pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0098477**
Wastewater Type	**Sewage**	APS ID	**822301**
Facility Type	**SFTF**	Authorization ID	**1313636**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Highland Tank & Manufacturing Co.**	Facility Name	**Highland Tank & Manufacturing Co. SFTF**
Applicant Address	1 Highland Road	Facility Address	1 Highland Road
	Stoystown, PA 15563-6456		Stoystown, PA 15563-6456
Applicant Contact	John Jacob	Facility Contact	Same as Applicant
Applicant Phone	717-664-1443	Facility Phone	Same as Applicant
Client ID	6088	Site ID	242090
SIC Code	4952	Municipality	Quemahoning Township
SIC Description	Trans. & Utilities - Sewerage Systems	County	Somerset
Date Application Received	May 4, 2020	WQM Required	No
Date Application Accepted	May 5, 2020	WQM App. No.	

Project Description: NPDES Permit Renewal for Discharge of Treated Sewage Effluent.

Summary of Review

DEP received an application on May 4, 2020 for a renewal of a NPDES Permit No. PA0098477. The permit was previously issued on October 13, 2015 and expired on October 31, 2020.

The small flow sewage treatment facility (SFTF) consists of a Norweco Singular Bio-Kinetic Model 960-500 treatment tank utilizing an extended aeration process. This is a package unit which provides flow equalization, pretreatment, aeration, clarification, and tertiary filtration. The treated flow will then travel through a hydro-kinetic bio-film reactor to further improve effluent quality. Disinfection process consists of using Erosion tablet chlorinator and chlorine contact tank. The treated effluent is piped underground outside the Offices building and discharges through Outfall 001 at a roadway side ditch. Then it gets mixed with the stormwater inside the ditch, piped again underground crossing the road (Highland Road), and then through an earth channel discharges to Oven Run which is classified as Cold Water Fishery (CWF) per Chapter 93 Designated Uses. The permitted flow is 300 gallons per day. Singular treatment tank has a total capacity of 1300 gallons and is designed to treat a wastewater flow of 500 gpd. The Hydro-Kinetic Bio-Film Reactor is designed to treat up to 800 gpd. The capacity of chlorine contact tank is 300 gallons.

This facility serves an office and workshop restrooms. No food is prepared on site. A contractor cleans the filters twice a year. Samples are collected and submitted to Geochemical Laboratories. The laboratory analytical sheets and chain of custody are received with the eDMR submissions.

Approve	Deny	Signatures	Date
X		Hazim Aldalli / Environmental Engineering Specialist	June 7, 2023
x		Mahbuba Iasmin Ph.D., P.E. / Environmental Engineer Manager	September 1, 2023

Summary of Review

This singular treatment system is expected to produce an effluent not to exceed 10 mg/l $CBOD_5$ and 10 mg/l TSS as monthly averages. This is verified by NSF testing.

Outfall 001 Relocation

Based on DEP site visits on May 18, May 23, 2022, and March 29, 2023, Outfall 001 is located in front of the office building near Lambertsville Rd (SR 1007) (Lat 40º 5' 12.17", Long -78º 54' 47"). The flow is discharged into a roadside ditch along Lambertsville Rd and then flows approx. 100' south along Lambertsville Rd. The flow then crosses under Lambertsville Rd. and culverts into an intermittent stream (see photographs on pages 20, 22, and 23). The stream remains intermittent for approximately 300 feet until its confluence with Oven Run. (Lat 40º 5' 12" Long -78º 54' 50").

The actual location of Outfall 001 identified through site visits doesn't match with the last permit issued or the reviewed renewal application. The verified outfall location and the findings from site visits were confirmed with the applicant via a letter dated February 22, 2022 (see Appendix C).

A WQM Permit No.5688403 issued on August 23, 1988 authorized the relocation and construction of the current treatment facility, which is located inside the Office building within Highland Tank property. This change was approved by Planning on November 10, 1987, but the relocation of the treatment facility didn't include the outfall relocation in above mentioned WQM permit or the following NPDES permit issued on November 19, 1993. As a result, the original effluent Outfall 001 coordinates were carried over to the renewal permit application for this cycle. The outfall coordinates of the updated location are added to this Draft Permit.

