pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northeast Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0062316**
Facility Type	**Non-Municipal**	APS ID	**789380**
Major / Minor	**Minor**	Authorization ID	**1188995**

Applicant and Facility Information

Applicant Name	**Cresson Point Properties LLC**	Facility Name	**Blue Mountain Village STP**
Applicant Address	PO Box 53	Facility Address	1249 Blue Mountain Circle
	Ashfield, PA 18212-0053		Saylorsburg, PA 18353
Applicant Contact	Cole Peffer	Facility Contact	Craig Labarre
Applicant Phone	(610) 674-7499	Facility Phone	(570) 897-7474
Client ID	298023	Site ID	49065
Ch 94 Load Status	Not Overloaded	Municipality	Ross Township
Connection Status	-	County	Monroe
Date Application Received	June 12, 2017	EPA Waived?	Yes
Date Application Accepted	June 30, 2017	If No, Reason	-

Purpose of Application: Renewal of NPDES Permit.

Summary of Review

This is a NPDES Permit Renewal for a 0.0375 MGD Non-municipal STP discharging to Aquashicola Creek (HQ-CWF, Stream Code# 3776), below the Chicola Lake Dam. This STP serves a Mobile Home Park.

Background:

- Annual ADF were 0.0058 MGD (2014), 0.0086 MGD (2015), and 0.00815 MGD (2016) with 0.0117 MGD in May.
- Permit transferred in 2012. Facility name changed at that time.

Special Part C Conditions: Changes bolded.

- Part C.I.A, B, C, **D**: Existing Standard conditions including stormwater prohibition, necessary property rights, residuals management, **Planning**. **Planning is new to this permit**.
- **Part C.I.E: New Chlorine Minimization condition**
- Part C.I.F: Existing Changes in Stream/Discharge condition
- **Part C.II: New standard solids management conditions**

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		James D. Berger, P.E. / Environmental Engineer	July 19, 2019
X		Amy M. Bellanca, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.0375 (NPDES Permit basis)
Latitude	40º 50' 54.00"	Longitude	-75º 22' 27.00"
Quad Name	Wind Gap	Quad Code	1243 (5.22.2)
Wastewater Description:	Sewage Effluent		
Receiving Waters	Aquashicola Creek	Stream Code	3776
NHD Com ID	26290889	RMI	-
Drainage Area	10.6 square miles	Yield (cfs/mi^2)	0.126
Q_{7-10} Flow (cfs)	1.33	Q_{7-10} Basis	USGS PAStreamstats LFY at downstream USGS gage location.
Elevation (ft)	~580 Feet	Slope (ft/ft)	-
Watershed No.	2-B	Chapter 93 Class.	HQ-CWF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-

Background/Ambient Data: None available		Data Source: None available
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	PALMERTON BORO MUNI AUTH (ID# 101331) per E-maps		
PWS Waters	Aquashicola Creek	Flow at Intake (cfs)	-
PWS RMI	-	Distance from Outfall (mi)	~13 miles

Changes Since Last Permit Issuance: **This is a Natural Trout Reproduction Stream, subject to the more stringent (non-summer) Dissolved Oxygen WQS (from the headwaters to confluence with Buckwha Creek)**.

Other Comments:

- Aquashicola Creek discharges to the Lehigh River.
- Chicola Lake Dam No. 45-100 is a Class C-4 dam.
- DFLOW was not used. There is a downstream gage (USGS Gage #01450500 (Aquashicola Creek at Palmerton, PA)) for the watershed but DFLOW was not used because gage website indicated gage receives “Occasional diversion from Pohopoco Creek into Aquashicola Creek upstream from station” (per gage webpage with Buckwha Creek & Mill Creek and Palmerton contributions to the gage location’s 76.7 square mile drainage area. The USGS PAStreamstats incorporated all available gage data and accounts for site-specific characteristics in estimating low flow conditions. The downstream gage location was used to determine the overall LFY for the watershed, which was lower than estimated LFY at the Outfall No. 001 location (i.e. more conservative).

Treatment Facility Summary

Treatment Facility Name: Blue Mountain Village STP

WQM Permit No.	Issuance Date	Scope
4590405-T1	12/21/2012	Permit Transfer to current permittee, no changes in STP design or operation approved.
4590405	6/19/1990	**0.033** MGD STP consisting of **comminutor and bar screen**, extended aeration, a final clarifier, **a gas chlorinator** and contact tank, post-aeration, **a package rapid sand filter** and an aerated sludge holding tank. IRR noted sand filter was not needed to meet permit limits but applicant decided on it anyway, with lift station after chlorine contact tank so that effluent can be either pumped to the filter or flow via gravity to outfall line. Original Permittee was "Hector and Angela Marrero t/a Chicola Lake MHP". Facility name was then "Chicola Lake Mobile Home Park". Application indicated 110 ultimate units envisioned.

