pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northwest Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Amendment, Major**	Application No.	**PA0021598 A-1**
Facility Type	**Municipal**	APS ID	**1124889**
Major / Minor	**Major**	Authorization ID	**1504947**

Applicant and Facility Information

Applicant Name	**Conneaut Lake Joint Municipal Authority**	Facility Name	**Conneaut Lake Joint Municipal Authority STP**
Applicant Address	PO Box 277, 9888 Highway 285	Facility Address	First Street Extension
	Conneaut Lake, PA 16316		Conneaut Lake, PA 16316
Applicant Contact	Ron Harper, Manager	Facility Contact	Ron Harper, Manager
Applicant Phone	(814) 382-3815	Facility Phone	(814) 382-3815
Client ID	35909	Site ID	458743
Ch 94 Load Status	Not Overloaded	Municipality	Sadsbury Township
Connection Status	No Limitations	County	Crawford County
Date Application Received	October 30, 2024	EPA Waived?	No
Date Application Accepted	October 31, 2024	If No, Reason	Major Facility
Purpose of Application	Amendment of an NPDES Permit to modify a compliance schedule for an existing discharge of treated sanitary wastewater.		

Summary of Review

Act 14 - Proof of Notification was submitted and received.

A Part II Water Quality Management permit is not required at this time.

The applicant should be able to meet the limits of this permit, which will protect the uses of the receiving stream.

I. OTHER REQUIREMENTS:

A. Stormwater into Sewers
B. Right of Way
C. Solids Handling
D. Effluent Chlorine Optimization and Minimization

SPECIAL CONDITIONS:

II. Compliance Schedule for CBOD5
III. Solids Management
IV. Whole Effluent Toxicity (WET)

There is 1 open violation in efacts associated with the subject Client ID (35909) as of 4/16/2025 (see Attachment 1).

Approve	Deny	Signatures	Date
X		Stephen A. McCauley Stephen A. McCauley, E.I.T. / Project Manager	4/16/2025
X		Adam Olesnanik Adam Olesnanik, P.E. / Environmental Engineer Manager	4/17/2025

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	1.1
Latitude	41º 35' 54.70"	Longitude	-80º 17' 57.30"
Quad Name	-	Quad Code	-
Wastewater Description:	Sewage Effluent		

Receiving Waters	Conneaut Outlet (WWF)	Stream Code	52232
NHD Com ID	127346647	RMI	14.0
Drainage Area	28.8	Yield (cfs/mi^2)	0.08
Q_{7-10} Flow (cfs)	2.3	Q_{7-10} Basis	calculated
Elevation (ft)	1066	Slope (ft/ft)	0.001775
Watershed No.	16-D	Chapter 93 Class.	WWF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired		
Cause(s) of Impairment	Nutrients, Siltation		
Source(s) of Impairment	Highway/Road/Bridge Runoff (Non-Construction Related) and Natural Sources, Urban Runoff/Storm Sewers		
TMDL Status	-	Name	-

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

Nearest Downstream Public Water Supply Intake	Aqua Pennsylvania, Inc. - Emlenton		
PWS Waters	Allegheny River	Flow at Intake (cfs)	1,376
PWS RMI	90.0	Distance from Outfall (mi)	56

Comments: This is an amendment of an NPDES Permit to modify a compliance schedule for an existing discharge of treated sanitary wastewater. Per the Engineers Report from the NPDES Permit Amendment application (see Attachment 2), the Permittee is requesting that the compliance schedule set for the more restrictive CBOD5 limits be delayed until July 1, 2028 (the more restrictive limits in the current NPDES Permit were set to take effect on July 1, 2026).

