

Application Type Renewal
Wastewater Type Sewage
Facility Type SFTF

NPDES PERMIT FACT SHEET INDIVIDUAL SFTF/SRSTP

Application No. PA0221996
APS ID 1146599
Authorization ID 1542727

Applicant, Facility and Project Information

Applicant Name <u>North Brook Homeowners Association</u>	Facility Name <u>North Brook Subdivision</u>
Applicant Address <u>107 McDonnell Lane</u>	Facility Address <u>103 McDonnell Lane</u>
<u>Butler, PA 16002</u>	<u>Butler, PA 16001</u>
Applicant Contact <u>Darryl Mcmarlin</u>	Facility Contact _____
Applicant Phone _____	Facility Phone _____
Client ID <u>148849</u>	Site ID <u>521582</u>
SIC Code <u>4952</u>	Municipality <u>Middlesex Township</u>
SIC Description <u>Trans. & Utilities - Sewerage Systems</u>	County <u>Butler</u>
Date Application Received <u>September 22, 2025</u>	WQM Required <u>-</u>
Date Application Accepted <u>October 21, 2025</u>	WQM App. No. _____
Project Description <u>Renewal for a Small Flow Treatment Facility</u>	

Summary of Review

The permittee is applying for reissuance of Individual Permit **PA0221996** that expired on October 31, 2024. This is a discharge into stream channel - Trib 63713 To Glade Run. The average daily flow is projected to be 2000 GPD.

The existing facility consists of: (NYADIC M-61) units, 48-gpm pump station, chemical addition for phosphorus control, pressure dosed 1020-square foot sub-surface sand filter, chlorination, 365-gallo chlorine contact tank and de-chlorination.

Act 14 notifications were submitted and received.

AMRs were received and appears to be operational.

There are no open violations in WMS for the subject Client ID (**148849**) as of October 21, 2025.

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		Adebayo Olude Adebayo Olude / Civil Engineer Trainee	October 21, 2025
X		Adam Olesnanik Adam Olesnanik, P.E. / Environmental Engineer Manager	November 3, 2025

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>.002</u>
Latitude	<u>40° 44' 17.83"</u>	Longitude	<u>-79° 56' 14.97"</u>
Quad Name	<u>Valencia</u>	Quad Code	<u>40079F8</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Glade Run (WWF)</u>	Stream Code	<u>63713</u>
NHD Com ID	<u>126222409</u>	RMI	<u>1.0100</u>
Drainage Area	<u>0.052</u>	Yield (cfs/mi ²)	<u>0.004</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.000222</u>	Q ₇₋₁₀ Basis	<u>USGS StreamStats</u>
Elevation (ft)		Slope (ft/ft)	<u>-</u>
Watershed No.	<u>20-C</u>	Chapter 93 Class.	<u>WWF</u>
Existing Use		Existing Use Qualifier	
Exceptions to Use	<u>-</u>	Exceptions to Criteria	<u>-</u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	
Background/Ambient Data		Data Source	
pH (SU)	<u>7</u>	Default	
Temperature (°F)	<u>25</u>	Default - WWF	
Hardness (mg/L)	<u>100</u>	Default	
Other:	<u>-</u>	-	
Nearest Downstream Public Water Supply Intake	<u>Little Connoquenessing Creek</u>		
PWS Waters	<u>Harmony Borough Water Authority</u>	Flow at Intake (cfs)	<u>2.0</u>
PWS RMI	<u>1.1</u>	Distance from Outfall (mi)	<u>>5miles</u>

Changes Since Last Permit Issuance: Elevation was revised using Google Earth. Drainage Area and Q₇₋₁₀ Flow were revised using USGS StreamStats. The Previous permit issuance listed the Beaver Falls Municipal Authority as the nearest downstream public water supply. The nearest downstream is currently Little Connoquenessing Creek.

Other Comments: This SRSTP was designed where applicable in accordance with the SFTF Manual.

