pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0041114**
Facility Type	**Non-Municipal**	APS ID	**779718**
Major / Minor	**Minor**	Authorization ID	**1213176**

Applicant and Facility Information

Applicant Name	**The Kiski School**	Facility Name	**The Kiski School**
Applicant Address	1888 Brett Lane	Facility Address	1888 Brett Lane
	Saltsburg, PA 15681-8951		Saltsburg, PA 15681-8951
Applicant Contact	Mr. James Good	Facility Contact	Same as Applicant
Applicant Phone	724.422.6824	Facility Phone	Same as Applicant
Client ID	7842	Site ID	244403
Ch 94 Load Status	Not Overloaded	Municipality	Loyalhanna Township
Connection Status		County	Westmoreland
Date Application Received	January 10, 2018	EPA Waived?	Yes
Date Application Accepted	January 11, 2018	If No, Reason	

Purpose of Application: Application for a renewal of an existing NPDES permit for discharge of treated Sewage.

Summary of Review

The applicant has applied for a renewal of NPDES Permit No. PA0041114, which was previously issued by the Department on June 27, 2013. That permit expired on June 30, 2018.

WQM Permit No. 6569424, issued on December 5, 1969, authorized construction of the plant to treat an average design flow of 0.04 mgd. The existing treatment process consists of activated sludge, final clarification and chlorination.

The receiving stream, Kiskiminetas River, is classified as a WWF and is located in State Watershed No. 18-C.

The applicant has complied with Act 14 Notifications and no comments were received.

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		/s/ William C. Mitchell, E.I.T. / Project Manager	October 29, 2019
X		/s/ Christopher Kriley, P.E. / Program Manager	October 29, 2019

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.04
Latitude	40º 29.0' 13.00"	Longitude	-79º 27.00' 16.00"
Quad Name	Saltsburg	Quad Code	1510
Wastewater Description:	Sewage Effluent		
Receiving Waters	Kiskiminetas River (WWF)	Stream Code	42816
NHD Com ID	125292357	RMI	27.0
Drainage Area	1672.0	Yield (cfs/mi^2)	0.06579
Q_{7-10} Flow (cfs)	110.0	Q_{7-10} Basis	US Arm Corp. of Eng. Est., Min. Release from Conemaugh River Res. & Loyalhanna Lake & Dam
Elevation (ft)		Slope (ft/ft)	0.0001
Watershed No.	18-C	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Metals, pH, Siltation, Suspended Solids		
Source(s) of Impairment	Abandoned Mine Drainage		
TMDL Status	Final	Name	Kiskiminetas-Conemaugh River Watersheds TMDL

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake		Buffalo Township MA, Freeport Plant	
PWS Waters	Allegheny River	Flow at Intake (cfs)	2900
PWS RMI	29.4	Distance from Outfall (mi)	

Changes Since Last Permit Issuance: NONE

Other Comments: The discharge is to the Kiskiminetas-Conemaugh River Watersheds that has a Final TMDL and is impaired by metals and pH. This sewage discharge is not expected to contribute to the stream impairment for which abandoned mine drainage is source of such impairment. A 1/year monitor and report requirement for Iron, Manganese, and Aluminum is established in the permit to verify that the sewage discharge is not contributing to the impairment. The same sample type for these parameters is used as for the other main parameters in the permit such as $CBOD_5$, and TSS. They are to be specified as Daily Max Reporting. The monitoring frequency is yearly for plants rated less than 0.499 MGD.

Treatment Facility Summary				
Treatment Facility Name: Kiski School STP (The)				
WQM Permit No.	**Issuance Date**			
6569424	December 5, 1969			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Secondary	Activated Sludge	Chlorination	
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.04	68.0	Not Overloaded		Regional WWTP

Changes Since Last Permit Issuance: None

Compliance History

Operations Compliance Check Summary Report

Facility: The Kiski School

NPDES Permit No.: PA004114

Compliance Review Period: 10/14 – 10/19

Inspection Summary: No inspections found

Violation Summary: No violations found

Open Violations by Client ID: No open violations for Client ID

Enforcement Summary: No enforcement found

DMR Violation Summary:

NON COMPLIANCE DATE	NON COMPLIANCE TYPE	PARAMETER	SAMPLE VALUE	PERMIT VALUE	UNIT OF MEASURE	STATISTICAL BASE CODE
03/26/2019	Violation of permit condition	Fecal Coliform	8166	2000	CFU/100 ml	Geometric Mean
03/26/2019	Violation of permit condition	Fecal Coliform	27550	10000	CFU/100 ml	Instantaneous Maximum
02/28/2019	Violation of permit condition	Fecal Coliform	20460	10000	CFU/100 ml	Instantaneous Maximum
10/25/2017	Violation of permit condition	Fecal Coliform	2420	1000	CFU/100 ml	Instantaneous Maximum
10/25/2017	Violation of permit condition	Fecal Coliform	913	200	CFU/100 ml	Geometric Mean

Compliance Status:

Facility has not been inspected since 2014. Will plan on inspection in near future. Permit issuance is recommended.