Compliance History

DMR Data for Outfall 001 (from February 1, 2024 to January 31, 2025)

Parameter	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24
Flow (MGD) Average Monthly	0.5020	0.6260	0.4080	0.3707	0.3730	0.4370	0.3820	0.4510	0.5190	0.7910	0.6360	0.4740
Flow (MGD) Weekly Average	0.7460	0.7220	0.5510	0.4811	0.4710	0.5960	0.4533	0.4950	0.6080	1.0280	0.7060	0.5000
pH (S.U.) Daily Minimum	7.08	7.16	7.09	7.11	7.09	7.06	6.51	6.95	7.21	7.21	7.23	7.17
pH (S.U.) Daily Maximum	7.45	7.64	7.88	7.76	7.52	7.58	7.40	7.45	7.55	7.59	7.58	7.49
DO (mg/L) Daily Minimum	8.69	10.71	9.44	7.95	8.25	7.82	6.75	7.57	7.88	8.65	11.63	10.64
TRC (mg/L) Average Monthly	0.01	0.01	0.02	0.02	0.02	0.02	< 0.01	0.02	0.01	0.02	0.02	0.02
TRC (mg/L) Instantaneous Maximum	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
CBOD5 (lbs/day) Average Monthly	26	27.0	33	35	70	98	37.0	65.0	66	91	47	30
CBOD5 (lbs/day) Weekly Average	34	33.0	49	47	77.0	221	112.0	99.0	135	109	54	37
CBOD5 (mg/L) Average Monthly	6.5	5.63	11.10	11.97	23.43	23.31	11.76	18.15	16.05	15.83	9.1	7.25
CBOD5 (mg/L) Weekly Average	8.25	9.07	17.98	16.2	27.12	34.75	28.4	24.2	29.15	22.4	9.8	8.29
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	479	337	345	82	186	158	86	278	297	184	489	493
BOD5 (mg/L) Raw Sewage Influent Average Monthly	117	72	134	28	62	43.0	29	56	81	24	89	91
TSS (lbs/day) Average Monthly	32	55.0	44	< 21	< 32	61	38.0	46.0	57	113	78	44
TSS (lbs/day) Raw Sewage Influent Average Monthly	606	627	309	47	515	15	414	360	300	452	539	378
TSS (lbs/day) Weekly Average	40	66.0	61	33	< 45	153	67.0	65.0	66	183	83	63
TSS (mg/L) Average Monthly	8	10.0	13	< 7	< 10	14	13.0	13.0	15	18	15	10
TSS (mg/L) Raw Sewage Influent Average Monthly	148	134	120	16	172	4.2	142	72	82	58	98	70

TSS (mg/L) Weekly Average	10	12.0	15	13	11	24	17.0	16.0	18	20	16	13
Fecal Coliform (No./100 ml) Geometric Mean	< 5	< 7	< 5	< 4	< 16	< 51	< 5	< 6	< 4	< 57	< 12	< 10
Fecal Coliform (No./100 ml) Instantaneous Maximum	< 5	18	5	5	782	1724	5	10	5	7766	994	80
E. Coli (No./100 ml) Instantaneous Maximum	2	6	1	< 1	1120	1	1	7	1	2420	11	12
Total Nitrogen (lbs/day) Average Monthly	59	48	55	55	53	71	48	60	55	57	46	1492
Total Nitrogen (mg/L) Average Monthly	14.5	10.3	21.3	18.5	17.8	19.3	16.4	12.1	15	7.28	10.2	9.52
Ammonia (lbs/day) Average Monthly	3	4.0	4	2	3	< 2	< 4.0	3.0	3	< 6	< 5	< 2
Ammonia (mg/L) Average Monthly	0.683	0.804	1.235	0.798	0.858	< 0.605	< 1.179	0.783	0.879	< 1.021	< 1.11	< 0.436
Total Phosphorus (lbs/day) Average Monthly	6	6	9	10	13	12	< 0.3	10	7	13	7	188
Total Phosphorus (mg/L) Average Monthly	1.53	1.3	3.58	3.24	4.3	3.4	< 0.1	1.92	1.83	1.7	1.3	1.2
Total Aluminum (lbs/day) Average Quarterly		0.01			0.06			0.09			0.2	
Total Aluminum (ug/L) Average Quarterly		39			22			118			66	
Total Arsenic (lbs/day) Average Quarterly		< 0.03			0.04			< 0.08			0.05	
Total Arsenic (ug/L) Average Quarterly		10			12			10			15	
Hexavalent Chromium (lbs/day) Average Monthly	< 0.04	< 0.05	< 0.03	< 0.03	< 0.03	< 0.07	< 0.03	< 0.04	< 0.04	< 0.06	< 0.05	< 0.04
Hexavalent Chromium (lbs/day) Weekly Average	< 0.05	< 0.06	< 0.04	< 0.03	< 0.04	< 0.20	< 0.04	< 0.04	< 0.05	< 0.01	< 0.05	< 0.04
Hexavalent Chromium (ug/L) Average Monthly	10	10	10	10	10	< 0.02	10	10	10	< 0.01	10	10
Hexavalent Chromium (ug/L) Weekly Average	10	10	10	10	10	0.06	10	10	10	< 0.01	10	10
Total Copper (lbs/day) Average Monthly	< 0.04	0.05	0.10	< 0.02	0.03	0.08	0.03	< 0.09	0.04	0.08	0.07	0.05
Total Copper (lbs/day) Weekly Average	0.05	0.06	0.30	0.04	0.04	0.20	0.05	0.30	0.04	0.10	0.09	0.07
Total Copper (ug/L) Average Monthly	10	9.7	32	8.3	11	0.023	11	25	10	0.013	14	13
Total Copper (ug/L) Weekly Average	12	12.5	96	15	12	0.064	13	75	11	0.015	16	15

