

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

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0111953
 APS ID 983559
 Authorization ID 1256466

Applicant and Facility Information

Applicant Name	<u>Guardian Elder Care Inc.</u>	Facility Name	<u>Highlands Care Center STP</u>
Applicant Address	<u>PO Box 10</u> <u>Laporte, PA 18626-0100</u>	Facility Address	<u>Main Street</u> <u>Laporte, PA 18626</u>
Applicant Contact	<u>Matt Selig</u>	Facility Contact	<u></u>
Applicant Phone	<u>(570) 946-7700</u>	Facility Phone	<u></u>
Client ID	<u>86369</u>	Site ID	<u>244767</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Laporte Borough</u>
Connection Status	<u></u>	County	<u>Sullivan</u>
Date Application Received	<u>December 20, 2018</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>January 7, 2019</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of existing NPDES permit application</u>		

Summary of Review

The above permittee has submitted an NPDES renewal application for their existing discharge (Outfall 001) from an elder care facility located in Laporte Borough, Sullivan County. The treatment facility for the nursing home consists of a comminutor and bar screen, an aeration tank, a clarifier, a chlorinator, a chlorine contact tank, dechlorination, a flow meter and outfall. The design flow of the treatment facility is 0.015 MGD and the highest annual average flow over the past 3 years has been 0.0109 MGD.

Unless otherwise noted, all applicable DEP Standard Operating Procedures (SOPs) were followed during the review of this application. It is recommended that the permit be drafted as described within this fact sheet.

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
		Chad A. Fabian / Project Manager	November 13, 2019
		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.015</u>
Latitude	<u>41° 25' 29.11"</u>	Longitude	<u>-76° 30' 16.96"</u>
Quad Name	<u>LaPorte</u>	Quad Code	<u>3-18.4</u>
Wastewater Description:	<u>Sewage Effluent</u>		
Receiving Waters	<u>Unnamed Tributary to Mill Creek (EV (existing use))</u>	Stream Code	<u>20346</u>
NHD Com ID	<u>66909189</u>	RMI	<u>0.8500</u>
Drainage Area	<u>0.38</u>	Yield (cfs/mi ²)	<u>0.34</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.13</u>	Q ₇₋₁₀ Basis	<u>Previous permit reviews/stream delineation</u>
Elevation (ft)	<u>1900</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>10-B</u>	Chapter 93 Class.	<u>CWF, MF</u>
Existing Use	<u>EV(EXCEPTIONAL VALUE)</u>	Existing Use Qualifier	<u>RBP - Antidegradation</u>
Exceptions to Use	<u>None</u>	Exceptions to Criteria	<u>None</u>
Assessment Status	<u>Attaining Use(s)</u>		
Near Milton, PA, approximately 60 miles downstream on the West Branch Susquehanna River			
Nearest Downstream Public Water Supply Intake			

Changes Since Last Permit Issuance:

DEP has evaluated information indicating that the existing use of the receiving waters is different than the designated use under 25 Pa. Code § 93.9. In developing the draft NPDES permit, DEP is proposing to protect the existing use of the receiving waters. Following DEP's notice of the receipt of the application and the draft permit in the Pennsylvania Bulletin, DEP will accept written comments during the public comment period regarding DEP's tentative determination to protect the existing use. DEP will make a final determination on existing use protection for the receiving waters as part of the final permit action.

Compliance History	
Summary of DMRs:	A review of the past 24 months of eDMR sampling indicates no effluent violations have occurred. Based on the file review performed during the review of this application, the facility has a long history of compliance.
Summary of Inspections:	The last inspection was performed on 3/16/2018 by Steve Puzio (DEP, Clean Water Program, Water Quality Specialist). No violations were found during the inspection.

