pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0219487 A-1**
Facility Type	**Non-Municipal**	APS ID	**1062765**
Major / Minor	**Minor-MISF1**	Authorization ID	**1395267**

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Washington County Land Resources Inc.**	Facility Name	**Hallam Portal STP**
Applicant Address	46226 National Road	Facility Address	Hallam Road (T-477)
	Saint Clairsville, OH 43950-8742		Amity, PA 15331
Applicant Contact	Kimberly L Betcher	Facility Contact	Jon D Nagel
Applicant Phone	(740) 338-3241	Facility Phone	(740) 338-3255
Client ID	358014	Site ID	605350
Ch 94 Load Status	Not Overloaded	Municipality	Amwell Township
Connection Status	No Limitations	County	Washington
Date Application Received	April 7, 2022	EPA Waived?	Yes
Date Application Accepted	May 6, 2022	If No, Reason	
Purpose of Application	NPDES permit renewal and transfer for treated sewage discharges from a non-municipal sewage treatment plant.		

Summary of Review

This application is for a renewal of NPDES Permit PA0219487. The Permit was last issued on December 17, 2017 and authorized a discharge of 0.025 MGD from the Hallam Portal STP to an unnamed tributary of Redd Run. The receiving stream is classified as trout stock fishery (TSF) at the point of discharge per Chapter 93 Designated Uses.

The NPDES permit will expire on November 30, 2022, and the renewal application was submitted to the Department on April 19, 2022, which is considered an early submittal.

The applicant (Washington County Land Resources Inc.) is the new owner replaced the current permit holder (The Washington County Coal Company). A transfer application was received on April 7, 2022 and a transfer permit (WQM No. 6303403 T-1) was issued on July 21, 2022.

WQM Permit No. 6303403 was originally issued on September 5, 2003 and authorized construction of the sewage treatment facility with a hydraulic design capacity of 0.025 MGD.

The wastewater treatment plant includes the following facilities: comminution, flow equalization, extended aeration, clarification, chlorination, and dechlorination before discharging. Soda ash or lime is added to the sewage to increase the alkalinity for ammonia reduction.

No industrial or commercial users are discharging to this facility per Application NOI.

Approve	Deny	Signatures	Date
X		Hazim Aldalli Hazim Aldalli / Environmental Engineering Specialist	September 12, 2022
x		Mahbuba Iasmin Mahbuba Iasmin, Ph.D., P.E./ Environmental Engineering Manager	September 20, 2022

Summary of Review

The facility is registered for eDMR reporting. The eDMR reports show no effluent discharge since June 2020.

The applicant responded to DEP's email on May 10, 2022 (Appendix F) that the facility is not treating any influent since June 2020. All wastewater is now pumped out of the system prior to discharge, and disposed of at Hapchuck Inc., an authorized waste facility (rather than being treated and discharged on site). Also, no reasonable potential exists for sampling for metals (Copper, Lead, and Zinc) since the mine has been closed for years, and the portal only functions as an office building.

No violations or limit exceedances were noticed for the reviewed eDMRs of 2018-2020.

Operations last inspection report on September 30, 2021 stated, "The treatment plant appears to be well maintained and operated. The brush used for the squeegee, and a net used to maintain the clarifier are onsite, always a good sign of a well-maintained plant".

The applicant states that no upgrades or changes will occur to the facility within the coming five years.

The STP has the EPA waiver since there are no industrial or commercial users.

The Act – 14 PL 834 Municipal and County Notifications were provided by the April 13, 2022 letters and no comments were received.

Sludge use and disposal description and location(s): No sludge or solid waste has been hauled or applied; the facility is sending out its influent to Hapchuck, Inc. under permit number WV0014 to be treated since June 2020 per the engineer's email on July 28, 2022 (Appendix F).

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.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.0250
Latitude	40º 8' 11.80"	Longitude	-80º 11' 30.82"
Quad Name	Washington East	Quad Code	40080B2
Wastewater Description:	Sewage Effluent		

Receiving Waters	Unnamed Trib. to Redd Run	Stream Code	40838
NHD Com ID	99410398	RMI	0.20
Drainage Area	0.29	Yield (cfs/mi^2)	0.0064
Q_{7-10} Flow (cfs)	0.00186	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1286	Slope (ft/ft)	0.05
Watershed No.	19-B	Chapter 93 Class.	TSF
Existing Use		Existing Use Qualifier	
Exceptions to Use	None.	Exceptions to Criteria	None.
Assessment Status	Attaining Use(s): Aquatic Life		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	

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

Nearest Downstream Public Water Supply Intake	Marianna Municipal Waterworks		
PWS Waters	Tenmile Creek	Flow at Intake (cfs)	2.36
PWS RMI		Distance from Outfall (mi)	>20.0

Changes Since Last Permit Issuance: DEP updated its WQM 7.0 criteria for Ammonia-Nitrogen in 2019. Limits and conditions of this permit need to be redeveloped to an adequate level to protect water quality.

Other Comments: None.

Treatment Facility Summary

Treatment Facility Name: Hallam Portal STP

WQM Permit No.	Issuance Date
6303403	September 5, 2003
6303403 T-1	7/21/2022

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary with Ammonia Reduction	Extended Aeration	Chlorine with Dechlorination	0.025

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.025	N/A	Not Overloaded	Another Facility	Off Site

Changes Since Last Permit Issuance: Transfer of ownership from The Washington County Coal Company to Washington County Land Resources Inc.

Other Comments: No discharge since June 2020, effluent and biosolids are being treated out in another facility.

