pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0060216**
Facility Type	**Non-Municipal**	APS ID	**948966**
Major / Minor	**Minor**	Authorization ID	**1324239**

Applicant and Facility Information

Applicant Name	**Raceway Holdings, Inc**	Facility Name	**Twin Rocks Truck Stop**
Applicant Address	2227 Scranton Carbondale Highway	Facility Address	151 Twin Rocks Road
	Scranton, PA 18508-1151		Lake Ariel, PA 18436-4859
Applicant Contact	Simrat Aulakh, President	Facility Contact	Tom Markey, Chief Operator
Applicant Phone	(570) 291-4260	Facility Phone	(570) 689-5660
Client ID	284780	Site ID	261103
Ch 94 Load Status	Not Overloaded	Municipality	Sterling Township
Connection Status	-	County	Wayne
Date Application Received	August 21, 2020	EPA Waived?	Yes
Date Application Accepted	September 1, 2020	If No, Reason	-
Purpose of Application	Renewal of NPDES permit for discharge of treated sewage.		

Summary of Review

The applicant is requesting the renewal of an NPDES permit to discharge up to 0.0485 MGD of treated sewage into Uban Creek, a High-Quality, Cold-Water Fishery, Migratory Fish (HQ-CWF, MF) receiving stream in State Water Plan Basin 1-C (Wallenpaupack Creek). As per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than its designated use. This stream segment is designated as a naturally reproducing trout stream as per PA Fish & Boat Commission. This discharge is not expected to affect public water supplies.

This stream is not directly classified as being part of a TMDL, however the Lake Wallenpaupack TMDL (for nutrients and mercury) is applicable downstream.

Outfall 001

Limitations for pH, Total Suspended Solids (TSS), and Fecal Coliform are technology-based and carried over from the previous permit. Limitations for Dissolved Oxygen (DO), $CBOD_5$, Ammonia-Nitrogen, and Total Phosphorous are water quality-based and carried over from the previous permit. WQM 7.0 modeling did not recommend stricter limits.

As per PA Code 92a.47(a)(8) (which refers to PA Code 92a.48(b)(2)), a monthly average TRC facility-specific BAT effluent limit of 0.5 mg/L has been applied to this permit renewal. The existing IMAX limitation of 1.41 mg/L has been carried over from the previous permit. The TRC Calculation Spreadsheet did not recommend more stringent water quality-based limitations. eDMR data from June 2020 to May 2021 (seen on page 4 of this fact sheet) indicates that the facility is consistently under 0.5 mg/L monthly average for TRC. Therefore, the new TRC technology-based limit will be applied at the permit effective date.

Quarterly monitoring/ reporting for Total Dissolved Solids has been carried over from the previous permit. Monitoring/ reporting of the raw sewage influent for BOD_5 has also been carried over from the previous permit.

Approve	Deny	Signatures	Date
X		/s/ Allison Seyfried / Environmental Engineering Specialist	July 8, 2021
X		/s/ Amy M. Bellanca, P.E. / Environmental Engineer Manager	7-9-21

Summary of Review

Sewage discharges now require monitoring and reporting for E. Coli. A monitoring frequency of 1/month for design flows >= 1 MGD, 1/quarter for design flows >= 0.05 and < 1 MGD, 1/year for design flows of 0.002 – 0.05 MGD will be utilized.

The annual monitoring and reporting for Total Nitrogen, Total Kjeldahl Nitrogen, and Nitrate-Nitrite as N has been maintained in this permit.

For this permit renewal, all monitoring frequencies for parameters with limitations are consistent with the Department's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits* (document no. 362-0400-001).

There is currently no Delaware River Basin Commission docket for this facility.

There are no representative stream gages in the vicinity of the outfall and the drainage area at Outfall 001 is too small for USGS StreamStats to estimate accurate low flow values. Therefore, the default Low Flow Yield (LFY) of 0.1 cfs/mi^2 was used to model the discharge. For modeling inputs, RMI values were obtained using the "PA Historic Streams" feature of eMapPA, drainage areas were delineated using USGS's StreamStats Interactive Map, and elevations were obtained using the elevation profile feature of StreamStats.

Outfall 002
Outfall 002 consists of industrial stormwater. The site consists of a gasoline service station and would fall under Appendix L monitoring requirements of the PAG-03 General Permit for stormwater discharges. The limits from the previous permit were carried over. The monitoring frequency has been increased from 1/year to 1/ 6 months to be consistent with the monitoring frequency requirements in the PAG-03 General Permit.

PPC plan implementation and completion of an annual inspection and compliance evaluation are required under the permit.

The existing permit expired on February 28, 2021 and the application for renewal was received on time.