Completed by: John Murphy

Completed date: 10/15/19

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .04
Latitude 40º 29' 13.00" **Longitude** -79º 27' 16.00"
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)

Water Quality-Based Limitations

The discharge was previously modeled using WQM6.3 to evaluate $CBOD_5$, Ammonia Nitrogen and Dissolved Oxygen parameters and there have been no changes to the discharge or the receiving stream. Therefore, it is not necessary to remodel those three parameters using the current WQM 7.0 model because the same effluent results are computed for a single discharge scenario. The modeling results show technology based effluent limitations for CBOD5 are appropriate. The modeling results also confirm that Ammonia-Nitrogen and Dissolved Oxygen limitations are not necessary to meet in-stream water quality criterion.

The Average Monthly and Instantaneous Maximum Total Residual Chlorine (TRC) effluent limitations imposed in the previous NPDES permit were 1.4 mg/l and 3.3 mg/l, respectively. At that time, those values were considered BAT limitations per the SWRO's TRC Implementation for Sewage Facilities Planning Section Interim Guidance, dated June 20, 1995 for an existing minor facility having a design flow <= 0.1 mgd permitted before July 1995. An average monthly limitation of 0.5 mg/l for TRC is now a regulatory standard under 92a.48(b)(2) and will be imposed. Please see the attached TRC_CALC Model, which used the recommended in-stream and discharge chlorine demand default values of 0.3 mg/l and 0 mg/l.

Best Professional Judgment (BPJ) Limitations

Comments: A Dissolved Oxygen minimum limitation of 4.0 mg/l will be imposed based on the standard in 25 PA Code Chapter 93 and best professional judgment.

Anti-Backsliding

N/A

Additional Considerations:

For existing discharges, a year-round monitoring requirement for Ammonia-Nitrogen will be established. The monitoring requirement for Ammonia-Nitrogen will be 2/month.

For pH, Dissolved Oxygen (DO) and Total Residual Chlorine (TRC), a monitoring frequency 1/day has been imposed. In general, less frequent monitoring may be established only when the permittee demonstrates that there will be no discharge on days where monitoring is not required.

Nutrient monitoring is required to establish the nutrient load from the waste water treatment facility and the impacts that load may have on the quality of the receiving stream(s). A 1/year monitor and report requirement for Total N & Total P has been added to the permit as per Chapter 92.a.61.

Monitoring frequency for the proposed effluent limits are based upon Table 6-3, Self-Monitoring Requirements for Sewage Dischargers, from the Departments Technical Guidance for the Development and Specification of Effluent Limitations.

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) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	0.04	Report Daily Max	XXX	XXX	XXX	XXX	2/month	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
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	50.0	2/month	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60.0	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
Total Nitrogen	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	Report	XXX	Report	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Total Iron	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Total Manganese	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

110	= Q stream (cfs)	0.5	= CV Daily
0.04	= 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)
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 = 567.084	1.3.2.iii	WLA cfc = 552.855
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 211.309	5.1d	LTA_cfc = 321.404

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.500	BAT/BPJ
		INST MAX LIMIT (mg/l) = 1.635	

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)**

Pollution Report - Modeling Information

PA0041114

School name changed in past to The Kiski School

THE KISKIMINETAS SPRINGS SCHOOL HAS APPLIED FOR A RENEWAL OF NPDES PERMIT PA0041114. NPDES PERMIT PA0041114 AUTHORIZES A DISCHARGE OF 0.04 MGD FROM THE KISKIMINETAS SPRINGS SCHOOL STP TO THE KISKIMINETAS RIVER.

NPDES PERMIT PA0041114 ISSUED ON JULY 22, 1980 IMPOSED SECONDARY EFFLUENT LIMITATIONS ON THIS DISCHARGE. THE SECONDARY EFFLUENT LIMITATIONS WERE STATED TO BE BASED ON THE FACT THAT THE KISKIMINETAS RIVER WAS ACID MINE AFFECTED.

