pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northwest Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0221961**
Facility Type	**Non-Municipal**	APS ID	**1012642**
Major / Minor	**Minor**	Authorization ID	**1423387**

Applicant and Facility Information

Applicant Name	**Timberlee Valley Sanitary Company, Inc.**	Facility Name	**Timberlee Valley STP**
Applicant Address	800 South Washington Street	Facility Address	Smalstig Road
	Evans City, PA 16033		Evans City, PA 16033
Applicant Contact	Robert Brennan rbrennan@brennanhomes.com	Facility Contact	Robert Brennan rbrennan@brennanhomes.com
Applicant Phone	(742) 287-6278	Facility Phone	(412) 287-6728
Client ID	142306	Site ID	483556
Ch 94 Load Status	Not Overloaded	Municipality	Connoquenessing Township
Connection Status	No Limitations	County	Butler County
Date Application Received	January 20, 2022	EPA Waived?	Yes
Date Application Accepted	January 27, 2022	If No, Reason	
Purpose of Application	Renewal of an NPDES Permit for an existing discharge of treated sanitary wastewater from a non-municipal sewer system.		

Summary of Review

Act 14 - Proof of Notification was submitted and received.

A Part II Water Quality Management permit will be required prior to upgrades made to the STP.

The applicant should be able to meet the limits of this permit, which will continue to protect the uses of the receiving stream.

I. OTHER REQUIREMENTS:
- A. Stormwater into sewers
- B. Right of way
- C. Solids handling
- D. Ultraviolet (UV) Light Disinfection Reporting

SPECIAL CONDITIONS:
- II. Solids Management

There are no open violations in efacts associated with the subject Client ID (142306) as of 1/25/2023.

Approve	Deny	Signatures	Date
X		Stephen A. McCauley Stephen A. McCauley, E.I.T. / Environmental Engineering Specialist	1/25/2023
X		Chad W. Yurisic Chad W. Yurisic, P.E. / Environmental Engineer Manager	2/23/2023

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.068 (previously 0.030)
Latitude	40º 51' 09"	Longitude	-80º 03' 53"
Quad Name	-	Quad Code	-
Wastewater Description:	Sewage Effluent		

Receiving Waters	Crab Run (CWF)	Stream Code	34957
NHD Com ID	126218424	RMI	2.562
Drainage Area	7.8 mi^2	Yield (cfs/mi^2)	0.047
Q_{7-10} Flow (cfs)	0.367	Q_{7-10} Basis	Buffalo Creek near Freeport
Elevation (ft)	1007	Slope (ft/ft)	0.0057
Watershed No.	20-C	Chapter 93 Class.	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	Final	Name	Little Connoquenessing Creek Watershed

Background/Ambient Data		Data Source
pH (SU)	7.4	Stream survey on Crab Run
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake		Harmony Borough Water Company	
PWS Waters	Little Connoquenessing Creek	Flow at Intake (cfs)	2.0
PWS RMI	1.1	Distance from Outfall (mi)	6.0

* - The TMDL for the Little Connoquenessing Creek Watershed is due to low pH and metals caused by Abandoned Mine Drainage (AMD). This discharge is not expected to add Aluminum, Iron, or Manganese in any quantities that would add to the impairment of the Little Connoquenessing Creek, which is at least 2 miles downstream from the discharge.

Sludge use and disposal description and location(s): Sludge is disposed of at an approved landfill.

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.

Narrative: This Fact Sheet details the determination of draft NPDES permit limits for a renewal of treated sewage from a non-municipal sewage treatment plant in Connoquenessing Township, Butler County. A major amendment was recently issued on 11/30/2022 to increase the discharge flow from 0.030 MGD to 0.068 MGD.

Permitted treatment consists of: (WQM Permits no. 1096404 and 1001406)

An existing 18,000 gpd STP with a 3,079 gallon trash trap, a manual bar screen with bypass, two 10,000 gallon flow equalization tanks in series, an 8,984 gallon aeration tank and a 12,542 gallon aeration tank in series, a 3,072 clarification tank, and Ultraviolet (UV) light disinfection. Sludge is handled via a 6,000 gallon aerobic sludge digestion tank. Alum is approved for use to control phosphorus. Soda Ash is approved for use in controlling alkalinity.

Flow from the equalization tanks will be split between the existing 18,000 STP and a new 50,000 gpd extended aeration STP with 52,554 gallons of aeration, 3,905 gallons of clarification, a 10,511 gallon aerated sludge holding tank, and an emergency backup generator. UV disinfection will be performed at the existing units.

