

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

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0228761
 APS ID 1022569
 Authorization ID 1325819

Applicant and Facility Information

Applicant Name	<u>Donald Baker</u>	Facility Name	<u>Bakercrest Personal Care Home</u>
Applicant Address	<u>80 Baker Crest Lane</u> <u>Millerton, PA 16936-9319</u>	Facility Address	<u>76 Baker Crest Lane</u> <u>Millerton, PA 16936-9319</u>
Applicant Contact	<u>Nathan Rundell</u>	Facility Contact	<u>Nathan Rundell</u>
Applicant Phone	<u>(570) 502-0845</u>	Facility Phone	<u>(570) 502-0845</u>
Client ID	<u>90636</u>	Site ID	<u>269555</u>
Ch 94 Load Status	<u>n/a</u>	Municipality	<u>Rutland Township</u>
Connection Status	<u>n/a</u>	County	<u>Tioga</u>
Date Application Received	<u>September 1, 2020</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>September 9, 2020</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of existing NPDES permit</u>		

Summary of Review

The above applicant has submitted an NPDES renewal application for the renewal of the above NPDES permit. The discharge is from a sewage treatment system that serves Bakercrest Home for the Elderly in Rutland Township, Tioga County. The outfall is to an Unnamed Tributary (UNT) to Bear Creek. The treatment system was built in 2003 and consists of an 8000 gallon septic tank, a 1200 gallon dosing tank, two subsurface lined sand filters in parallel, an erosion chlorinator, and two chlorine contact tanks (1500 and 1000 gallons) in series.

Based on the following review of the application and existing files for the facility, I recommend the permit be drafted and published in the PA Bulletin for the required 30 day comment period. Unless otherwise noted, the Standard Operating Procedure (SOP) for new and reissuance of individual NPDES permit application was followed during the course of this review.

Sludge use and disposal description and location(s):

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		Chad A. Fabian / Project Manager	May 11, 2021
X		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	May 12, 2021

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.005</u>
Latitude	<u>41° 53' 46.20"</u>	Longitude	<u>76° 54' 55.00"</u>
Quad Name	<u>Millerton</u>	Quad Code	<u>0330</u>
Wastewater Description: <u>Sewage from Bakercrest Home for the Elderly</u>			
Receiving Waters	<u>UNT to Bear Creek</u>	Stream Code	<u>31309</u>
NHD Com ID	<u>57350359</u>	RMI	<u>1.5</u>
Drainage Area	<u><3</u>	Yield (cfs/mi ²)	<u>n/a</u>
Q ₇₋₁₀ Flow (cfs)	<u>intermittent</u>	Q ₇₋₁₀ Basis	<u>n/a</u>
Elevation (ft)	<u>1700</u>	Slope (ft/ft)	<u>n/a</u>
Watershed No.	<u>4-A</u>	Chapter 93 Class.	<u>TSF</u>
Existing Use	<u>TSF</u>	Existing Use Qualifier	<u>n/a</u>
Exceptions to Use	<u>none</u>	Exceptions to Criteria	<u>None</u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u>None</u>		
Source(s) of Impairment	<u>n/a</u>		
TMDL Status	<u>Final, 04/07/2005</u>	Name	<u>Tioga River</u>
Nearest Downstream Public Water Supply Intake	NY state border approximately 24 miles downstream on the Tioga River		

Changes Since Last Permit Issuance: None

Other Comments: The Tioga River TMDL is for point source impairment of metals from acid mine drainage and is not applicable to this discharge since no metals are expected in the discharge. The receiving stream (UNT to Bear Creek) is attaining its Chapter 93 uses of TSF.

Compliance History	
Summary of DMRs:	The facility utilizes the Department's eDMR system. In the past 12 months, no effluent violations have been reported. In the past 2 years, the average discharge flow has been approximately 800 gallons per day. A summary of the effluent results for the past twelve months can be found on page 3 of this document.
Summary of Inspections:	The most recent onsite inspection was performed by the Department on 1/15/2020. No violations were found during the inspection. It was noted that the Bakercrest Home for the Elderly no longer is operational. The site has been converted to 8 apartments with a maximum capacity of 24 people. It was recommended that the permittee contact Dan Thetford (PA DEP, Clean Water Program, Planning Section Chief) to discuss the change of use at the facility (from elderly home to apartments).