TOM PROCH, DEPT AQUATIC BIOLOGIST, STATED THAT THE KISKIMINETAS RIVER WAS STILL ACID MINE AFFECTED AND THAT THE FLOW RATIO BETWEEN THE CONEMAUGH RIVER AND LOYALHANNA CREEK DETERMINES TO WHAT EXTENT THE KISKIMINETAS RIVER COULD SUPPORT AQUATIC LIFE. IT WAS HIS OPINION THAT AN INVERTABRATE AQUATIC COMMUNITY PROBABLY DOES NOT EXIST AT THIS SITE, HOWEVER, FISH COULD BE PRESENT AT TIMES DUE TO THEIR MOBILITY. THEREFORE, A POINT OF FIRST USE WILL BE CONSIDERED TO EXIST AT THE DISCHARGE POINT

PA0041114

THE SALTSBURG BORO STP (NPDES PA0037818) DISCHARGES APPROXIMATELY 2200 ft UPSTREAM of THE KISKIMINETAS SPRINGS SCHOOL STP. THE SALTSBURG BORO STP DISCHARGES TO THE CONEMAUGH RIVER. (REFER TO EXHIBIT A BELOW)

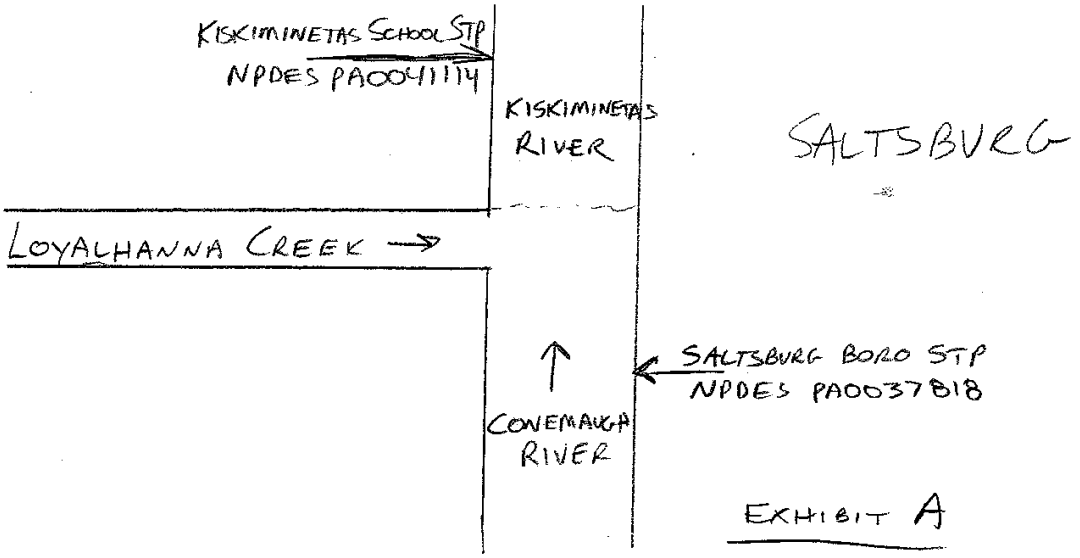


EXHIBIT A

SINCE THE POSSIBILITY EXISTS THAT THESE DISCHARGES COULD INTERACT AND CREATE A D.O. CRITERIA VIOLATION, THEY WILL BE EVALUATED CONCURRENTLY.

MODEL AND REACH INFORMATION

DRAINAGE AREA CONEMAUGH RIVER = 1373 sq mi
DRAINAGE AREA SALTSBURG BORO STP = 1373 sq mi
DRAINAGE AREA LOYALHANNA CREEK = 299 sq mi
DRAINAGE AREA KISKIMINETAS SPRINGS SCHOOL STP = 1373+299 = 1672 mi^2