Stormwater Permitting

Stormwater Outfalls (002-008) included in the permit application appear to discharge stormwater exposed to industrial activities within the facility's drainage area. The industrial operations are conducted indoors which include welding and fabrication, vehicle repair and maintenance, blasting and spray painting, and storage. The stormwater effluent data reported in the application were not complete enough to compare it to stream criteria, EPA's Multi-Sector General Permit "benchmark values", DEP's ELGs and other references while considering site specific conditions such as stream flow and location to determine if actual discharge concentrations of various pollutants in stormwater warrant further controls. If there is insufficient data available or if pollutant levels are beyond No Exposure conditions as specified in *PAG-03 NPDES General Permit For Discharges of Stormwater Associated with Industrial Activity No Exposure Certification Instructions [3800-PM-BCW0083f Rev 12/2022]*, monitoring for specific pollutants and/or a Stormwater Pollution Prevention Plan (SWPPs) are required in the permit. During this renewal, sampling requirements for stormwater outfalls and a special Part C condition have been added to the permit to include the key components of the Department's PAG-03 General Permit for Discharges of Stormwater Associated with Industrial Activities.

Based on the engineer's letter on March 3, 2023 (see Appendix C) and after the site visit on March 29, 2023, it was confirmed that no industrial process wastewater generated from the shop discharges through the stormwater outfalls. Based on the industrial operations of the facility, PAG-03 Appendix U– Fabricated Metal Products benchmarks and PAG-03 Appendix J – Additional Facilities would apply. Applicable Part C conditions for stormwater management and correction plans were included in the Draft Permit.

The application stated that there were no changes to the facility conditions regarding discharge, receiving stream, or treatment technology for the next five years. Therefore, Act 537 planning update was not needed.

The permittee continues to use DEP's eDMR system to upload the sampling test results. The reviewed reports show that there were no limits exceedance during the period of 01/01/2020 - 03/1/2023 after the new treatment unit was installed under the WQM permit No.5688403 A-1.

An appropriate evidence of the Act – 14 PL 834 Municipal Notification was provided by April 29, 2020 letters, and no comments were received.

Summary of Review
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. The details on the development of effluent limits and/or monitoring can be found below.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.0003
Latitude	40º 5' 12.17"	Longitude	-78º 54' 47"
Quad Name	Stoystown	Quad Code	41078A8
Wastewater Description:	Sewage Effluent, Stormwater		
Receiving Waters	Oven Run (CWF)	Stream Code	80423
NHD Com ID	123723961	RMI	2.25
Drainage Area	0.65	Yield (cfs/mi^2)	0.052
Q_{7-10} Flow (cfs)	0.0338	Q_{7-10} Basis	USGS Stream Stats
Elevation (ft)	2297	Slope (ft/ft)	0.0437
Watershed No.	18-E	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use	None.	Exceptions to Criteria	None.
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, PH		
Source(s) of Impairment	ACID MINE DRAINAGE		
TMDL Status	Final, Tentative	Name	Kiskiminetas-Conemaugh River Watershed TMDL, Oven Run Watershed TMDL

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake	HOOVERSVILLE MUNI AUTH		
PWS Waters	Stonycreek River	Flow at Intake (cfs)	9.0
PWS RMI	25.00	Distance from Outfall (mi)	3.9

Changes Since Last Permit Issuance:

- Per DEP's stream assessment reported on June 7, 2022 (Appendix D), the point of first use is determined to be Oven Run Creek. The Unnamed Tributary to Oven Run where the stormwater drain first meets showed zero taxa.
- DEP updated its WQM 7.0 criteria for Ammonia-Nitrogen (NH_3-N) in 2019. Limits and conditions of this permit need to be redeveloped to an adequate level to protect water quality.

Other Comments: Currently, effluent flows from Outfall 001 on the East side of Highland Rd. (Appendix C) approximately 10 feet to a roadway side storm drain. The storm drain carries the effluent west and then under the road where it afterwards mixes with the facility's running stormwater (Outfall 002), and eventually flows into Oven Run Stream.

