

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

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0031097
 APS ID 1007765
 Authorization ID 1298989

Applicant and Facility Information

Applicant Name	<u>Radley Run Sewer Association, Inc.</u>	Facility Name	<u>Radley Run Country Club STP</u>
Applicant Address	<u>1100 Country Club Road</u> <u>West Chester, PA 19382</u>	Facility Address	<u>1100 Country Club Road</u> <u>West Chester, PA 19382</u>
Applicant Contact	<u>Craig Kandravi</u>	Facility Contact	<u>Craig Kandravi</u>
Applicant Phone	<u>(610) 793-1660</u>	Facility Phone	<u>(610) 793-1660</u>
Client ID	<u>66963</u>	Site ID	<u>454742</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Birmingham Township</u>
Connection Status	<u>n/a</u>	County	<u>Chester</u>
Date Application Received	<u>November 21, 2019</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u></u>	If No, Reason	<u></u>
Purpose of Application	<u>Permit Renewal</u>		

Summary of Review

The permittee has submitted a renewal application for NPDES permit to discharge treated sewage to Radley Run (3H-WWF) through Outfall 001.

The facility serves Radley Run Country Club and consists of bar screens, equalization tank, aeration tank, two clarifiers and chlorine contact tank. Chlorine is used for disinfection and Aluminum Sulfate is added for Phosphorus removal.

DEP has contacted a site visit on 1-7-20. (copy of the inspection report is attached to this factsheet).



Radley Run C.C. STP
1-7-20 CEI.pdf

No issues with operating the facility were noted.

The treated sewage from a sewage treatment plant discharges to Radley Run, a tributary to Brandywine Creek that is part of Christina River Watershed which has WLAs established by EPA for nutrients and sediment under low-flow and high-flow conditions. No changes in quality or quantity of the effluent discharge, therefore all previously established effluent limits and monitoring requirements will be proposed in draft permit and listed on p.6.

Act 14 Notifications: Birmingham Township and Chester County Department of Health were notified about the NPDES permit renewal application on October 2, 2020.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES

Approve	Deny	Signatures	Date
X		Begay Omuralieva / Environmental Engineering Specialist /s/	1/29/2020
X		Pravin C. Patel, P.E. / Environmental Engineer Manager /s/	1/29/2020

Summary of Review

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.	001	Design Flow (MGD)	.017
Latitude	39° 54' 55.26"	Longitude	-75° 37' 2.27"
Quad Name	West Chester	Quad Code	1941
Wastewater Description: Sewage Effluent from Radley Run Country Club STP			
Receiving Waters	Radley Run (WWF, MF)	Stream Code	00071
NHD Com ID	26108208	RMI	1.0700
Drainage Area	3.24 mi ²	Yield (cfs/mi ²)	1.14
Q ₇₋₁₀ Flow (cfs)	0.57	Q ₇₋₁₀ Basis	0.176
Elevation (ft)		Slope (ft/ft)	Previous Permit Renewal
Watershed No.	3-H	Chapter 93 Class.	WWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	FLOW REGIME MODIFICATION, SILTATION, SILTATION AGRICULTURE, URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM		
Source(s) of Impairment	SEWERS		
TMDL Status	Final	Name	Christina River Basin

Changes Since Last Permit Issuance: none

Treatment Facility Summary				
Treatment Facility Name: Radley Run Country Club STP				
WQM Permit No.	Issuance Date			
765S2	January 1965			
765S2-T1	7/18/1975			
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage			No Disinfection	
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.017		Not Overloaded		

Changes Since Last Permit Issuance: none

Compliance History

DMR Data for Outfall 001 (from December 1, 2018 to November 30, 2019)

