

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

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0047198
APS ID 974346
Authorization ID 1403176

Applicant and Facility Information

Applicant Name	<u>Np New Castle LLC</u>	Facility Name	<u>Schuylkill Mall STP</u>
Applicant Address	<u>3315 N Oak Trfy</u> <u>Kansas City, MO 64116-2775</u>	Facility Address	<u>150 Mall Road</u> <u>Frackville, PA 17931</u>
Applicant Contact	<u>Dana Baker</u>	Facility Contact	<u>Dana Baker</u>
Applicant Phone	<u>(570) 933-9865</u>	Facility Phone	<u>(570) 933-9865</u>
Client ID	<u>343417</u>	Site ID	<u>488029</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>New Castle Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Schuylkill</u>
Date Application Received	<u>July 8, 2022</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>July 8, 2022</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of NPDES permit to discharge treated sewage effluent.</u>		

Summary of Review

The applicant is requesting the renewal of an NPDES permit to discharge 0.05 MGD of treated sewage into Tributary 03260 to Mud Run, a Cold-Water Fishes (CWF) receiving stream in State Water Plan Basin 3-A (Upper Schuylkill River). Per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than the 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 uses equalization, aerobic digestion, secondary clarification, and uses chlorine for disinfection.

Since last application was approved and issued, there has been a change to this segment of Mud Run. It is now classified as a Cold-Water Fishes receiving stream, a change from a previous designation of High-Quality, Cold-Water Fishes.

The initial application was submitted and received in the summer of 2022. The current renewal process was resumed in late summer 2024. Facility and contact information have been updated as of October 2024.

There are no representative stream gages in the vicinity of the outfall. The previous permit was modeled based on the Dam Files (D54-054) Inspection Reports which indicated the Kauffman located upstream of the outfall. The Q₇₋₁₀ low flow for modeling will be .157cfs based on the report and LFY to be .2035cfs based on a .76mi² drainage area. 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.

Modeling for Ammonia-Nitrogen and DO recommended more stringent limits than the previous permit. These new WQBELs will go into effect three (3) years after the new permit effective date to allow the facility to make the necessary changes to accommodate this change. Ammonia-Nitrogen WQM modeling indicated a summertime limit of 6.44mg/L average monthly

Approve	Deny	Signatures	Date
X		<i>William Hon</i> William Hon / Environmental Engineer Specialist	April 3, 2025
X		<i>Edward Dudick</i> Edward Dudick, P.E. / Environmental Engineer Manager	April 3, 2025

Summary of Review

with an IMAX of 12.88 should be added. Wintertime limitations have been set to three (3) times this limit as per SOP for establishing effluent limitations in individual sewage permits (SOP No. BCW-PMT-033).

Limitations for pH and Fecal Coliform are technology-based and carried over from the previous permit. Limitations for CBOD₅, TRC, and Total Suspended Solids (TSS) are water quality-based and carried over from the previous permit.

Monitoring frequencies for all parameters with limitations have been updated to the recommended frequencies found in Table 6-3 of DEP's Technical Guidance for the Development and Specification of Effluent Limitations (Document No. 362-0400-001). This change will affect sampling parameters for pH, DO, and TRC.

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 discharge between .05 and 1MGD is found in the SOP for establishing effluent limitations for individual sewage.

Monitoring and Sampling requirements for TDS, Nitrate-Nitrite as N, Total Nitrogen, Total Phosphorus, Total Aluminum, Total Iron, and Total Manganese have been retained in this renewal at a sampling frequency of 1/year.

DRBC DOCKET NO. D-2019-004-1 is associated with this facility which was approved on 3/11/2020 and expires on 12/21/2027. Special conditions for DRBC having other requirements will be included in the permit renewal.

Dam Program personnel have noted that some dams do not comply with their minimum release requirements at all times. Therefore, existing dry stream condition has been retained in this permit.

Application indicated 1.968 dry tons of sludge is hauled to Greater Hazelton JSA via contractor from this facility on a yearly basis.

This segment of the unnamed tributary to Mud Run is impaired by Atmospheric Deposition. This facility is not expected to contribute to this impairment.

The existing permit expired on 12/31/2022 and the application for renewal was received on time. A Water Management System Inspection query was performed and indicated that on 5/16/2024 a Follow-up Inspection was performed with no violations noted. There are no open violations for this client that could warrant withholding issuance of this permit.