Treatment Facility Summary				
Treatment Facility Name: Highland Tank and Manufacturing Co.				
WQM Permit No.	**Issuance Date**			
5688403	August 23, 1988			
5688403 A-1	July 15, 2019			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Bio-reactor Secondary	Septic Tank, Bio-Kinetic Filter	Chlorination	0.0003
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.0003	0.6	Not Overloaded	Septic Tank	No Information

Changes Since Last Permit Issuance:

The WQM Permit No. 5688403 A-1 issued on July 15, 2019 addressed the new treatment plant (Norweco Singular Bio-Kinetic Model 960-500) which replaced the malfunctional 1988 old treatment unit, and it is expected to produce an effluent not to exceed 10 mg/l $CBOD_5$ and 10 mg/l TSS as monthly averages, this is verified by NSF testing and meets DEP SOP regarding SFTF.

Other Comments: None.

Compliance History	
Summary of AMRs:	- Between 11/01/2015 and 10/31/2020, the facility has not complied with submittal of Annual Maintenance Reports AMR. DMR under eDMR was the only reports for effluent limits sampling. - The reviewed reports show that there were no limits exceedance during the period of 01/01/2020 - 03/01/2023.
Summary of Inspections:	There are no reported enforcements against this facility.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0003
Latitude 40º 5' 12.17" **Longitude** -78º 54' 47"
Wastewater Description: Treated 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 Clean Water Program New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Application" (SOP No. BCW-PMT-003, Version 1.8, Final, November 9, 2012, Revised May 17, 2019).

Parameter	Avg	IMAX	Sample Type	Frequency: SFTFs	Frequency: SRSTPs
Flow (GPD)	Report	XXX	Estimate (SRSTPs) Measured (SFTFs)	1/month	1/year
BOD5 (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/year
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).

Additional Considerations:

TSS, and Fecal Coliform limitations will be imposed based upon the Department's current Standard Operating Procedure (SOP) for Clean Water Program – New and Reissuance Small Flow Treatment Facility (SFTF) Individual NPDES Permit Applications (*SOP No. BCW-PMT-003, Version 1.8*).

Technology-based effluent limits for pH will be imposed based upon State Regulation 95.2(1).

BOD_5 limitations will be imposed instead of $CBOD_5$ which reflect the most stringent limitation amongst the Technology-Based Effluent Limitations and based upon the Department's SOP – New and Reissuance Individual SFTF NPDES Permits, and per DEP Small Flow Treatment Facilities Manual (Nov. 2003).

The TRC modelling (see Appendix B) showed that the BAT limits of 0.5 mg/l average monthly and 1.1 mg/l for inst. max. are acceptable.

Sewage discharges with design flows < 2,000 gpd do not require monitoring for Total Nitrogen and Total Phosphorus in new and reissued permits.

Sampling frequency at Outfall 001 for all parameters is 1/month which is consistent with the Department's SOP - New and Reissuance of SFTF Individual NPDES Permit Applications and Table 6-3 of DEP's Technical Guidance for the Development and Specification of Effluent Limitations.

Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

The data generated from the sampling process will be used to build a database that will be evaluated on the next renewal cycle to validate permitting uncontaminated stormwater runoff under this individual sewage permit.

Total Maximum Daily Load (TMDL) Considerations

This facility discharges to the Kiskiminetas-Conemaugh River Watersheds. This Watershed has a Final TMDL and is impaired by metals. The receiving stream, Oven Run, also falls under Oven Run Watershed TMDL which is superseded by Kiskiminetas-Conemaugh River Watershed TMDL. Abandoned mine drainage is a source of the TMDL impairment. This sanitary sewage discharge is not expected to contribute to the stream Metals impairment. No WLAs have been developed for this sewage discharge; no monitoring requirements for Total Iron, Total Manganese, and Total Aluminum will be imposed on this facility for this renewal permit.

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" (362-0400-101), 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
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.5	XXX	1.1	1/month	Grab
Biochemical Oxygen Demand (BOD5)	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	200.0 Geometric Mean	XXX	XXX	1/month	Grab

Compliance Sampling Location: End of Pipe 001.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0 (precipitation induced)
Latitude	40º 5' 11"	Longitude	-78º 54' 49"
Quad Name	Stoystown	Quad Code	41078A8
Wastewater Description:	Storm Water		
Receiving Waters	Oven Run (CWF)	Stream Code	80423
NHD Com ID	123723961	RMI	0.63
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	18-E	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, PH		
Source(s) of Impairment	ACID MINE DRAINAGE		
TMDL Status	Final, Tentative	Name	Kiskiminetas-Conemaugh River Watershed TMDL; Oven Run Watershed TMDL