Compliance History	
Summary of DMRs:	eDMRs for the period 2018-2022 shows that the facility was in compliance with the current permit limitations, and the facility after June 2020 is not receiving any influent.
Summary of Inspections:	No violations were noted. The plant seems in good shape and well maintained, last inspection was on September 30, 2021

Other Comments: None.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0250
Latitude 40º 8' 11.80" **Longitude** -80º 11' 30.82"
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./100 ml)	Report	IMAX	-	92a.61
D.O. (mg/L)	4.0	Min	-	BPJ
NH3-N (mg/L)	25	Average Monthly	-	BPJ
	50	IMAX		
Total N (mg/L)	Report	Average Monthly	-	92a.61
Total P (mg/L)	Report	Average Monthly	-	92a.61

Comments: The existing discharge was evaluated using WQM 7.0 to evaluate the $CBOD_5$, Ammonia Nitrogen and Dissolved Oxygen parameters.

The Total Suspended Solids, pH, and Fecal Coliform parameters are not evaluated using WQM 7.0. The bases for the proposed technology-based limitations are listed in the above table.

Water Quality-Based Limitations

The following limitations were determined through water quality modeling (Appendix A):

Parameter	Limit (mg/l)	SBC	Model
TRC	0.010	Average Monthly	DEP TRC Cal.
CBOD5 (May1-Oct 31)	25	Average Monthly	WQM7.0
CBOD5 (Nov 1- Apr 30)	25	Average Monthly	WQM7.0
NH3-N (May1-Oct 31)	1.9	Average Monthly	WQM7.0
NH3-N (Nov 1- Apr 30)	2.8	Average Monthly	WQM7.0
Dissolved Oxygen	6.0	Minimum	WQM7.0

Comments: DEP policy allows new parameters introduced into renewed permits, in which the application manager desires for the permittee to collect data to verify reasonable potential for the subsequent permit application review to select any reasonable monitoring frequency that is greater than or equal to once per year, 1/month sampling should be sufficient to determine compliance.

Best Professional Judgment (BPJ) Limitations

The reviewed eDMR (since June, 2020) and received application showed no effluent discharge. The following effluent limitations, modelling, and special conditions justifications will be applied to the discharge condition whenever indicated on the submitted effluent monitoring reports and/or during inspection and other regulatory or compliance investigations.

The stream flow (Q7-10) to wastewater flow (design flow) ratio is less than 3:1. Therefore, PADEP's dry stream guidance, 1988 and DEP's" Policy And Procedure For Evaluating Wastewater Discharges To Intermittent And Ephemeral Streams, Drainage Channels And Swales, And Storm Sewers, 2008" will be considered to evaluate applicable effluent limitations and/or monitoring requirements. Also per DEP's SOP- Establishing Effluent Limitations for Individual Sewage Permits, "For existing discharges, if the more stringent treatment requirements cannot be achieved, do not apply the standards in DEP guidance (391-2000-014) for 2008 unless the receiving stream is impaired, and the point source discharge contributes to the impairment. If this is the case, apply the more stringent treatment requirements and provide a schedule to meet final limitations not exceeding three years in the draft permit. Do not approve design flow increases without applying the more stringent treatment requirements where the discharge meets the criteria in the guidance for a dry stream". The receiving stream (Unnamed Trib. Redd Run) is a perennial stream based on the stream assessment done by the Department on October 23, 2002 (see Appendix B).Since the receiving stream is not a dry stream and is not impaired (attaining its uses, see page 3); the Advanced Treatment Requirements will not be imposed.

A WQBEL Dissolved Oxygen (DO) of 6.0 mg/L should be maintained from the current permit limitations based on DEP water quality model WQM 7.0 version 1.10 (Appendix A).

Checking on the eDMR, the facility can meet the newly more stringent WQBEL Ammonia-Nitrogen seasonal limits of 1.9 & 2.8 mg/l, as the plant has achieved effluent limits of NH_3-N lower than these limits. No compliance schedule is necessary (see Appendix C for last five years of Ammonia's eDMRs).

Anti-Backsliding

Section 402(o) of the Clean Water Act (CWA), enacted in the Water Quality Act of 1987, establishes anti-backsliding rules governing two situations. The first situation occurs when a permittee seeks to revise a Technology-Based effluent limitation based on BPJ to reflect a subsequently promulgated effluent guideline which is less stringent. The second situation addressed by Section 402(o) arises when a permittee seeks relaxation of an effluent limitation which is based upon a State treatment standard of water quality standard.

The previously imposed limits for pH Effluent Limitation of (6.0 Minimum, and 9.0 Maximum SIU), Fecal Coliform AML Geo Mean seasonal limits of (200 & 2000 CFU/100 ml), TSS AML, Weekly Average, and Ins. Max of (30, 45, and 60 mg/l), and TRC Ins. Max of (0.04 mg/l); will be all unchanged due to Anti-Backsliding as stated in 40 CFR Section 122.44(l).

TN and TP Monitoring

Per SOP (No. BCW-PMT-033: Establishing Effluent Limitations for Individual Sewage Permits):

- Nutrient monitoring is required, at a minimum, to establish the nutrient load from the wastewater treatment facility and the impacts that load may have on the quality of the receiving stream(s). Sewage discharges with design flows > 2,000 gpd require monitoring, at a minimum, for Total Nitrogen and Total Phosphorus in new and reissued permits.

The receiving stream (Unnamed Trib. to Redd Run) is not impaired with nutrients (per reviewed eDMRs) and advanced treatment requirements for TN, and TP will not be imposed. The newly proposed stringent Ammonia limitations will help in lowering TN.

Annual monitoring is recommended.

Disinfection

Total Residual Chlorine (TRC) limits are updated based on the DEP preset values entered in the Department Calculation Sheet (Appendix E) for chlorine stream and discharge demands. A limit of 0.01 mg/l and IMAX of 0.04 mg/l will be imposed.