A Water Management System Inspection query indicated that on December 12, 2018 a Compliance Evaluation was performed and on December 18, 2020 an Administrative/ File Review was performed.

There are currently three open violations for this client in the Clean Water Program that may need to be resolved before issuance of the final permit:

1. 12/12/2018 - Violation ID 836669 – Violation Code 92A.41(A)5 – NPDES – Failure to properly operate and maintain all facilities which are installed or used by the permittee to achieve compliance (WPC NPDES - Program Specific ID: PA0060216).

2. 9/21/2020 - Violation ID 898557 – Violation Code 92A.44 – NPDES – Violation of effluent limits in Part A of permit (WPC NPDES - Program Specific ID: PA0060216).

3. 12/18/2020 - Violation ID 902631 – Violation Code 92A.41(A)5 – NPDES – Failure to properly operate and maintain all facilities which are installed or used by the permittee to achieve compliance (WPC NPDES - Program Specific ID: PA0060216).

Sludge use and disposal description and location(s): As per the permittee's NPDES renewal application, sludge is hauled to the Wyoming Valley Sanitary Authority in Wilkes-Barre, PA by Koberlein Environmental Services.

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)	0.0485
Latitude	41º 21' 24.40"	Longitude	-75º 22' 28.53"
Quad Name	Sterling	Quad Code	0842
Wastewater Description:	Sewage Effluent, WLA Assigned in EPA-Approved TMDL		
Receiving Waters	Uban Creek (HQ-CWF)	Stream Code	5596
NHD Com ID	25932462	RMI	0.12
Drainage Area	3.32 mi^2	Yield (cfs/mi^2)	0.10
Q_{7-10} Flow (cfs)	0.332	Q_{7-10} Basis	State-wide default
Elevation (ft)	1,252.5	Slope (ft/ft)	-
Watershed No.	1-C	Chapter 93 Class.	HQ-CWF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-
Nearest Downstream Public Water Supply Intake	Easton Area Water System		
PWS Waters	Delaware River	Flow at Intake (cfs)	-
PWS RMI	110.4	Distance from Outfall (mi)	~ 128.5

Treatment Facility Summary

Treatment Facility Name: Twin Rocks Truck Stop

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Activated Sludge	Chlorination	0.0113

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0485	125	Not Overloaded	Holding Tank	Hauled

Compliance History

DMR Data for Outfall 001 (from June 1, 2020 to May 31, 2021)

Parameter	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20
Flow (MGD) Average Monthly	0.007	0.011	0.013	0.010	0.008	0.008	0.010	0.011	0.012	0.015	0.009	0.009
Flow (MGD) Daily Maximum	0.032	0.021	0.022	0.022	0.025	0.019	0.017	0.023	0.024	0.028	0.023	0.020
pH (S.U.) Instantaneous Minimum	6.9	6.8	6.9	6.7	6.8	7.0	7.0	6.6	6.6	7.0	6.8	6.8
pH (S.U.) Instantaneous Maximum	7.9	7.7	9.0	8.3	8.4	8.3	7.9	7.8	8.4	8.5	7.6	8.5
DO (mg/L) Minimum	7.0	7.0	8.5	9.0	8.0	8.0	7.1	7.0	7.0	7.0	6.8	7.1
TRC (mg/L) Average Monthly	0.029	0.31	0.31	0.40	0.40	0.38	0.40	0.042	0.34	0.30	0.29	0.34
TRC (mg/L) Instantaneous Maximum	0.68	0.50	0.51	0.60	0.90	0.60	0.80	1.00	0.70	0.50	0.73	0.76
CBOD5 (mg/L) Average Monthly	< 2.0	3.5	< 4.0	< 2.0	< 10.3	< 2.5	< 2.0	< 11.0	< 2.0	8.0	< 2.0	< 2.0
CBOD5 (mg/L) Daily Maximum	2.0	4.0	6.0	< 2.0	68.0	4.0	< 2.0	20.0	2.0	10.0	2.0	< 2.0
BOD5 (mg/L) Influent Average Monthly	257	200	116.5	290	253	1202	843	499	175	915.5	362	411.5
BOD5 (mg/L) Influent Daily Maximum	282	212	130.0	346	330	4400	901	793	190	1190	414	684
TSS (mg/L) Average Monthly	35.0	25.5	4.5	< 3.8	8.5	10.3	13.5	18.0	8.0	14.5	9.0	13.5
TSS (mg/L) Daily Maximum	58.0	36.0	5.0	5.0	10.0	19.0	14.0	25.0	9.0	22.0	13.0	14.0
Total Dissolved Solids (mg/L) Average Quarterly			666			970			1542			780
Fecal Coliform (No./100 ml) Geometric Mean	132	> 49	4	< 2	> 7	< 1	2	< 1	< 1	< 1	< 2	< 1