Free Cyanide (lbs/day) Average Monthly	< 0.007	< 0.007	< 0.005	< 0.002	< 0.005	< 0.002	< 0.005	< 0.004	< 0.005	< 0.007	< 0.010	< 0.006
Free Cyanide (lbs/day) Weekly Average	0.02	< 0.010	0.01	< 0.002	< 0.009	< 0.003	0.01	0.003	0.01	< 0.01	0.02	0.01
Free Cyanide (ug/L) Average Monthly	1.6	1.4	1.6	0.6	1.8	< 0.0006	1.6	0.9	1.3	< 0.0013	2.6	1.4
Free Cyanide (ug/L) Weekly Average	4	2.3	4.0	0.8	3.3	< 0.0008	4.0	0.8	4	< 0.0028	4.5	3
Dissolved Iron (lbs/day) Average Quarterly		0.01			0.1			3			0.9	
Dissolved Iron (ug/L) Average Quarterly		46			49			378			< 253	
Total Iron (lbs/day) Average Quarterly		0.5			0.7			4			1	
Total Iron (ug/L) Average Quarterly		157			246			571			355	
Total Zinc (lbs/day) Average Quarterly		0.04			0.04			0.2			0.07	
Total Zinc (ug/L) Average Quarterly		13			0.015			24			22	

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through June 30, 2028.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
DO	XXX	XXX	6.0 Daily Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.10	XXX	0.35	1/day	Grab
CBOD5 Nov 1 - Apr 30	229.0	367.0	XXX	25.0	40.0	50	2/week	24-Hr Composite
CBOD5 May 1 - Oct 31	138.0	211.0	XXX	15.0	23.0	30	2/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
TSS	275.0	413.0	XXX	30.0	45.0	60	2/week	24-Hr Composite
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/week	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/month	Grab
Total Nitrogen	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Ammonia Nov 1 - Apr 30	41.2	XXX	XXX	4.5	XXX	9	2/week	24-Hr Composite

Outfall 001, Continued (from Permit Effective Date through June 30, 2028)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Ammonia May 1 - Oct 31	13.7	XXX	XXX	1.5	XXX	3	2/week	24-Hr Composite
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Aluminum (ug/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Arsenic (ug/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Hexavalent Chromium (ug/L)	0.16	0.25	XXX	17.5	27.3	43.8	2/week	24-Hr Composite
Total Copper (ug/L)	0.23	0.36	XXX	24.9	38.8	62.2	2/week	24-Hr Composite
Free Cyanide (ug/L)	0.086	0.13	XXX	9.4	14.7	23.5	2/week	24-Hr Composite
Dissolved Iron (ug/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Iron (ug/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Zinc (ug/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite

Compliance Sampling Location: at Outfall 001, after disinfection.

