

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

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0061905  
APS ID 1070841  
Authorization ID 1465746

**Applicant and Facility Information**

Applicant Name	<u>Applegreen PA Welcome Center LLC</u>	Facility Name	<u>Hickory Run Turnpike Plaza</u>
Applicant Address	<u>208 Harristown Road Glen Rock</u> <u>Glen Rock, NJ 07452</u>	Facility Address	<u>256 Danner Road Hickory Run Service Plaza</u> <u>Jim Thorpe, PA 18229</u>
Applicant Contact	<u>Shawn Leslie</u>	Facility Contact	<u>Shawn Leslie</u>
Applicant Phone	<u>(443) 206-6899</u>	Facility Phone	<u>(443) 206-6899</u>
Client ID	<u>370385</u>	Site ID	<u>253196</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Penn Forest Township</u>
Connection Status		County	<u>Carbon</u>
Date Application Received	<u>November 1, 2023</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>November 2, 2023</u>	If No, Reason	
Purpose of Application	<u>Renewal of NPDES permit to discharge treated sewage.</u>		

**Summary of Review**

The applicant is requesting a renewal of existing NPDES permit to discharge .04MGD of treated sewage effluent to receiving water Stony Creek, an EV-MF (Exceptional Value-Migratory Fish) designated receiving stream in State Water Plan Basin 2-B (Middle 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.

The facility services the Hickory Run Turnpike Plaza and the process design is as follows: Wastewater flows from the plaza to a flow equalization tank then to primary clarifier. From there, flow goes to a flow splitter box and is distributed between two rotary arm rock media trickling filters. Effluent from here flows to the recirculation pump station and the is pumped to biotowers. Flow then heads to a secondary wet well followed by a secondary clarifier. Finally, effluent enters a chlorine contact tank where it is chlorinated, de-chlorinated, and discharged through Outfall 001.

Limits for CBOD<sub>5</sub>, TSS, pH, Total Nitrogen, Total Phosphorus, Nitrate-Nitrite as N, Total Kjeldahl and fecal coliform are technology based and carried over from the previous permit. E. Coli has been added to this permit due to rev to limitation guidelines. For sewage dischargers for design flows of .002 - .05MGD, technology-based limit of a reporting frequency of 1/year and limitation of "Report IMAX" will be used. TRC, DO, and NH<sub>3</sub>-N limitations are water-quality based and is carried over from previous permit.

Sewage sludge generated from this facility is 3.127 dry tons annually. Sludge is transported off site to a facility in Lehigh County. Solids Management special conditions has been carried over to this permit from previous permit.

Stony Creek has one impairment: Lehigh River TMDL. This impairment is for Metals and pH. This facility is not expected to impact this impairment.

Approve	Deny	Signatures	Date
X		William Hon (s) William Hon / Environmental Engineer Specialist	September 26, 2024
X		Amy M. Bellanca, P.E. / Acting Engineer Manager	

Summary of Review

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.

Special conditions for this facility include Chlorine Minimization and Solids Management.

The previous permit expired on 4/30/2024. The renewal application was received and processed by the DEP on at least 180 days prior. The previous inspection at this facility was conducted on 1/25/2024 with 1 violation not relevant to the issuance of this permit. There are two open violations for this client. Violation of effluent limits in Part A of permit and Failure to monitor pollutants as required by the NPDES permit.