Per eDMRs reviewed (see Appendix C), the plant has achieved effluent limits of TRC lower than these limits, no compliance schedule is necessary.

E. Coli

Pursuant to 25 Pa. code § 92a.61(b) annual monitoring for *E. Coli* will be imposed at Outfall (001) to determine if *E. Coli* will be a pollutant of concern, which is consistent with DEP SOP No. BCW-PMT-033 revised March 24, 2021.

Monitoring Frequency Considerations

For pH, TRC, and Dissolved Oxygen (DO), a monitoring frequency of 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. The permittee may remain in compliance with the permit by using a No Discharge Indicator (NODI) code on the “Daily Effluent Monitoring” supplemental form to identify the absence of a discharge on a particular day.

The daily monitoring frequencies and other frequencies justified above are consistent with current policy and Table 6-3 of DEP’s 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)	0.025	XXX	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	0.01	XXX	0.04	1/day	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
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	2.8	XXX	5.6	2/month	Grab
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	1.9	XXX	3.8	2/month	Grab
E Coli (No./100ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab

Compliance Sampling Location: outfall 001.

Appendix A – WQM 7.0 Modeling – Summer Conditions

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
19B	40838	Trib 40838 to Redd 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)
0.200	Hallam Pot STP	PA0219487 A-1	0.025	CBOD5	25		
				NH3-N	1.97	3.94	
				Dissolved Oxygen			6

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
19B	40838	Trib 40838 to Redd 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
0.200	Hallam Pot STP	16.55	17.06	16.55	17.06	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
0.200	Hallam Pot STP	1.85	1.97	1.85	1.97	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)		
0.20	Hallam Pot STP	25	25	1.97	1.97	6	6	0	0

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
19B	40838	Trib 40838 to Redd Run

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
0.200	0.025	20.229	7.000
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
2.291	0.319	7.182	0.055
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
23.94	1.493	1.88	0.712
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
6.103	25.883	Owens	6
Reach Travel Time (days)			
0.220			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.022	23.16	1.85	6.42
0.044	22.40	1.82	6.63
0.066	21.67	1.79	6.78
0.088	20.96	1.77	6.89
0.110	20.28	1.74	6.98
0.132	19.61	1.71	7.06
0.154	18.97	1.68	7.13
0.176	18.35	1.66	7.20
0.198	17.75	1.63	7.26
0.220	17.17	1.61	7.32

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		

WQM 7.0 Hydrodynamic Outputs

SWP Basin	Stream Code	Stream Name
19B	40838	Trib 40838 to Redd 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												
0.200	0.00	0.00	0.00	.0387	0.05000	.319	2.29	7.18	0.06	0.220	20.23	7.00
Q1-10 Flow												
0.200	0.00	0.00	0.00	.0387	0.05000	NA	NA	NA	0.05	0.222	20.15	7.00
Q30-10 Flow												
0.200	0.00	0.00	0.00	.0387	0.05000	NA	NA	NA	0.06	0.218	20.31	7.00

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
19B	40838	Trib 40838 to Redd Run	**0.200**	1268.00	0.29	0.05000	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	0.006	0.00	0.00	0.000	0.000	0.0	0.00	0.00	25.00	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
Hallam Pot STP	PA0219487 A-	0.0250	0.0250	0.0250	0.000	20.00	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	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
19B	40838	Trib 40838 to Redd Run	**0.000**	1259.00	0.73	0.05000	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	0.008	0.01	0.00	0.000	0.000	0.0	0.00	0.00	25.00	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	0.00	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	4.00	12.51	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

Appendix A – WQM 7.0 Modeling – Winter Conditions

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
19B	40838	Trib 40838 to Redd 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)
0.200	Hallam Pot STP	PA0219487 A-1	0.025	CBOD5	25		
				NH3-N	2.89	5.78	
				Dissolved Oxygen			6

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
19B	40838	Trib 40838 to Redd 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
0.200	Hallam Pot STP	24.1	24.85	24.1	24.85	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
0.200	Hallam Pot STP	2.71	2.89	2.71	2.89	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)		
0.20	Hallam Pot STP	25	25	2.89	2.89	6	6	0	0

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
19B	40838	Trib 40838 to Redd Run

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
0.200	0.025	14.541	7.000
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
2.291	0.319	7.182	0.055
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
23.94	1.493	2.75	0.460
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
6.299	25.883	Owens	6
Reach Travel Time (days)			
0.220			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.022	23.34	2.73	7.21
0.044	22.75	2.70	7.74
0.066	22.17	2.67	8.06
0.088	21.61	2.65	8.25
0.110	21.07	2.62	8.38
0.132	20.53	2.59	8.47
0.154	20.02	2.57	8.54
0.176	19.51	2.54	8.59
0.198	19.02	2.51	8.64
0.220	18.53	2.49	8.68

WQM 7.0 Hydrodynamic Outputs

SWP Basin	Stream Code	Stream Name
19B	40838	Trib 40838 to Redd 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												
0.200	0.00	0.00	0.00	.0387	0.05000	.319	2.29	7.18	0.06	0.220	14.54	7.00
Q1-10 Flow												
0.200	0.00	0.00	0.00	.0387	0.05000	NA	NA	NA	0.05	0.222	14.70	7.00
Q30-10 Flow												
0.200	0.00	0.00	0.00	.0387	0.05000	NA	NA	NA	0.06	0.218	14.39	7.00