Discharge, Receiving Waters and Water Supply Information

Outfall No.	003	Design Flow (MGD)	0 (precipitation induced)
Latitude	40º 5' 12"	Longitude	-78º 54' 51"
Quad Name	Stoystown	Quad Code	41078A8
Wastewater Description:	Storm Water		
Receiving Waters	Oven Run (CWF)	Stream Code	80423
NHD Com ID	123723961	RMI	0.60
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	18-E	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, PH		
Source(s) of Impairment	ACID MINE DRAINAGE		
TMDL Status	Final, Tentative	Name	Kiskiminetas-Conemaugh River Watershed TMDL; Oven Run Watershed TMDL

Discharge, Receiving Waters and Water Supply Information

Outfall No.	004	Design Flow (MGD)	0 (precipitation induced)
Latitude	40º 5' 14"	Longitude	-78º 54' 51"
Quad Name	Stoystown	Quad Code	41078A8
Wastewater Description:	Storm Water		
Receiving Waters	Oven Run (CWF)	Stream Code	80423
NHD Com ID	123723961	RMI	0.56
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	18-E	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, PH		
Source(s) of Impairment	ACID MINE DRAINAGE		
TMDL Status	Final, Tentative	Name	Kiskiminetas-Conemaugh River Watershed TMDL; Oven Run Watershed TMDL

Discharge, Receiving Waters and Water Supply Information

Outfall No.	005	Design Flow (MGD)	0 (precipitation induced)
Latitude	40º 5' 15"	Longitude	-78º 54' 50"
Quad Name	Stoystown	Quad Code	41078A8
Wastewater Description:	Storm Water		
Receiving Waters	Oven Run (CWF)	Stream Code	80423
NHD Com ID	123723961	RMI	0.54
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	18-E	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, PH		
Source(s) of Impairment	ACID MINE DRAINAGE		
TMDL Status	Final, Tentative	Name	Kiskiminetas-Conemaugh River Watershed TMDL; Oven Run Watershed TMDL

Discharge, Receiving Waters and Water Supply Information

Outfall No.	006	Design Flow (MGD)	0 (precipitation induced)
Latitude	40º 5' 16"	Longitude	-78º 54' 51"
Quad Name	Stoystown	Quad Code	41078A8
Wastewater Description:	Storm Water		
Receiving Waters	Oven Run (CWF)	Stream Code	80423
NHD Com ID	123723961	RMI	0.52
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	18-E	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, PH		
Source(s) of Impairment	ACID MINE DRAINAGE		
TMDL Status	Final, Tentative	Name	Kiskiminetas-Conemaugh River Watershed TMDL; Oven Run Watershed TMDL

Discharge, Receiving Waters and Water Supply Information

Outfall No.	007	Design Flow (MGD)	0 (precipitation induced)
Latitude	40º 5' 17"	Longitude	-78º 54' 52"
Quad Name	Stoystown	Quad Code	41078A8
Wastewater Description:	Storm Water		
Receiving Waters	Oven Run (CWF)	Stream Code	80423
NHD Com ID	123723961	RMI	0.49
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	18-E	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, PH		
Source(s) of Impairment	ACID MINE DRAINAGE		
TMDL Status	Final, Tentative	Name	Kiskiminetas-Conemaugh River Watershed TMDL; Oven Run Watershed TMDL

Discharge, Receiving Waters and Water Supply Information

Outfall No.	008	Design Flow (MGD)	0 (precipitation induced)
Latitude	40º 5' 18"	Longitude	-78º 54' 52"
Quad Name	Stoystown	Quad Code	41078A8
Wastewater Description:	Storm Water		
Receiving Waters	Oven Run (CWF)	Stream Code	80423
NHD Com ID	123723961	RMI	0.48
Drainage Area		Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)		Q_{7-10} Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	18-E	Chapter 93 Class.	CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, PH		
Source(s) of Impairment	ACID MINE DRAINAGE		
TMDL Status	Final, Tentative	Name	Kiskiminetas-Conemaugh River Watershed TMDL; Oven Run Watershed TMDL

Development of Effluent Limitations

STORMWATER Outfalls 002 - 008

The Department's policy for stormwater discharges is to either (1) require that the stormwater is uncontaminated, (2) impose "Monitor and Report", to establish effluent goals and require the permittee to submit a Stormwater Pollution Prevention Plan (SWPPP), or (3) impose effluent limits. In all cases, a storm water special condition is placed in the permit in Part C.

