

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

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0097268
 APS ID 1024877
 Authorization ID 1329941

Applicant and Facility Information

Applicant Name	<u>Henry Clay Villa LP</u>	Facility Name	<u>Henry Clay Villa</u>
Applicant Address	<u>5253 National Pike</u> <u>Markleysburg, PA 15459-1025</u>	Facility Address	<u>5253 National Pike</u> <u>Markleysburg, PA 15459-1025</u>
Applicant Contact	<u>Melvin Pike</u>	Facility Contact	<u>Melvin Pike</u>
Applicant Phone	<u>(724) 329-5545</u>	Facility Phone	<u>(724) 329-5545</u>
Client ID	<u>278676</u>	Site ID	<u>250030</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Henry Clay Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Fayette</u>
Date Application Received	<u>October 7, 2020</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>October 13, 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 their existing 0.004 MGD discharge of treated sewage from their Sewage Treatment Plant (STP) that serves a nursing home in Henry Clay Township, Fayette County. The discharge was previously determined to be to a dry intermittent stream.

Based on the following review, it is recommended the permit be drafted.

Sludge use and disposal description and location(s): Clairton STP

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		<i>Chad A. Fabian</i> Chad A. Fabian / Project Manager	February 28, 2021
X		<i>Nicholas W. Hartranft, P.E.</i> Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	March 1, 2021

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>.004</u>
Latitude	<u>39° 45' 35.55"</u>	Longitude	<u>-79° 26' 41.44"</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Unnamed Tributary to Hall Run</u>	Stream Code	<u>UNT to 39369</u>
NHD Com ID	<u>69923217</u>	RMI	<u>0.473</u>
Drainage Area	<u>0.115</u>	Yield (cfs/mi ²)	<u>0.044</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.005</u>	Q ₇₋₁₀ Basis	<u>WR Bulletin #12, Pg. 398, Sta. 03081200, Drake Run Near Confluence.</u>
Elevation (ft)	<u>2060</u>	Slope (ft/ft)	<u>0.096</u>
Watershed No.	<u>19-E</u>	Chapter 93 Class.	<u>WWF</u>
Existing Use	<u>WWF</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>		
Nearest Downstream Public Water Supply Intake	<u>Indian Creek Valley Water Authority</u>		

Changes Since Last Permit Issuance: The discharge was previously considered to be to a dry intermittent stream.

Treatment Facility Summary				
Treatment Facility Name: Henry Clay Villa Nursing Home STP				
WQM Permit No.	Issuance Date			
2677407	11/18/1977			
2677407 (transfer)	12/17/2009			
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary With Ammonia Reduction	Extended Aeration	Chlorine With Dechlorination	0.0093
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0093	15	Not Overloaded	Dewatering	Other WWTP

Changes Since Last Permit Issuance: None

Compliance History	
Summary of DMRs:	The facility utilizes the Department's eDMR system. No effluent violations have been reported in the past 12 months. A summary of the effluent results can be found in a table on the next page.
Summary of Inspections:	The most recent inspection by the Department was conducted on 12/17/2018. No violations were discovered during the inspection.

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	0.00076 9	0.00107 7	0.00085 7	0.00084 6	0.00075 4	0.00071 4	0.00075 4	0.00123 1	0.00086 2	0.00084 3	0.00080 0	0.00085
pH (S.U.) Minimum	7.0	6.9	6.9	7.0	7.0	7.0	7.0	7.0	7.0	6.9	7.0	7.0
pH (S.U.) Maximum	7.1	7.1	7.1	7.1	7.1	7.3	7.2	7.1	7.1	7.1	7.2	7.2
DO (mg/L) Minimum	6.4	6.4	6.4	6.4	6.4	6.3	6.3	6.4	6.3	6.3	6.4	6.4
TRC (mg/L) Average Monthly	< 0.02	< 0.02	< 0.02	< 0.02	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
TRC (mg/L) Instantaneous Maximum	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
CBOD5 (mg/L) Average Monthly	4.7	2.0	2.9	2.0	2.0	2.0	3.8	2.0	4.3	2.2	3.1	2.0
CBOD5 (mg/L) Instantaneous Maximum	4.7	2.0	2.9	2.0	2.0	2.0	3.8	2.0	4.3	2.2	3.1	2.0
TSS (mg/L) Average Monthly	5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0	5.0	8.0	5.0	6.0
TSS (mg/L) Instantaneous Maximum	5.0	5.0	5.0	5.0	5.0	5.0	6.0	5.0	5.0	8.0	5.0	6.0
Fecal Coliform (CFU/100 ml) Geometric Mean	1	1	1	1	1	1	1	2	1	1	2	1
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	1	1	1	1	1	1	1	2	1	1	2	1
Ammonia (mg/L) Average Monthly	0.7	0.2	0.2	0.4	0.3	0.4	1.8	0.3	0.9	0.2	0.4	0.2
Ammonia (mg/L) Instantaneous Maximum	0.7	0.2	0.2	0.4	0.3	0.4	1.8	0.3	0.9	0.2	0.4	0.2

Existing and 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)	0.00925	XXX	XXX	XXX	XXX	XXX	1/month	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	XXX	1/day	Grab
DO	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.08	XXX	0.20	1/day	Grab
CBOD5	XXX	XXX	XXX	10	XXX	20	1/month	Grab
TSS	XXX	XXX	XXX	30	XXX	60	1/month	Grab
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/month	Grab
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	7.5	XXX	15.0	1/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	2.5	XXX	5.0	1/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab

Compliance Sampling Location: 001

All of the above proposed effluent limitations and monitoring frequencies are the same in the existing permit. The following is a justification for those limitations:

-The dissolved oxygen, CBOD₅, and TSS limitations were developed based on previous versions of the Department's *Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers* (391-2000-014). The existing policy, which is dated April 12, 2008, is only applicable to new and expanding discharges. Since the facility was constructed prior to April 12, 2008, the existing effluent limitations for these parameters are applicable.

-The following limitations were determined through previous water quality modeling:

Parameter	Limit (mg/l)	SBC	Model
Ammonia-Nitrogen	2.5	Average Monthly	NH3N Toxicity Routine Model
Total Residual Chlorine	0.08	Average Monthly	TRC_CALC Spreadsheet

The remaining effluent limitations are based on technology standards as follows:

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
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)

All monitoring frequency for the proposed effluent limits were based upon Table 6-3, Self-Monitoring Requirements for Sewage Discharges, from the Departments Technical Guidance for the Development and Specification of Effluent Limitations.

Best Professional Judgment (BPJ) Limitations

Comments: None

Anti-Backsliding

There is no proposal to relax an existing effluent limitation in this draft permit.

It is recommended the permit be drafted as described above.