

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

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0061921 and 4589407T-4
 APS ID 1043918 / 1044805
 Authorization ID 1362689 / 1364160

Applicant and Facility Information

Applicant Name	<u>Brookdale Drug And Alcohol Rehabilitation LLC</u>	Facility Name	<u>Brookdale Drug And Alcohol LLC</u>
Applicant Address	<u>2455 Black Mountain Road</u> <u>Scotrun, PA 18355</u>	Facility Address	<u>2455 Back Mountain Road</u> <u>Scotrun, PA 18355-7758</u>
Applicant Contact	<u>Robert Hackenberg</u> <u>Rhackenberg@nefginc.com</u>	Facility Contact	<u>Robert Hackenberg</u>
Applicant Phone	<u>(570) 688-9898</u>	Facility Phone	<u>(570) 688-9898</u>
Client ID	<u>364389</u>	Site ID	<u>237646</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Pocono Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Monroe</u>
Date Application Received	<u>July 8, 2021</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>July 28, 2021</u>	If No, Reason	<u></u>
Purpose of Application	<u>Transfer and Renewal of an existing NPDES Permit.</u>		

Summary of Review

Transfer Background –

The applicant is requesting the renewal and transfer of the NPDES Permit PA0061921 and WQM Permit 4589407 from Brookdale Enterprises, LLC. The original WQM permit, 4589407, approved the construction and operation of a packaged sewage treatment plant and a pump stations at the resort in 1999. Permit 4589407T-1 was transferred to Brookdale Resort Propco, LLC on November 27, 2012 and then to Silverleaf Resorts, Inc August 18, 2014 as T-2. Brookdale Enterprises LLC was transferred as T-3 on June 1, 2018. This T-4 will be the fourth WQM transfer. The renewal application was not submitted in a timely fashion and an administrative extension letter has been sent.

Renewal –

The applicant is requesting the renewal of a NPDES Permit to discharge up to 0.05 MGD of treated sewage into an Unnamed Tributary to Scot Run (HQ-CWF), located in State Water Plan watershed 1-E. It is classified for High Quality Waters - Cold Water Fishes, aquatic life, water supply and recreation. In 2020, their average daily flow was 0.006 MGD. 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. The discharge is not expected to affect public water supplies.

The Outfall 001 effluent limits for CBOD5, TSS, pH, and Fecal Coliform are technology-based requirements. The Dissolved Oxygen, Ammonia, TDS, and Phosphorous limits are water quality based.

The existing permit expires 07/31/2021 so an administrative extension letter has been sent.

Approve	Deny	Signatures	Date
X		Bernard Feist (signed) Bernard Feist, P.E. / Environmental Engineer	August 17, 2021
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	8-19-21

Summary of Review

The NMS query "Inspections & Inspectors – Inspections – Inspection History by Permit" was run. A Complaint Inspection was done on 06/22/2021 with No Violations Noted.

The NMS query "Violations – eFACTS – Open Violations for Client" was run. There are currently no open violations. The EPA Waiver is in effect.

Sludge use and disposal description and location(s): Hazelton Sewer Authority.

DEP is requesting Pump Station names and gps coordinates to update our data base with the renewal.

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.	<u>001</u>	Design Flow (MGD)	<u>.049</u>
Latitude	<u>41° 5' 7.28"</u>	Longitude	<u>-75° 20' 20.33"</u>
Quad Name	<u>Mount Pocono</u>	Quad Code	<u>4.22.2</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Scot Run (HQ-CWF)</u>	Stream Code	<u>4813</u>
NHD Com ID	<u>26158356</u>	RMI	<u></u>
Drainage Area	<u>1.28 sq mi</u>	Yield (cfs/mi ²)	<u>0.17</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.22</u>	Q ₇₋₁₀ Basis	<u>Pocono Creek gage 01441500 DFlow</u>
Elevation (ft)	<u></u>	Slope (ft/ft)	<u>0.03</u>
Watershed No.	<u>1-E</u>	Chapter 93 Class.	<u>HQ-CWF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Attaining Use(s): aquatic life, water supply and recreation</u>		
TMDL Status	<u></u>	Name	<u></u>
Background/Ambient Data		Data Source	
pH (SU)	<u></u>		<u></u>
Temperature (°F)	<u></u>		<u></u>
Hardness (mg/L)	<u></u>		<u></u>
Other:	<u></u>		<u></u>
Nearest Downstream Public Water Supply Intake			<u>na</u>
PWS RMI	<u></u>	Distance from Outfall (mi)	<u>> 20 miles</u>