Other Comments: None

Compliance History

DMR Data for Outfall 001 (from January 1, 2020 to December 31, 2020)

Parameter	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20
Flow (MGD) Average Monthly	0.0009	0.0008	0.0007	0.0006	0.0008	0.0006	0.0006	0.0010	0.0009	0.0008	0.0009	0.0009
Flow (MGD) Daily Maximum	0.0009	0.0008	0.0008	0.0006	0.0008	0.0007	0.0007	0.0011	0.0011	0.0008	0.0009	0.0009
pH (S.U.) Minimum	7.45	7.88	8.18	7.92	7.85	7.47	7.35	6.59	7.15	6.65	7.52	6.47
pH (S.U.) Maximum	8.98	8.65	8.71	8.46	8.34	8.33	8.08	7.87	8.67	8.15	8.67	8.30
TRC (mg/L) Average Monthly	0.42	0.45	0.49	0.39	0.36	0.50	0.23	0.34	0.33	0.35	0.38	0.43
TRC (mg/L) Instantaneous Maximum	0.71	0.83	0.78	0.60	0.52	1.31	1.15	0.45	0.89	0.50	0.56	0.60
CBOD5 (mg/L) Average Monthly	< 2.2	< 2.2	< 2.2	< 2.2	< 2.2	< 2.1	2.2	< 2.2	< 2.1	< 2.2	< 2.2	< 1.9
TSS (mg/L) Average Monthly	< 4.0	< 8	< 4.0	< 4.0	< 4.0	< 4	4.0	< 4.0	< 4.0	< 16	< 4	< 4
Fecal Coliform (No./100 ml) Average Monthly	4.9	56	4.95	2.9	3.5	2.3	1	2.9	< 8.1	38	260	< 1
Fecal Coliform (No./100 ml) Instantaneous Maximum	21.6	105	24.6	8.6	4.1	5.2	1	4.1	66	727	2420	1
Ammonia (mg/L) Daily Maximum	< 0.10			< 0.10			0.39			0.64		

Development of Effluent Limitations				
Outfall No.	001	Design Flow (MGD)	.005	
Latitude	41° 53' 46.20"	Longitude	-76° 54' 55.00"	
Wastewater Description:	Sewage Effluent			

Technology-Based Limitations

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

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
CBOD ₅	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)

Water Quality-Based Limitations

The existing limitations in the permit were originally established based on the DEP’s Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers (391-2000-014, effective date August 18, 1997).

A “Reasonable Potential Analysis” was not performed as there are no known toxics to be in the waste stream nor does the renewal application require effluent testing for toxics.

Section I.C.3 of the Department’s SOP for Establishing Effluent Limitations for Individual Sewage Permits (SOP No. BPNPSM-PMT-033) allows for existing permittees to maintain existing parameter limits where the facility would be unable to meet more stringent limitations of the updated guidance referenced above (391-2000-014, effective date April 12, 2008). Therefore, no water quality modeling (WQM 7.0) or TRC evaluation was performed. However, any increase in design flow at the facility would require a full re-evaluation of effluent limitations

Best Professional Judgment (BPJ) Limitations

No reporting for dissolved oxygen is required since aerated treatment processes are not utilized at the facility.

Anti-Backsliding

No relaxation of any effluent limitation is proposed in the draft permit.

Chesapeake Bay Requirements

According to the Department’s Supplement to the Phase 2 Chesapeake Bay Watershed Implementation Plan (WIP), the facility is classified as a Phase 5 bay discharger (>0.002 MGD and <0.2 MGD). Phase 5 facilities are required to monitor for total nitrogen and total phosphorus at a rate of 1/year unless the facility has already conducted at least two years of nutrient monitoring and a summary of the results are included in the next permit fact sheet. The facility has been sampling for total nitrogen and total phosphorus during the existing permit cycle. The following is a summary of the peak values reported over the existing permit cycle:

Parameter	Instantaneous Maximum (mg/l)	Total Annual (lbs)
Total Nitrogen (TN)	33	502
Total Phosphorus (TP)	2.38	36

Proposed and Existing 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	XXX	9.0	XXX	1/day	Grab
CBOD5	XXX	XXX	XXX	10	XXX	20	2/month	Grab
TSS	XXX	XXX	XXX	20	XXX	40	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200	XXX	1000	2/month	Grab
Ammonia	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/quarter	Grab

Compliance Sampling Location: 001

Other Comments:

All of the above proposed limitations are the same as the existing permit, except that total nitrogen and total phosphorus has been removed as described above.