Pennsylvania Department of Environmental Protection

Northwest Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0221317**
Facility Type	**Non-Municipal**	APS ID	**1066339**
Major / Minor	**Minor**	Authorization ID	**1401211**

Applicant and Facility Information

Applicant Name	**Allegheny Clarion Valley Development Corporation**	Facility Name	**Allegheny Clarion Valley Industrial Park**
Applicant Address	PO Box 311	Facility Address	9 Penn West Way
	Foxburg, PA 16036		Emlenton, PA 16373
Applicant Contact	James Hite	Facility Contact	James Hite
Applicant Phone	(724) 355-1071	Facility Phone	(724) 355-1071
Client ID	66157	Site ID	456456
Ch 94 Load Status	Not Overloaded	Municipality	Allegheny Township
Connection Status	No Limitations	County	Butler
Date Application Received	June 27, 2022	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: NPDES Renewal.

Summary of Review

An application was submitted for an NPDES permit renewal for an existing minor sewage facility discharge. The Allegheny Clarion Valley Industrial Park Water Plant consists of a lift station, 2 screening facilities, 2 flow equalization tanks, 4 aeration tanks, 2 clarifier tanks, chlorine disinfection / post aeration tank, and de-chlorination tank.

Changes to the permit: E. Coli monitoring has been added to the permit. A slightly more stringent TRC limit has been added.

There are no open violations for the NWRO Clean Water Program.

Sludge use and disposal description and locations: Disposed off-site

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		Benjamin R. Lockwood Benjamin R. Lockwood / Environmental Engineering Specialist	April 22, 2025
X		Adam Olesnanik Adam Olesnanik, P.E. / Environmental Engineer Manager	April 23, 2025

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.045
Latitude	41º 10' 14"	Longitude	79º 45' 26"
Quad Name		Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary to Little Scrubgrass Creek (CWF)	Stream Code	51200
NHD Com ID	100479989	RMI	2.3
Drainage Area	0.96 mi^2	Yield (cfs/mi^2)	0.037
Q_{7-10} Flow (cfs)	0.0353	Q_{7-10} Basis	USGS PA StreamStats
Elevation (ft)	1454	Slope (ft/ft)	
Watershed No.	16-G	Chapter 93 Class.	CWF
Existing Use	N/A	Existing Use Qualifier	N/A
Exceptions to Use	N/A	Exceptions to Criteria	N/A
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	N/A		
Source(s) of Impairment	N/A		
TMDL Status	Final	Name	Little Scrubgrass
Nearest Downstream Public Water Supply Intake	Aqua Pennsylvania, Inc. - Emlenton		
PWS Waters	Allegheny River	Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	15.0

Changes Since Last Permit Issuance: None

Other Comments: None

Treatment Facility Summary				
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Tertiary	Activated Sludge With Solids Removal	Ultraviolet	0.045
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.045	82.17	Not Overloaded	Sludge Holding	Other WWTP

Changes Since Last Permit Issuance: None

Other Comments: None

Compliance History	
Summary of DMRs:	There was a fecal coliform violation in May 2024, a DO violation in September 2024, and an Ammonia violation in November 2024.
Summary of Inspections:	3/14/2023: A routine inspection was conducted. The report indicated that the plant is in poor shape. A WQM permit 1018408 was issued on October 26, 2018 for construction of a new treatment facility. At the time of inspection the upgrade had not begun. The design hydraulic capacity will be increased to 0.045 mgd and the design organic capacity will be 100 lbs/day. The effluent was clear with no odor noticed. No other issues were noted.

