



Application Type

Renewal

Facility Type

Non-Municipal

Major / Minor

Minor

Application No.

**PA0052132**

APS ID

**622617**

Authorization ID

**1478951**

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

**Applicant and Facility Information**

Applicant Name	<b>Parkland School District</b>	Facility Name	<b>Parkland School District Orefield Mid School</b>
Applicant Address	2219 N Cedar Crest Boulevard	Facility Address	4502 Lime Kiln Drive
	Allentown, PA 18104-9665		Orefield, PA 18069-2321
Applicant Contact	Arthur Oakes	Facility Contact	Arthur Oakes
Applicant Phone	(610) 351-5587	Facility Phone	(610) 351-5587
Client ID	51892	Site ID	249436
Ch 94 Load Status	Not Overloaded	Municipality	South Whitehall Township
Connection Status		County	Lehigh
Date Application Received	April 1, 2024	EPA Waived?	Yes
Date Application Accepted	April 5, 2024	If No, Reason	
Purpose of Application	Renewal of existing NPDES permit to discharge treated sewage effluent.		

**Summary of Review**

The applicant is requesting the renewal of an NPDES permit to discharge 0.0093 MGD of treated sewage to Jordan Creek, a Trout Stocking, Migratory Fish (TSF, MF) receiving stream in State Water Plan Basin 2C (Lower Lehigh River). 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 not designated as a naturally reproducing trout stream as per PA Fish & Boat Commission. This discharge is not expected to affect public water supplies.

The system for this facility is primary treatment via bar screening, followed by two extended aeration tanks, and finally a chlorine contact tank for disinfection. This facility also uses treatment chemicals Soda Ash (pH control) and Sodium Bisulfate (dechlorination) in this process.

The receiving stream is impaired by URBAN RUNOFF/STORM SEWERS - SILTATION; URBAN RUNOFF/STORM SEWERS - FLOW REGIME MODIFICATION. This discharge is not expected to impact this impairment.

The facility reports 3.352 dry tons of sludge is hauled annually via independent contractor to Lehigh County Pretreatment.

There are no representative stream gages in the vicinity of the outfall. A standard low flow yield (LFY) of 0.1 cfs/mi<sup>2</sup> was used to model the discharge. RMI values were obtained using the Department's eMapPA, drainage areas were delineated using USGS's StreamStats interactive map, and elevations were obtained using the elevation profile tool on StreamStats.

E. Coli monitoring requirements will be introduced into the new permit according to PA DEP policy for individual sewage effluent limitations. E. Coli requirements for a treatment plant with less than .05 MGD discharge is found in the SOP for establishing effluent limitations for individual sewage.

Approve	Deny	Signatures	Date
X		<i>William Hon</i> William Hon / Environmental Engineer Specialist	April 10, 2025
X		<i>Edward Dudick</i> Edward Dudick, P.E. / Environmental Engineer Manager	April 17, 2025

### Summary of Review

Limitations for pH, CBOD<sub>5</sub>, Total Suspended Solids, Dissolved Oxygen (DO), and Fecal Coliform are technology-based and carried over from the previous permit. Limitations for Ammonia-Nitrogen and Total Residual Chloride (TRC) are water quality-based and carried over from the previous permit. WQM modeling did not recommend stricter limitations for Ammonia-Nitrogen.

Annual monitoring requirements for Total Dissolved Solids, Total Nitrogen, Total Phosphorus, Nitrate-Nitrite as N, and Total Kjeldahl Nitrogen are carried over from the previous permit.

Special conditions added into this permit:

- Chlorine Minimization
- DRBC May Have Other Requirements
- Solids Management

The previous inspection performed at this facility occurred on 1/4/2024 and resulted in zero (0) NOVs. There are no open violations in the Clean Water Program that would warrant the withholding of the issuance of this permit. Recommend approval.