Fecal Coliform (No./100 ml) Instantaneous Maximum	313	> 2420	7	5	> 2420	< 1	3	1	1	< 1	3	< 1
Nitrate-Nitrite (lbs/day) Annual Average						0.01						
Nitrate-Nitrite (mg/L) Annual Average						0.26						
Total Nitrogen (lbs/day) Annual Average						1.53						
Total Nitrogen (mg/L) Annual Average						30.66						
Ammonia (mg/L) Average Monthly	0.7	0.4	0.4	0.4	2.8	< 0.2	1.4	4.5	2.9	17.0	0.5	0.9
TKN (lbs/day) Annual Average						1.52						
TKN (mg/L) Annual Average						30.4						
Total Phosphorus (lbs/day) Average Monthly	0.07	0.2	0.07	0.02	0.04	0.02	0.04	0.06	0.02	0.06	0.04	0.03
Total Phosphorus (mg/L) Average Monthly	0.7	2.8	1.7	0.3	0.5	0.3	0.5	0.5	0.2	0.7	0.2	0.4
Total Phosphorus (lbs) Total Annual						18.28						

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0485
Latitude 41º 21' 25.17" **Longitude** -75º 22' 28.59"
Wastewater Description: Sewage Effluent, WLA Assigned in EPA-Approved TMDL

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
Total Suspended Solids	30.0	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45.0	Average Weekly	133.102(b)(2)	92a.47(a)(2)
	60.0	IMAX	-	92a.47
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)
E. Coli (No./100ml)	Report	Average Annually	-	92a.61

Water Quality-Based Limitations

The following limitations were determined through water quality modeling (output files attached):

Parameter	Limit (mg/l)	SBC	Model
$CBOD_5$ Nov 1 - Apr 30	25.0	Average Monthly	Previous Modeling / TMDL
	40.0	Daily Maximum	
	50.0	IMAX	
$CBOD_5$ May 1 - Oct 31	20.0	Average Monthly	
	30.0	Daily Maximum	
	40.0	IMAX	
Dissolved Oxygen	6.0	Minimum	
TRC	1.41	IMAX	
Total Dissolved Solids	Report	Average Quarterly	
Ammonia-Nitrogen Nov 1 - Apr 30	9.0	Average Monthly	
	18.0	IMAX	
Ammonia-Nitrogen May 1 - Oct 31	3.0	Average Monthly	
	9.0	IMAX	
Total Phosphorous	0.5	Average Monthly	
	1.0	IMAX	
	74.97 (total load, lbs)	Total Annual	

Anti-Backsliding

No limitations were made less stringent.

Modeling Using USGS StreamStats:

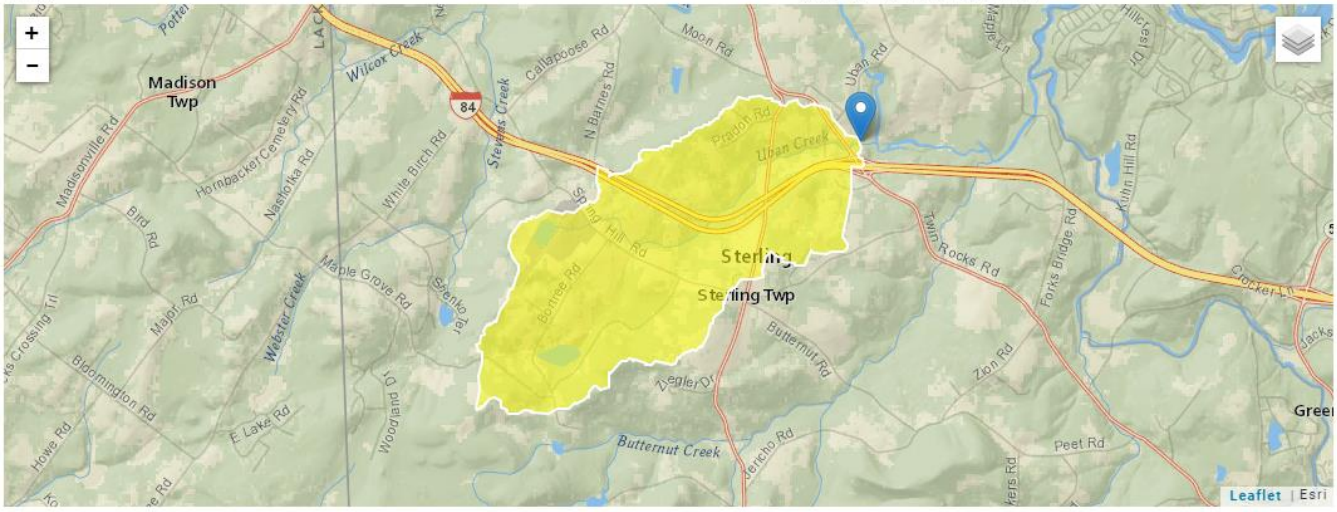
At Outfall 001 on Uban Creek:

