

Application Type Renewal  
Facility Type Non-Municipal  
Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0030571  
APS ID 1057763  
Authorization ID 1386702

**Applicant and Facility Information**

Applicant Name	<u>Louis J Mascaro Foundation Inc.</u>	Facility Name	<u>Mascaro STP</u>
Applicant Address	<u>2650 Audubon Road</u> <u>Audubon, PA 19403-2400</u>	Facility Address	<u>585 Freeman School Road</u> <u>Schwenksville, PA 19473-2111</u>
Applicant Contact	<u>Louis Mascaro</u>	Facility Contact	<u>Jon March</u>
Applicant Phone	<u>(888) 627-2276</u>	Facility Phone	<u>(267) 933-6120</u>
Client ID	<u>364671</u>	Site ID	<u>260158</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Lower Salford Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Montgomery</u>
Date Application Received	<u>February 15, 2022</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u></u>	If No, Reason	<u></u>
Purpose of Application	<u>Permit Renewal</u>		

**Summary of Review**

The applicant requests renewal of an NPDES permit to discharge treated sewage from Mascaro STP to an UNT to East Branch of Perkiomen Creek. At point of discharge the stream is intermittent.

The STP consists of influent screen, one aeration tank, one sludge holding tank, two final clarifiers, two sand filters, UV disinfection system and final effluent metering pit.

Aluminum sulfate is listed as a wastewater treatment chemical in the application for sequestering of Phosphorus.

Based on the eDMR review, the discharge is in compliance with the existing permit limitations. According to the comments from operations section, plant has minimal influent flow. There has been no significant activity in the surrounding buildings for several years. The new owner is looking to increase activity at the site in the near future. This permit was recently transferred to the current owner.

No industrial users are connected to the system.

There is no change in quality of wastewater, receiving stream designation and or treatment at the plant. This is a small facility under 50,000-gpd with no change in wastewater characteristics. Therefore, mostly the existing permit limits are carried over to the draft 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-

Approve	Deny	Signatures	Date
X		<i>Sara Abraham</i> Sara Reji Abraham, E.I.T. / Project Manager	April 13, 2022
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	04/13/2022

**Summary of Review**

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.

Act 14 Notifications:

Lower Salford Township - February 11, 2022  
Montgomery County - February 11, 2022

Permit Conditions:

- A. No Stormwater
- B. Acquire Necessary Property Rights
- C. Proper Sludge Disposal
- D. Abandon STP when Municipal Sewers Available
- E. Chlorine Optimization
- F. Small Stream Discharge
- G. Operator Notification
- H. Fecal Coliform Reporting
- I. Solids Management

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.0225</u>
Latitude	<u>40° 16' 33.63"</u>	Longitude	<u>-75° 25' 17.70"</u>
Quad Name	<u>Perkiomenville</u>	Quad Code	<u>1642</u>
Wastewater Description: <u>Treated Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to East Branch Perkiomen Creek (TSF, MF)</u>	Stream Code	<u>01175</u>
NHD Com ID	<u>25986846</u>	RMI	<u>0.40</u>
Drainage Area	<u>0.8 sq. miles</u>		
Q <sub>7-10</sub> Flow (cfs)	<u>0.0 (intermittent Stream)</u>	Q <sub>7-10</sub> Basis	<u>Previous fact sheet</u>
Watershed No.	<u>3-E</u>	Chapter 93 Class.	<u>TSF, MF</u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u>None</u>		
Source(s) of Impairment	<u>N/A</u>		
TMDL Status	<u>None</u>	Name	<u></u>

Treatment Facility Summary				
Treatment Facility Name: Mascaro STP				
<b>WQM Permit No.</b>	<b>Issuance Date</b>			
4698437	1998			
<b>Waste Type</b>	<b>Degree of Treatment</b>	<b>Process Type</b>	<b>Disinfection</b>	<b>Avg Annual Flow (MGD)</b>
Sewage	Tertiary	Extended Aeration With Solids Removal	Ultraviolet	0.02275
<b>Hydraulic Capacity (MGD)</b>	<b>Organic Capacity (lbs/day)</b>	<b>Load Status</b>	<b>Biosolids Treatment</b>	<b>Biosolids Use/Disposal</b>
0.0225		Not Overloaded	Holding Tank	Other WWTP