A special condition is added to the permit to include some of the key components of the Department's General Permit (PAG-03) for Discharges of Stormwater Associated with Industrial Activities. The SIC Code (4952 – Sewerage Systems) does not fall within the SIC Codes of the given Department appendices. However, based on facility's industrial operations, the facility would be subject to requirements under Appendix U and Appendix J as discussed earlier in the Fact Sheet.

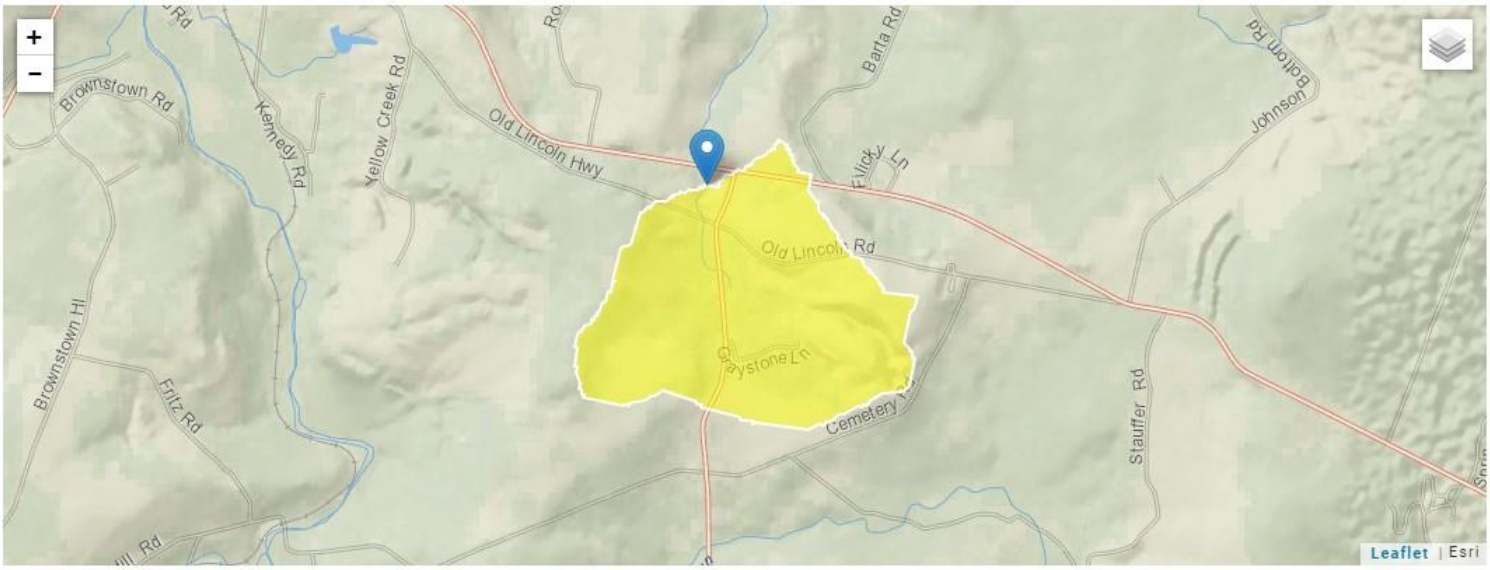
The table below contains the monitoring requirements for stormwater Outfalls 002 - 008. Part A I.B will include the table below and a special condition within Part C of the renewal permit will have the language concerning stormwater sampling, reporting, and compliance.

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	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Oil & Grease	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Appendix -A- USGS Stream Stats

StreamStats Report

Region ID:	PA
Workspace ID:	PA20211001134223852000
Clicked Point (Latitude, Longitude):	40.08764, -78.91404
Time:	2021-10-01 09:42:43 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.65	square miles
ELEV	Mean Basin Elevation	2297	feet
PRECIP	Mean Annual Precipitation	43	inches

Low-Flow Statistics Parameters [Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.65	square miles	2.33	1720
ELEV	Mean Basin Elevation	2297	feet	898	2700
PRECIP	Mean Annual Precipitation	43	inches	38.7	47.9

Low-Flow Statistics Disclaimers [Low Flow Region 3]

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 3]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.087	ft^3/s
30 Day 2 Year Low Flow	0.126	ft^3/s
7 Day 10 Year Low Flow	0.0338	ft^3/s
30 Day 10 Year Low Flow	0.0468	ft^3/s
90 Day 10 Year Low Flow	0.0708	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.