STATION.--01441495 POCONO CREEK AB WIGWAM RUN NEAR STROUDSBURG, PA
 LOCATION.--Lat 40° 59'27", long 75° 15'20", Monroe County, Hydrologic Unit 02040104, on right bank at bridge on SR 2005, 150 ft upstream from Wigwam Run, and 4.0 mi upstream from mouth, and 4.0 mi west of Stroudsburg.
 DRAINAGE AREA.--38.9 square miles.
 PERIOD OF RECORD.--June 2002 to current year.
 GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 574.57 ft above National Geodetic Vertical Datum of 1929. Satellite telemetry at station.

Gage	Period	Days in+	Zero/Miss+	Percentile	Excur per+	7Q10
01441495 - Pocono Creek ab Wigwam Run near Stroudsburg, PA	2003/04/01 - 2018/04/01	5,479	0/0	0.07%	0.80	6.51

Q₇₋₁₀ LowFlowYield (cfs/mi²)= 6.51/38.9 = 0.17

Treatment Facility Summary				
Treatment Facility Name: Brookdale Drug And Alcohol WWTP				
WQM Permit No.		Issuance Date		
4589407		1999		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	UV	0.049
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.049	90	Not Overloaded	Aerobic Digestion	Other WWTP

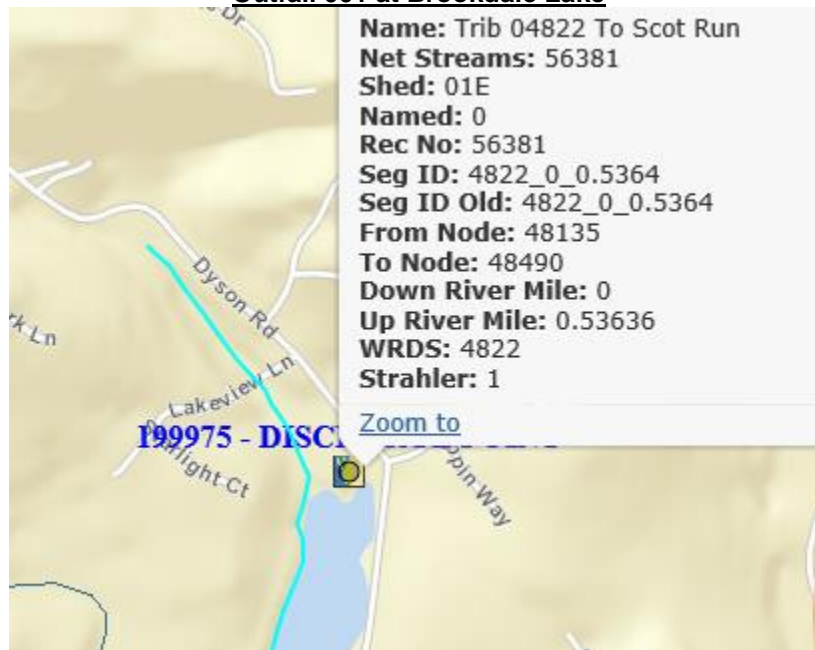
Other Comments: The WWTP utilizes an extended aeration activated sludge treatment system paired with sand filtration. The WWTP consists of a 30,000-gallon equalization tank, flow splitter box to two (2) 25,000 gallon extended aeration tanks, two clarifiers, sand filtration, ultraviolet disinfection, and a post aeration tank. The facility has three pumping stations throughout the resort.

Per DRBC D-2006-019-5 requirements the existing WWTP has a generator installed capable of providing standby power, a remote alarm system, and a TDS limit of 1,000 mg/l.