Modeling Inputs:

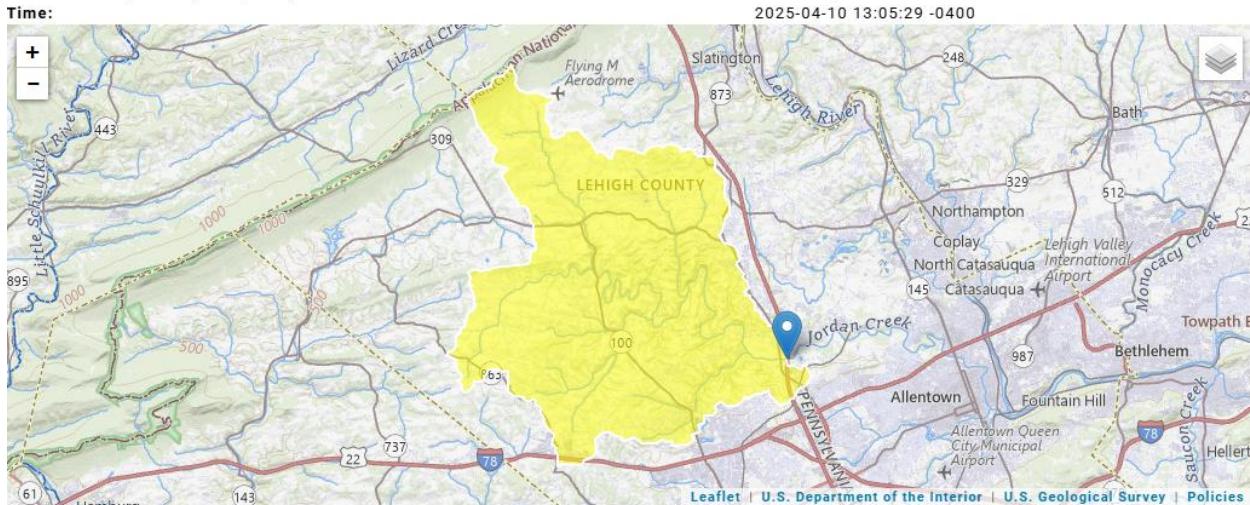
PT1 @ Outfall, Stream 3424 (Jordan Creek), 2-C (Lower Lehigh River), TSF MF

RMI: 1.31 (for Modeling Purposes)

Clicked Point (Latitude, Longitude):

40.62249, -75.57735

2025-04-10 13:05:29 -0400



[Collapse All](#)

#### Basin Characteristics

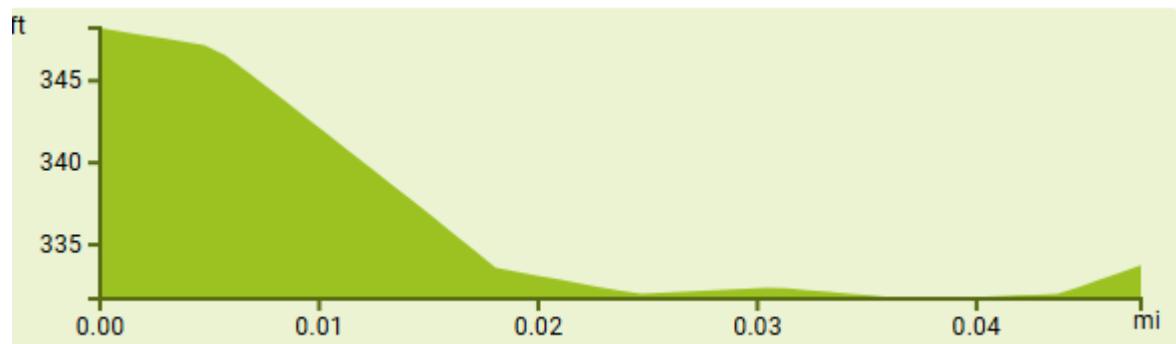
Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	2.33	percent
DRNAREA	Area that drains to a point on a stream	68.3	square miles

7 Day 10 Year Low Flow 2.27 ft<sup>3</sup>/s

USGS Gauge 01451800 (Upstream)