Parameter	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18
Flow (MGD) Average Monthly	0.00558	0.00568	0.00531	0.0064	0.00879	0.00895	0.00901	0.00721	0.00913	0.00862	0.0093	0.01038
Flow (MGD) Daily Maximum	0.01139	0.01331	0.00807	0.00991	0.01281	0.01713	0.01656	0.01199	0.01546	0.01652	0.01678	0.01768
pH (S.U.) Instantaneous Minimum	7.2	6.9	6.9	6.8	6.9	6.8	7.1	7.1	7.0	7.3	7.2	7.0
pH (S.U.) Instantaneous Maximum	8.2	8.23	8.1	7.9	8.4	8.2	8.9	8.7	8.3	8.8	8.1	8.53
DO (mg/L) Instantaneous Minimum	6.09	6.19	5.97	5.43	5.12	5.23	5.07	5.33	5.06	5.93	5.77	5.93
TRC (mg/L) Average Monthly	< 0.04	< 0.03	< 0.03	< 0.03	< 0.1	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TRC (mg/L) Instantaneous Maximum	0.22	0.16	0.08	0.11	0.54	0.6	0.15	0.49	0.28	1.07	0.64	0.83
CBOD5 (lbs/day) Average Monthly	< 0.09	0.08	0.07	0.1	0.1	0.6	0.2	0.1	0.1	0.2	< 0.07	0.1
CBOD5 (mg/L) Average Monthly	< 3	2	2	3	4	6	3	3	3	4	< 2	2
BOD5 (mg/L) Raw Sewage Influent Average Monthly	166	66	227	63	32	48	111	79	77	80	66	58
TSS (lbs/day) Average Monthly	< 0.1	< 0.1	0.1	< 0.2	< 0.2	< 0.4	< 0.2	< 0.2	< 0.2	< 0.3	< 0.1	< 0.2
TSS (mg/L) Average Monthly	< 4	< 4	4	< 4	< 4	< 5	< 4	< 4	< 4	< 4	< 4	< 4
TSS (mg/L) Raw Sewage Influent Average Monthly	350	217	161	114	112	168	91	70	77	73	75	76

Fecal Coliform (No./100 ml) Average Monthly	12	< 4	6	8	5	< 12	3	1	24	< 1	5	4
Fecal Coliform (No./100 ml) Instantaneous Maximum	70	17	19	11	6	144	11	1	63	< 2	8	14
Total Nitrogen (lbs/day) Average Monthly	1.0	1.4	1.2	1.3	1.8	3.1	1.1	0.6	0.8	0.8	0.5	0.5
Total Nitrogen (mg/L) Average Monthly	30	41	38	36	40	35	22	12	18	13	14	11
Ammonia (lbs/day) Average Monthly	< 0.003	< 0.003	< 0.003	< 0.004	< 0.005	< 0.01	< 0.006	< 0.006	< 0.005	0.3	< 0.004	< 0.005
Ammonia (mg/L) Average Monthly	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.15	< 0.10	5.21	< 0.10	< 0.10
Total Phosphorus (lbs/day) Average Monthly	0.01	0.004	0.01	0.03	0.07	0.10	0.06	0.01	0.04	0.10	0.02	0.01
Total Phosphorus (mg/L) Average Monthly	0.3	0.1	0.3	0.7	1.4	1.4	1.0	0.4	0.8	1.4	0.5	0.3

Compliance History

No issues

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and 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.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ 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	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.2	1/day	Grab
CBOD5	3.5	XXX	XXX	25	XXX	50	2/month	24-Hr Composite
BOD5 Raw Sewage Influent	XXX	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
TSS	2.8	XXX	XXX	20	XXX	40	2/month	24-Hr Composite
TSS Raw Sewage Influent	XXX	XXX	XXX	Report	XXX	XXX	2/month	24-Hr Composite
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	1000	2/month	Grab
Total Nitrogen	7.0	XXX	XXX	50	XXX	100	2/month	24-Hr Composite
Ammonia	1.4	XXX	XXX	10	XXX	20	2/month	24-Hr Composite
Total Phosphorus Nov 1 - Mar 31	0.28	XXX	XXX	2.0	XXX	4	2/month	24-Hr Composite
Total Phosphorus Apr 1 - Oct 31	0.21	XXX	XXX	1.5	XXX	3	2/month	24-Hr Composite

Compliance Sampling Location: Outfall 001