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
19B	40838	Trib 40838 to Redd Run	**0.200**	1268.00	0.29	0.05000	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	0.013	0.00	0.00	0.000	0.000	0.0	0.00	0.00	5.00	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
Hallam Pot STP	PA0219487 A-	0.0250	0.0250	0.0250	0.000	15.00	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	4.00	12.51	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
19B	40838	Trib 40838 to Redd Run	**0.000**	1259.00	0.73	0.05000	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	0.016	0.01	0.00	0.000	0.000	0.0	0.00	0.00	5.00	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	20.00	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	4.00	12.51	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

Appendix B – Stream Assessment Memorandum –

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
Southwest Regional Office
October 23, 2002
8-412-442-5219

SUBJECT: Perennial Stream Determination
Unnamed Tributary to Redd Run
Washington County, Amwell Township
Stream Code: 40838
SWP: 19B

TO: Emily Shade
Sewage Planning Specialist
Water Management

FROM: Abbey Falcone
Water Pollution Biologist
Water Management

On Friday, October 18, 2002, I performed a perennial stream determination for Sewage Planning Specialist Emily Shade. The objective of the survey was to examine the proposed discharge point for the 84 Mine sewage treatment plant and determine whether the stream is perennial or intermittent at that location. According to the "Implementation Guidance for Evaluation Wastewater Discharges to Drainage Swales and Ditches," a stream is perennial if it flows continuously throughout the year and is capable of supporting a benthic macroinvertebrate population composed of two or more recognizable taxonomic groups. The representative organisms must be large enough to be seen by the unaided eye and retained by a U.S. Standard 30 sieve (0.595 mm pores) as well as living part of their life cycle within or upon substrates in a body of water.

Our station was located on an unnamed tributary to Redd Run in Amwell Township. Several taxa of aquatic organisms were recovered, such as mayflies (heptageniidae), stoneflies (leuctridae and perlodidae), beetles (psephenidae), sowbugs (asellidae), crayfish (cambaridae), caddisflies (uenoidae), flatworms (planaria), and aquatic earthworms (oligochaeta). In addition, the predominance of a gravel and rubble substrate, as well as a defined stream channel, indicated a perennial condition.

Regarding permits for wastewater discharges, the site should be considered perennial.

cc: D. Davis
R. Lattner
T. Proch
File

AF:kld

R

Pennsylvania Department of Environmental Protection

400 Waterfront Drive
Pittsburgh, PA 15222-4745
July 19, 2002

Southwest Regional Office

412-442-4000
Fax 412-442-4328

Joseph C. Wilcox, Jr.
Environmental Engineer
Eighty-Four Mining Company
PO Box 355
Eighty Four, PA 15337

Re: Sewage
Preliminary Effluent Limits
Mine #84 - Proposed Hallam Portal STP
Amwell Township
Washington County

File
Sewage
Correspondence
File

Dear Mr. Wilcox:

In response to your letter request, we have developed preliminary effluent limits for a discharge of 0.025 MGD to a drainage swale to an unnamed tributary of Redd Run. Any changes in the size or location of the discharge will require a reevaluation. The preliminary effluent limits are:

Parameter	Concentration (mg/l)		
	Monthly Average	Weekly Average	Instantaneous Maximum
$CBOD_5$	10		20
Suspended Solids	10		20
Ammonia Nitrogen (as N) (5-1 to 10-31) (11-1 to 4-30)	 2.0 3.5		 4.0 7.0
Total Residual Chlorine (if chlorination used for disinfection)	1.4		3.3
Dissolved Oxygen	Minimum of 3.0 at all times		
pH	Within the range of 6 to 9 standard units at all times		
Fecal Coliform	Not greater than 200/100 ml as a geometric average value, not greater than 1,000/100 ml in more than 10% of the samples tested from May 1 to Sept. 30; not greater than 2000/100 ml as a geometric average value during the remainder of the year.		

Original File Copy

Issuance of these limits does not represent approval for a discharge to the waters of the Commonwealth. This information is provided as an aid in evaluating alternative wastewater disposal methods.

To meet the requirements of the Sewage Facilities Act, the proposed facility must be included in the municipality's Official Plan for Wastewater Management approved by the Department. This requirement can be satisfied by submitting planning module components, adopted by the municipality as a revision to their Official Plan, to the Department's McMurray Office for approval. The modules can be obtained from that office (phone 724-941-7100).

State law requires all reasonable alternatives for area-wide waste treatment management to be evaluated. The modules should contain a narrative of what alternatives to the treatment proposal were considered and why there were rejected.

After the Department grants planning approval, permit applications may be submitted. Please remember that an NPDES permit application must be filed with the Department at least 180 days before you propose to commence discharge of treated wastewater. A Water Management Part II permit must be obtained from the Department prior to starting construction of the treatment facility. Permit applications can be obtained by contacting this office.

A condition for issuance of permits for a nonmunicipal plant is that the facility must be abandoned upon notification from the Department or municipality after connection to a municipal system becomes feasible.

If you have any questions, please call me at 412-442-4052.

Sincerely,

Anthony J. Setto

Anthony J. Setto. P.E.
Sanitary Engineer
Water Management

Appendix C – Data Monitoring Reports – Ammonia-Nitrogen
July 2017 to May 2021

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

National Pollutant Discharge Elimination System (NPDES)
Electronic Discharge Monitoring Report (eDMR)

6/14/2022 11:59:50 AM

Region: SWRO
County: 63 - Washington
Municipality: 63913 - Amwell Twp
Permit #: PA0219487
Monitoring Period Date Range: 8/1/2017 To 5/1/2022
Client: All
Parameter: Ammonia-Nitrogen (00610)

Permit #:	PA0219487	Facility Address:	HALLAM PORTAL STP HALLAM RD (T-477) AMITY, PA 15331
Client ID / Name:	310093 - THE WASHINGTON CNTY COAL CO		
Primary Facility ID / Name:	633493 - HALLAM PORTAL STP	County:	Washington
Major Facility:	No	Municipality:	Amwell Twp
Region:	SWRO	Latitude / Longitude:	40.1375 / -80.1875