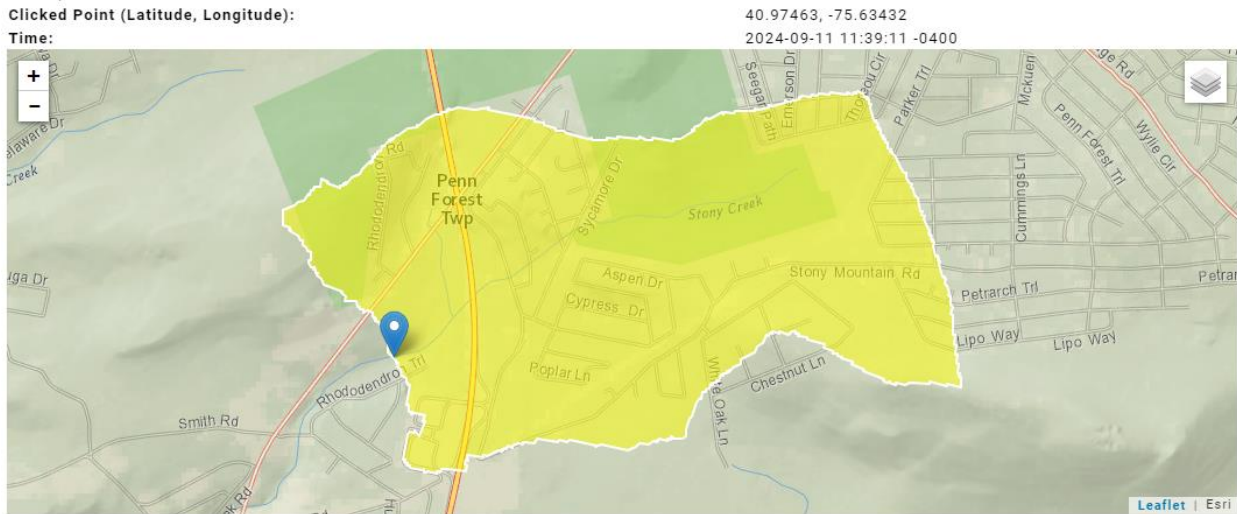
Recommend approval.

Modeling Inputs:

At Outfall 001

RMI: 4.889 – 3.11 = 1.779

Stream Code: Stony Creek, 2B, 58424



Collapse All

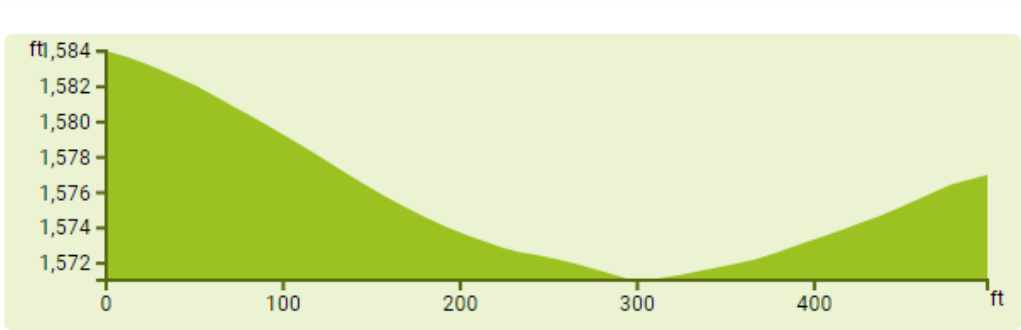
Basin Characteristics

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	2.48	square miles

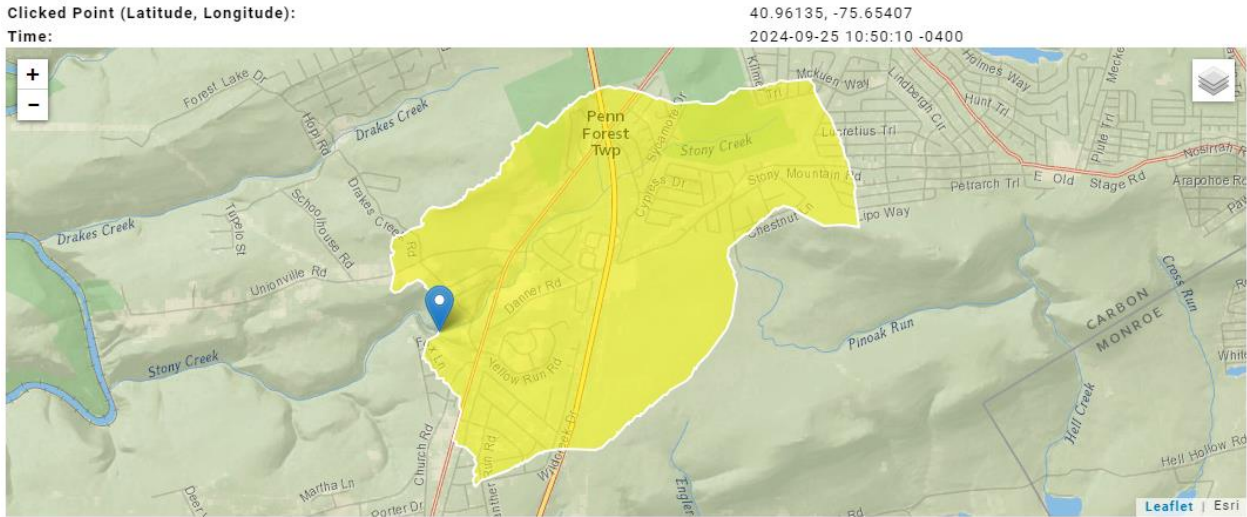
Statistic	Value	Unit
7 Day 2 Year Low Flow	0.633	ft <sup>3</sup> /s
30 Day 2 Year Low Flow	0.868	ft <sup>3</sup> /s
7 Day 10 Year Low Flow	0.25	ft <sup>3</sup> /s

Summary of Review

Elevation profile



PT2: At Conflux w/ Yellow Run  
RMI: .01  
Stream Code: Stony Creek, 2B, 58424

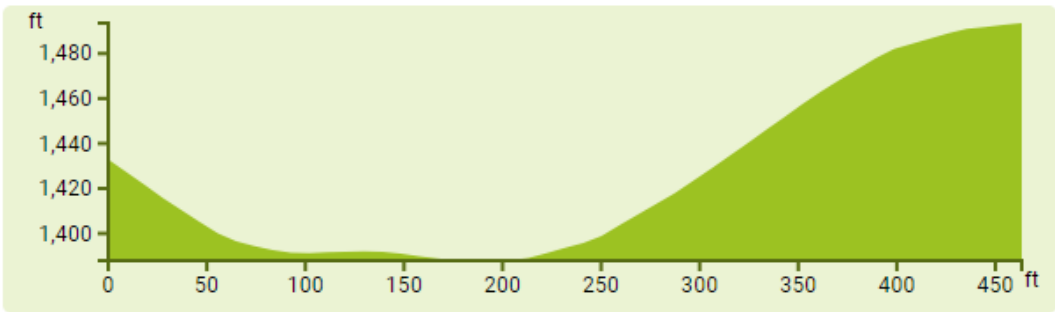


+ Collapse All

> 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	6.18	square miles
Statistic		Value	Unit
7 Day 2 Year Low Flow		0.789	ft^3/s
30 Day 2 Year Low Flow		1.08	ft^3/s
7 Day 10 Year Low Flow		0.314	ft^3/s

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)
1.78	Hickory Run	PA0061905	0.0400
Parameter	Effluent Limit 30 Day Average (mg/L)	Effluent Limit Maximum (mg/L)	Effluent Limit Minimum (mg/L)
CBOD5	25		
NH3-N	11.25	22.5	
Dissolved Oxygen			3

Record: 1 of 1 No Filter Search

Print

< Back

Next >

Archive

Cancel

Summary of Review

**TRC EVALUATION**

Input appropriate values in A3:A9 and D3:D9

0.24	= Q stream (cfs)	0.5	= CV Daily
0.04	= 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 = 1.256	1.3.2.iii	WLA cfc = 1.217
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc = 0.468	5.1d	LTA_cfc = 0.708

Source	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

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.



Approve	Deny	Signatures	Date
X		William Hon (s) William Hon / Environmental Engineer Specialist	September 26, 2024
X		Amy M. Bellanca, P.E. / Acting Engineer Manager	