**Compliance History**

**DMR Data for Outfall 001 (from March 1, 2021 to February 28, 2022)**

Parameter	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21	AUG-21	JUL-21	JUN-21	MAY-21	APR-21	MAR-21
Flow (MGD) Average Monthly	0.0044	0.00475 6	0.00023	0.00059 2	0.0025	0.00063 6	0.00453 4	0.00046 2	0.00398 4	0.00031 3	0.00027 4	0.00709 3
pH (S.U.) Minimum	6.8	6.7	6.9	6.6	7.1	6.7	7.0	7.0	6.8	7.0	6.8	7.0
pH (S.U.) Maximum	7.3	7.0	7.4	7.5	7.2	8.1	7.6	7.9	7.2	7.3	7.1	7.9
DO (mg/L) Minimum	10.4	10.0	7.0	6.7	6.3	6.5	6.6	6.0	6.0	6.1	6.8	10.8
CBOD5 (mg/L) Average Monthly	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	3.8	< 2.0	< 2.0
TSS (mg/L) Average Monthly	< 4.0	< 4.0	< 2.5	< 4.0	< 4.0	< 4.0	4.3	< 4.0	< 4.0	9.0	< 4.0	< 4.0
Fecal Coliform (CFU/100 ml) Geometric Mean	1.0	2.0	1.0	3.0	8.0	13.0	10.0	20.0	2.0	4.0	1.0	< 1.0
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	1.0	6.0	1.0	12.0	35.0	170.0	96.0	128.0	4.0	6.0	1.0	< 1.0
Ammonia (mg/L) Average Monthly	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10	< 0.1	< 0.10	< 0.10	< 0.10	0.30	< 0.10	< 0.1
Total Phosphorus (mg/L) Average Monthly	0.10	0.20	0.10	0.20	0.20	0.10	0.20	0.20	0.20	0.30	0.20	0.20

**Development of Effluent Limitations**

Outfall No. 001 Design Flow (MGD) .0225  
 Latitude 40° 16' 33.18" Longitude -75° 25' 18.06"  
 Wastewater Description: Treated 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
CBOD <sub>5</sub>	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
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)

**Water Quality-Based Limitations**

The following limitations were determined through water quality modeling and from previous fact sheet:

Parameter	Limit (mg/l)	SBC	Basis
CBOD <sub>5</sub> (05/01 to 10/31)	10	Average Monthly	Dry stream Discharge Guidance
CBOD <sub>5</sub> (11/01 to 04/30)	20	Average Monthly	Seasonal limitatoin
TSS	30	Average Monthly	DRBC 3.10.4. D.1.a
NH <sub>3</sub> -N (05/01 to 10/31)	1.5	Average Monthly	WQM 7.0
NH <sub>3</sub> -N (11/01 to 04/30)	4.5	Average Monthly	WQM 7.0
Phosphorus as P	2.0	Average Monthly	Chapter 95.9
DO	6.0	Minimum	Existing limit
pH (STD)	6.0 to 9.0	Min/Max	Ch. 93
Fecal Coliform	#200/100ml	Geo Mean	Ch. 92a/DRBC
Total Nitrogen*	Monitor	Average Monthly	SOP
E-Coli*	Monitor		SOP

\* Total Nitrogen and E-Coli monitoring are included in the draft permit according to the DEP SOP guidance (Chapter 92.a.61) and is consistent with the requirements of other similar discharges in the area. These are the only new requirements in the permit.

**Best Professional Judgment (BPJ) Limitations**

Comments: N/A

**Anti-Backsliding**

N/A

**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	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/week	Grab
DO	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/week	Grab
CBOD5 Nov 1 - Apr 30	XXX	XXX	XXX	20	XXX	40	2/month	24-Hr Composite
CBOD5 May 1 - Oct 31	XXX	XXX	XXX	10	XXX	20	2/month	24-Hr Composite
TSS	XXX	XXX	XXX	30	XXX	60	2/month	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	4.5	XXX	9	2/month	24-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	1.5	XXX	3	2/month	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	2.0	XXX	4	2/month	24-Hr Composite