pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0113956**
Facility Type	**Municipal**	APS ID	**1024467**
Major / Minor	**Minor**	Authorization ID	**1329146**

Applicant and Facility Information

Applicant Name	**Locust Township Municipal Authority**	Facility Name	**Slabtown Wastewater Treatment Plant**
Applicant Address	1223a Numidia Drive Catawissa, PA 17820-8632	Facility Address	E Lake Glory Road Catawissa, PA 17820
Applicant Contact	Susan Adam	Facility Contact	Thomas Runge
Applicant Phone	(570) 799-5710	Facility Phone	(570) 799-5710
Client ID	241299	Site ID	262380
Ch 94 Load Status	Not Overloaded	Municipality	Locust Township
Connection Status	No Limitations	County	Columbia
Date Application Received	October 1, 2020	EPA Waived?	Yes
Date Application Accepted	October 14, 2020	If No, Reason	
Purpose of Application	Renewal of an existing NPDES permit for the discharge of treated sewage.		

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		*Derek S. Garner* Derek S. Garner / Project Manager	February 10, 2021
X		*Nicholas W. Hartranft* Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	February 10, 2021

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.01
Latitude	40º 54' 22.33"	Longitude	-76º 24' 53.50"
Quad Name	Catawissa	Quad Code	1134
Wastewater Description:	Sewage Effluent		

Receiving Waters	UNT of Roaring Creek	Stream Code	27497
NHD Com ID	65642311	RMI	0.12
Drainage Area	3.01	Yield (cfs/mi^2)	0.382
Q_{7-10} Flow (cfs)	1.15	Q_{7-10} Basis	Streamgage No. 01468500
Elevation (ft)	750	Slope (ft/ft)	n/a
Watershed No.	5-E	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	n/a	Name	n/a

Nearest Downstream Public Water Supply Intake	Danville Municipal Water Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	1,120
PWS RMI	138.06	Distance from Outfall (mi)	16.67

Treatment Facility Summary

The Slabtown Wastewater Treatment Plant has an annual average design flow and hydraulic capacity of 0.01 MGD. The organic capacity is 15 lbs/day. Treatment is provided by a Cromaglass sequencing batch reactor unit. Disinfection and dechlorination are provided by tablet feeders.

Digested sludge is hauled to another wastewater treatment plant, if necessary.

Compliance History

The following effluent violations occurred during the existing permit's term:

Noncompliance Date	Noncompliance Category	Parameter	Sample Value	Violation Condition	Permit Value	Units	SBC
8/24/2017	Concentration 3 Effluent Violation	Fecal Coliform	> 2420	>	1000	CFU/100 ml	IMAX
3/21/2018	Load 1 Effluent Violation	CBOD5	2.7	>	2.1	lbs/day	Avg Mo
3/21/2018	Load 1 Effluent Violation	TSS	2.7	>	2.5	lbs/day	Avg Mo

Since none of the above effluent violations are chronic or continuous, the compliance history should not impact the development of effluent limits.

There are no open violations associated with the permittee.

The facility was most recently inspected by DEP on March 12, 2020. All treatment units were operational and no impacts to the receiving stream were noted. No violations were identified during the inspection.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.01
Latitude 40º 54' 22.44" **Longitude** -76º 24' 53.27"
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)

Water Quality-Based Limitations

A “Reasonable Potential Analysis” was conducted in WQM 7.0 v1.0b (attached). The model indicates that, based on available data, water quality-based effluent limitations for CBOD5, ammonia-n, and dissolved oxygen are not necessary.

TRC effluent limitations were evaluated using the TRC_CALC spreadsheet (attached). Due to a correction in the number of samples taken per month (20 samples, corrected from 30), a slightly more stringent instantaneous maximum limit of 1.5 mg/l is recommended. Since the permittee already dechlorinates the effluent, the new instantaneous maximum limit should not result in noncompliance.

Best Professional Judgment (BPJ) Limitations

DEP recommends the existing monitoring requirements for dissolved oxygen and ammonia-n remain in the permit to continue to help characterize the wastewater.