Flow is monitor only based on Chapter 92a.61. The limits for pH and Dissolved Oxygen are technology-based on Chapter 93.7. The Total Residual Chlorine (TRC) limits are water quality-based on Chapter 93.7. The limits for $CBOD_5$ are water quality-based on Chapter 93.7. Monitoring for influent BOD5 and influent Total Suspended Solids is based on Chapter 92a.61. The limits for Total Suspended Solids and Fecal Coliform are technology based on Chapter 92a.47. The limits for Ammonia-Nitrogen are water quality-based on Chapter 93.7. Monitoring for E. Coli, Total Nitrogen, Total Phosphorus, Total Aluminum, Total Arsenic, Dissolved Iron, Total Iron, and Total Zinc is based on Chapter 92a.61. The limits for Hexavalent Chromium, Total Copper, and Free Cyanide are water quality-based on Chapter 16.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: July 1, 2028 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	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
DO	XXX	XXX	6.0 Daily Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.10	XXX	0.35	1/day	Grab
CBOD5	45.8	71.5	XXX	5.0	7.5	10	2/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
TSS	275.0	413.0	XXX	30.0	45.0	60	2/week	24-Hr Composite
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/week	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/month	Grab
Total Nitrogen	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Ammonia Nov 1 - Apr 30	41.2	XXX	XXX	4.5	XXX	9	2/week	24-Hr Composite
Ammonia May 1 - Oct 31	13.7	XXX	XXX	1.5	XXX	3	2/week	24-Hr Composite

Outfall 001, Continued (from July 1, 2028 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	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	1/month	24-Hr Composite
Total Aluminum (ug/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Arsenic (ug/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Hexavalent Chromium (ug/L)	0.16	0.25	XXX	17.5	27.3	43.8	2/week	24-Hr Composite
Total Copper (ug/L)	0.23	0.36	XXX	24.9	38.8	62.2	2/week	24-Hr Composite
Free Cyanide (ug/L)	0.086	0.13	XXX	9.4	14.7	23.5	2/week	24-Hr Composite
Dissolved Iron (ug/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Iron (ug/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Zinc (ug/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite

Compliance Sampling Location: at Outfall 001, after disinfection.

Flow is monitor only based on Chapter 92a.61. The limits for pH and Dissolved Oxygen are technology-based on Chapter 93.7. The Total Residual Chlorine (TRC) limits are water quality-based on Chapter 93.7. The limits for $CBOD_5$ are water quality-based on Chapter 93.7. Monitoring for influent BOD5 and influent Total Suspended Solids is based on Chapter 92a.61. The limits for Total Suspended Solids and Fecal Coliform are technology based on Chapter 92a.47. The limits for Ammonia-Nitrogen are water quality-based on Chapter 93.7. Monitoring for E. Coli, Total Nitrogen, Total Phosphorus, Total Aluminum, Total Arsenic, Dissolved Iron, Total Iron, and Total Zinc is based on Chapter 92a.61. The limits for Hexavalent Chromium, Total Copper, and Free Cyanide are water quality-based on Chapter 16.

Attachment 1

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

WATER MANAGEMENT SYSTEM
OPEN VIOLATIONS BY CLIENT

Client ID: 35909
Client: All

Open Violations: 1

CLIENT ID	CLIENT	PF ID	FACILITY	PF KIND	PF STATUS
35909	CONNEAUT LAKE JT MUNI AUTH CRAWFORD CNTY	487819	CONNEAUT LAKE JT MUN AUTH STP	Sewage Publicly Owned (Muni)	Active

INSP PROGRAM	PROGRAM SPECIFIC ID	INSP ID	VIOLATION ID	INSPECTION CATEGORY	VIOLATION DATE	VIOLATION CODE	VIOLATION	PF INSPECTOR	INSP REGION
WPC NPDES	PA0021598	3833607	8205221	PF	08/22/2024	92A.44	NPDES - Violation of effluent limits in Part A of permit	PUDLICK,DAN	NWRO

Attachment 2

ENGINEER'S OVERVIEW REPORT ON THE SCOPE OF MAJOR AMENDMENT

Erosion and Sedimentation Control Plan – Revised July 2022
Conneaut Lake Joint Municipal Authority
S-8 Line Separation Project, Sadsbury Township, Crawford County