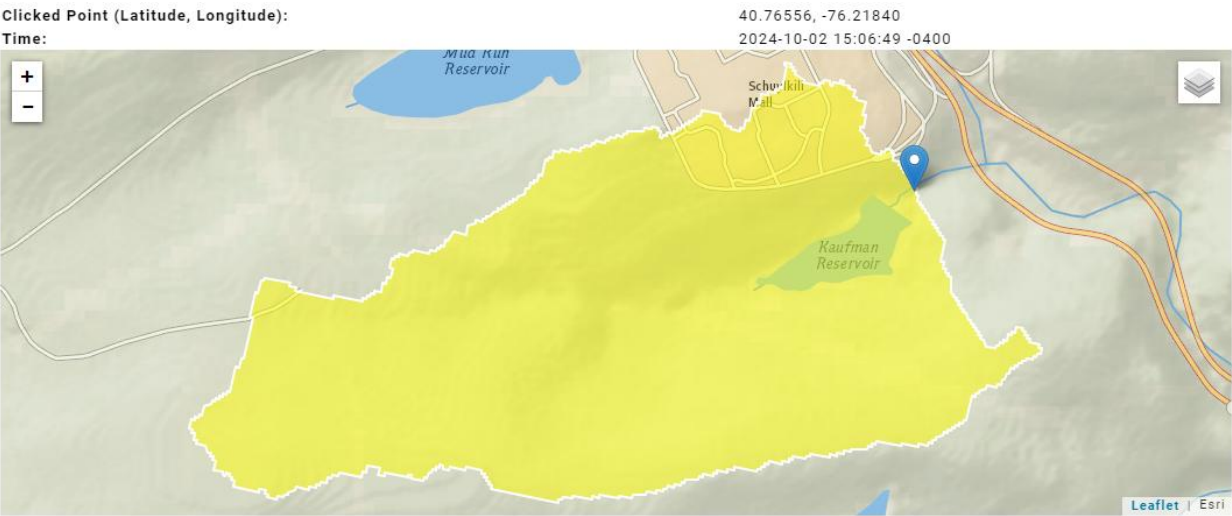
Modeling Inputs:

Pt1 @ Outfall

RMI: 1.2

Stream: Tributary to Mud Run, 2360

Summary of Review

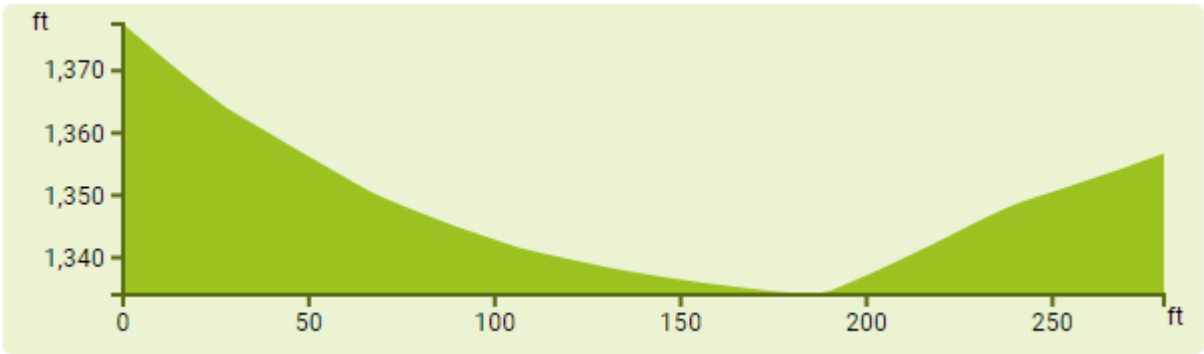


Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	0.79	square miles

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.139	ft ³ /s
30 Day 2 Year Low Flow	0.198	ft ³ /s
7 Day 10 Year Low Flow	0.0497	ft ³ /s