Appendix -B- TRC Calculation

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.0338	= Q stream (cfs)	0.5	= CV Daily
0.0003	= Q discharge (MGD)	0.5	= CV Hourly
4	= 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 = 23.251	1.3.2.iii	WLA cfc = 22.661
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 8.664	5.1d	LTA_cfc = 13.174

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.720	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.500	BAT/BPJ
		INST MAX LIMIT (mg/l) = 1.170	

WLA afc	(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))... ...+ Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)
LTAMULT afc	EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)
LTA_afc	wla_afc*LTAMULT_afc
WLA_cfc	**(.011/e(-k*CFC_tc) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))... ...+ Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)**
LTAMULT_cfc	EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5)
LTA_cfc	wla_cfc*LTAMULT_cfc
AML MULT	EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*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)**

Appendix -C- Effluent and Stormwater Outfalls Permitting

Highland Tank

Unmatched Quality & Service Since 1946

www.highlandtank.com
One Highland Road
Stoystown, PA 15563
PH: 814-893-5701

02/02/2022

Hazim Aldalli
Environmental Engineer
Department of Environmental Protection – Clean Water
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222

RE: Sewer Effluent Outfall Location

Dear Mr. Aldalli:

A new septic system for the Highland Tank Office Building was installed in 2019. This work was authorized under DEP permit no. 5688403. As a result of this new installation, the sewer effluent outfall (001) location changed. Currently, effluent flows from Outfall 001 on the East side of Highland Rd. (see attached photograph) approximately 10 feet to a storm drain. The storm drain carries the effluent West under the road where it eventually flows into Oven Run Stream.

The coordinates for the Outfall 001 have been updated on the attached "Topographic Map – Outfall Locations".

Please contact me with any questions, or if you need any additional information

Kind regards,

Kevin Wozniak
EHS Manager
Office: 717-664-1431
Email: kwozniak@highlandtank.com

Enclosure

Highland Tank

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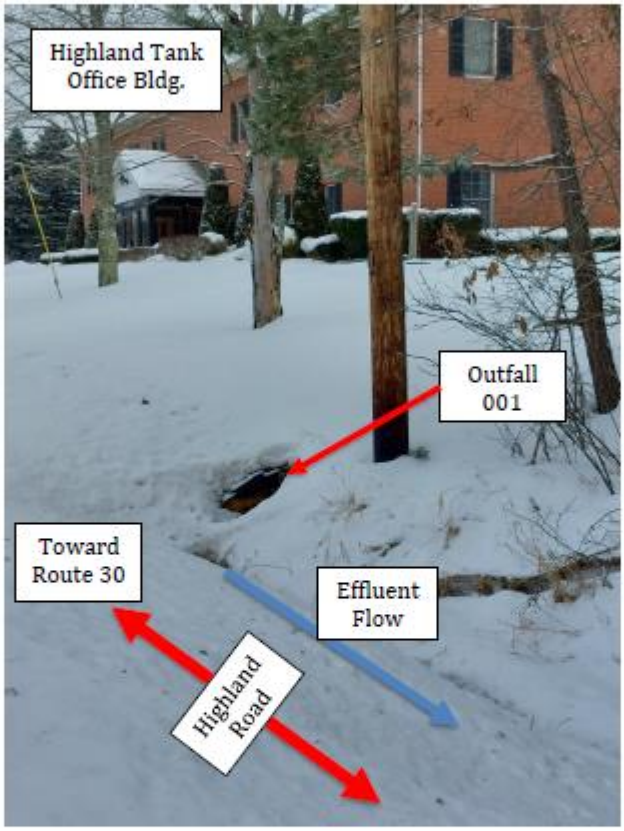
www.highlandtank.com
One Highland Road
Stoystown, PA 15563
PH: 814-893-5701

