

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

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0253324
APS ID 1108710
Authorization ID 1475437

Applicant and Facility Information

Applicant Name	<u>North American Medical Center LLC</u>	Facility Name	<u>Scenery Hill Manor Personal Care Home STP</u>
Applicant Address	<u>680 Lions Health Camp Road</u> <u>Indiana, PA 15701-8781</u>	Facility Address	<u>680 Lions Health Camp Road</u> <u>Indiana, PA 15701-8781</u>
Applicant Contact	<u>Owen Larkin</u>	Facility Contact	<u></u>
Applicant Phone	<u>(724) 463-7600</u>	Facility Phone	<u></u>
Client ID	<u>371046</u>	Site ID	<u>664472</u>
Ch 94 Load Status	<u></u>	Municipality	<u>Armstrong Township</u>
Connection Status	<u></u>	County	<u>Indiana</u>
Date Application Received	<u>January 31, 2024</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u></u>	If No, Reason	<u></u>
Purpose of Application	<u>NPDES Renewal of a treated sewage discharge.</u>		

Summary of Review

This facility is a package plant serving a medical and rehab center.

E. Coli monitoring has been added per the Department's SOP for new and reissued permits.

WQM and TRC modeling have been updated, resulting in changes to Total Residual Chlorine (TRC), Dissolved Oxygen (DO), and Ammonia (NH3-N) effluent limits.

This facility's average annual discharge flow of 0.005 MGD has exceeded its design and permitted discharge flow of 0.0044 MGD.

There are currently no open violations for this client (371046) as of 11/13/2024.

Sludge use and disposal description and location(s): Sludge is disposed of at a 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*

Approve	Deny	Signatures	Date
X		Jordan A. Frey, E.I.T. Jordan A. Frey, E.I.T. / Project Manager	November 13, 2024
X		Adam Olesnanik Adam Olesnanik, P.E. / Environmental Engineer Manager	November 18, 2024

Summary of Review

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.

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.0044
Latitude	40° 38' 2.16"	Longitude	-79° 12' 45.64"
Quad Name	40079F2	Quad Code	Ernest
Wastewater Description: Sewage Effluent			
Receiving Waters	Cheese Run (CWF)	Stream Code	46707
NHD Com ID	123858616	RMI	
Drainage Area	0.22	Yield (cfs/mi²)	0.009
Q ₇₋₁₀ Flow (cfs)	0.002	Q ₇₋₁₀ Basis	Streamstats
Elevation (ft)	1284	Slope (ft/ft)	---
Watershed No.	17-E	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	Crooked Creek Watershed
Background/Ambient Data		Data Source	
pH (SU)	7.0	Default	
Temperature (°F)	20	Default	
Hardness (mg/L)	100	Default	
Other:			
Nearest Downstream Public Water Supply Intake	Buffalo Township Municipal Water Authority - Freeport		
PWS Waters	Allegheny River	Flow at Intake (cfs)	2576
PWS RMI	30	Distance from Outfall (mi)	>25

Changes Since Last Permit Issuance: None.

Other Comments: None.

Treatment Facility Summary				
Treatment Facility Name: Scenery Hill Manor Pch STP				
WQM Permit No.	Issuance Date			
3206401 T-1	July 27, 2022			
3206401 A-1	November 10, 2011			
3206401	November 7, 2006			
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary with NH ₃ -N Reduction	Extended Aeration	Chlorine Tablets (de-chlorinated with Sodium Bisulfite tablets)	0.0050
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0044	10	Overloaded	Aerobic Holding Tank	Landfill

Changes Since Last Permit Issuance: Biosolids are now disposed of in a landfill, per NPDES renewal application. Average Annual Flow (0.0050 MGD) now exceeds the Design Hydraulic Capacity (0.0044 MGD), so this facility is currently overloaded.

Other Comments: Facility is a Chromaglass plant, consisting of an aerated equalization tank, aerobic treatment unit, chlorine contact tank, dechlorination tank and a sludge processing tank.

