

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

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0244040  
APS ID 1010630  
Authorization ID 1304240

**Applicant and Facility Information**

Applicant Name	<u>Shelly Square LP</u>	Facility Name	<u>Shelly Rd Development</u>
Applicant Address	<u>528 Main Street Suite 200</u> <u>Harleysville, PA 19438-2266</u>	Facility Address	<u>Rte 63 &amp; Shelly Road</u> <u>Salfordville, PA 18958</u>
Applicant Contact	<u>Bryan Hunsberger</u>	Facility Contact	<u>Bryan Hunsberger</u>
Applicant Phone	<u>(215) 513-7368</u>	Facility Phone	<u>(215) 513-7368</u>
Client ID	<u>242801</u>	Site ID	<u>631736</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Upper Salford Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Montgomery</u>
Date Application Received	<u>January 28, 2020</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 has submitted an application for NPDES permit to discharge treated sewage from sewage treatment plant serving Shelly Square Shopping Center into East Branch of Perkiomen Creek.

There are different user's flows that STP receives from several businesses at the Shelly Square shopping Center: Vernfield Landis, H&R Block, H/S Therapy Associates, K's Nails, Quality Cleaners, Alderfer Real Estate, Bark Avenue, Super Cuts, Pelleritos Rizza, China Moon, and Uninvest.

The facility (15,000 gpd) consists of influent Sampler, an equalization tank section with bar screen, treatment train – BESST Process by Purestream, Inc. (rated 12,2446 gpd), sludge holding tank (6395 gallons), Effluent Filter, UV disinfection Unit, Control Building, chemical storage and pumps, and effluent sampling and metering facility.

DEP has conducted a site visit on 12/9/19. Copy of the inspection is attached:



Shelly Square STP  
12-09-19 Insp.pdf

Based on the inspection report following recommendation was given:

**Alarm dialer was on, but the phone line was dead and modules were not lit. The issues should be investigated, and the results forwarded to this inspector to avoid a violation.**

Approve	Deny	Signatures	Date
X		<i>Begay Omuralieva</i> Begay Omuralieva / Environmental Engineering Specialist	April 1, 2020
X		Pravin C. Patel, P.E. / Environmental Engineer Manager /s/	April 1, 2020

**Summary of Review**

The permittee replied that the issue was with their network provider Verizon. Two effluent non-compliance results were submitted for Ammonia and Phosphorus (see p. 5 of this factsheet).

Since there are no significant effluent violations and quality and quantity of the discharge is relatively the same, all previously established effluent limits and monitoring requirements are proposed in the draft permit as listed on p.6 of this factsheet.

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)	.012446
Latitude	40° 17' 47.56"	Longitude	-75° 24' 54.85"
Quad Name		Quad Code	
Wastewater Description: Sewage Effluent			
Receiving Waters	East Branch Perkiomen Creek (TSF, MF)	Stream Code	
Receiving Waters	East Branch Perkiomen Creek	Stream Code	01168
NHD Com ID	25987682	RMI	6.31 mi
Drainage Area	47.53	Yield (cfs/mi <sup>2</sup> )	
Q <sub>7-10</sub> Flow (cfs)	0.43	Q <sub>7-10</sub> Basis	
Elevation (ft)	180.000 Ft	Slope (ft/ft)	
Watershed No.	3-E	Chapter 93 Class.	TSF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use			
Assessment Status	Attaining Use(s)		

Changes Since Last Permit Issuance: none

Treatment Facility Summary				
<b>Treatment Facility Name:</b> Shelly Square STP				
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Activated Sludge With Solids Removal	Ultraviolet	12446
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
16553	98.32	Not Overloaded	Aerobic Digestion	Other WWTP

Changes Since Last Permit Issuance: none

Compliance History

DMR Data for Outfall 001 (from February 1, 2019 to January 31, 2020)

Parameter	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19
Flow (MGD) Average Monthly	0.00417	0.00273	0.00208	0.0022	0.00287	0.00318	0.00306 1	0.00310 1	0.00352	0.00323	0.00328	0.00318
Flow (MGD) Daily Maximum	0.01008	0.00487	0.00379	0.00338	0.00517	0.0056	0.00502	0.00438	0.00536	0.0058	0.00444	0.00546
pH (S.U.) Instantaneous Minimum	7.0	6.7	6.7	6.6	6.7	6.9	7.0	6.5	6.8	6.7	6.1	6.5
pH (S.U.) Maximum	7.8	7.5	7.2	7.5	7.4	7.5	7.8	7.8	7.7	7.7	7.6	8.2
DO (mg/L) Minimum	6.0	6.0	6.5	6.1	6.1	6.0	6.1	6.1	6.4	6.4	6.0	7.8
CBOD5 (mg/L) Average Monthly	4.0	4.0	4.8	2.0	2.0	2.6	< 2.0	3.5	2.4	2.8	3.0	3.0
TSS (mg/L) Average Monthly	9.0	8.0	5.5	3.2	5.8	5.2	5.8	3.5	8.0	8.5	6.0	3.8
Total Dissolved Solids (mg/L) Average Monthly	1136.0	1318.0	1268	1122.0	1066.0	1074.0	1082.0	1444.0	1224.0	1172.0	248.0	1418.0
Oil and Grease (mg/L) Average Monthly	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	4.6	< 3.9	< 3.8
Fecal Coliform (CFU/100 ml) Average Monthly	2.0	2.0	4.0	1.0	1.0	5.0	< 1.0	1.0	2.0	< 1.0	< 1.0	< 1.0
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	2.0	9.0	45.0	4.0	3.0	60.0	< 1.0	6.0	6.0	< 1.0	< 1.0	< 1.0
UV Intensity (mW/cm <sup>2</sup> ) Minimum	0.1	0.1	0.1	0.1	0.1	0.10	0.2	0.10	0.1	0.1	0.10	0.1
UV Intensity (mW/cm <sup>2</sup> ) Average Monthly	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.20	0.2	0.1	0.10	0.1
Total Nitrogen (mg/L) Average Monthly	3.61	30.2	38.5	29.8	11.4	34.0	2.62	34.6	45.2	36.3	48.1	40.7
Ammonia (mg/L) Average Monthly	0.10	0.10	0.90	0.30	0.10	< 0.01	< 0.1	0.4	0.10	0.2	2.0	0.1

**NPDES Permit Fact Sheet  
Shelly Rd Development**

**NPDES Permit No. PA0244040**

Total Phosphorus (mg/L) Average Monthly	0.65	0.16	0.10	0.08	0.07	0.08	0.06	0.05	0.12	0.15	0.29	0.19
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**Compliance History**

**Effluent Violations for Outfall 001, from: March 1, 2019 To: January 31, 2020**

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Ammonia	03/31/19	Avg Mo	2.0	mg/L	1.5	mg/L
Total Phosphorus	01/31/20	Avg Mo	0.65	mg/L	0.5	mg/L

**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	Daily Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Recorded
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	XXX	XXX	XXX	15	XXX	30	1/week	24-Hr Composite
TSS	XXX	XXX	XXX	15	XXX	30	1/week	24-Hr Composite
Total Dissolved Solids	XXX	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	Report	XXX	XXX	1/week	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	1000	1/week	Grab
UV Intensity (mW/cm <sup>2</sup> )	XXX	XXX	Report	XXX	XXX	XXX	1/week	Metered
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	1/month	Calculation
Ammonia	XXX	XXX	XXX	1.5	XXX	3	1/week	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	0.5	XXX	1	1/week	24-Hr Composite

Compliance Sampling Location: Outfall 001