1. Streamflow:

Crab Run @ Outfall 001 (from the previous WQPR):

Drainage Area:	7.8	sq. mi.	(previous WQPR)
Yieldrate:	0.047	cfsm	(previous WQPR)
Q_{7-10}:	0.367	cfs	(calculated)
% of stream allocated:	100%	Basis:	no nearby discharges

2. Wasteflow:

Proposed discharge: 0.068 MGD = 0.105 cfs

Runoff flow period: 24 hours Basis: Runoff flow with flow equalization

There is greater than 3 parts stream flow (Q7-10) to 1 part effluent (design flow). In accordance with the SOP, since this is an existing discharge, the treatment requirements in document number 391-2000-014, titled, "Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers", dated April 12, 2008, are not necessary.

Flow will be required to be monitored as authorized under Chapter 92a.61, and as recommended in the SOP.

3. Parameters:

The following parameters were evaluated: pH, Total Suspended Solids, Fecal Coliform, E. Coli, Phosphorus, NH_3-N, $CBOD_5$, Dissolved Oxygen, and Total Residual Chlorine.

a. pH

Between 6.0 and 9.0 at all times

Basis: Application of Chapter 93.7 technology-based limits.

The measurement frequency was previously set to 3/week and will be retained for the interim limits. The final limits will be set to 1/day as recommended in the SOP, based on Table 6-3 in the "Technical Guidance for the Development and Specification of Effluent Limitations" (362-0400-001).

b. Total Suspended Solids

Limits are 30.0 mg/l as a monthly average and 60 as an instantaneous maximum.

Basis: Application of Chapter 92a47 technology-based limits.

c. Fecal Coliform

05/01 - 09/30: 200/100ml (monthly average geometric mean)
1,000/100ml (instantaneous maximum)

10/01 - 04/30: 2,000/100ml (monthly average geometric mean)
10,000/100ml (instantaneous maximum)

Basis: Application of Chapter 92a47 technology-based limits

d. E. Coli

Monitoring will be retained for E. Coli at a frequency of 1/quarter.

Basis: Application of Chapter 92a.61 as recommended by the SOP for flows greater than 0.05 MGD and less than 1.0 MGD.

e. Total Phosphorus

The technology-based limits for Total Phosphorus under Chapter 96.5 that were set for the Connoquenessing Creek Basin will be retained with this renewal.

f. Total Nitrogen

Monitoring for Total Nitrogen will be retained with this amendment in accordance with the SOP, based on Chapter 92a.61.

g. Ammonia-Nitrogen (NH_3-N)

Median discharge pH to be used: 7.3 Standard Units (S.U.)

Basis: Average pH value from DMR summary

Discharge temperature: 25°C (default value used in the absence of data)

Median stream pH to be used: 7.4 Standard Units (S.U.)

Basis: Crab Run stream survey

Stream Temperature: 20˚C (default value used for CWF modeling)

Background NH_3-N concentration: 0.1 mg/l

Basis: Default value.

Calculated NH_3-N Summer limits: 8.3 mg/l (monthly average)
16.6 mg/l (instantaneous maximum)

Calculated NH_3-N Winter limits: 24.9 mg/l (monthly average)
49.8 mg/l (instantaneous maximum)

Result: WQ modeling resulted in the calculated summer limits above (see Attachment 1). The winter limits are calculated as 3 times the summer limits per the SOP. These limits will be set as the final limits.

h. $CBOD_5$

Median discharge pH to be used: 7.3 Standard Units (S.U.)

Basis: Average pH value from DMR summary

Discharge temperature: 25°C (default value used in the absence of data)

Median stream pH to be used: 7.4 Standard Units (S.U.)

Basis: Crab Run stream survey

Stream Temperature: 20˚C (default value used for CWF modeling)

Background $CBOD_5$ concentration: 2.0 mg/l

Basis: Default value

Calculated $CBOD_5$ limits: 25.0 mg/l (monthly average)
50.0 mg/l (instantaneous maximum)

Result: WQ modeling resulted in the calculated CBOD5 limits above (see Attachment 1), which are the same as the previous NPDES Permit and will be retained.

i. Dissolved Oxygen (DO)

A Dissolved Oxygen technology-based minimum of 4.0 mg/l is recommended by the WQ Model (see Attachment 1), and the SOP, based on Chapter 93.7, under the authority of Chapter 92a.61.