Monitoring Period Begin Date	Monitoring Period End Date	DMR Received Date	Outfall	Discharge	Monitoring Location	Parameter Name	Parameter Code	DMR Value	Permit Limit	Units	Statistical Base Code
12/01/2017	12/31/2017	01/26/2018	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.3	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.3	6.0	mg/L	Instantaneous Maximum
02/01/2018	02/28/2018	03/26/2018	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	0.6	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.7	6.0	mg/L	Instantaneous Maximum
03/01/2018	03/31/2018	04/26/2018	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	0.6	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.6	6.0	mg/L	Instantaneous Maximum
04/01/2018	04/30/2018	05/21/2018	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.5	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.6	6.0	mg/L	Instantaneous Maximum
05/01/2018	05/31/2018	06/14/2018	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.3	2.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.4	4.0	mg/L	Instantaneous Maximum
06/01/2018	06/30/2018	07/17/2018	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.3	2.0	mg/L	Average Monthly

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National Pollutant Discharge Elimination System (NPDES)
Electronic Discharge Monitoring Report (eDMR)

6/14/2022 11:59:50 AM

06/01/2018	06/30/2018	07/17/2018	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	0.3	4.0	mg/L	Instantaneous Maximum
07/01/2018	07/31/2018	08/27/2018	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.4	2.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.5	4.0	mg/L	Instantaneous Maximum
08/01/2018	08/31/2018	09/26/2018	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	0.2	2.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.2	4.0	mg/L	Instantaneous Maximum
09/01/2018	09/30/2018	10/26/2018	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 1.0	2.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	2.0	4.0	mg/L	Instantaneous Maximum
10/01/2018	10/31/2018	11/27/2018	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.4	2.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.5	4.0	mg/L	Instantaneous Maximum
11/01/2018	11/30/2018	12/12/2018	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.7	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.9	6.0	mg/L	Instantaneous Maximum
12/01/2018	12/31/2018	01/24/2019	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.6	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.9	6.0	mg/L	Instantaneous Maximum
01/01/2019	01/31/2019	02/25/2019	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.7	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.9	6.0	mg/L	Instantaneous Maximum
02/01/2019	02/28/2019	03/25/2019	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.6	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.9	6.0	mg/L	Instantaneous Maximum
03/01/2019	03/31/2019	04/26/2019	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 2.5	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	4.6	6.0	mg/L	Instantaneous Maximum
04/01/2019	04/30/2019	05/23/2019	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.3	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	< 0.3	6.0	mg/L	Instantaneous Maximum
05/01/2019	05/31/2019	06/25/2019	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	0.4	2.0	mg/L	Average Monthly

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

National Pollutant Discharge Elimination System (NPDES)
Electronic Discharge Monitoring Report (eDMR)

6/14/2022 11:59:50 AM

05/01/2019	05/31/2019	06/25/2019	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	0.4	4.0	mg/L	Instantaneous Maximum
06/01/2019	06/30/2019	07/25/2019	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.3	2.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.3	4.0	mg/L	Instantaneous Maximum
07/01/2019	07/31/2019	08/26/2019	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.3	2.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	< 0.3	4.0	mg/L	Instantaneous Maximum
08/01/2019	08/31/2019	09/16/2019	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.3	2.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.32	4.0	mg/L	Instantaneous Maximum
09/01/2019	09/30/2019	10/25/2019	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.3	2.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	< 0.3	4.0	mg/L	Instantaneous Maximum
10/01/2019	10/31/2019	11/25/2019	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.3	2.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	< 0.3	4.0	mg/L	Instantaneous Maximum
11/01/2019	11/30/2019	12/26/2019	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.3	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.3	6.0	mg/L	Instantaneous Maximum
12/01/2019	12/31/2019	01/22/2020	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.3	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	< 0.3	6.0	mg/L	Instantaneous Maximum
01/01/2020	01/31/2020	02/25/2020	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	2.0	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	2.3	6.0	mg/L	Instantaneous Maximum
02/01/2020	02/29/2020	03/20/2020	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.3	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.3	6.0	mg/L	Instantaneous Maximum
03/01/2020	03/31/2020	04/27/2020	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.03	3.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	< 0.03	6.0	mg/L	Instantaneous Maximum
04/01/2020	04/30/2020	05/26/2020	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.3	3.0	mg/L	Average Monthly

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

National Pollutant Discharge Elimination System (NPDES)
Electronic Discharge Monitoring Report (eDMR)

6/14/2022 11:59:50 AM

04/01/2020	04/30/2020	05/26/2020	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.3	6.0	mg/L	Instantaneous Maximum
05/01/2020	05/31/2020	06/24/2020	001	Yes	Final Effluent	Ammonia-Nitrogen	00610	< 0.5	2.0	mg/L	Average Monthly
					Final Effluent	Ammonia-Nitrogen	00610	0.6	4.0	mg/L	Instantaneous Maximum

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Appendix C – Data Monitoring Reports - TRC – July 2017 to May 2021

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

National Pollutant Discharge Elimination System (NPDES)
Electronic Discharge Monitoring Report (eDMR)

6/7/2022 3:05:28 PM

Region: SWRO
County: 63 - Washington
Municipality: All
Permit #: PA0219487
Monitoring Period Date Range: 7/1/2017 To 5/1/2022
Client: All
Parameter: Total Residual Chlorine (TRC) (50060)