2006-019-5.pdf

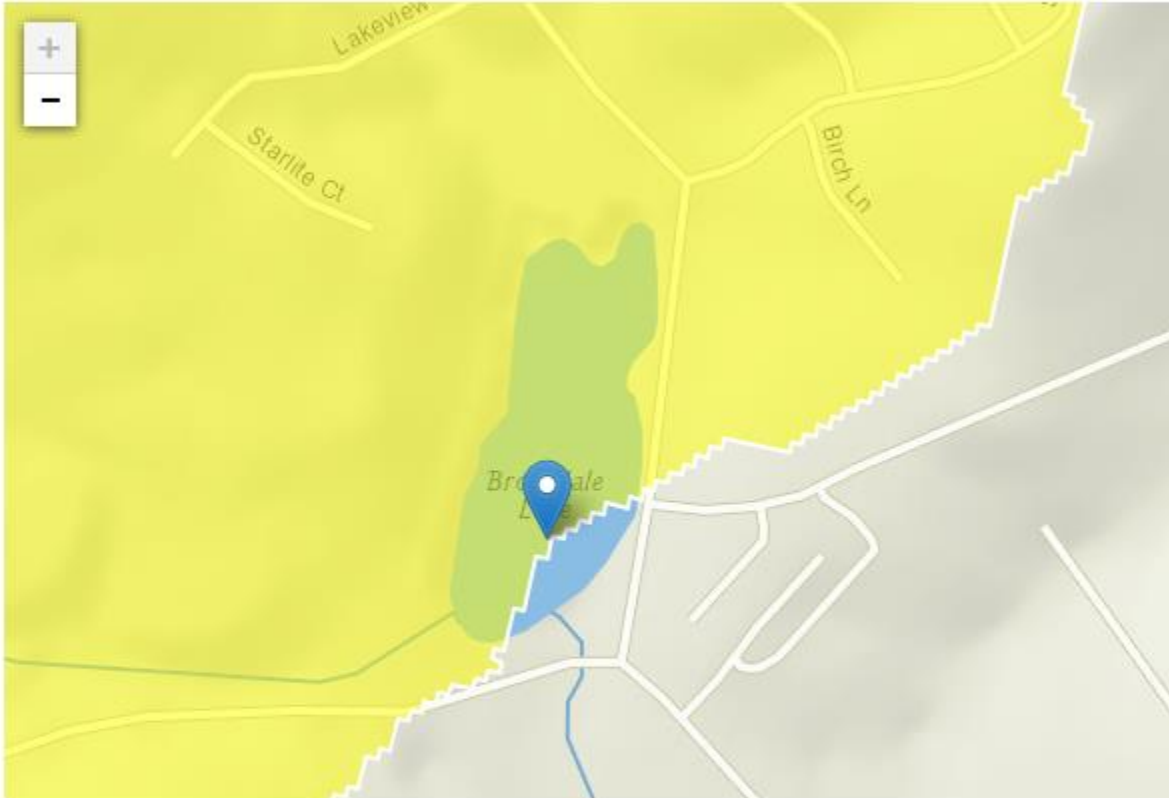
Outfall 001 at Brookdale Lake



Outfall 001 RMI 0.2 Elevation 1300 ft

StreamStats Report

Region ID: PA
Workspace ID: PA2021080915353690
Clicked Point (Latitude, Longitude): 41.08272, -75.33875
Time: 2021-08-09 11:35:52 -