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended aeration	Chlorine tablet	0.0375
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.033*	62.55	Not Overloaded	None	Disposal

*Original WQM Permit-approved capacity per 1990 WQM Permit Application and IRR.

Changes Since Last Permit Issuance: None known.

Other Comments:

New WQM Permitting might be required due to changes from WQM Permitted design described above.

- **DEP Inspection Report indicates facility was not using permitted comminutor. 7/19/2019 DEP Inspector E-mail indicated no comminutor onsite as of 7/8/2019 Inspection. Inspector noted that bar screen is in-place but doing little.**
- **No mention of permitted sand filter in NPDES Permit Renewal application description. 7/19/2019 DEP Inspector E-mail indicated it is not in use.**
- **Apparent use of alum chemical feed system "for pH control" per NPDES Permit Renewal application. 7/19/2019 DEP Inspector e-mail indicated soda ash in use.**
- **Use of chlorine tablet system versus originally approved chlorine gas disinfection).**
- **They might need to contact the DRBC to determine if they need a new or updated DRBC Docket for facility changes.**

Sludge: Sludge is being stored in waste sludge tank, then shipped to Greater Hazelton Regional Authority.

Compliance History

DMR Data for Outfall 001 (from June 1, 2018 to May 31, 2019)

Parameter	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18	SEP-18	AUG-18	JUL-18	JUN-18
Flow (MGD) Average Monthly	0.012	0.009	0.012	0.009	0.010	0.009	0.009	0.008	0.008	0.008	0.007	0.007
Flow (MGD) Daily Maximum	0.013	0.014	0.034	0.010	0.018	0.011	0.012	0.011	0.010	0.010	0.009	0.008
pH (S.U.) Minimum	6.9	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.0	7.0	7.0	7.0
pH (S.U.) Maximum	7.1	7.1	7.2	7.2	7.1	7.1	7.1	7.3	7.2	7.2	7.2	7.9
DO (mg/L) Minimum	9.07	9.64	10.23	8.94	8.35	9.36	8.9	8.42	7.68	8.07	8.37	7.8
TRC (mg/L) Average Monthly	0.95	0.94	0.92	0.85	0.85	0.88	0.92	1.0	0.95	0.98	0.94	0.93
TRC (mg/L) Instantaneous Maximum	1.13	1.09	1.15	0.96	0.91	0.95	1.10	1.27	1.20	1.8	1.25	2.2
CBOD5 (mg/L) Average Monthly	< 2.0	< 2.0	2.0	4.4	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	2.8
TSS (mg/L) Average Monthly	< 4.0	4.0	< 4.0	4.4	5.6	4.8	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Fecal Coliform (CFU/100 ml) Geometric Mean	1	3.0	3.0	1	7	3	11	< 1.0	< 1.0	< 1	< 1	< 1
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	1	3.0	3.0	1	7	3	11	< 1.0	< 1.0	< 1	< 1	< 1

Compliance History

Inspection History:

CLIENT	FACILITY NAME	INSP ID	INSPECTED DATE	INSP TYPE	INSPECTION RESULT DESC	INSPECTOR ID	INSPECTOR
CRESSON POINT PROP LLC	BLUE MTN VILLAGE STP	2588401	04/20/2017	Follow-up Inspection	No Violations Noted	00615077	ACKERS, DANIEL
CRESSON POINT PROP LLC	BLUE MTN VILLAGE STP	2562073	02/14/2017	Compliance Evaluation	No Violations Noted	00615077	ACKERS, DANIEL
CRESSON POINT PROP LLC	BLUE MTN VILLAGE STP	2130700	01/10/2013	Administrative/File Review	Violation(s) Noted	00364396	MOYER, GARY

Comments:

Facility has been modified without DEP WQM Permitting or found Part A.III.C.1 notification in available DEP files: See Treatment Plan Section for details on permitted facility design.

- **NPDES Permit Application facility description omitted permitted comminutor/bar screens. DEP Inspection Reports (3/24/2010 and 2/14/2017) indicate permitted comminutor and bar screens were removed (due to problems with "wipes"). However, no WQM Permit was issued for deletion of permitted treatment unit(s).**
- **The permitted design included a sand filter, whose status is unknown.**
- **Change from permitted gas chlorination to chlorine tablet system.**
- **Application noted use of alum onsite for "pH" control. Use of alum for phosphorus control or other purposes (chemical feed system) was not addressed by the 1990 WQM Permit IRR.**
- **No DRBC Docket found on DRBC website or facility NPDES Permit File to address facility changes.**