Other Comments: There are no open violations for this Applicant for NWRO Clean Water Program

Compliance History

DMR Data for Outfall 001 (from March 1, 2024 to February 28, 2025)

Parameter	FEB-25	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24
Flow (MGD) Average Monthly	0.0005	0.005	0.0005	0.005	0.005	0.005	0.0008	0.0005	0.005	0.0016	0.0083	0.028
Flow (MGD) Daily Maximum	0.0005	0.005	0.0005	0.005	0.005	0.0005	0.005	0.0005	0.005	0.005	0.0336	0.133
pH (S.U.) Minimum	6.5	6.5	6.8	6.2	6.1	6.1	6.2	6.2	6.1	6.1	6.08	6.7
pH (S.U.) Maximum	6.8	7.4	7.6	8.2	6.5	6.5	6.4	6.8	6.5	6.2	6.8	7.3
DO (mg/L) Minimum	6.1	6.06	6.04	6.06	6.08	5.56	6.0	6.01	6.04	6.04	6.06	6.1
TRC (mg/L) Average Monthly	0.04	0.04	0.03	0.04	0.03	0.04	0.05	0.03	0.03	0.05	0.04	0.09
TRC (mg/L) Instantaneous Maximum	0.09	0.13	0.09	0.11	0.06	0.08	0.12	0.06	0.06	0.13	0.08	0.26
CBOD5 (mg/L) Average Monthly	11.3	7.7	< 3.3	11.8	< 2.0	< 3.0	< 2.0	< 2.0	< 4.7	6.3	< 2.0	< 2.3
TSS (mg/L) Average Monthly	10.0	10.0	< 5.5	18.5	< 10.0	< 5.5	< 5.0	< 5.0	< 15.5	< 6.0	< 5.0	< 7.5
Fecal Coliform (No./100 ml) Geometric Mean	< 1	< 20	< 2	< 1	< 1	< 17	< 1	< 1	< 1	> 49	< 12	< 1
Fecal Coliform (No./100 ml) Instantaneous Maximum	< 1	387	5	< 1	< 1	284	< 1	< 1	< 1	> 2420	138	< 1
Total Nitrogen (mg/L) Average Quarterly			10.3			< 17.665			1.855			1.77
Ammonia (mg/L) Average Monthly	3.8	< 0.2	1.4	8.3	0.4	0.3	< 0.2	< 1.7	0.4	1.5	< 0.5	< 0.4
Total Phosphorus (mg/L) Average Quarterly			0.818			< 1.4			< 0.8			1.1

Compliance History

Effluent Violations for Outfall 001, from: April 1, 2024 To: February 28, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
DO	09/30/24	Min	5.56	mg/L	6.0	mg/L
Fecal Coliform	05/31/24	Geo Mean	> 49	No./100 ml	200	No./100 ml
Fecal Coliform	05/31/24	IMAX	> 2420	No./100 ml	1000	No./100 ml
Ammonia	11/30/24	Avg Mo	8.3	mg/L	6.0	mg/L

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .045
Latitude 41º 10' 14" **Longitude** 79º 45' 26"
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)

Comments: E. Coli monitoring has been added per Chapter 92 requirements.

Water Quality-Based Limitations

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

Parameter	Limit (mg/l)	SBC	Model
NH3-N	2.63	Avg. Mo.	WQM 7.0
$CBOD_5$	25	Avg. Mo.	WQM 7.0

Comments: The existing NH_3-N limit of 2.0 mg/l average monthly is more stringent and will remain in the permit. The water-quality based $CBOD_5$ limit of 25 mg/l is the same as the existing permit limit.

Additional Considerations

The UNT to Little Scrubgrass Creek is included in the Little Scrubgrass Creek TMDL for AMD metals. The UNT is not impaired by the AMD metals, and is attaining its uses, therefore no additional monitoring will be added with this renewal. This is consistent with the existing permit requirements.

Total Nitrogen and Total Phosphorus will be monitored 1/year per the Departments' SOP.

A Dissolved Oxygen minimum limitation of 6.0 mg/l is implemented in the existing NPDES permit, and will remain in the renewal.

DEP's TRC Evaluation Spreadsheet was used, which provided an average monthly limit of 0.08 mg/l. This is more stringent than the existing permit limit; therefore, an average monthly limit of 0.08 mg/l and an instantaneous maximum limit of 0.27 mg/l will be imposed in the permit. Based on a review of past DMR data, the facility is capable of meeting this new effluent limitation.