L7-10 Used was .1547cfs

Pt2 @ Conflux w/ Mill Creek approx. 1.2miles down stream
RMI: .01
Mud Run, 2359

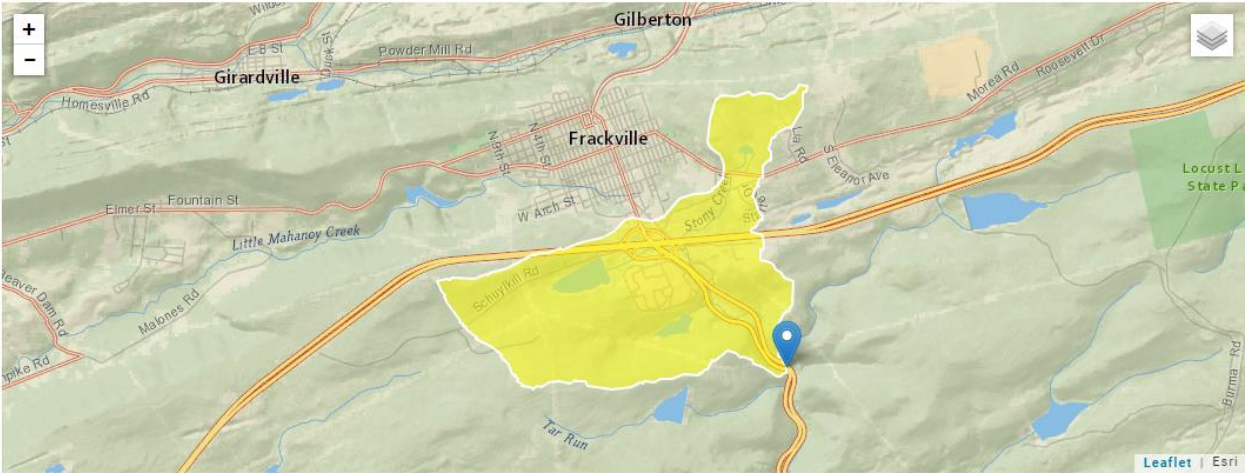
Summary of Review

Clicked Point (Latitude, Longitude):

40.75943, -76.20491

Time:

2024-10-02 15:12:30 -0400

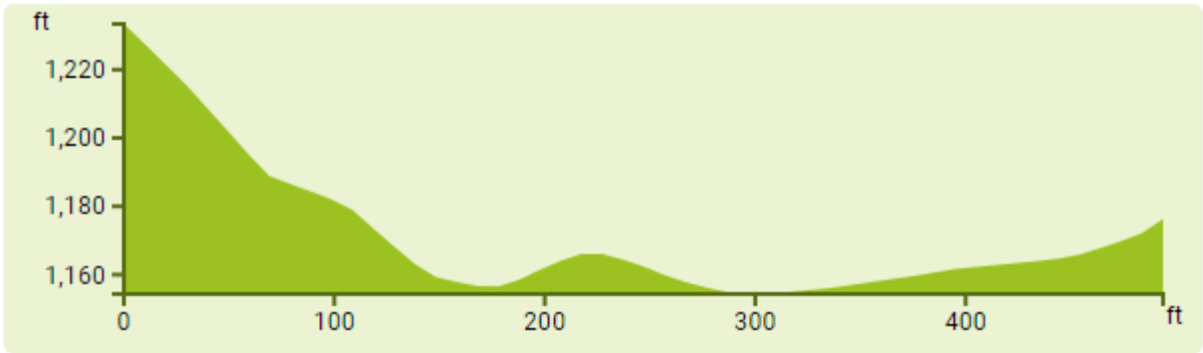


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Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	3	square miles

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.428	ft ³ /s
30 Day 2 Year Low Flow	0.607	ft ³ /s
7 Day 10 Year Low Flow	0.161	ft ³ /s



Summary of Review

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.157	= Q stream (cfs)	0.5	= CV Daily
0.05	= 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 = 0.666	1.3.2.iii	WLA cfc = 0.642
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 0.248	5.1d	LTA_cfc = 0.373

Source	Effluent Limit Calculations
PENTOXSD TRG 5.1f	AML MULT = 1.231
PENTOXSD TRG 5.1g	AVG MON LIMIT (mg/l) = 0.306 AFC
	INST MAX LIMIT (mg/l) = 1.000

Analysis Results WQM 7.0

HydrodynamicsNH3-N AllocationsD.O. AllocationsD.O. SimulationEffluent Limitations

RMI

Discharge Name

Permit Number

Disc Flow (mgd)

1.20

Schuylkill Mall

PA0047198

0.0500

Parameter	Effluent Limit 30 Day Average (mg/L)	Effluent Limit Maximum (mg/L)	Effluent Limit Minimum (mg/L)
CBOD5	25		
NH3-N	6.44	12.88	
Dissolved Oxygen			5

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Next >

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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**