Compliance History

DMR Data for Outfall 001 (from October 1, 2018 to September 30, 2019)

Parameter	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18
Flow (MGD) Average Monthly	0.0065	0.0068	0.0068	0.0075	0.0077	0.0067	0.0071	0.0077	0.0079	0.0077	0.0075	0.0075
Flow (MGD) Daily Maximum	0.0097	0.0087	0.0097	0.0141	0.0151	0.0093	0.0107	0.0115	0.0097	0.00112	0.0103	0.0125
pH (S.U.) Minimum	7.1	7.1	7.1	7.1	7.3	7.1	7.0	7.1	7.1	7.0	6.9	7.0
pH (S.U.) Maximum	7.5	7.5	7.6	7.5	7.6	7.5	7.7	7.6	7.6	7.5	7.6	9.0
TRC (mg/L) Average Monthly	0.10	0.11	0.07	0.10	0.06	0.07	0.10	0.10	0.08	0.09	0.07	0.07
TRC (mg/L) Instantaneous Maximum	0.21	0.21	0.17	0.19	0.09	0.17	0.89	0.27	0.18	0.20	0.89	0.19
CBOD5 (mg/L) Average Monthly	4.0	5.0	3.0	3.0	5.0	4.0	4.0	8.0	3.0	8.0	3.0	3.0
TSS (mg/L) Average Monthly	6.0	5.0	7.0	4.0	15.0	10.0	6.0	19.0	8.0	6.0	6.0	5.0
Fecal Coliform (CFU/100 ml) Geometric Mean	1	5	1	1	1	1	1	1	1	8	4	2
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	1	21	1	1	1	1	1	1	1	62	66	3
Total Nitrogen (mg/L) Daily Maximum										2.61		
Ammonia (mg/L) Average Monthly	0.60	0.40	0.55	1.40	1.75	1.02	0.91	0.80	0.94	3.57	0.56	0.56
Total Phosphorus (mg/L) Daily Maximum										1.59		

Development of Effluent Limitations

Outfall No. <u>001</u>	Design Flow (MGD) <u>.015</u>
Latitude <u>41° 25' 28.70"</u>	Longitude <u>-76° 30' 10.50"</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:

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 (dichlorination)	0.02	Average Monthly	-	92a.48(b)(3)

Comments: The above TRC limitations are more stringent since the existing use is now Exceptional Value (EV).

Water Quality-Based Limitations

A “Reasonable Potential Analysis” was not performed since the facility does not have any industrial users nor does it accept any hauled in wastes. Therefore, the application does not require any toxics to be sampled in the permit renewal application since they are not expected to be present in the discharge.

The Department’s WQM7.0 model allows the Department to evaluate point source discharges of dissolved oxygen (DO), carbonaceous BOD (CBOD₅), and ammonia-nitrogen (NH₃-N) into free-flowing streams and rivers. To accomplish this, the model simulates two basic processes: the mixing and degradation of NH₃-N in the stream and the mixing and consumption of DO in the stream due to the degradation of CBOD₅ and NH₃-N. An input DO value of 6.0 mg/l was used since the receiving stream is classified as an EV watershed. The attached WQM7.0 modeling shows that the existing effluent limitations are protective of water quality standards for CBOD₅, NH₃-N. A new dissolved oxygen effluent limitation will be set at a minimum of 6.0 mg/l.

Best Professional Judgment (BPJ) Limitations

Even though the facility already has dichlorination, a review of the DMRs show that the effluent does not meet the newly proposed 0.02 mg/l TRC effluent limitation. Therefore, the Department recommends a two-year compliance schedule for the new TRC requirements. The two years will give sufficient time for the permittee to either modify their existing dichlorination system or install an alternate means of disinfection.

Anti-Backsliding

There is no proposal to relax of any limitations in this permit.

EXISTING Effluent Limitations and Monitoring Requirements

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	2/week	Grab
TRC	XXX	XXX	XXX	0.33	XXX	0.89	2/week	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	50	2/month	8-Hr Composite
TSS	XXX	XXX	XXX	30.0	XXX	60	2/month	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	12.0	XXX	24	2/month	8-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	4.0	XXX	8	2/month	8-Hr Composite

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
TRC*	XXX	XXX	XXX	0.02*	XXX	0.89	1/day	Grab
Dissolved Oxygen (DO)	XXX	XXX	6.0	XXX	XXX	XXX	1/day	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	50	2/month	8-Hr Composite
TSS	XXX	XXX	XXX	30.0	XXX	60	2/month	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	12.0	XXX	24	2/month	8-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	4.0	XXX	8	2/month	8-Hr Composite

*The proposed TRC limitation will be effective 2 years after permit effective date. In the interim, the existing TRC limitations will be effective.

Other Comments:

The above proposed monitoring frequencies for pH, TRC, and DO have been changed to 1/day to match Table 6.3 in the Department's *Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits (Document No. 362-0400-001)*.