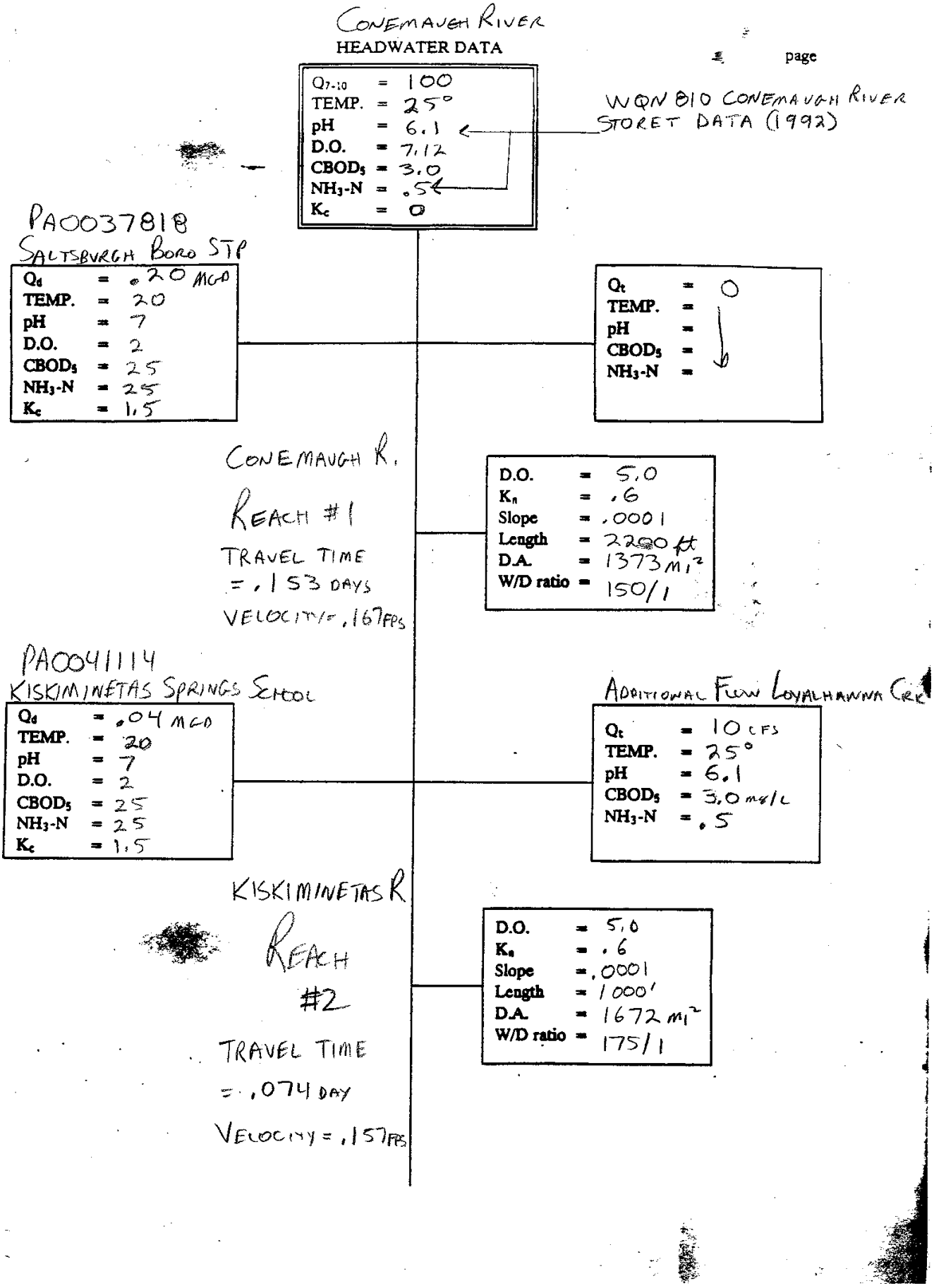
BULLETIN 12 INDICATES THAT BOTH THE CONEMAUGH RIVER AND LOYALHANNA CREEK ARE HIGHLY REGULATED.

LOYALHANNA CREEK IS REGULATED BY LOYALHANNA LAKE & DAM. THE MINIMUM RELEASE FROM LOYALHANNA LAKE/RESERVOIR IS 10 CFS FROM LEWIS KWETT of U.S. ARMY CORP of ENGRS.

THE MINIMUM RELEASE FROM THE CONEMAUGH RIVER RESERVOIR IS 100 CFS. OBTAINED FROM THE U.S. ARMY CORPS OF ENGRS, LEWIS KWETT

COMPUTE W/D RATIOS

Q = 100 CFS WIDTH ≈ 300 ft WIDE FROM TOPO MAP
DEPTH ≈ 2.0 ft AS PER DISCUSSION WITH DEPT PERSONNEL FAMILIAR WITH KISKIMINETAS & CONEMAUGH RIVERS
W/D of CONEMAUGH R AT SALTSBURG BORO STP = 300/2.0 = 150 to 1
VELOCITY = .167 FPS TRAVEL TIME = .153 DAYS
Q = 110 CFS WIDTH = 350 ft WIDE DEPTH = 2.0 ft
W/D of KISKIMINETAS R. AT SCHOOL STP = 350/2 = 175 to 1
VELOCITY = .157 TRAVEL TIME = .074 DAYS


