pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0218456**
Wastewater Type	**Sewage**	APS ID	**717615**
Facility Type	**SRSTP**	Authorization ID	**1311662**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Dale R. & Elaine L. Wright**	Facility Name	**Wright SRSTP**
Applicant Address	432 Lakeview Drive	Facility Address	432 Lakeview Drive
	New Brighton, PA 15066-4123		New Brighton, PA 15066-4123
Applicant Contact	Elaine Wright (dewright0698@aol.com)	Facility Contact	Elaine Wright
Applicant Phone	(724) 847-2886	Facility Phone	(724) 847-2886
Client ID	142710	Site ID	528027
SIC Code	4952	Municipality	New Sewickley Township
SIC Description	Trans. & Utilities - Sewerage Systems	County	Beaver
Date Application Received	April 15, 2020	WQM Required	N/A
Date Application Accepted	April 15, 2020	WQM App. No.	N/A

Project Description: Application for the renewal of the existing individual NPDES permit.

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.

Approve	Deny	Signatures	Date
X		*Jonathan P. Peterman* Jonathan P. Peterman / Project Manager	January 22, 2021
X		*Donald Leone* Donald Leone, P.E. / Environmental Engineer Manager	January 22, 2021

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.0004
Latitude	40º 44' 58.59"	Longitude	-80º 12' 49.93"
Quad Name	Baden	Quad Code	1304
Wastewater Description:	Sewage Effluent		
Receiving Waters	Brush Creek (WWF)	Stream Code	34787
NHD Com ID	126223637	RMI	6.55
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)	917	Slope (ft/ft)	N/A
Watershed No.	20-C	Chapter 93 Class.	WWF
Existing Use	WWF	Existing Use Qualifier	N/A
Exceptions to Use	None.	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	PATHOGENS		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final (4/9/1999)	Name	Brush Creek (Butler)
Nearest Downstream Public Water Supply Intake	Beaver Falls Municipal Authority		
PWS Waters	Beaver River	Flow at Intake (cfs)	640
PWS RMI	18.2	Distance from Outfall (mi)	32

Changes Since Last Permit Issuance: None.
Other Comments: None.

Treatment Facility Summary

Treatment Facility Name: Wright SRSTP

WQM Permit No.	Issuance Date	Notes:
0400403	11/22/2000	Initial construction.

Waste Type	Degree of Treatment	Process Type	Disinfection	Design Flow (MGD)
Sewage	Tertiary	SBR W/Sol Removal	Hypochlorite	0.0004
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.0005	--	Not Overloaded	--	Other WWTP

Treatment System Components:

- 500 GPD Cromaglass CA-5 treatment unit.
- High rate sand filter.
- Chlorinator.
- 130-gallon Chlorine contact tank.

Changes Since Last Permit Issuance: None.

Anti-Backsliding

In accordance with 40 CFR 122.44(l)(1) and (2), this permit does not contain effluent limitations, standards, or conditions that are less stringent than the previous permit.

TMDL Impairment

The Department's Geographic Information System (GIS) shows that the Brush Creek is impaired and a TMDL does exist for the stream segment. The TMDL does not list any individual wasteload allocations (WLAs) for the facility.

Existing Effluent Limitations and Monitoring Requirements

Existing Limits – Outfall 001

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly		Minimum	Average Monthly		Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/month	Grab
Total Residual Chlorine	XXX	XXX	XXX	Report	XXX	Report	1/month	Grab
CBOD5	XXX	XXX	XXX	10	XXX	20	1/year	Grab
Total Suspended Solids	XXX	XXX	XXX	10	XXX	20	1/year	Grab
Fecal Coliform (CFU/100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	1,000	1/year	Grab

*The existing effluent limits for Outfall 001 were based on a design flow of 0.0004 MGD.

Development of Effluent Limitations and Monitoring Frequencies

Outfall No. 001 **Design Flow (MGD)** 0.0004
Latitude 40º 44' 58.59" **Longitude** -80º 12' 49.93"
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
BOD_5	10	Average Monthly	125.3(a)(2)(i)	DEP SFTF Design Manual (Document 362-0300-002)
	20	IMAX		
Total Suspended Solids	10	Average Monthly	125.3(a)(2)(i)	DEP SFTF Design Manual (Document 362-0300-002)
	20	IMAX		
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform	200 / 100 ml	Geo Mean	-	92a.47(a)(4)

Water Quality-Based Limitations
The Department utilizes the WQM 7.0 v1.0b and the DEP Toxics Management Spreadsheet - Version 1.1 models to establish water quality-based effluent limitations. This modeling is not utilized for facilities that discharge less than 2,000 gpd. Additionally, the "TRC Calc" spreadsheet is not utilized for SRSTPs.

Best Professional Judgement (BPJ) Limitations
None.
Comments: None.

Additional Considerations
None

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

Proposed Limits – Outfall 001

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	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
TRC	XXX	XXX	XXX	Report Avg Mo	XXX	Report	1/month	Grab
BOD5	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	1000	1/year	Grab

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.0004 MGD.

Flow
There are no proposed changes for flow monitoring which is required by §92a.61(d)(1).

Five-Day Biochemical Oxygen Demand (BOD_5)
The limits for $CBOD_5$ are existing technology-based effluent limits. Facilities that have been designed and built utilizing the technologies established in the *Small Flow Treatment Facilities Design Manual* (Document 362-0300-002) have been proven to continuously produce effluent with less than 10 mg/l (BOD_5) and is considered best practicable control technology currently available (BPT). In accordance with current policies and procedures for facilities of this type, an effluent limit for BOD_5 will be utilized in lieu of $CBOD_5$.

Total Suspended Solids (TSS)
The limits for TSS are existing technology-based effluent limits. Facilities that have been designed and built utilizing the technologies established in the *Small Flow Treatment Facilities Design Manual* (Document 362-0300-002) have been

proven to continuously produce effluent with less than 10 mg/l (TSS) and is considered best practicable control technology currently available (BPT). The existing limits will remain.

Fecal Coliforms
The existing fecal coliform limits correspond with what is specified in the updated 25 PA Code § 92a.47 (a)(4)&(5). Since the monitoring frequency is 1/Year, Annual Average will be used in lieu of Geometric Mean. Additionally, the units for fecal coliform has been updated to No./ ml.

pH
40 CFR §133.102(c) and 25 PA Code §95.2(1) provide the basis of effluent limitations for pH. No changes are proposed for pH limitations.

Total Residual Chlorine (TRC)
Reporting of only the average monthly concentration is consistent with monitoring requirements for other systems discharging 0.0004 mgd and is appropriate for this discharge. There are no proposed changes for the monitoring of TRC.

Sample Types
The sample types (grab and estimate) for all of the parameters correspond with the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-3 and will remain.

Monitoring Frequencies
In order to maintain consistency with other SRSTP facilities, all monitoring frequencies will be required to be (1/ Year) at a minimum and (1/ Month) for TRC. In no case will “Upon Request” be utilized for monitoring of these parameters.

Other Comments: None.

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 no unresolved violations.

File Review / DMR’s – The last facility inspection was conducted by the Department on 6/8/17. No violations are noted in this report. Operations and Maintenance recommendations were provided to the permittee. The application provided proof of tank pumping dated 5/8/2018.

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)

Appendix A – MAP