DEP also recommends that existing requirements for BOD5 and TSS influent monitoring remain in the permit to continue to characterize the influent and help with Chapter 94 reporting requirements.

Chesapeake Bay Considerations

Per Phase 3 of Pennsylvania’s Chesapeake Bay Watershed Implementation Plan, the Slabtown Wastewater Treatment Plant is considered a Phase 5 facility (annual average design flow > 0.002 MGD and < 0.2 MGD). The WIP states that Phase 5 facilities that have completed at least two years of nutrient monitoring may have the monitoring requirements removed. Accordingly, DEP has proposed to remove the monitoring requirements for total nitrogen and total phosphorus. The summarized results are as follows:

Monitoring Period	Total N (mg/l)	Total P (mg/l)
2017	21.3	2.8
2018	< 1.7	0.5
2019	< 10	< 0.05
2020	5.325	1.74

Monitoring Frequencies

The existing permit established a 5/week monitoring frequency for pH, dissolved oxygen, and total residual chlorine; increases from 2/week. The 5/week frequency was a result of negotiations between DEP and Schlesinger & Kerstetter, LLP, acting on behalf of the Authority. Since there have been no effluent violations associated with these parameters under the increased monitoring frequency, DEP believes the existing frequencies are still appropriate.

Anti-Backsliding

No effluent limits have been proposed to be made less stringent. Monitoring requirements for total nitrogen and total phosphorus were removed per the Chesapeake Bay Watershed Implementation Plan's recommendations for Phase 5 facilities. Anti-backsliding is not applicable.

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.

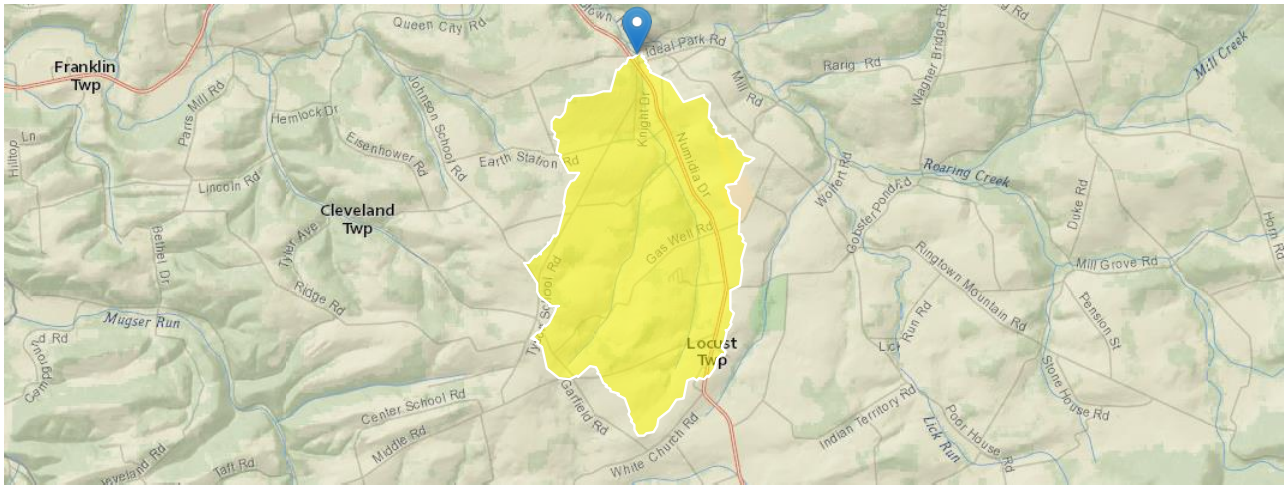
Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	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	Report Inst Min	XXX	XXX	XXX	5/week	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.5	5/week	Grab
CBOD5	2.1	3.3	XXX	25.0	40.0	50	2/month	Grab
BOD5 Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/month	Grab
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/month	Grab
TSS	2.5	3.8	XXX	30.0	45.0	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
Ammonia	Report	Report	XXX	Report	Report	XXX	2/month	Grab