CONEMAUGH RIVER
HEADWATER DATA
page
Q_{7-10} = 100
TEMP. = 25°
pH = 6.1
D.O. = 7.12
$CBOD_5$ = 3.0
NH_3-N = .5
K_c = 0
WQN 810 CONEMAUGH RIVER STORET DATA (1992)
PA0037818
SALTSBURGH BORO STP
Q_d = .20 MGD
TEMP. = 20
pH = 7
D.O. = 2
$CBOD_5$ = 25
NH_3-N = 25
K_c = 1.5
Q_t = 0
TEMP. =
pH =
$CBOD_5$ =
NH_3-N =
CONEMAUGH R.
REACH #1
TRAVEL TIME
= .153 DAYS
VELOCITY = .167 FPS
D.O. = 5.0
K_n = .6
Slope = .0001
Length = 2290 ft
D.A. = 1373 mi^2
W/D ratio = 150/1
PA0041114
KISKIMINETAS SPRINGS SCHOOL
Q_d = .04 MGD
TEMP. = 20
pH = 7
D.O. = 2
$CBOD_5$ = 25
NH_3-N = 25
K_c = 1.5
ADDITIONAL FLOW LOYALHANNA CRK
Q_t = 10 CFS
TEMP. = 25°
pH = 6.1
$CBOD_5$ = 3.0 mg/L
NH_3-N = .5
KISKIMINETAS R.
REACH #2
TRAVEL TIME
= .074 DAY
VELOCITY = .157 FPS
D.O. = 5.0
K_a = .6
Slope = .0001
Length = 1000'
D.A. = 1672 mi^2
W/D ratio = 175/1

SALTSBURG BORO STP PA0037818
FILE:

HEADWATERS AND TRIBUTARY DATA

NO. OF REACHES : 2

RH	Q7-10 (CFS)	T (C)	PH	DO (MG/L)	CBOD5 (MG/L)	NH3-N (MG/L)
HW	100	25	6.1	7.54	3	.5
1	0					
2	10	25	6.1	7.54	3	.5

STREAM CHARACTERISTICS

RCH	Q7-10 CFS	T (C)	PH	DO MG/L	CBOD5 MG/L	NH3-N MG/L
1	100	25	6.1	7.54	3	.5
2	110	25	6.1	7.54	3	.5

Q 1-10/Q 7-10 = .64
Q30-10/Q 7-10 = 1.36

SALTSBURG BORO STP PA0037818
FILE:

DISCHARGER DATA
Q7-10 DESIGN CONDITIONS

RH	Q MGD	T (C)	PH	DO MG/L	CBOD5 MG/L	NH3-N MG/L	KC	
1	.2	20	7	2	25	25	1.5	NPDES PA0037818
2	.04	20	7	2	25	25	1.5	NPDES PA0041114

REACH CHARACTERISTICS

RH	D.O. GOAL	KN (/D)	RCH. SL. (FT/FT)	RCH. LEN. (FT.)	DRAIN AREA (MI^2)	W/D
1	5	.6	1E-04	2200	1373	150
2	5	.6	1E-04	1000	1672	175

SALTSBURG BORO STP PA0037818
FILE:

REACH CHARACTERISTICS

RH	KR (/D)	TT (DAYS)
1	0	.153
2	0	.074

3 BASED ON Q = VA
SOLVED FOR V WITH KNOWN Q AND A

NH3-N DISCHARGE ALLOCATIONS AT Q30-10

DIS	Q (MGD)	IND. CONC. (MG/L)	ALL. CONC. (MG/L)	CRIT. RCH.	PCT. RED. (%)
1	.2	25	25	0	0
2	.04	25	25	0	0

SALTSBURG BORO STP PA0037818
FILE: SALTSBURG STP.WQM6.3

NH3-N DISCHARGE ALLOCATIONS AT Q1-10

DIS	Q (MGD)	IND. CONC. (MG/L)	ALL. CONC. (MG/L)	CRIT. RCH.	PCT. RED. (%)
1	.2	50	50	0	0
2	.04	50	50	0	0

MULTIPLE DISCHARGE LIMITATIONS
(TOTAL) DISCHARGE = .2 MGD
TEMP = 25 PH = 6.1
CBOD-5= 3.07 NH3-N= .58 D.O. = 7.52
KC'= .033 KN= .6 D.O.GOAL = 5
KR= 1.854 (O'CONNOR)
DIS. 1 RCH. 1 TRVL TIME:.153