1.0 PROJECT OVERVIEW

1.1 Introduction

The Conneaut Lake Joint Municipal Authority (CLJMA) is proposing to locate and cap a deteriorating 12" reinforced concrete force main and reroute the line by installing a 12-inch High Density Polyethylene (HDPE) pipe using a horizontal directional drilling (HDD) method. Additional upgrades to the wastewater treatment plant to improve efficiency and functionality will also occur within previously disturbed areas within the wastewater treatment plant (WWTP). The Project takes place within Conneaut Borough and Sadsbury Township, Crawford County. The Project proposes to create two bore pits to facilitate the HDD, one at the existing pump station located on S. Shore Dr. (~41.60340, -80.29602) and another within the WWTP facility located at the end of Richmond St. (~41.59864, -80.29976). This Project proposes to bore under Conneaut Lake Rd. (State Route 18/322) and Pennsylvania State Game Lands No. 213. An open cut method will be used to connect the equipment within the facilities and to the existing line. This Erosion and Sedimentation Control Plan (ESCP) sets forth a work plan for the excavation and construction required for this Project. This plan establishes Best Management Practices (BMPs) to be implemented throughout the duration of the Project.

The purpose of this ESCP document is to minimize and/or avoid potential adverse environmental impacts due to the operation and maintenance activities associated with the construction procedures. The proposed practices are intended to maintain, to the fullest extent practicable, the integrity of sensitive resources such as wetlands and streams or protected habitats if any are located within the work areas. This document was prepared in accordance with the following Pennsylvania Department of Environmental Protection (PADEP) documents: Erosion and Sediment Control Best Management Practice Manual (PADEP's E&SC BMP Manual, March 2012).

1.2 Project Description

Prior to performing boring operations, the existing biosolid dewatering reed bed will be disassembled and hauled offsite to a disposal facility. Two bore pits, approximately 10-feet x 10-feet will be excavated to perform the boring operations. The launching pit will be located within the Wastewater Treatment Plant (WWTP) at approximately 41.59864, -80.29976 and the receiving pit will be located south of S Shore Dr., at approximately 41.60340, -80.29602. Once the successful boring has been completed and pipeline integrity has been tested, trenching operations will commence to locate the existing force main along S. 1st St. to terminate and cap the pipe. Concurrently, service from the existing force main will be connected to the proposed 12-inch HDPE to bypass the existing failing segments. The proposed screen building, sludge/pump building, and solid drying filter and associated piping will all be constructed after

the successful completion of the boring. Construction activities are proposed within a single-phase approach.

This ESCP is specific to the components specified to this Project located in Crawford County. Construction activities will be limited to approximately 1.65 acres on urban, wooded, and open land consisting of grass, gravel, wooded, and pavement covered areas. A United States Geological Survey (USGS) Quadrangle Map with the Project location is provided as Figure 1.

2.0 MAJOR AMENDMENT

The above was copied exactly from the approved Erosion and Sedimentation Control Plan – Revised July 2022 for the CLJMA S-8 Line Separation Project. The details which are changing from the original project description in section 1.2 per this Major Amendment are highlighted yellow and detailed herein. Phase 1 is used to refer to the scope of the S-8 line separation and the WWTP upgrade construction activities discussed in the prior application and the associated Major Amendment changes required to complete Phase 1 which includes the demolition of the Borough WWTP. Phase 2 refers to the WWTP upgrades required per the future, more stringent, WWTP NPDES Discharge Permit Limits which will require a WQM Permit, as well as the additional construction activities as detailed herein. Due to the extremely tight schedule for Phase 2 WQM Permit and Upgrades, the construction has been combined with the Phase 1 Major Amendment construction since the LOD and project areas are the same.

2.1 Scope of Changes

As the result of a 6-month delay in funding and the PENNVEST Closing for the current S-8 Line Separation and WWTP upgrade project as part of Phase 1, the original project execution sequence described in section 1.2 of the E&S plan had to be changed. The HDD drilling operation was originally planned to be done in the Winter, prior to the peak tourist season at the Lake, and prior to the construction of the belt filter press and screening buildings. The HDD launching pit was located at the same location as the excavation for the foundation for the belt filter press building. However, the project was started later than planned and the HDD boring could not be done first as originally proposed as a result of the funding and the PENNVEST closing delay. The contractor completed the removal of the existing biosolid dewatering reed bed, and then proceeded with the foundation and construction of the belt filter press screening building to allow the Phase 1 project work to proceed to avoid further delays to the Phase 1 and the following Phase 2 upgrades.