Outfall 001 Location – Street View



TOPOGRAPHIC MAP – OUTFALL LOCATIONS

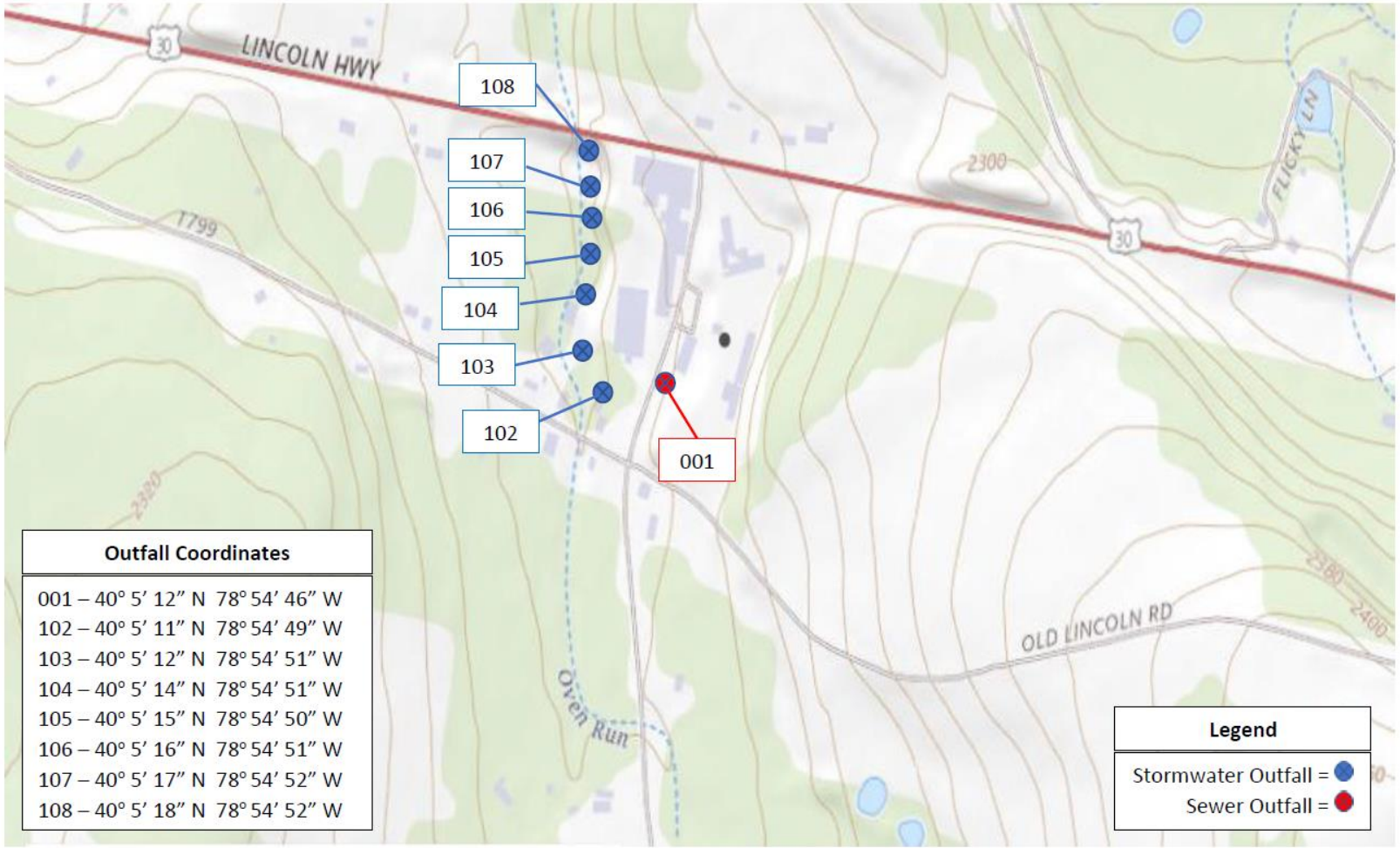


***Figure 1: SFTF* Outfall 001.**

***Figure 2:* Sideroad Ditch.**

Figure 3: **Cross Road Stormwater Pipe discharging to Undocumented Tributary to Oven Run.**

Figure 4: **Undocumented Tributary's meeting point with Oven Run.**

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Stoystown, PA 15563
PH: 814-893-5701

03/03/2023

Hazim Aldalli
Environmental Engineer
Department of Environmental Protection – Clean Water
Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222

RE: NPDES Permit Renewal PA0098477

Dear Mr. Aldalli:

This letter is in response to your email (dated 2/17/2023). I am glad to hear the original planning documentation for the facility sewage outfall (001) was located and the Department has decided to continue with its review of the renewal application.