Anti-Backsliding

Pursuant to 40 CFR § 122.44(l)(1), all proposed permit requirements addressed in this fact sheet are at least as stringent as the requirements implemented in the existing NPDES permit.

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.

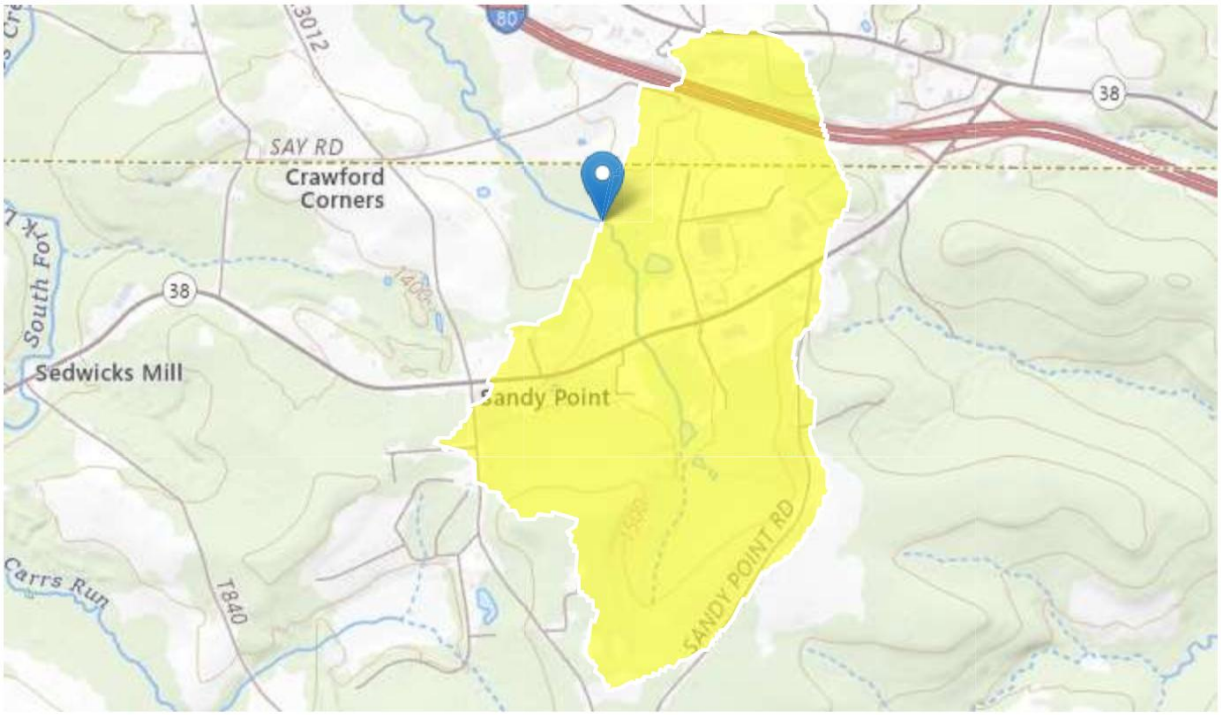
Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

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	XXX	9.0	XXX	1/day	Grab
DO	XXX	XXX	6.0	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.08	XXX	0.27	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	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Nitrogen	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	8-Hr Composite
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	6.0	XXX	12	2/month	8-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	2.0	XXX	4	2/month	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	8-Hr Composite

Compliance Sampling Location: Outfall 001

Allegheny Clarion Valley Development Corporation PA0221317 Outfall 001

Region ID: PA
Workspace ID: PA20250417100543061000
Clicked Point (Latitude, Longitude): 41.17074, -79.75699
Time: 2025-04-17 06:06:16 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.96	square miles
ELEV	Mean Basin Elevation	1454	feet
PRECIP	Mean Annual Precipitation	43	inches

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.96	square miles	2.33	1720
ELEV	Mean Basin Elevation	1454	feet	898	2700
PRECIP	Mean Annual Precipitation	43	inches	38.7	47.9