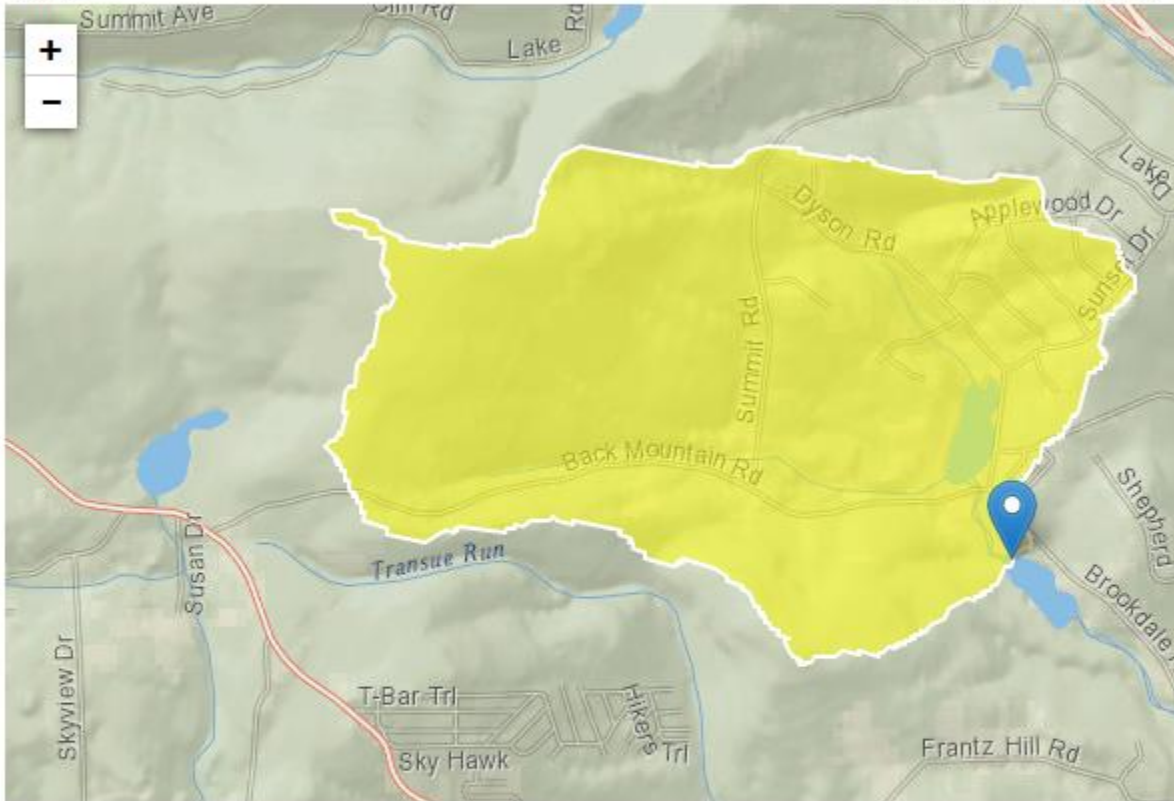
Low-Flow Statistics Parameters [Low Flow Region 5]

Parameter Code	Parameter Name	Value	Units	Min L
DRNAREA	Drainage Area	1.28	square miles	4.84
7 Day 10 Year Low Flow		0.0567	ft^3/s	

RMI 0.0 Elevation 1267 ft

StreamStats Report

Region ID: PA
Workspace ID: PA2021080915490901
Clicked Point (Latitude, Longitude): 41.07943, -75.33703
Time: 2021-08-09 11:49:25 -



Low-Flow Statistics Parameters [Low Flow Region 5]

Parameter Code	Parameter Name	Value	Units	Min L
DRNAREA	Drainage Area	1.39	square miles	4.84

Development of Effluent Limitations

Outfall No. <u>001</u>	Design Flow (MGD) <u>.05</u>
Latitude <u>41° 5' 7.76"</u>	Longitude <u>-75° 20' 17.24"</u>
Wastewater Description: <u>Sewage Effluent</u>	

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	Minimum	Average Monthly	Average Weekly	IMAX	Basis
Flow (MGD)	XXX	Report	Report Max Daily	XXX	§§ 92a.27, 92a.61
CBOD5 (mg/L)	XXX	25	40	50	§ 92a.47
TSS (mg/L)	XXX	30	45	60	§ 92a.47
TRC (mg/L)	XXX	0.5	XXX	1.6	§§ 92a.47-48
NH3-N (mg/L)	XXX	25	XXX	50	BPJ
D.O. (mg/L)	4	XXX	XXX	XXX	BPJ
pH (SU)	6	XXX	XXX	9	§ 92a.47, § 95.2
Total N (mg/L)	XXX	Report	XXX	XXX	§ 92a.61
Total P (mg/L)*	XXX	2.0*	XXX	XXX	§ 92a.61
Fecal Coliform (No./100 ml) (May-Sept)	XXX	200 Geo Mean	XXX	1,000	§ 92a.47
Fecal Coliform (No./100 ml) (Oct-April)	XXX	2,000 Geo Mean	XXX	10,000	§ 92a.47

*A Total Phosphorus permit limit of 2.0 mg/l is new for this permit term. The Total Phosphorus requirements are included in the permit as per PaDEP's 2010 Lake Trophic Study.