7 Day 10 Year Low F 2.2 cubic feet per  
low second

Summary of Review



40.62262      -75.57734      331.81

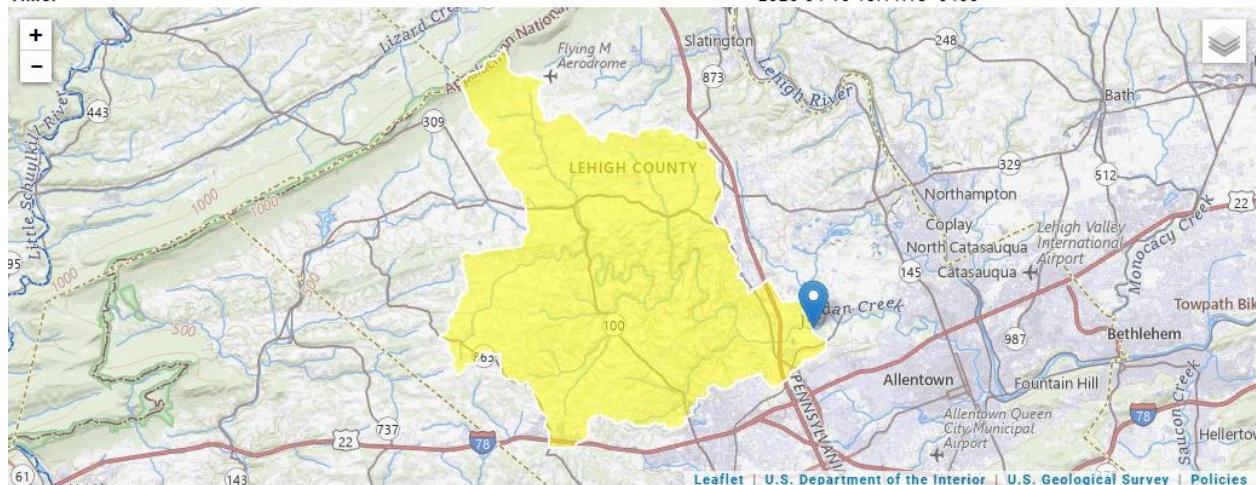
PT2 Approx 1.32 miles away from Outfall 001, RMI: .01 (for modeling purposes)

Clicked Point (Latitude, Longitude):

40.62775, -75.55869

2025-04-10 13:11:18 -0400

Time:

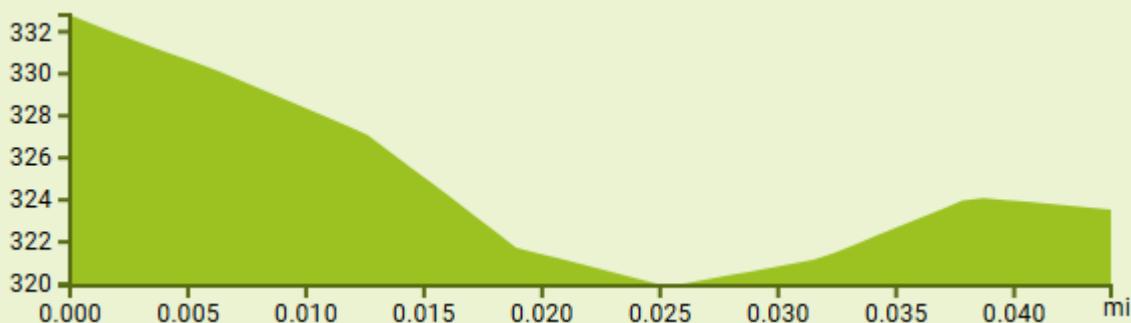


[Collapse All](#)

► Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	4.25	percent
DRNAREA	Area that drains to a point on a stream	70.3	square miles

7 Day 10 Year Low Flow      2.71



40.62782      -75.55863      319.91

Summary of Review

Analysis Results WQM 7.0

Hydrodynamics NH3-N Allocations D.O. Allocations D.O. Simulation Effluent Limitations

RMI	Discharge Name	Permit Number	Disc Flow (mgd)
1.31	Orefield	PA0052132	0.0093
Parameter	Effluent Limit 30 Day Average (mg/L)	Effluent Limit Maximum (mg/L)	Effluent Limit Minimum (mg/L)
CBOD5	25		
NH3-N	25	50	
Dissolved Oxygen			3

Record: 1 of 1 No Filter Search

**TRC EVALUATION**

Input appropriate values in A3:A9 and D3:D9

2.27	= Q stream (cfs)	0.5	= CV Daily
0.0093	= 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 = 50.351	1.3.2.iii	WLA_cfc = 49.081
PENTOXSD TRG	5.1a	LTAMULT_afc = 0.373	5.1c	LTAMULT_cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 18.762	5.1d	LTA_cfc = 28.533

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		

Public Participation

### Summary of Review

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.



Pennsylvania  
**Department of**  
Environmental Protection