Low-Flow Statistics Disclaimers [Low Flow Region 3]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [Low Flow Region 3]

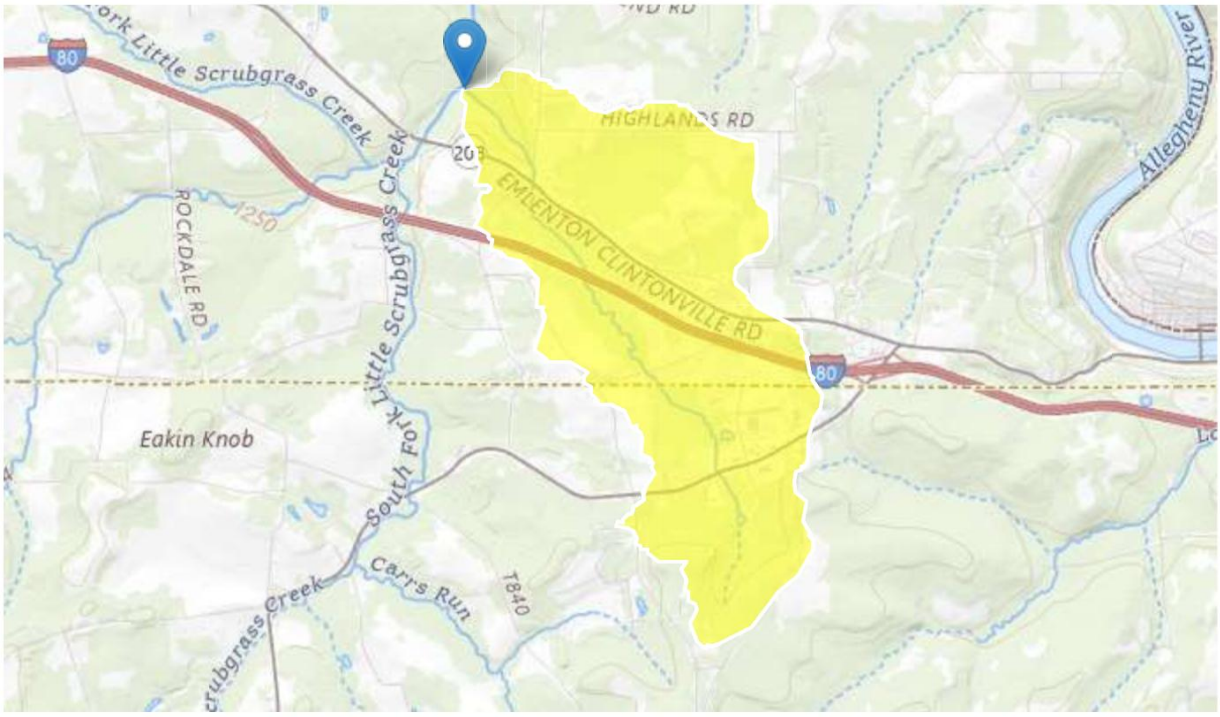
Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0915	ft^3/s
30 Day 2 Year Low Flow	0.137	ft^3/s
7 Day 10 Year Low Flow	0.0353	ft^3/s
30 Day 10 Year Low Flow	0.0524	ft^3/s
90 Day 10 Year Low Flow	0.0792	ft^3/s

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Allegheny Clarion Valley Development Corporation PA0221317 RMI = 0.0

Region ID: PA
Workspace ID: PA20250417101830497000
Clicked Point (Latitude, Longitude): 41.19438, -79.77980
Time: 2025-04-17 06:19:05 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	2.83	square miles
ELEV	Mean Basin Elevation	1390	feet
PRECIP	Mean Annual Precipitation	43	inches

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.83	square miles	2.33	1720
ELEV	Mean Basin Elevation	1390	feet	898	2700
PRECIP	Mean Annual Precipitation	43	inches	38.7	47.9