Permit #:	**PA0219487**	Facility Address:	**HALLAM PORTAL STP HALLAM RD (T-477) AMITY, PA 15331**
Client ID / Name:	**310093 - THE WASHINGTON CNTY COAL CO**		
Primary Facility ID / Name:	**633493 - HALLAM PORTAL STP**	County:	**Washington**
Major Facility:	**No**	Municipality:	**Amwell Twp**
Region:	**SWRO**	Latitude / Longitude:	**40.1375 / -80.1875**

Monitoring Period Begin Date	Monitoring Period End Date	DMR Received Date	Outfall	Discharge	Monitoring Location	Parameter Name	Parameter Code	DMR Value	Permit Limit	Units	Statistical Base Code
12/01/2017	12/31/2017	01/26/2018	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.00	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.00	0.04	mg/L	Instantaneous Maximum
02/01/2018	02/28/2018	03/26/2018	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.00	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.00	0.04	mg/L	Instantaneous Maximum
03/01/2018	03/31/2018	04/26/2018	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.00	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.00	0.04	mg/L	Instantaneous Maximum
04/01/2018	04/30/2018	05/21/2018	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.00	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.00	0.04	mg/L	Instantaneous Maximum
05/01/2018	05/31/2018	06/14/2018	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.00	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.00	0.04	mg/L	Instantaneous Maximum
06/01/2018	06/30/2018	07/17/2018	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.00	0.02	mg/L	Average Monthly

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

National Pollutant Discharge Elimination System (NPDES)
Electronic Discharge Monitoring Report (eDMR)

6/7/2022 3:05:28 PM

06/01/2018	06/30/2018	07/17/2018	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.00	0.04	mg/L	Instantaneous Maximum
07/01/2018	07/31/2018	08/27/2018	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.00	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.00	0.04	mg/L	Instantaneous Maximum
08/01/2018	08/31/2018	09/26/2018	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.003	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.01	0.04	mg/L	Instantaneous Maximum
09/01/2018	09/30/2018	10/26/2018	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	< 0.01	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.01	0.04	mg/L	Instantaneous Maximum
10/01/2018	10/31/2018	11/27/2018	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.004	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.02	0.04	mg/L	Instantaneous Maximum
11/01/2018	11/30/2018	12/12/2018	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.005	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.02	0.04	mg/L	Instantaneous Maximum
12/01/2018	12/31/2018	01/24/2019	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.01	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.02	0.04	mg/L	Instantaneous Maximum
01/01/2019	01/31/2019	02/25/2019	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	< 0.01	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.03	0.04	mg/L	Instantaneous Maximum
02/01/2019	02/28/2019	03/25/2019	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	< 0.001	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.03	0.04	mg/L	Instantaneous Maximum
03/01/2019	03/31/2019	04/26/2019	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	< 0.001	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.03	0.04	mg/L	Instantaneous Maximum
04/01/2019	04/30/2019	05/23/2019	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.0001	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.02	0.04	mg/L	Instantaneous Maximum
05/01/2019	05/31/2019	06/25/2019	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.00001	0.02	mg/L	Average Monthly

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

National Pollutant Discharge Elimination System (NPDES)
Electronic Discharge Monitoring Report (eDMR)

6/7/2022 3:05:28 PM

05/01/2019	05/31/2019	06/25/2019	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.03	0.04	mg/L	Instantaneous Maximum
06/01/2019	06/30/2019	07/25/2019	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	< 0.001	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.02	0.04	mg/L	Instantaneous Maximum
07/01/2019	07/31/2019	08/26/2019	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	< 0.00001	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.03	0.04	mg/L	Instantaneous Maximum
08/01/2019	08/31/2019	09/16/2019	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	< 0.0001	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.02	0.04	mg/L	Instantaneous Maximum
09/01/2019	09/30/2019	10/25/2019	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.00001	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.03	0.04	mg/L	Instantaneous Maximum
10/01/2019	10/31/2019	11/25/2019	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.000001	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.03	0.04	mg/L	Instantaneous Maximum
11/01/2019	11/30/2019	12/26/2019	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.0000001	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.04	0.04	mg/L	Instantaneous Maximum
12/01/2019	12/31/2019	01/22/2020	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	< 0.000001	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.03	0.04	mg/L	Instantaneous Maximum
01/01/2020	01/31/2020	02/25/2020	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.00001	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.03	0.04	mg/L	Instantaneous Maximum
02/01/2020	02/29/2020	03/20/2020	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.000001	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.02	0.04	mg/L	Instantaneous Maximum
03/01/2020	03/31/2020	04/27/2020	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	< 0.01	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.03	0.04	mg/L	Instantaneous Maximum
04/01/2020	04/30/2020	05/26/2020	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.011	0.02	mg/L	Average Monthly

SSRS_NPDES_036 Ver 1.1

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pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

National Pollutant Discharge Elimination System (NPDES)
Electronic Discharge Monitoring Report (eDMR)

6/7/2022 3:05:28 PM

04/01/2020	04/30/2020	05/26/2020	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.03	0.04	mg/L	Instantaneous Maximum
05/01/2020	05/31/2020	06/24/2020	001	Yes	Final Effluent	Total Residual Chlorine (TRC)	50060	0.009	0.02	mg/L	Average Monthly
					Final Effluent	Total Residual Chlorine (TRC)	50060	0.03	0.04	mg/L	Instantaneous Maximum