The measurement frequency was previously set to 3/week and will be retained for the interim limits. The final limits will be set to 1/day as recommended in the SOP, based on Table 6-3 in the "Technical Guidance for the Development and Specification of Effluent Limitations" (362-0400-001).

j. Total Residual Chlorine (TRC)

☒ Ultraviolet (UV) light monitoring

UV Intensity reporting will be retained with this renewal.

The measurement frequency was previously set to 3/week and will be retained for the interim limits. The final limits will be set to 1/day as recommended in the SOP, based on Table 6-3 in the "Technical Guidance for the Development and Specification of Effluent Limitations" (362-0400-001).

☐ TRC limits: _____ mg/l (monthly average)
_____ mg/l (instantaneous maximum)

Basis: N/A

4. Reasonable Potential Analysis for Receiving Stream:

A Reasonable Potential Analysis was not performed in accordance with State practices using the Department's Toxics Management Spreadsheet since no sampling other than sewage-related parameters was performed for this facility with the renewal application.

5. Reasonable Potential for Downstream Public Water Supply (PWS):

The Department's Toxics Management Spreadsheet does not calculate limits for parameters that are based on PWS criteria (TDS, Chloride, Bromide, and Sulfate). However, since no sample data was provided, mass-balance calculations were not performed.

Nearest Downstream potable water supply (PWS): Harmony Borough Water Company
Distance downstream from the point of discharge: 6.0 miles (approximate)

Result: No limits or monitoring is necessary as there is significant dilution available.

6. Anti-Backsliding:

Since all the permit limits in this renewal are the same or more restrictive than the previous NPDES Permit, anti-backsliding is not applicable.

7. Attachment List:

Attachment 1 - WQ Modeling Printouts

(The Attachment above can be found at the end of this document)

Compliance History

DMR Data for Outfall 001 (from January 1, 2022 to December 31, 2022)

Parameter	DEC-22	NOV-22	OCT-22	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22
Flow (MGD) Average Monthly	0.011	0.012	0.011	0.013	0.013	0.012	0.012	0.013	0.013	0.011	0.012	0.010
pH (S.U.) Daily Minimum	7.2	7.4	7.2	7.3	7.3	7.2	6.6	7.0	6.8	7.4	7.4	7.4
pH (S.U.) Daily Maximum	7.6	7.8	7.8	7.7	8.0	7.8	7.8	7.8	7.6	7.7	7.9	7.7
DO (mg/L) Daily Minimum	4.4	4.5	4.1	4.5	4.1	4.5	4.2	4.4	4.3	4.5	4.3	4.3
CBOD5 (mg/L) Average Monthly	3.4	3.2	3.0	3.3	7.8	4.7	17.8	5.4	9.9	3.0	5.6	7.5
TSS (mg/L) Average Monthly	4.5	3.5	11.5	3.0	6.5	4.0	25.5	4.0	6.5	3.0	6.5	7.0
Fecal Coliform (No./100 ml) Geometric Mean	34	175	133	8	423	32	1646	1	1062	372	336	755
Fecal Coliform (No./100 ml) Instantaneous Maximum	53	179	234	16	2420	63	2420	1	2420	432	1414	2420
UV Intensity (µw/cm²) Average Monthly	260	260	260	260	260	260	00	260	260	260	260	260
Total Nitrogen (mg/L) Average Monthly	32.8	36.4	16.9	23.8	23.0	27.4	21.9	39.3	37.1	37.9	31.8	35.9
Ammonia (mg/L) Average Monthly	13.4	24.0	6.7	10.4	18.0	19.6	13.3	32.1	22.1	17.6	19.2	24.8
Total Phosphorus (mg/L) Average Monthly	0.4	0.7	1.0	1.2	1.2	0.6	2.3	1.0	2.0	1.4	1.7	2.7

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 Startup of New or Upgraded Facilities.

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	XXX	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	3/week	Grab
DO	XXX	XXX	4.0 Daily Min	XXX	XXX	XXX	3/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
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
UV Intensity (µw/cm²)	XXX	XXX	XXX	Report	XXX	XXX	3/week	Measured
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	25.0	XXX	50	2/month	8-Hr Composite
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	17.5	XXX	35	2/month	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	2.0	XXX	4	2/month	8-Hr Composite

Compliance Sampling Location: at Outfall 001, after ultraviolet (UV) light disinfection.