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 Three Years After Permit Effective 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	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	Upon Request	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	Upon Request	Grab
TRC	XXX	XXX	XXX	0.06	XXX	0.2	1/month	Grab
BOD5	XXX	XXX	XXX	10.0	XXX	20	1/month	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20	1/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	4.5	XXX	9.0	Upon Request	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	1.5	XXX	3.0	Upon Request	Grab

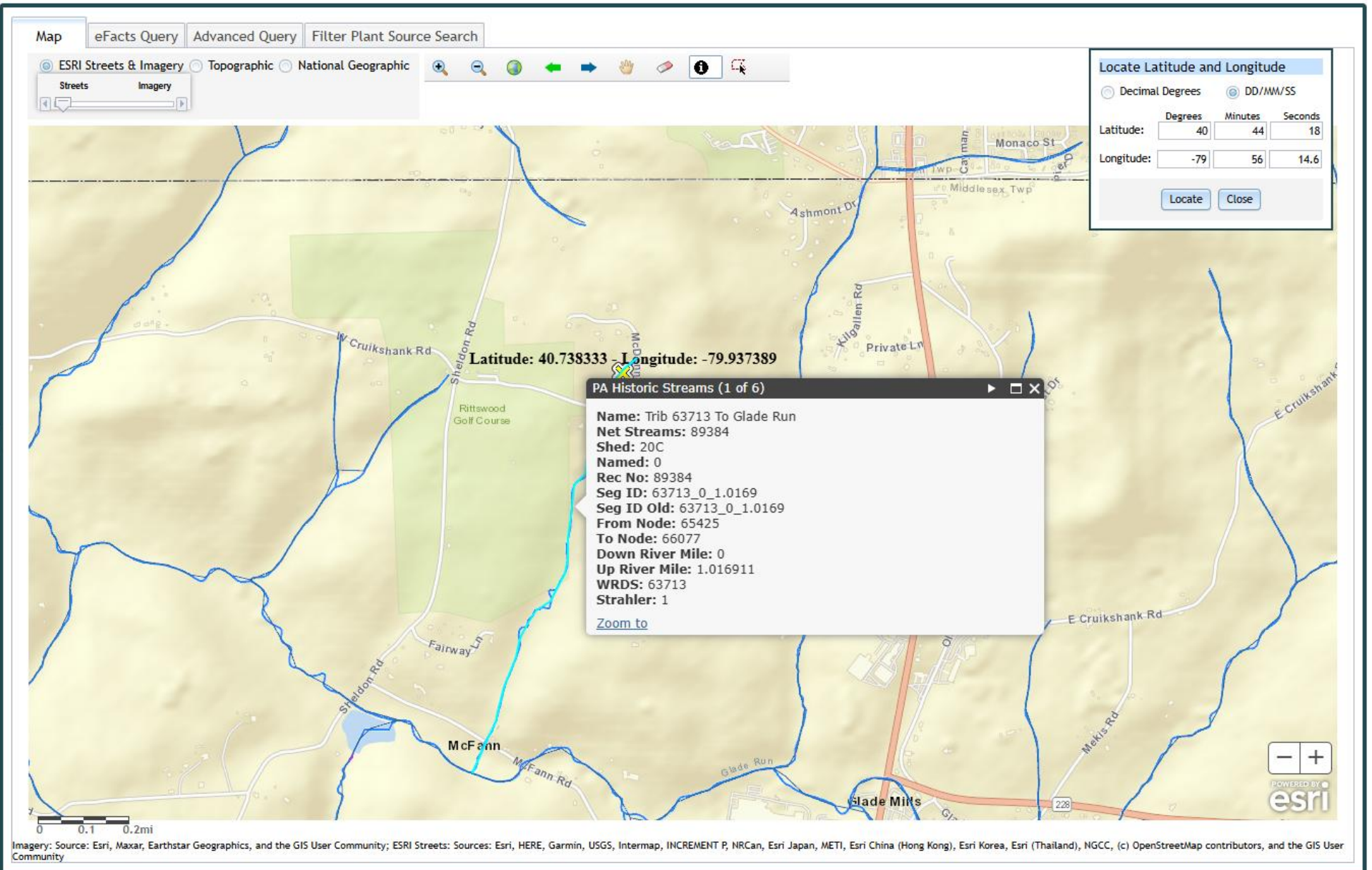
Outfall 001, Effective Period: Three Years After Permit Effective Date through Permit Expiration Date.