RMI	Elevation (ft)	Drainage Area (mi^2)	Q_{7-10} Flow (cfs)
0.12	1,252.5	3.32	0.0737

$$Low\ Flow\ Yield\ using\ StreamStats = \frac{0.0737\ ft^3/sec}{3.32\ mi^2} = \mathbf{0.0222}\ \frac{\boldsymbol{ft^3/sec}}{\boldsymbol{mi^2}}$$

StreamStats Report

Region ID: PA
Workspace ID: PA20210706184134805000
Clicked Point (Latitude, Longitude): 41.35681, -75.37447
Time: 2021-07-06 14:41:53 -0400



Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	3.32	square miles

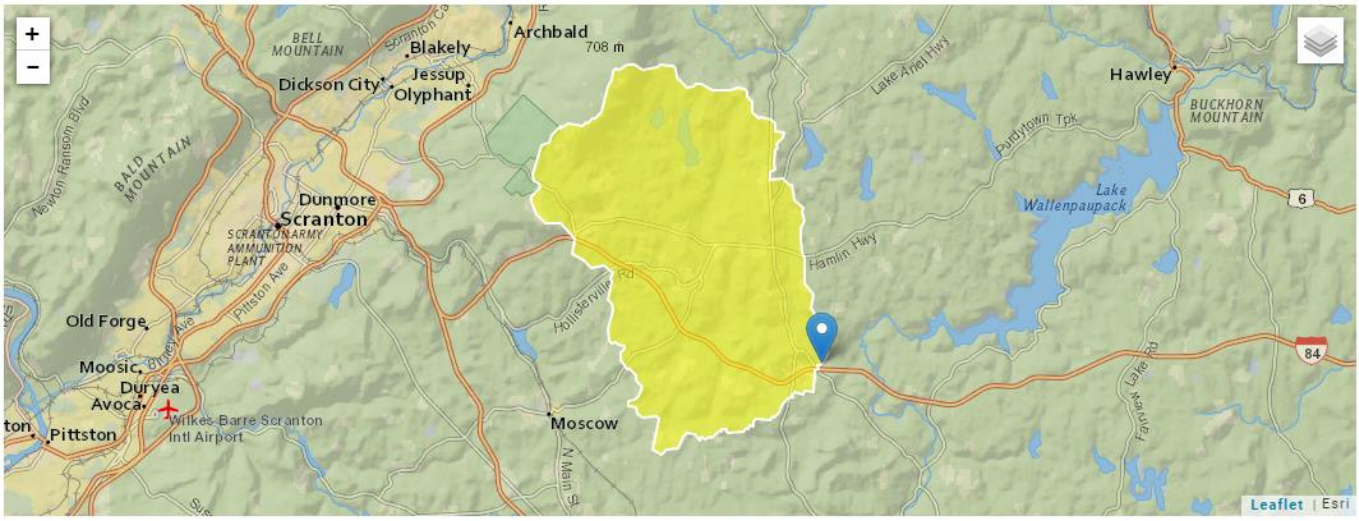
Statistic	Value	Unit
7 Day 2 Year Low Flow	0.237	ft^3/s
30 Day 2 Year Low Flow	0.356	ft^3/s
7 Day 10 Year Low Flow	0.0737	ft^3/s

At confluence with West Branch Wallenpaupack Creek (5572):

RMI	Elevation (ft)	Drainage Area (mi²)
0.00 1.74 (on 5572)	1,224.6	55.9

StreamStats Report

Region ID: PA
Workspace ID: PA20210706184849501000
Clicked Point (Latitude, Longitude): 41.35689, -75.37224
Time: 2021-07-06 14:49:08 -0400



Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	55.9	square miles

Modeling Using State-wide Low-Flow Yield (LFY) of 0.1 cfs/mi²:

$$\frac{0.1\ ft^3/sec}{mi^2} \times 3.32\ mi^2 = \mathbf{\frac{0.332\ ft^3}{sec}}$$

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
01C	5596	UBAN CREEK

RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
0.120	Twin Rocks TS	PA0060216	0.049	CBOD5	25		
				NH3-N	12.78	25.56	
				Dissolved Oxygen			3

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.332	= Q stream (cfs)	0.5	= CV Daily
0.0485	= 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 = 1.431	1.3.2.iii	WLA cfc = 1.387
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.533	5.1d	LTA_cfc = 0.806

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.500	BAT/BPJ
		INST MAX LIMIT (mg/l) = 1.635	