Open Violations per 7/17/2019 WMS Query (Open Violation by Client No.): None

Permit: PA0062316
Client ID: 298023
Client: All

Open Violations: 0

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .0375
Latitude 40º 50' 53.29" **Longitude** -75º 22' 26.05"
Wastewater Description: Sewage Effluent

Permit Limits and Monitoring: Changes bolded

Parameter	Limit (mg/l unless otherwise specified)	SBC	Model/Basis
CBOD5	**Report Lbs/d** 25.0 **Report** 50.0	**Monthly Average** Monthly Average **Daily Max** IMAX	Existing Technology limit (Chapter 92a.47) supported by water quality modeling. Application data indicated max of 25.0 mg/l and average of 2.19 mg/l (24 samples).
TSS	**Report Lbs/d** 30.0 **Report** 60.0	**Monthly Average** Monthly Average **Daily Max** IMAX	Existing Technology limit (Chapter 92a.47). Application data indicated max of 30.0 mg/l and average of 4.89 mg/l (24 samples).
pH	6.0 – 9.0 SU	**Inst.** Min - IMAX	Existing Technology limit (Chapter 92a.47) Application data was 7.13 – 7.67 SU (24 samples).
Dissolved Oxygen (DO)	6.0	**Inst.** Minimum	Existing permit limit supported by water quality modeling. No Application data. See EDMR data.
Fecal Coliform (5/1 – 9/30)	200/100 ml 1,000/100 ml	Geo Mean IMAX	Existing Technology limit (Chapter 92a.47) Application data of max of 1000/100 ml and average of 1.33/100 ml (24 samples).
Fecal Coliform (10/1 – 4/30)	2,000/100 ml 10,000 ml/100 ml	Geo Mean IMAX	See above.
Total Residual Chlorine	1.2**0** 2.8**0**	Monthly Average IMAX	Existing TRC Limits supported by water quality modeling. Site-specific BAT (is based on old Regional POTW BAT, no significant facility disinfection upgrades, and no apparent stream degradation). **Significant digit added**. **Application data was max 2.5 mg/l and average of 1.08 mg/l (24 samples). See EDMR for more recent data.**
Ammonia-Nitrogen (May 1 - Oct 31)	**Report Lbs/d 25.0 Report 50.0**	**Monthly Average Monthly Average Daily Max IMAX**	**New Ammonia-N limits per water quality modeling and DEP statewide BPJ. Application data 0.10 mg/l (1 samples).**
Ammonia-Nitrogen (Nov 1 - Apr 30)	**Report Lbs/d Report Report**	**Monthly Average Monthly Average Daily Max**	**See above.**
Total Phosphorus	**Report Lbs/d Report Report**	**Annual Average Annual Average Daily Max**	**Annual nutrient monitoring (Chapter 92a.61). Application data was 2.08 mg/l (1 sample).**
Total Nitrogen (Nitrate-Nitrite-N + TKN measured in same sample)	**Report Lbs/d Report Report**	**Annual Average Annual Average Daily Max**	**Annual nutrient monitoring (Chapter 92a.61). Application data was 25.2 mg/l (1 sample).**

Total Dissolved Solids (TDS)	**Report Lbs/d Report Report**	**Annual Average Annual Average Daily Max**	**Annual monitoring (Chapter 92a.61). No application data.**
Aluminum	**Report Lbs/d Report Report**	**Annual Average Annual Average Daily Max**	**Annual monitoring (Chapter 92a.61) due to use of alum per NPDES Permit Application form with discharge to HQ stream. No application data.**

Comments:

- Outfall No. 001 Sampling Point: Chlorine Contact Tank discharge.
- Monitoring Frequencies: Updated to standard 1/day and 2/month frequencies. Annual monitoring for nutrients. Units updated for grab sampling (Instantaneous Minimum) and #/100 ml for fecal coliforms.
- Additional Reporting: Mass loadings and daily max reporting added. No additional sampling required.
- **Antidegradation: No additional degradation is expected in the absence of any new or increased or additional stream loading. Aluminum monitoring would detect over-usage of alum wastewater treatment chemical. No known stream impairment at discharge location.**

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
02B	3776	AQUASHICOLA CREEK

RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
1.190	Blue Mtn Vil ST	PA0062316	0.038	CBOD5	25		
				NH3-N	25	50	
				Dissolved Oxygen			6

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9 — Blue Mtn Village STP

1.3356	= Q stream (cfs)	0.5	= CV Daily
0.0375	= Q discharge (MGD)	0.5	= CV Hourly
30	= no. samples	1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)
1.2	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)
0	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 7.363	1.3.2.iii	WLA cfc = 7.171
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 2.744	5.1d	LTA_cfc = 4.169

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 1.200	BAT/BPJ
		INST MAX LIMIT (mg/l) = 3.924	