Comments: The limitations and monitoring requirements proposed for the draft permit will 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. The new requirements contained in the Authority's Draft NPDES permits are a result of a Statewide effort to improve the quality of data collected at wastewater treatment facilities.

Water Quality-Based Limitations

A “Reasonable Potential Analysis” determined the following limitations through water quality modeling (output files attached):

RMI	Discharge Name	Permit Number	Disc Flow (mgd)
0.20	Brookdale drug	PA0061921	0.0490

Parameter	Effluent Limit 30 Day Average (mg/L)	Effluent Limit Maximum (mg/L)	Effluent Limit Minimum (mg/L)
CBOD5	25		
NH3-N	8.67	17.34	
Dissolved Oxygen			4

Design Condition: Q7-10 Q1-10 Q30-10

RMI	Stream Flow (cfs)	PWS With (cfs)	Net Stream Flow (cfs)	Disc Analysis Flow (cfs)	Reach Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Reach Trav Time (days)	Analysis Temp (°C)	Analysis pH
0.200	0.22	0.00	0.22	.0758	0.03125	.428	5.88	13.73	0.117	0.105	21.29	7.00

Comments: No additional Toxic modelling limits



TMS PA0061921.pdf

Best Professional Judgment (BPJ) Limitations

Comments: Add recommended Lake Model Phosphorous limit of 2.0 mg/l, keep DRBC’s TDS limit

Anti-Backsliding

Keep all other existing PaDEP’s HQ ant-deg limitations

Compliance History

DMR Data for Outfall 001 (from July 1, 2020 to June 30, 2021)

Parameter	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20
Flow (MGD) Average Monthly	0.005	0.005	0.006	0.005	0.004	0.004	0.005	0.005	0.007	0.007	0.008	0.0077
Flow (MGD) Daily Maximum	0.015	0.009	0.014	0.013	0.006	0.006	0.026	0.0147	0.011	0.009	0.019	0.013
pH (S.U.) Minimum	7.32	7.33	7.17	6.8	7.1	7.11	7.0	7.0	6.78	6.39	6.71	7.21
pH (S.U.) Instantaneous Maximum	7.9	8.17	8.07	8.11	7.91	7.81	8.80	8.0	7.85	8.38	8.19	8.01
DO (mg/L) Minimum	8.09	7.26	6.72	7.29	10.61	10.93	9.63	8.44	7.75	8.1	7.1	8.3
CBOD5 (mg/L) Average Monthly	3.8	4.1	0.5	10.2	5.2	< 3.2	< 3.8	< 2.4	5.1	8.1	< 5.7	6.6
TSS (mg/L) Average Monthly	< 5.5	< 5.0	< 7.6	22.9	< 23.1	< 9.4	13.9	< 10.8	< 6.1	< 11.7	< 7.8	9.8
Total Dissolved Solids (mg/L) Daily Maximum	784.3			420.3			311.3			838.3		
Fecal Coliform (CFU/100 ml) Geometric Mean	< 5	< 2	< 6	< 3	< 8	< 7	< 34	169	27	30	3	< 7
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	10	< 2	37	10	23	23	580	540	36	180	4	16
Nitrate-Nitrite (lbs/day) Average Quarterly	2.67			0.47			1.93			4.0		
Nitrate-Nitrite (mg/L) Average Quarterly	62.8			12.79			43.3			58.0		
Total Nitrogen (lbs/day) Average Quarterly	2.67			0.63			1.97			4.33		
Total Nitrogen (mg/L) Average Quarterly	62.83			18.10			43.93			59.5		
Ammonia (mg/L) Average Monthly	< 0.1	< 0.1	0.5	13.7	6.7	< 0.5	< 0.10	< 0.1	< 0.1	1.4	2.6	0.3
TKN (lbs/day) Average Quarterly	< 0.04			0.18			0.05			< 0.10		
TKN (mg/L) Average Quarterly	< 1			5.33			1.17			< 2.03		
Total Phosphorus (lbs/day) Average Quarterly	0.04			0.01			0.01			0.060		
Total Phosphorus (mg/L) Average Quarterly	0.98			0.30			0.25			0.849		