The municipal sewage which currently passes through the Borough WWTP will be sent to the new Inlet Box being installed as part of the Phase 1 upgrades at the CLJMA WWTP once the Phase 1 upgrades are completed. As a result of this change in the construction sequence, a new land area outside the limits of disturbance (LOD) is required for the HDD launching pit and this is shown on the Amendment POST-1 drawing in the orange box. This new work area overlaps the existing Conneaut Borough Wastewater Treatment Plant as shaded in light green and therefore the WWTP will need to be demolished and removed to provide the required land area

to complete the Phase 1 upgrades as well as the following Phase 2 upgrades explained in the next section. The area of the Borough WWTP is 24,776 sq. ft. The gravity line which crosses Barber Run and enters the Borough WWTP pump station will be replaced with a second gravity line to directly connect the upstream and downstream manholes and allow the removal of the Borough pump station and the need for repumping of the influent sewage. This new 12" PVC line will be installed via the same HDD drilling method and cross Barber Run in the same manner as the 12" force main in Phase 1. Temporary bypass pumping of the sewage which currently flows into the Borough WWTP will be provided until the Phase 1 upgrades are completed. This second water crossing to bypass the Borough pump station is shown on the Amendment POST-1 drawing in the light green area marked 1,189.62 sq. ft. The total combined additional area included within the LOD of this Major Amendment is 25,966 sq. ft. or 0.6 acre.

The CLJMA WWTP NPDES Discharge Permit No. PA0021598 issued on July 7, 2023 included more stringent discharge limits for the WWTP which currently take effect on July 1, 2026 which is less than a year from the completion of the Phase 1 WWTP upgrade project. Until the Phase 1 upgrades are completed and commissioned, we will not know the new WWTP effluent characteristics, but due to the current July 1, 2026 deadline, we have had to assume the new plant effluent characteristics and have been evaluating alternative treatment technologies to meet the new discharge limits. We have completed an ozone and ozone + peroxide bench study in July 2024, but the results were not favorable. At this time, the only technology being offered to meet the CBOD5 concentration limit of 5 mg/l is a Membrane Bioreactor (MBR) system which consists of biological aerobic nitrification and low-pressure membrane filtration. The outline for the proposed aeration and MBR tanks along with the associated pumps/blowers is shown on the Amendment POST-1 drawing in the light gray box. Detail design shall be completed for the Phase 2 WWTP upgrades and a WQM Permit Application shall be submitted by March 2025. Once the WQM Permit is issued, a PENNVEST funding application will be submitted. When the necessary funding is secured, the project RFP will be issued for bid. Construction of the Phase 2 WWTP upgrades is expected to take 20 months, and the proposed project schedule and proposed effective date for the new CBOD5 permit limits is shown below in section 2.2.

2.2 Proposed Project Schedule

Milestone	Target Dates*
Pre-Application Meeting Request	September 20, 2024
Pre-Application Meeting	October 2024
Prepare and Submit Required Documents	November 2024
Major Amendment Approval	December 2024
Demolition of Old Borough WWTP	January 2025

HDD Boring to Commence	February 2025
Completion of Current Phase 1 Upgrades to the WWTP	October 2025
Submit WQM Permit Application for Phase 2 Upgrades to the WWTP	March 2025
PADEP WQM Approval	June 2025
PENNVEST Consultation Meeting	June 2025
PENNVEST Submittal	October 2025
PENNVEST Approval	January 2026
Project Bids Due	May 2026
PENNVEST Closing	July 2026
Project Award and Contracts Signed	August 2026
Construction Commences for Phase 2 Upgrades	October 2026
Construction Status Report for Phase 2 Upgrades	June 2027
Construction Status Report for Phase 2 Upgrades	December 2027
Completion of Phase 2 Upgrades to the WWTP	June 2028
WWTP Permit No. PA0021598 – New Discharge Limits Effective Date	July 1, 2028

*The target completion dates for each milestone are dependent on the completion of the prior milestones which could change as we progress.

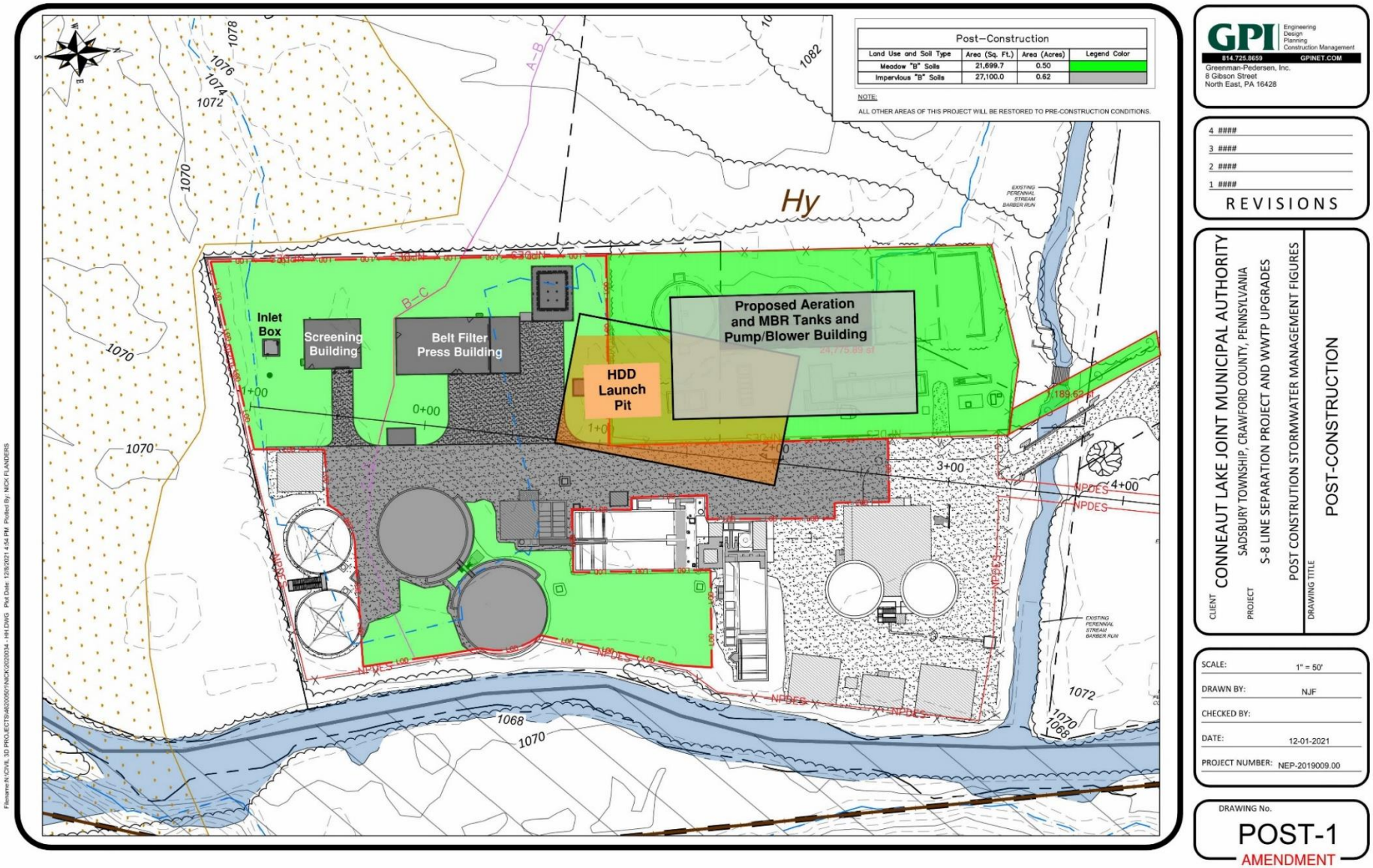
Respectfully Submitted,

Rosewood Tower Consulting

Diane Altland

Diane Altland, P.E.
Owner/ Principal

October 10, 2024



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4 ####
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REVISIONS

CLIENT: CONNEAUT LAKE JOINT MUNICIPAL AUTHORITY
PROJECT: SADSBURY TOWNSHIP, CRAWFORD COUNTY, PENNSYLVANIA
S-8 LINE SEPARATION PROJECT AND WWTP UPGRADES
POST CONSTRUTION STORMWATER MANAGEMENT FIGURES
DRAWING TITLE: POST-CONSTRUCTION

SCALE: 1" = 50'
DRAWN BY: NJF
CHECKED BY:
DATE: 12-01-2021
PROJECT NUMBER: NEP-2019009.00

DRAWING No.
POST-1
AMENDMENT