Compliance History

DMR Data for Outfall 001 (from October 1, 2023 to September 30, 2024)

Parameter	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23
Flow (MGD) Average Monthly	0.0037	0.0036	0.0044	0.0047	0.0052	0.0043	0.0044	0.0044	0.0041	0.004	0.0036	0.0039
Flow (MGD) Daily Maximum	0.0044	0.0037	0.0048	0.0048	0.0055	0.0044	0.0049	0.0047	0.0043	0.004	0.0037	0.0042
pH (S.U.) Instantaneous Minimum	7.1	7.1	7.1	7.1	7.1	7.1	6.6	7.0	7.1	6.1	7.1	7.1
pH (S.U.) Instantaneous Maximum	7.3	7.4	7.4	7.3	7.4	7.3	7.4	7.3	7.4	6.4	7.3	7.4
DO (mg/L) Instantaneous Minimum	5.9	5.8	5.9	6.1	5.8	5.9	5.8	5.8	5.3	6.1	6.0	6.1
TRC (mg/L) Average Monthly	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.002
TRC (mg/L) Instantaneous Maximum	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.20
CBOD5 (mg/L) Average Monthly	8.7	6.34	5.1	23.5	11.4	14.5	14.6	18	16.2	11.46	9.66	7.6
CBOD5 (mg/L) Instantaneous Maximum	14	7.36	5.3	42.6	13.6	15.2	14.8	29	18.6	16.3	10.5	8.43
TSS (mg/L) Average Monthly	11	8	9	12	25	30	22	20	15	12	17	12
TSS (mg/L) Instantaneous Maximum	14	8	11	18	38	32	23	27	16	18	18	14
Fecal Coliform (No./100 ml) Geometric Mean	< 5	< 5	< 5	21	< 4	10	< 5	61	< 5	< 2	11	< 5
Fecal Coliform (No./100 ml) Instantaneous Maximum	< 5	< 5	< 5	86	16	20	< 5	116	< 5	< 5	26	< 5
Total Nitrogen (mg/L) Daily Maximum										12.0		

**NPDES Permit Fact Sheet
Scenery Hill Manor Pch STP**

NPDES Permit No. PA0253324

Parameter	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23	NOV-23	OCT-23
Ammonia (mg/L) Average Monthly	7.18	< 0.4	0.81	1.17	0.94	5.1	8.6	1.24	1.64	4.65	0.955	1.12
Ammonia (mg/L) Instantaneous Maximum	9.48	< 0.4	1.21	1.26	1.29	5.12	16.7	1.7	2.0	8.14	1.1	1.83
Total Phosphorus (mg/L) Daily Maximum										3.9		

Development of Effluent Limitations

Outfall No.	001	Design Flow (MGD)	.0044
Latitude	40° 38' 2.00"	Longitude	-79° 12' 47.00"
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)
E. Coli (No./100ml)	Report	IMAX		92a.61

Comments: E. Coli monitoring was added based on the Department's SOP for new and reissued permits.

Water Quality-Based Limitations

The following limitations were determined through water quality modeling (output files attached):

Parameter	Limit (mg/l)	SBC	Model
Ammonia (May-Oct)	2.0	Average Monthly	WQM v.1.0b
CBOD ₅	25	Average Monthly	WQM v1.0b
Dissolved Oxygen (DO)	6.0	Daily Minimum	WQM v.1.0b
Total Residual Chlorine	0.05	Average Monthly	TRC Spreadsheet

Comments: Water Quality Modeling recommended an NH₃-N (Ammonia) limit of 2.03 mg/l, which is rounded to 2.0 mg/l, and recommended a Dissolved Oxygen limit of 6.0 mg/l.

The Department's TRC Spreadsheet recommends a TRC limit of 0.05 mg/l. It is of note that prior analysis considered only 4 samples per month, but as TRC sampling was increased to 5/week in the last permit cycle, 20 monthly samples was assumed in the current analysis.

No Compliance Schedule is proposed because a survey of the recent eDMRs shows this facility is already meeting the proposed TRC limits, is consistently meeting proposed Ammonia limits, and consistently meeting or within 0.2 mg/l of the proposed Dissolved Oxygen limit.

Best Professional Judgment (BPJ) Limitations

Comments: None.

Anti-Backsliding

None.