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	Report Daily Max	XXX	XXX	XXX	XXX	1/month	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	Upon Request	Grab
DO	XXX	XXX	5.0 Daily Min	XXX	XXX	XXX	Upon Request	Grab
TRC	XXX	XXX	XXX	0.019	XXX	0.063	1/month	Grab
BOD5	XXX	XXX	XXX	10.0	XXX	20	1/month	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20	1/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	4.5	XXX	9.0	Upon Request	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	1.5	XXX	3.0	Upon Request	Grab

Compliance Sampling Location: Outfall 001, after disinfection.

Other Comments: Flow is monitor only based on Chapter 92a.61. The limits for BOD5, Total Suspended Solids, and Fecal Coliforms are technology- based on Chapter 92a.47. The limits for pH are technology-based on Chapter 93.7. The calculated TRC limits of 0.019mg/L is more stringent than the previous limit of 0.06mg/L in the current permit. Therefore, a compliance schedule will be included in the permit. For the first three years of the permit, the previous permit limitation of 0.06 mg/L will be imposed, then the final effluent limitations will be imposed. The Draft permit includes a three-year compliance schedule and the corresponding Part C condition.

Attachment 1
eMAP- Receiving Streams Information
Attachment 2





Attachment 3
StreamStats Report

StreamStats Report

Region ID:
Workspace ID:
Clicked Point (Latitude, Longitude):
Time:

PA
PA20251021134548080000
40.73776, -79.93807
2025-10-21 09:46:09 -0400



+ Collapse All

> Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.052	square miles
ELEV	Mean Basin Elevation	1274	feet

Attachment 4
TRC Spreadsheet

TRC_CALC

TRC EVALUATION					
Input appropriate values in A3:A9 and D3:D9					
0.000222	= Q stream (cfs)	0.5	= CV Daily		
0.002	= Q discharge (MGD)	0.5	= CV Hourly		
30	= no. samples	1	= AFC_Partial Mix Factor		
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor		
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)		
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)		
0	= % Factor of Safety (FOS)		= Decay Coefficient (K)		
Source	Reference	AFC Calculations		Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 0.042		1.3.2.iii	WLA cfc = 0.033
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373		5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc = 0.016		5.1d	LTA_cfc = 0.019
Source	Effluent Limit Calculations				
PENTOXSD TRG	5.1f	AML MULT = 1.231			
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.019		AFC	
		INST MAX LIMIT (mg/l) = 0.063			
WLA afc	$(.019/e^{-k \cdot AFC_tc}) + [(AFC_Yc \cdot Qs \cdot 0.019 / Qd \cdot e^{-k \cdot AFC_tc})] \dots$ $\dots + Xd + (AFC_Yc \cdot Qs \cdot Xs / Qd) \cdot (1 - FOS / 100)$				
LTAMULT afc	$EXP((0.5 \cdot LN(cvh^2 + 1)) - 2.326 \cdot LN(cvh^2 + 1)^{0.5})$				
LTA_afc	wla_afc * LTAMULT_afc				
WLA_cfc	$(.011/e^{-k \cdot CFC_tc}) + [(CFC_Yc \cdot Qs \cdot 0.011 / Qd \cdot e^{-k \cdot CFC_tc})] \dots$ $\dots + Xd + (CFC_Yc \cdot Qs \cdot Xs / Qd) \cdot (1 - FOS / 100)$				
LTAMULT_cfc	$EXP((0.5 \cdot LN(cvd^2 / no_samples + 1)) - 2.326 \cdot LN(cvd^2 / no_samples + 1)^{0.5})$				
LTA_cfc	wla_cfc * LTAMULT_cfc				
AML MULT	$EXP(2.326 \cdot LN((cvd^2 / no_samples + 1)^{0.5}) - 0.5 \cdot LN(cvd^2 / no_samples + 1))$				
AVG MON LIMIT	MIN(BAT_BPJ, MIN(LTA_afc, LTA_cfc) * AML_MULT)				
INST MAX LIMIT	1.5 * ((av_mon_limit / AML_MULT) / LTAMULT_afc)				