SSRS_NPDES_036 Ver 1.1

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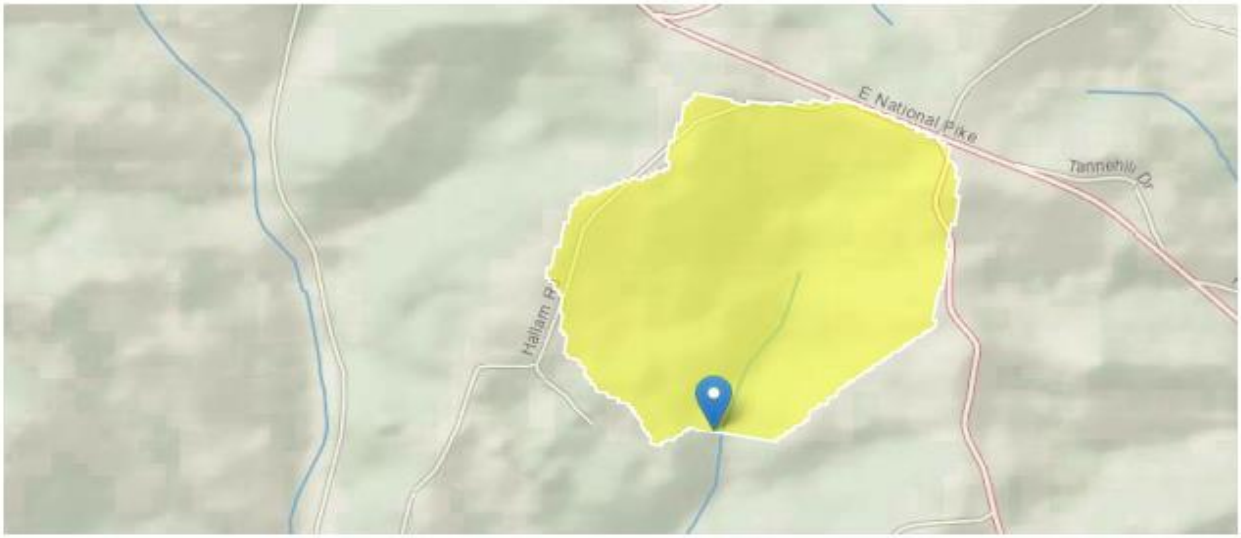
Appendix D – StreamStats Report

StreamStats Report

Region ID: PA
Workspace ID: PA20220524135358343000
Clicked Point (Latitude, Longitude): 40.13532, -80.18009
Time: 2022-05-24 09:54:18 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.29	square miles
ELEV	Mean Basin Elevation	1286	feet

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.29	square miles	2.26	1400
ELEV	Mean Basin Elevation	1286	feet	1050	2580

Low-Flow Statistics Disclaimers [Low Flow Region 4]

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 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.00726	ft^3/s
30 Day 2 Year Low Flow	0.0149	ft^3/s
7 Day 10 Year Low Flow	0.00186	ft^3/s
30 Day 10 Year Low Flow	0.00439	ft^3/s
90 Day 10 Year Low Flow	0.00969	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/)

Application Version: 4.9.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.0

Appendix E – Total Residual Chlorine Calculation

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

0.00186	= Q stream (cfs)	0.5	= CV Daily
0.025	= 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 Discharg	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 =	0.034	1.3.2.iii	WLA cfc =	0.026
PENTOXSD TRG	5.1a	LTAMULT afc =	0.373	5.1c	LTAMULT cfc =	0.581
PENTOXSD TRG	5.1b	LTA_afc=	0.013	5.1d	LTA_cfc =	0.015

Source		Effluent Limit Calculations		
PENTOXSD TRG	5.1f	AML MULT =	1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) =	0.016	AFC
		INST MAX LIMIT (mg/l) =	0.052	

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)**

Appendix F – Permit Correspondences –

Aldalli, Hazim

From: Nagel, Jon <jnagel@acnrinc.com>
Sent: Tuesday, May 10, 2022 9:25 PM
To: Dunn, Howard
Cc: Aldalli, Hazim; Iasmin, Mahbuba; Greenwald, Stacey; Murphy, John; Betcher, Kim
Subject: [External] Re: WPC PA0219487 Inspection Report 3259533
Attachments: image002.png; PA0219487_SEWAGE_CEI_20210930.pdf

ATTENTION: This email message is from an external sender. Do not open links or attachments from unknown sources. To report suspicious email, forward the message as an attachment to CWOPA_SPAM@pa.gov.

Mr. Dunn,

The sewage system is being pumped out by an authorized waste disposal company, and is not being treated and discharged through the permitted outfall. Therefore there hasn't been a discharge to sample and report.

Thank you,
Jon

On May 10, 2022, at 9:22 PM, Dunn, Howard <hdunn@pa.gov> wrote:

CAUTION: This email originated from outside of ACNR. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jon

Are you sampling effluent and reporting it, in the e-DMR system? If not it's a problem, you won't get your permit renewed.

Howard Dunn | Water Quality Specialist| Department of Environmental Protection |
California Technology Park |
25 Technology Drive |
Coal Center, PA 15423 |
Phone: 724.769.1053 |cell 412 225 4057
Fax: 724.769.1102
www.depweb.state.pa.us

From: Aldalli, Hazim <haldalli@pa.gov>
Sent: Tuesday, May 10, 2022 7:23 PM
To: Dunn, Howard <hdunn@pa.gov>
Cc: Murphy, John <johnmur@pa.gov>; Iasmin, Mahbuba <moiasmin@pa.gov>; Greenwald, Stacey <sgreenwald@pa.gov>
Subject: RE: WPC PA0219487 Inspection Report 3259533

Howard,

1

The facility is not reporting any effluent sampling results since June 2020 over the eDMR as you can check below, your inspection report on September 30, 2021 did not mention the reason behind that. If you please have any information I can include to my review it will be more appreciated.