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" (386-0400-001), 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	1/week	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	5/week	Grab
DO	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	5/week	Grab
TRC	XXX	XXX	XXX	0.05	XXX	0.15	5/week	Grab
CBOD5	XXX	XXX	XXX	25	XXX	50	2/month	Grab
TSS	XXX	XXX	XXX	30	XXX	60	2/month	Grab
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./100ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Nitrogen	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/year	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	6.0	XXX	12.0	2/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	2.0	XXX	4.0	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001, after disinfection.

TRC Spreadsheet - Scenery Hill Manor PCH STP

TRC EVALUATION					
Input appropriate values in A3:A9 and D3:D9					
0.002	= Q stream (cfs)	0.5	= CV Daily		
0.005	= Q discharge (MGD)	0.5	= CV Hourly		
20	= 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)		
0.5	= 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 = 0.101		1.3.2.iii	WLA cfc = 0.091
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373		5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc = 0.038		5.1d	LTA_cfc = 0.053
Source	Effluent Limit Calculations				
PENTOXSD TRG	5.1f	AML MULT = 1.288			
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.049		AFC	
		INST MAX LIMIT (mg/l) = 0.152			
WLA afc	$(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))... \\ ...+ Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)$				
LTAMULT afc	$EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)$				
LTA_afc	wla_afc*LTAMULT_afc				
WLA_cfc	$(.011/e(-k*CFC_tc)) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))... \\ ...+ Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)$				
LTAMULT_cfc	$EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5)$				
LTA_cfc	wla_cfc*LTAMULT_cfc				
AML MULT	$EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*LN(cvd^2/no_samples+1))$				
AVG MON LIMIT	MIN(BAT_BPJ,MIN(LTA_afc,LTA_cfc)*AML_MULT)				
INST MAX LIMIT	1.5*((av_mon_limit/AML_MULT)/LTAMULT_afc)				

WQM 7.0 Wasteload Allocations

<u>SWP Basin</u>		<u>Stream Code</u>	<u>Stream Name</u>					
17E		46707	CHEESE 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
4.086	Outfall 001	7.13	8.38	7.13	8.38	0	0
3.756		NA	NA	7.92	NA	NA	NA

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
4.086	Outfall 001	1.48	2.03	1.48	2.03	0	0
3.756		NA	NA	1.68	NA	NA	NA

Dissolved Oxygen Allocations

RMI	Discharge Name	<u>CBOD5</u>		<u>NH3-N</u>		<u>Dissolved Oxygen</u>		Critical Reach	Percent Reduction
		Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)		
4.09	Outfall 001	25	25	2.03	2.03	6	6	0	0
3.76		NA	NA	NA	NA	NA	NA	NA	NA

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>			
17E	46707	CHEESE RUN			
<u>RMI</u>	<u>Total Discharge Flow (mgd)</u>	<u>Analysis Temperature (°C)</u>		<u>Analysis pH</u>	
4.086	0.004	23.922		7.000	
<u>Reach Width (ft)</u>	<u>Reach Depth (ft)</u>	<u>Reach WDRatio</u>		<u>Reach Velocity (fps)</u>	
1.522	0.238	6.398		0.024	
<u>Reach CBOD5 (mg/L)</u>	<u>Reach Kc (1/days)</u>	<u>Reach NH3-N (mg/L)</u>		<u>Reach Kn (1/days)</u>	
20.04	1.427	1.59		0.947	
<u>Reach DO (mg/L)</u>	<u>Reach Kr (1/days)</u>	<u>Kr Equation</u>		<u>Reach DO Goal (mg/L)</u>	
6.483	27.860	Owens		6	
<u>Reach Travel Time (days)</u>					
0.841					
	Subreach Results				
	TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)	
	0.084	17.36	1.47	6.61	
	0.168	15.03	1.36	6.84	
	0.252	13.02	1.25	7.06	
	0.337	11.28	1.16	7.24	
	0.421	9.77	1.07	7.40	
	0.505	8.46	0.99	7.55	
	0.589	7.32	0.91	7.67	
	0.673	6.34	0.84	7.68	
	0.757	5.49	0.78	7.68	
	0.841	4.76	0.72	7.68	
<u>RMI</u>	<u>Total Discharge Flow (mgd)</u>	<u>Analysis Temperature (°C)</u>		<u>Analysis pH</u>	
3.756	0.004	22.218		7.000	
<u>Reach Width (ft)</u>	<u>Reach Depth (ft)</u>	<u>Reach WDRatio</u>		<u>Reach Velocity (fps)</u>	
2.323	0.256	9.071		0.026	
<u>Reach CBOD5 (mg/L)</u>	<u>Reach Kc (1/days)</u>	<u>Reach NH3-N (mg/L)</u>		<u>Reach Kn (1/days)</u>	
3.56	0.251	0.41		0.830	
<u>Reach DO (mg/L)</u>	<u>Reach Kr (1/days)</u>	<u>Kr Equation</u>		<u>Reach DO Goal (mg/L)</u>	
7.925	24.516	Owens		6	
<u>Reach Travel Time (days)</u>					
2.076					
	Subreach Results				
	TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)	
	0.208	3.36	0.34	7.91	
	0.415	3.17	0.29	7.91	
	0.623	2.99	0.24	7.91	
	0.830	2.83	0.20	7.91	
	1.038	2.67	0.17	7.91	
	1.245	2.52	0.14	7.91	
	1.453	2.38	0.12	7.91	
	1.661	2.24	0.10	7.91	
	1.868	2.12	0.09	7.91	
	2.076	2.00	0.07	7.91	

