No open violations for Client ID 351528

**Enforcement Summary:**

No enforcements executed during review period

**Effluent Violation Summary:**

N/A

**Compliance Status:** Facility is generally in compliance with no open violations or pending enforcements. As of the most recent inspection in 2022, the facility had not yet been constructed.

**Completed by:** Amanda Illar **Completed date:** 12/18/24

Outfall No.	001	Design Flow (MGD)	.0005
Latitude	40° 13' 56.00"	Longitude	-80° 6' 33.00"
Wastewater Description: Sewage Effluent			

### Technology-Based Limitations (TBELs)

The following effluent limitations and monitoring requirements, at a minimum, will be established in all new and renewed SFTF permits based on the requirements of DEP's Standard Operating Procedure (SOP) for *New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Application* [SOP No. BCW-PMT-003 Version 1.8].

Parameter	Avg	IMAX	Sample Type	Frequency: SFTFs	Frequency: SRSTPs
Flow (GPD)	Report	XXX	Estimate (SRSTPs) Measured (SFTFs)	1/month	1/year
BOD <sub>5</sub> (mg/L)	10	20	Grab	1/month	1/year
TSS (mg/L)	10	20	Grab	1/month	1/year
pH*	6.0 S.U. Inst. Min.	9.0 S.U.	Grab	1/month	1/year
TRC (mg/L)	Report for SRSTPs; Use TRC Spreadsheet to determine WQBELs or 0.02 mg/L for SFTFs		Grab	1/month	1/month
Fecal Coliform (No./100 ml)	200 Geometric Mean (SFTFs) / Average (SRSTPs)		Grab	1/month	1/year

\* Technology-Based effluent limits for pH will be imposed based upon Federal Regulation 133.102(c) and State Regulation 95.2(1).

Please note that the winter fecal coliform limit previously imposed is being removed and a year-round fecal coliform limit of 200 cfu/100 mL is being imposed in accordance with DEP's SOP for *New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Application* [SOP No. BCW-PMT-003 Version 1.8].

Comments: This is a SRSTP with UV disinfection. The facility will not be required to measure TRC due to the absence of chlorination facilities.

### Anti-Degradation Best Available Combination of Technology (ABACT) TBELs

Outfall 001 discharges to Tributary 36960 of Chartiers Creek is a HQ-WWF stream. The discharge for this SRSTP is a treated residential sewage flow of 400 GPD.

The following Antidegradation Best Available Combination of Technologies (ABACT) effluent limits, at a minimum, will be established based on the requirements in Chapter 9 and Appendix B of DEP's "Water Quality Antidegradation Implementation Guidance" (Doc. No. 391-0300-002; November 29, 2003).

Parameter	Treatment Process Performance Expectations (mg/L)		
	<2,000 gpd	2,000-50,000 gpd	>50,000 gpd
CBOD <sub>5</sub> (May 1 – Oct. 31)	10	10	10
CBOD <sub>5</sub> (Nov. 1 – Apr. 30)	20	20	10
Suspended Solids	20	10	10
NH <sub>3</sub> -N (May 1 – Oct. 31)	5.0	3.0	1.5
NH <sub>3</sub> -N (Nov. 1 – Apr. 30)	15.0	9.0	4.5

Effective disinfection	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.
Other parameters, as needed	<i>Determined by the size and characteristics of the proposed discharge, may include – NO<sub>2</sub>/NO<sub>3</sub>-N, Total Phosphorus, Copper, Lead, Zinc</i>

**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	Annual Average	Maximum	Instant. Maximum		
Flow (GPD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
BOD <sub>5</sub>	XXX	XXX	XXX	10	XXX	20	1/year	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200.0	XXX	XXX	1/year	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	5.0	XXX	10.0	1/year	Grab

Compliance Sampling Location: Outfall 001

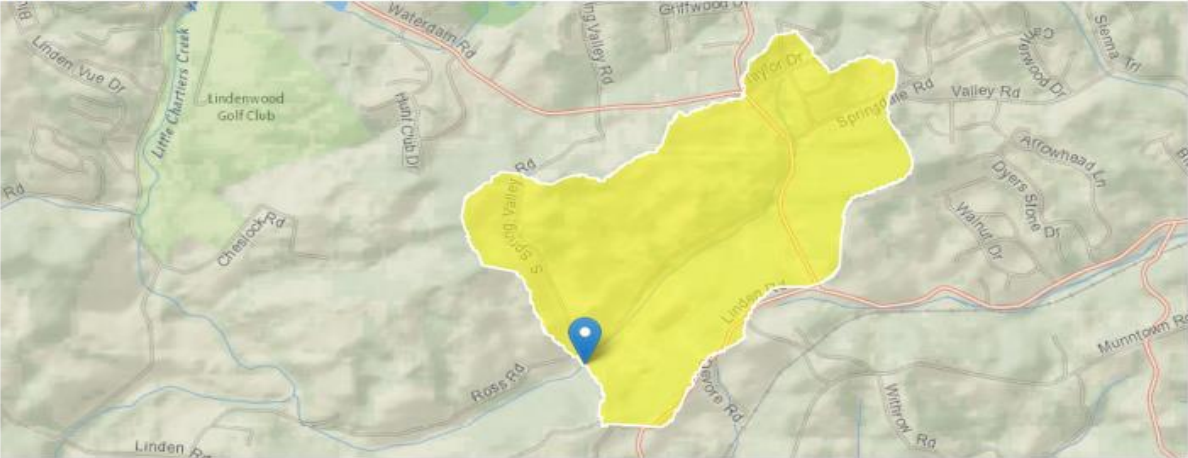
Other Comments: N/A



Attachment A  
USGS Stream Stats Output

StreamStats Report

Region ID: PA  
Workspace ID: PA20250129170413708000  
Clicked Point (Latitude, Longitude): 40.23280, -80.10965  
Time: 2025-01-29 12:04:53 -0500



Collapse All

➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	1.19	square miles
ELEV	Mean Basin Elevation	1157	feet

➤ Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	1.19	square miles	2.26	1400
ELEV	Mean Basin Elevation	1157	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	0.0332	ft <sup>3</sup> /s
30 Day 2 Year Low Flow	0.0634	ft <sup>3</sup> /s
7 Day 10 Year Low Flow	0.00997	ft <sup>3</sup> /s
30 Day 10 Year Low Flow	0.021	ft <sup>3</sup> /s
90 Day 10 Year Low Flow	0.0423	ft <sup>3</sup> /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/>)**

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Application Version: 4.26.0

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1