Compliance Sampling Location: Outfall 001

Locust Township - Slabtown Wastewater Treatment Plant

Region ID: PA
Workspace ID: PA20210209155215980000
Clicked Point (Latitude, Longitude): 40.90620, -76.41487
Time: 2021-02-09 10:52:35 -0500



Outfall 001 Drainage Area

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	4.4617	degrees
BSLOPDRAW	Unadjusted basin slope, in degrees	4.6633	degrees
BSLPDRPA20	Unadjusted basin slope, in degrees, from PA v1	4.8001	degrees
CARBON	Percentage of area of carbonate rock	0	percent
CENTROXA83	X coordinate of the centroid, in NAD_1983_Albers, meters	133640.242	meters
CENTROYA83	Basin centroid horizontal (y) location in NAD 1983 Albers	210601.859	meters
DRN	Drainage quality index from STATSGO	3	dimensionless
DRNAREA	Area that drains to a point on a stream	3.06	square miles
ELEV	Mean Basin Elevation	966	feet
ELEVMAX	Maximum basin elevation	1174	feet
FOREST	Percentage of area covered by forest	16.3012	percent
GLACIATED	Percentage of basin area that was historically covered by glaciers	0	percent
IMPNLCD01	Percentage of impervious area determined from NLCD 2001 impervious dataset	1.5543	percent
LC01DEV	Percentage of land-use from NLCD 2001 classes 21-24	11.0324	percent
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	11.1044	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	1.5684	percent
LONG_OUT	Longitude of Basin Outlet	-76.414883	degrees
MAXTEMP	Mean annual maximum air temperature over basin area from PRISM 1971-2000 800-m grid	58.8	degrees F
OUTLETXA83	X coordinate of the outlet, in NAD_1983_Albers,meters	133525.566	meters
OUTLETYA83	Y coordinate of the outlet, in NAD_1983_Albers, meters	212852.4708	meters
PRECIP	Mean Annual Precipitation	41	inches
ROCKDEP	Depth to rock	4.4	feet

DFLOW Results

All available data from Apr 1, 1989 through Mar 31, 2019 are included in analysis.

Gage	Period	Days in Record	Zero/Missing	1B3	Percentile	Excur per 3 yr	1Q10	Percentile	Excur per 3 yr	1Qy Type	xQy	Percentile	Harmonic	Percentile
01468500 - Schuylkill River at Landingville, PA	1988/04/01 - 2019/04/01	11,322	0/0	49.5	0.24%	0.97	46.8	0.17%	0.77	1Q6	47.5	0.19%	1.67E+02	40.07%
Gage	**Period**	**Days in Record**	**Zero/Missing**	**1B3**	**Percentile**	**Excur per 3 yr**	**7Q10**	**Percentile**	**Excur per 3 yr**	**7Qy Type**	**xQy**	**Percentile**	**Harmonic**	**Percentile**
01468500 - Schuylkill River at Landingville, PA	1988/04/01 - 2019/04/01	11,322	0/0	49.5	0.24%	0.97	50.8	0.31%	0.97	7Q11	45.7	0.13%	1.67E+02	40.07%
Gage	**Period**	**Days in Record**	**Zero/Missing**	**1B3**	**Percentile**	**Excur per 3 yr**	**30Q10**	**Percentile**	**Excur per 3 yr**	**30Qy Type**	**xQy**	**Percentile**	**Harmonic**	**Percentile**
01468500 - Schuylkill River at Landingville, PA	1988/04/01 - 2019/04/01	11,322	0/0	49.5	0.24%	0.97	57.3	1.40%	3.29	30Q18	49.4	0.24%	1.67E+02	40.07%