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)
4.086	Outfall 001	PA0253324	0.005	CBOD5	25		
				NH3-N	2.03	4.06	
				Dissolved Oxygen			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
17E	46707	CHEESE RUN	4.086	1284.00	0.22	0.00000	0.00	<input checked="" type="checkbox"/>

Stream Data

Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary		Stream	
	(cfsm)	(cfs)	(cfs)						Temp (°C)	pH	Temp (°C)	pH
Q7-10	0.009	0.00	0.00	0.000	0.000	0.0	0.00	0.00	20.00	7.00	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
Outfall 001	PA0253324	0.0050	0.0044	0.0044	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

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
17E	46707	CHEESE RUN	3.756	1228.00	0.53	0.00000	0.00	<input checked="" type="checkbox"/>

Stream Data												
Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary		Stream	
	(cfsm)	(cfs)	(cfs)						Temp (°C)	pH	Temp (°C)	pH
Q7-10	0.022	0.00	0.00	0.000	0.000	0.0	0.00	0.00	20.00	7.00	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

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
17E	46707	CHEESE RUN	2.880	1149.00	1.53	0.00000	0.00	<input checked="" type="checkbox"/>

Stream Data												
Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Depth	Tributary		Stream	
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	Temp (°C)	pH	Temp (°C)	pH
Q7-10	0.066	0.00	0.00	0.000	0.000	0.0	0.00	0.00	20.00	7.00	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

<u>SWP Basin</u>		<u>Stream Code</u>		<u>Stream Name</u>								
17E		46707		CHEESE RUN								
RMI	Stream Flow	PWS With	Net Stream Flow	Disc Analysis Flow	Reach Slope	Depth	Width	W/D Ratio	Velocity	Reach Trav Time	Analysis Temp	Analysis pH
	(cfs)	(cfs)	(cfs)	(cfs)	(ft/ft)	(ft)	(ft)		(fps)	(days)	(°C)	
Q7-10 Flow												
4.086	0.00	0.00	0.00	.0068	0.03214	.238	1.52	6.4	0.02	0.841	23.92	7.00
3.756	0.01	0.00	0.01	.0068	0.01708	.256	2.32	9.07	0.03	2.076	22.22	7.00
Q1-10 Flow												
4.086	0.00	0.00	0.00	.0068	0.03214	NA	NA	NA	0.02	0.880	24.25	7.00
3.756	0.01	0.00	0.01	.0068	0.01708	NA	NA	NA	0.02	2.353	22.77	7.00
Q30-10 Flow												
4.086	0.00	0.00	0.00	.0068	0.03214	NA	NA	NA	0.02	0.807	23.64	7.00
3.756	0.01	0.00	0.01	.0068	0.01708	NA	NA	NA	0.03	1.874	21.85	7.00

WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	<input checked="" type="checkbox"/>
WLA Method	EMPR	Use Inputted W/D Ratio	<input type="checkbox"/>
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	<input type="checkbox"/>
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	<input checked="" type="checkbox"/>
D.O. Saturation	90.00%	Use Balanced Technology	<input checked="" type="checkbox"/>
D.O. Goal	6		