Thanks,

Hazim Aldalli| Environmental Engineer
Department of Environmental Protection | Clean Water
South West Regional Office Building
400 Waterfront Drive | Pittsburgh, PA 15222
(412) 442-4117

From: Dunn, Howard <hdunn@pa.gov>
Sent: Monday, May 9, 2022 10:43 AM
To: Aldalli, Hazim <haldalli@pa.gov>
Cc: Murphy, John <johnmur@pa.gov>; Iasmin, Mahbuba <moiasmin@pa.gov>; Greenwald, Stacey <sgreenwald@pa.gov>
Subject: Fw: WPC PA0219487 Inspection Report 3259533

Hazim

This inspection report is from last fall. The facility is not reporting effluent violations in the eDMR system, as the assigned inspector any non-compliance issues are sent to me in the system. I am not aware of any compliance issues at the facility.

Howard Dunn | Water Quality Specialist| Department of Environmental Protection |
California Technology Park |
25 Technology Drive |
Coal Center, PA 15423 |
Phone: 724.769.1053 |cell 412 225 4057
Fax: 724.769.1102
www.depweb.state.pa.us

From: DEP_SOA@state.pa.us <DEP_SOA@state.pa.us>
Sent: Thursday, September 30, 2021 10:40 PM
To: Roote, David <droote@pa.gov>; Dunn, Howard <hdunn@pa.gov>
Cc: EP, CW Inspections <RA-EPCWINSP@pa.gov>
Subject: WPC PA0219487 Inspection Report 3259533

Sent from DEP SOA Middleware e-Inspections Application

2

Aldalli, Hazim

From:	Nagel, Jon <jnagel@acnrinc.com>
Sent:	Tuesday, May 10, 2022 9:00 PM
To:	Aldalli, Hazim
Cc:	Betcher, Kim; Iasmin, Mahbuba; Kriley, Christopher
Subject:	[External] RE: eDMR Effluent Reporting

ATTENTION: This email message is from an external sender. Do not open links or attachments from unknown sources. To report suspicious email, forward the message as an attachment to CWOPA_SPAM@pa.gov.

Mr. Aldalli,

My answers to your questions are below:

- No effluent reported – All wastewater is now pumped out of the system, prior to discharge, and disposed of at an authorized waste facility (rather than being treated and discharged on site).
- 2021 average flow rate - For the same reason mentioned above, the facility has not discharged due to waste being pumped out.
- Copper, Lead, and Zinc – The mine has been closed for years, and the portal only functions as an office building. No Reasonable Potential exists for these parameters.

Please advise with any further questions.

Thank you,

Jon M. Nagel
Director of Environmental Compliance
AMERICAN CONSOLIDATED NATURAL RESOURCES, INC.
46226 National Road
St. Clairsville, OH 43950

Cell - (740) 312-4546
Office - (740) 338-3100

From: Aldalli, Hazim <haldalli@pa.gov>
Sent: Tuesday, May 10, 2022 8:46 PM
To: Nagel, Jon <jnagel@acnrinc.com>
Subject: FW: eDMR Effluent Reporting

Dear Mr. Nagel,

1

I'm the permit writer from DEP Southwest Regional Office, I came across your application for the renewal of the NPDES permit PA0219487 for Hallam Portal STP which I have some missing information need your input:

- The eDMR system show no effluent reporting from June 2020 till now.
- The renewal application has an annual average flow of 0 MGD for 2021, can you elaborate more on that.
- Since this facility is servicing Mine 84 Hallam Portal and per renewal application form (page 7), you need to report Copper, Lead, Zinc, and any other suspected parameters might present in the effluent.

Please remember that the same information will be used to process your transfer application. Have any questions please send me back on this email or call me with the number shown below.

P.S. Sorry to miss type your email address

Thanks,

Hazim Aldalli| Environmental Engineer
Department of Environmental Protection | Clean Water
South West Regional Office Building
400 Waterfront Drive | Pittsburgh, PA 15222
(412) 442-4117

From: Aldalli, Hazim
Sent: Tuesday, May 10, 2022 8:42 PM
To: jangel@acnrinc.com; kimbetcher@acnrinc.com
Cc: Iasmin, Mahbuba <moiasmin@pa.gov>; Kriley, Christopher <ckriley@pa.gov>
Subject: eDMR Effluent Reporting

Dear Mr. Nagel,

I'm the permit writer from DEP Southwest Regional Office, I came across your application for the renewal of the NPDES permit PA0219487 for Hallam Portal STP which I have some missing information need your input:

- The eDMR system show no effluent reporting from June 2020 till now.
- The renewal application has an annual average flow of 0 MGD for 2021, can you elaborate more on that.
- Since this facility is servicing Mine 84 Hallam Portal and per renewal application form (page 7), you need to report Copper, Lead, Zinc, and any other suspected parameters might present in the effluent.

Please remember that the same information will be used to process your transfer application. Have any questions please send me back on this email or call me with the number shown below.

Thanks,

Hazim Aldalli| Environmental Engineer
Department of Environmental Protection | Clean Water
South West Regional Office Building
400 Waterfront Drive | Pittsburgh, PA 15222
(412) 442-4117

2

Aldalli, Hazim

From: Nagel, Jon <jnagel@acnrinc.com>
Sent: Thursday, July 28, 2022 1:49 PM
To: Aldalli, Hazim
Cc: Betcher, Kim
Subject: [External] Hallam Portal STP Requested Information

ATTENTION: *This email message is from an external sender. Do not open links or attachments from unknown senders. To report suspicious email, use the Report Phishing button in Outlook.*

Mr. Aldalli,

In follow up to our conversation, you requested the waste hauler from our Hallam Portal STP, who is Hapchuck, Inc. I believe their permit number is WV0014.

Please let me know if you need anything else.

Thank you,

Jon M. Nagel
Director of Environmental Compliance
AMERICAN CONSOLIDATED NATURAL RESOURCES, INC.
46226 National Road
St. Clairsville, OH 43950

Cell - (740) 312-4546
Office - (740) 338-3100