Flow is monitor only based on Chapter 92a.61. The limits for pH and Dissolved Oxygen are technology-based on Chapter 93.7. The limits for $CBOD_5$ and Total Suspended Solids are technology-based on Chapter 92a.47. The limits for Fecal Coliforms are technology-based on Chapter 92a.47. Monitoring for E. Coli, UV Intensity, and Total Nitrogen is based on Chapter 92a.61. The limits for Ammonia-Nitrogen are water quality-based on Chapter 93.7. The limits for Total Phosphorus are technology-based on Chapter 96.5.

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: Startup of New or Upgraded Facilities 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	XXX	XXX	XXX	XXX	XXX	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
DO	XXX	XXX	4.0 Daily Min	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
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
UV Intensity (µw/cm²)	XXX	XXX	XXX	Report	XXX	XXX	1/day	Measured
Total Nitrogen	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	24.9	XXX	49.8	2/month	8-Hr Composite
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	8.3	XXX	16.6	2/month	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	2.0	XXX	4	2/month	8-Hr Composite

Compliance Sampling Location: at Outfall 001, after ultraviolet (UV) light disinfection.

Flow is monitor only based on Chapter 92a.61. The limits for pH and Dissolved Oxygen are technology-based on Chapter 93.7. The limits for $CBOD_5$ and Total Suspended Solids are technology-based on Chapter 92a.47. The limits for Fecal Coliforms are technology-based on Chapter 92a.47. Monitoring for E. Coli, UV Intensity, and Total Nitrogen is based on Chapter 92a.61. The limits for Ammonia-Nitrogen are water quality-based on Chapter 93.7. The limits for Total Phosphorus are technology-based on Chapter 96.5.

Attachment 1

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
20C	34957	CRAB RUN

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)
2.562	Timberlee STP	PA0221961	0.068	CBOD5	25		
				NH3-N	8.32	16.64	
				Dissolved Oxygen			4

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
20C	34957	CRAB RUN

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
2.562	0.068	21.115	7.376
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
12.009	0.464	25.895	0.085
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
7.13	0.653	1.86	0.763
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
7.297	17.662	Owens	6
Reach Travel Time (days)			
1.848			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.185	6.28	1.61	8.07
0.370	5.53	1.40	8.07
0.554	4.87	1.22	8.07
0.739	4.29	1.06	8.07
0.924	3.78	0.92	8.07
1.109	3.33	0.80	8.07
1.294	2.93	0.69	8.07
1.479	2.58	0.60	8.07
1.663	2.27	0.52	8.07
1.848	2.00	0.45	8.07

WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	☑
WLA Method	EMPR	Use Inputted W/D Ratio	☐
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	☐
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	☑
D.O. Saturation	90.00%	Use Balanced Technology	☑
D.O. Goal	6		

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
20C	34957	CRAB RUN	**2.562**	1007.00	7.80	0.00000	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.047	0.00	0.00	0.000	0.000	0.0	0.00	0.00	20.00	7.40	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
Timberlee STP	PA0221961	0.0680	0.0000	0.0000	0.000	25.00	7.30

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	4.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
20C	34957	CRAB RUN	**0.000**	963.00	10.00	0.00000	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.047	0.00	0.00	0.000	0.000	0.0	0.00	0.00	20.00	7.40	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
		0.0000	0.0000	0.0000	0.000	25.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	3.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

WQM 7.0 Hydrodynamic Outputs

SWP Basin	Stream Code	Stream Name
20C	34957	CRAB RUN

RMI	Stream Flow (cfs)	PWS With (cfs)	Net Stream Flow (cfs)	Disc Analysis Flow (cfs)	Reach Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Reach Trav Time (days)	Analysis Temp (°C)	Analysis pH
Q7-10 Flow												
2.562	0.37	0.00	0.37	.1052	0.00325	.464	12.01	25.9	0.08	1.848	21.11	7.38
Q1-10 Flow												
2.562	0.23	0.00	0.23	.1052	0.00325	NA	NA	NA	0.07	2.221	21.55	7.37
Q30-10 Flow												
2.562	0.50	0.00	0.50	.1052	0.00325	NA	NA	NA	0.10	1.610	20.87	7.38

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
20C	34957	CRAB RUN

NH3-N Acute Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
2.562	Timberlee STP	9.82	31.72	9.82	31.72	0	0

NH3-N Chronic Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
2.562	Timberlee STP	1.45	8.32	1.45	8.32	0	0

Dissolved Oxygen Allocations

RMI	Discharge Name	CBOD5		NH3-N		Dissolved Oxygen		Critical Reach	Percent Reduction
		Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)		
2.56	Timberlee STP	25	25	8.32	8.32	4	4	0	0