

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

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0042927  
 APS ID 1086771  
 Authorization ID 1436557

**Applicant and Facility Information**

Applicant Name	<u>Owen J. Roberts School District</u>	Facility Name	<u>Owen J. Roberts SD Main Campus STP</u>
Applicant Address	<u>901 Ridge Road</u> <u>Pottstown, PA 19465</u>	Facility Address	<u>901 Ridge Road</u> <u>Pottstown, PA 19465</u>
Applicant Contact	<u>Mike Shelgren</u>	Facility Contact	<u>Mike Shelgren</u>
Applicant Phone	<u>(610) 469-5154</u>	Facility Phone	<u>(610) 469-5154</u>
Client ID	<u>73308</u>	Site ID	<u>260882</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>South Coventry Township</u>
Connection Status		County	<u>Chester</u>
Date Application Received	<u>March 27, 2023</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted		If No, Reason	
Purpose of Application	<u>Permit Renewal</u>		

**Summary of Review**

The permittee requests approval for the renewal of a National Pollutant Discharge Elimination System (NPDES) Individual permit application to discharge 39,000 gallons per day (gpd) of treated sewage from Owen J. Roberts School District Main Campus sewage treatment plant (STP) to an unnamed tributary (dry swale) to French Creek. The receiving water is classified as Exceptional Value (EV) under Chapter 93.

The STP is an extended aeration process consisting of a comminutor chamber, equalization tank, aeration tank, clarifier, sludge holding tank, dosing tank, sand filter bed, chlorine contact tank for chlorination and dechlorination.

No upgrades are proposed at this renewal.

There are no changes in the flow, stream designation, influent characteristics, treatment units etc. therefore the existing effluent limits are carried over to the draft permit.

eDMR review shows many noncompliance events due to TRC and couple of noncompliance events due to Fecal Coliform during the last one year. Based on the submitted reports there is an ongoing issue with equipment malfunction/failure and the Operator is trying to resolve the issue.

No comments received from Operation Section. An inspection was conducted by DEP on 02/07/2023, no violations were noted.

Sludge use and disposal description and location(s): sludge is hauling away to DELCORA or Goose Creek WWTP

Approve	Deny	Signatures	Date
X		<i>Sara Abraham</i> Sara Reji Abraham, E.I.T. / Project Manager	September 27, 2023
X		<i>Pravin Patel</i> Pravin C. Patel, P.E. / Environmental Engineer Manager	09/27/2023

## Summary of Review

Influent monitoring for CBOD5 and TSS are included in the draft permit to check compliance with the 85% removal efficiency requirement.

### 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.

### Act 14 Notifications:

Chester County - March 23, 2023  
South Coventry Township - March 23, 2023

### Permit Conditions:

- A. No Stormwater
- B. Necessary Property Rights
- C. Sludge Disposal
- D. Abandon STP
- E. Chlorine Optimization
- F. Small Stream Discharge
- G. Operator Notification
- H. Remedial Measures if Unsatisfactory Effluent
- I. Fecal Coliform Reporting
- J. Solids Management
- K. TRC Effluent Limitations below Quantitation's Limits

**Discharge, Receiving Waters and Water Supply Information**

Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.039</u>
Latitude	<u>40° 9' 59.44"</u>	Longitude	<u>-75° 40' 10.86"</u>
Quad Name	<u>Pottstown</u>	Quad Code	<u>1740</u>
Wastewater Description: <u>Treated Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to French Creek (EV, MF)</u>	Stream Code	<u>01548</u>
NHD Com ID	<u>25990422</u>	RMI	<u>12.7 (French Creek)</u>
Drainage Area	<u>0.45 mi<sup>2</sup></u>	Yield (cfs/mi <sup>2</sup> )	<u>0.0396</u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.0178</u>	Q <sub>7-10</sub> Basis	<u>Pennsylvania StreamStats</u>
Elevation (ft)	<u>349.5</u>	Slope (ft/ft)	<u>3.1</u>
Watershed No.	<u>3-D</u>	Chapter 93 Class.	<u>EV, MF</u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>Pathogens</u>		
Source(s) of Impairment	<u>Source unknown</u>		

**Treatment Facility Summary**

**Treatment Facility Name:** Owen J. Roberts SD Main Campus STP

WQM Permit No.	Issuance Date
1598401	3/9/1998

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Extended aeration with solids removal	Hypochlorite	0.039
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.039		Not Overloaded		Other WWTP