Low-Flow Statistics Flow Report [Low Flow Region 3]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR^2: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	0.266	ft^3/s	43	43
30 Day 2 Year Low Flow	0.392	ft^3/s	38	38
7 Day 10 Year Low Flow	0.109	ft^3/s	54	54
30 Day 10 Year Low Flow	0.159	ft^3/s	49	49
90 Day 10 Year Low Flow	0.237	ft^3/s	41	41

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

TRC_CALC

1A	B	C	D	E	F	G
2	**TRC EVALUATION**					
3	Input appropriate values in B4:B8 and E4:E7					
4	0.0353	= Q stream (cfs)		0.5	= CV Daily	
5	0.045	= Q discharge (MGD)		0.5	= CV Hourly	
6	30	= no. samples		1	= AFC_Partial Mix Factor	
7	0.3	= Chlorine Demand of Stream		1	= CFC_Partial Mix Factor	
8	0	= Chlorine Demand of Discharge		15	= AFC_Criteria Compliance Time (min)	
9	0.5	= BAT/BPJ Value		720	= CFC_Criteria Compliance Time (min)	
	0	= % Factor of Safety (FOS)			=Decay Coefficient (K)	
10	Source	Reference	AFC Calculations		Reference	CFC Calculations
11	TRC	1.3.2.iii	WLA afc = 0.181		1.3.2.iii	WLA cfc = 0.169
12	PENTOXSD TRG	5.1a	LTAMULT afc = 0.373		5.1c	LTAMULT cfc = 0.581
13	PENTOXSD TRG	5.1b	LTA_afc= 0.067		5.1d	LTA_cfc = 0.098
14						
15	Source		Effluent Limit Calculations			
16	PENTOXSD TRG	5.1f	AML MULT = 1.231			
17	PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.083		AFC	
18			INST MAX LIMIT (mg/l) = 0.271			

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)**

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
16G	51200	Trib 51200 to Little Scrubgrass Cr	**2.300**	1454.00	0.96	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	0.100	0.00	0.04	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
ACVDC	PA0221317	0.0450	0.0450	0.0450	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
16G	51200	Trib 51200 to Little Scrubgrass Cr	**2.300**	1454.00	0.96	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	0.100	0.00	0.04	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
ACVDC	PA0221317	0.0450	0.0450	0.0450	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
16G	51200	Trib 51200 to Little Scrubgrass Cr

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												
2.300	0.04	0.00	0.04	.0696	0.00527	.355	4.9	13.79	0.06	2.333	23.32	7.00
Q1-10 Flow												
2.300	0.02	0.00	0.02	.0696	0.00527	NA	NA	NA	0.06	2.508	23.77	7.00
Q30-10 Flow												
2.300	0.05	0.00	0.05	.0696	0.00527	NA	NA	NA	0.06	2.189	22.96	7.00

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	5		

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
16G	51200	Trib 51200 to Little Scrubgrass Cr

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
2.300	ACVDC	12.26	16.23	12.26	16.23	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
2.300	ACVDC	1.56	2.63	1.56	2.63	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)		
2.30	ACVDC	25	25	2.63	2.63	4	4	0	0

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
16G	51200	Trib 51200 to Little Scrubgrass Cr

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
2.300	0.045	23.318	7.000
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
4.901	0.355	13.792	0.060
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
17.26	0.793	1.75	0.904
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
5.428	24.234	Owens	5
Reach Travel Time (days)			
2.333			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.233	13.91	1.42	7.54
0.467	11.22	1.15	7.75
0.700	9.04	0.93	7.76
0.933	7.29	0.75	7.76
1.167	5.88	0.61	7.76
1.400	4.74	0.49	7.76
1.633	3.82	0.40	7.76
1.867	3.08	0.32	7.76
2.100	2.48	0.26	7.76
2.333	2.00	0.21	7.76

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
16G	51200	Trib 51200 to Little Scrubgrass Cr

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)
2.300	ACVDC	PA0221317	0.045	CBOD5	25		
				NH3-N	2.63	5.26	
				Dissolved Oxygen			4