Low-Flow (Q_{7-10}) Calculation

Facility: **Locust Twp Muni Auth Slabtown WWTP**
NPDES Permit No. **PA0113956**

Gage Information

Drainage Area: **133** mi^2
Q_{7-10}: **50.8** cfs
LFY: **0.382** cfsm

Outfall Information

Drainage Area: **3.01** mi^2
Q_{7-10}: **1.15** cfs

Downstream Locations

RMI: **0**
Drainage Area: **3.06** mi^2
Q_{7-10}: **1.169** cfs

RMI:
Drainage Area: mi^2
Q_{7-10}: cfs

RMI:
Drainage Area: mi^2
Q_{7-10}: cfs

RMI:
Drainage Area: mi^2
Q_{7-10}: cfs

RMI:
Drainage Area: mi^2
Q_{7-10}: cfs

RMI:
Drainage Area: mi^2
Q_{7-10}: cfs

RMI:
Drainage Area: mi^2
Q_{7-10}: cfs

RMI:
Drainage Area: mi^2
Q_{7-10}: cfs

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
05E	27497	Trib 27497 to Roaring Creek	**0.120**	750.00	3.01	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	0.382	0.00	0.00	0.000	0.000	0.0	0.00	0.00	20.00	6.50	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
Slabtown WWTP	PA0113956	0.0100	0.0100	0.0100	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	3.10	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
05E	27497	Trib 27497 to Roaring Creek	**0.000**	745.00	3.06	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 (ºC)	Tributary pH	Stream Temp (ºC)	Stream pH
Q7-10	0.382	0.00	0.00	0.000	0.000	0.0	0.00	0.00	20.00	6.50	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 (ºC)	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
05E	27497	Trib 27497 to Roaring Creek

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 (ºC)	Analysis pH
Q7-10 Flow												
0.120	1.15	0.00	1.15	.0155	0.00789	.512	12.21	23.87	0.19	0.039	20.07	6.50
Q1-10 Flow												
0.120	1.06	0.00	1.06	.0155	0.00789	NA	NA	NA	0.18	0.041	20.07	6.50
Q30-10 Flow												
0.120	1.30	0.00	1.30	.0155	0.00789	NA	NA	NA	0.20	0.037	20.06	6.50

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	0.92	Use Inputted Reach Travel Times	☐
Q30-10/Q7-10 Ratio	1.13	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
05E	27497	Trib 27497 to Roaring Creek

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
0.120	Slabtown WWTP	11.9	50	11.9	50	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
0.120	Slabtown WWTP	2.56	25	2.56	25	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)		
0.12	Slabtown WWTP	25	25	25	25	3.1	3.1	0	0

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
05E	27497	Trib 27497 to Roaring Creek

RMI	Total Discharge Flow (mgd)	Analysis Temperature (ºC)	Analysis pH
0.120	0.010	20.066	6.504
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
12.210	0.512	23.866	0.187
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
2.31	0.211	0.33	0.704
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
8.175	14.010	Tsivoglou	5
Reach Travel Time (days)			
0.039			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.004	2.30	0.33	8.22
0.008	2.30	0.33	8.23
0.012	2.30	0.33	8.23
0.016	2.30	0.33	8.23
0.020	2.30	0.33	8.23
0.024	2.29	0.33	8.23
0.028	2.29	0.33	8.23
0.031	2.29	0.32	8.23
0.035	2.29	0.32	8.23
0.039	2.29	0.32	8.23

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
05E	27497	Trib 27497 to Roaring 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)
0.120	Slabtown WWTP	PA0113956	0.010	CBOD5	25		
				NH3-N	25	50	
				Dissolved Oxygen			3.1

1A	B	C	D	E	F	G
2	**TRC EVALUATION**					
3	Input appropriate values in B4:B8 and E4:E7					
4	1.15	= Q stream (cfs)		0.5	= CV Daily	
5	0.01	= Q discharge (MGD)		0.5	= CV Hourly	
6	20	= 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)		0	=Decay Coefficient (K)	
10	Source	Reference	AFC Calculations		Reference	CFC Calculations
11	TRC	1.3.2.iii	WLA afc = 23.733		1.3.2.iii	WLA cfc = 23.130
12	PENTOXSD TRG	5.1a	LTAMULT afc = 0.373		5.1c	LTAMULT cfc = 0.581
13	PENTOXSD TRG	5.1b	LTA_afc= 8.843		5.1d	LTA_cfc = 13.447
14						
15	Source		Effluent Limit Calculations			
16	PENTOXSD TRG	5.1f	AML MULT = 1.288			
17	PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.500		BAT/BPJ	
18			INST MAX LIMIT (mg/l) = 1.563			

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)