TR.TM. (DAYS)	CBOD-5 (MG/L)	NH3-N (MG/L)	D.O. (MG/L)
.015	3.07	.57	7.51
.031	3.06	.56	7.5
.046	3.06	.55	7.48
.061	3.06	.55	7.47
.077	3.06	.54	7.46
.092	3.06	.53	7.45
.107	3.05	.52	7.44
.122	3.05	.52	7.44
.138	3.05	.51	7.43
.153	3.05	.5	7.42

D.O. CONTINUES TO SAG
KR RATE LOW 1.85
EXISTING DISCHARGE
PERFORM KR SENSITIVITY
ANALYSIS DOUBLE
KR RATE TO 3.7

SALTSBURG BORO STP PA0037818
FILE: SALTSBURG STP.WQM6.3

MULTIPLE DISCHARGE LIMITATIONS
(TOTAL) DISCHARGE = .24 MGD
TEMP = 25 PH = 6.1
CBOD-5= 3.06 NH3-N= .52 D.O. = 7.43
KC'= .031 KN= .6 D.O.GOAL = 5
KR= 1.793 (O'CONNOR)
DIS. 2 RCH. 2 TRVL TIME:.074

TR.TM. (DAYS)	CBOD-5 (MG/L)	NH3-N (MG/L)	D.O. (MG/L)
7E-03	3.06	.51	7.42
.015	3.05	.51	7.42
.022	3.05	.51	7.42
.03	3.05	.5	7.41
.037	3.05	.5	7.41
.044	3.05	.5	7.41
.052	3.05	.5	7.4
.059	3.05	.5	7.4

SEE ABOVE

.074 3.03 .3 7.37

REACH CHARACTERISTICS

RH	KR (/D)	TT (DAYS)
1	3.7	.153
2	3.6	.074

DOUBLED K_R RATES
EXISTING DISCHARGES

SALTSBURG BORO STP PA0037818
FILE: SALTSBURG STP.WQM6.3

MULTIPLE DISCHARGE LIMITATIONS

(TOTAL) DISCHARGE = .2 MGD
TEMP = 25 PH = 6.1
CBOD-5= 3.07 NH3-N= .58 D.O. = 7.52
KC'= .033 KN= .6 D.O.GOAL = 5
KR= 3.7 (USR DEF.)
DIS. 1 RCH. 1 TRVL TIME:.153

TR.TM. (DAYS)	CBOD-5 (MG/L)	NH3-N (MG/L)	D.O. (MG/L)
.015	3.07	.57	7.53
.031	3.06	.56	7.54
.046	3.06	.55	7.54
.061	3.06	.55	7.54
.077	3.06	.54	7.54
.092	3.06	.53	7.54
.107	3.05	.52	7.54
.122	3.05	.52	7.54

D.O. RECOVERY

MULTIPLE DISCHARGE LIMITATIONS
(TOTAL) DISCHARGE = .24 MGD
TEMP = 25 PH = 6.1
CBOD-5= 3.06 NH3-N= .52 D.O. = 7.54
KC'= .031 KN= .6 D.O.GOAL = 5
KR= 3.6 (USR DEF.)
DIS. 2 RCH. 2 TRVL TIME:.074

TR.TM. (DAYS)	CBOD-5 (MG/L)	NH3-N (MG/L)	D.O. (MG/L)
7E-03	3.06	.51	7.54
.015	3.05	.51	7.54
.022	3.05	.51	7.54
.03	3.05	.5	7.54
.037	3.05	.5	7.54
.044	3.05	.5	7.54
.052	3.05	.5	7.54
.059	3.05	.5	7.54
.067	3.05	.5	7.54
.074	3.05	.5	7.54

SALTSBURG BORO STP PA0037818
FILE: SALTSBURG STP.WQM6.3

EFFLUENT LIMITATIONS DISPLAY

DIS #	Q MGD	NH3-N TOX. 1 DAY	30 DAY	C-BOD5 30-DAY	DISS. OXYGEN NH3-N 30-DAY	EFF. D.O.	
1	.2	50	25	25	25	2	SALTSBURG STP
2	.04	50	25	25	25	2	KISKIMINETAS SPRINGS SCHOOL

Since Secondary Effluent Limitations Apply For Summer, No Need To Run Winter Modeling.