I have attached, per your request, a map identifying all industrial processes within Highland Tank's property and the locations of the facility's sewer and stormwater outfalls.

Please contact me with any questions, or if you need any additional information.

Kind regards,

Kevin Wozniak
EHS Manager
Office: 717-664-1431
Email: kwozniak@highlandtank.com

Enclosure

Highland Tank and Manufacturing Company
Facility Process Description by Building

Map Key	
Location ID	Building or Location Description
O1	Main Administrative Office Building
W1	Large Tank and Pressure Vessel Production Building; Welding & Fabrication
W2	Tank Production Building; Welding & Fabrication
W3	Small Tank Production Building; Welding & Fabrication
M1	Maintenance Shop; Vehicle and Equipment Repair and Maintenance Items Storage
O2	Production Administrative Offices
S1	Storeroom Building; Storage of Equipment and Parts used in Production
P1	Old Paint Shop; Blasting and Spray-Painting Operations
P2	New Paint Shop; Blasting and Spray-Painting Operations
M2	Maintenance Storage Building
A1	Plant Air Compressor Building
●	Sewer Outfall Location
⊗	Stormwater Outfall Location

Appendix -D- Point of First Use Survey

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMO

TO Robert George
Sewage Palnning Specialist
Clean Water Program

FROM Richard Spear
Aquatic Biologist Supervisor
Clean Water Program

DATE June 7, 2022

RE Point of First Use Survey
Undocumented and Unnamed Tributary to Oven Run
State Water Plan: 18E
Hydrologic Unit Code: 05010007
Stream Code: 45621
Quemahoning Twonship, Somerset County, PA

INTRODUCTION

On May 23, 2022, at the request of Robert George of the Clean Water Program, a Point of First Surface Water Use (POFU) Survey was attempted in the vicinity of an Undocumented and Unnamed Tributary to Oven Run next to the Highland Tank Office Building. The property's address is 1 Highland Road, Stoystown, PA 15563 in Quemahoning Township, Somerset County (Figure 1). The sampling location was at latitude 40.086667 and the longitude was -78.913056. I went with Robert George and Lisa Milsop of the Clean Water Program. The Department was accompanied by Dana Keith (Building Manager). I could not perform a delineation of the drainage area using USGS Stream Stats because the stream is undocumented and unnamed, so it is not on a map and thus not in Stream Stats.

SAMPLING METHODOLOGY

The POFU is the location at which a body of water can support aquatic life as defined in 25 Pennsylvania Code §93. Guidance for determining the POFU is in the Department's guidance document #391-2000-014, Policy and Procedures for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers (revised April 12, 2008). Specifically, Appendix B of the guidance document provides additional guidance when making a POFU determination.
On May 23, 2022, we sampled macroinvertebrates (Table 1) at the Undocumented and Unnamed Tributary to Oven Run. Macroinvertebrates were not found today but the protocol used was in accordance to the Department's Qualitative Benthic Macroinvertebrate Data Collection Protocol, found in the Water Quality Monitoring Protocols for Streams and Rivers 2021 (Monitoring Book), which can be found by accessing the following website:

Southwest Regional Office
400 Waterfront Drive | Pittsburgh, PA 16335 | 412.442.4000 | Fax. 412.442.4194 | www.dep.pa.gov

MONITORING_BOOK.pdf (state.pa.us)

RESULTS, DISCUSSION, AND CONCLUSIONS

The objective of this study was to examine aquatic life in the Undocumented and Unnamed Tributary to Oven Run to determine if and where the stream is capable of supporting an aquatic life use as defined in 25 Pennsylvania Code §93.9q, where water quality standards must be met. The Undocumented and Unnamed Tributary to Oven Run, had zero taxa found in it. Taxa were found in Oven Run from a survey done on 08/16/2001 and that makes Oven Run the point of first use.

cc: Stream File – Undocumented and Unnamed Tributary to Oven Run
Thomas Flanagan – SWRO Sewage Planning Specialist Supervisor
Stacey Greenwald – SWRO, Environmental Group Manager
Christopher Kriley – SWRO, Environmental Program Manager
Mahbuba Iasmin – SWRO, Environmental Group Manager
Michael Lookenbill – CO, Environmental Group Manager