**Compliance History**

**DMR Data for Outfall 001 (from April 1, 2022 to March 31, 2023)**

Parameter	MAR-23	FEB-23	JAN-23	DEC-22	NOV-22	OCT-22	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22
Flow (MGD) Average Monthly	0.0107	0.0102	0.0101	0.0084	0.0085	0.0120	0.0118			0.0094	0.0104	0.0093
Flow (MGD) Daily Maximum	0.027	0.02	0.024	0.022	0.021	0.025	0.034			0.026	0.021	0.021
pH (S.U.) Instantaneous Minimum	6.4	6.9	6.3	6.7	6.8	6.8	6.24			6.48	6.7	6.69
pH (S.U.) Instantaneous Maximum	7.7	7.6	7.6	7.5	7.6	7.7	8.47			7.44	7.41	7.28
DO (mg/L) Instantaneous Minimum	9.3	6.8	9.8	7.2	5.6	6.2	6.23			7.21	6.86	7.82
TRC (mg/L) Average Monthly	< 0.02	< 0.01	< 0.03	< 0.03	< 0.02	< 0.03	< 0.03			0.02	< 0.05	0.05
TRC (mg/L) Instantaneous Maximum	0.04	0.03	0.07	0.06	0.04	0.06	0.06			0.05	0.18	0.32
CBOD5 (mg/L) Average Monthly	2.2	< 2.2	< 2.1	< 2.4	< 3.1	3.5	3.8			4.8	< 2.3	2.4
BOD5 (mg/L) Raw Sewage Influent   Average Monthly	207	3425	275	227	110	385	260			585	442	331
TSS (mg/L) Average Monthly	3.5	4.5	4.5	11.0	6.5	8.0	6.5			3.0	8.5	4.0
TSS (mg/L) Raw Sewage Influent   Average Monthly	907	3560	637	113	57	540	543			925	623	703
Fecal Coliform (No./100 ml) Geometric Mean	< 2	< 3	< 2	< 2	< 2	< 5	< 25			3500	< 8	< 2
Fecal Coliform (No./100 ml) Instantaneous Maximum	< 2	5	< 2	3	< 2	13	310			3500	30	< 2
Total Nitrogen (mg/L) Average Monthly	77.71	< 75.76	66.9	52.36	79.4	< 92.92	72.68			86.89	91.84	81.3

Ammonia (mg/L) Average Monthly	1.9	< 0.2	3.1	0.4	< 0.02	< 0.2	< 0.3			< 0.02	0.2	0.01
Total Phosphorus (mg/L) Average Monthly	5.99	5.75	6.6	5.69	5.52	5.35	6.12			4.05	7.24	8.36

**Compliance History**

**Effluent Violations for Outfall 001, from: May 1, 2022 To: March 31, 2023**

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
TRC	10/31/22	Avg Mo	< 0.03	mg/L	.02	mg/L
TRC	12/31/22	Avg Mo	< 0.03	mg/L	.02	mg/L
TRC	05/31/22	Avg Mo	< 0.05	mg/L	.02	mg/L
TRC	09/30/22	Avg Mo	< 0.03	mg/L	.02	mg/L
TRC	01/31/23	Avg Mo	< 0.03	mg/L	.02	mg/L
TRC	12/31/22	IMAX	0.06	mg/L	.02	mg/L
TRC	11/30/22	IMAX	0.04	mg/L	.02	mg/L
TRC	09/30/22	IMAX	0.06	mg/L	.02	mg/L
TRC	10/31/22	IMAX	0.06	mg/L	.02	mg/L
TRC	05/31/22	IMAX	0.18	mg/L	.02	mg/L
TRC	06/30/22	IMAX	0.05	mg/L	.02	mg/L
TRC	02/28/23	IMAX	0.03	mg/L	.02	mg/L
TRC	03/31/23	IMAX	0.04	mg/L	.02	mg/L
TRC	01/31/23	IMAX	0.07	mg/L	.02	mg/L
Fecal Coliform	06/30/22	Geo Mean	3500	No./100 ml	200	No./100 ml
Fecal Coliform	06/30/22	IMAX	3500	No./100 ml	1000	No./100 ml



**Development of Effluent Limitations**

**Outfall No.** 001  
**Latitude** 40° 10' 0.92"  
**Wastewater Description:** Sewage Effluent

**Design Flow (MGD)** .039  
**Longitude** -75° 40' 11.34"

**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)

**The following limitations were determined:**

Parameter	Limit (mg/l)	SBC	Basis
CBOD <sub>5</sub>	25	Average Monthly	Existing limit
DO	4.0	Inst. Min.	Existing limit
TRC	0.02	Average Monthly	Existing limit
TSS	30	Average Monthly	Existing limit
NH <sub>3</sub> as N	10.0	Average Monthly	Existing limit
Total N	Report	Average Monthly	Data Collection/SOP
Total Phosphorus	Report	Average Monthly	Data Collection/SOP
Fecal Coliform (No./100ml)	200/1000	Geo Mean/Inst. Max.	Chap. 92/DRBC
E. Coli**	Report	Inst. Max.	Data Collection/SOP
pH	6.0 to 9.0 Std. Units		Chap. 93

\*E. Coli is the only new parameter in the permit.

\*\* Existing discharge to dry swale, EV stream. No changes proposed, no complaints concerning discharge to dry swale. Therefore, existing limits adequate, no requirement to upgrade, per dry swale policy.

**Anti-Backsliding**

N/A

**Proposed Effluent Limitations and Monitoring Requirements**

**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	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
Dissolved Oxygen	XXX	XXX	4.0 Inst Min	XXX	XXX	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	0.02	XXX	0.02	1/day	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5) Raw Sewage Influent	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Carbonaceous Biochemical Oxygen Demand (CBOD5)	XXX	XXX	XXX	25.0	XXX	50	2/month	8-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	30.0	XXX	60	2/month	8-Hr Composite
Total Suspended Solids Raw Sewage Influent	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-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	8-Hr Composite
Ammonia-Nitrogen	XXX	XXX	XXX	10.0	XXX	20	2/month	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite