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March 26, 2025

S. O. No. 495-03

VIA EMAIL ONLY
(martini@ctsapa.us)

Mr. Robert Martini, Operations Supervisor
Center Township Sanitary Authority
224 Center Grange Road
Aliquippa, Pennsylvania 15001

**Subject: 2024 Annual Wasteload Management Report
Center Township Sanitary Authority**

Dear Mr. Martini:

Transmitted herewith is the PaDEP Submission Confirmation and Chapter 94 Report for the subject project. The enclosed are for Authority files.

Should you have any questions, please contact Marie S. Hartman, P.E. directly (Ext. 246).

Sincerely,

Ned Mitrovich, P.E.

Marie S. Hartman, P.E.

NM/MSH:nwg

Attachments

cc/att: Wyatt D. Dishler, LSSE (wdishler@lsse.com)
Monica Langan, LSSE (mlangan@lsse.com)

-
-
- Coraopolis, PA (Headquarters)
 - Aliquippa, Beaver County, PA
 - Greensburg, Westmoreland County, PA
 - Dublin, Franklin County, OH
 - Albion, Erie County, PA
 - Butler, Butler County, PA
 - Clarion, Clarion County, PA
 - Pittsburgh, Allegheny County, PA
 - White Oak, Allegheny County, PA
 - Kittanning, Armstrong County, PA
 - Washington, Washington County, PA

CENTER TOWNSHIP SANITARY AUTHORITY
Beaver County, Pennsylvania

ANNUAL REPORT
Municipal Wasteload Management
(Chapter 94 Report)

OPERATING YEAR 2024

Elkhorn Run Sewage Treatment Plant

NPDES Permit No. PA0037940

MARCH 2025



846 Fourth Avenue, Coraopolis, PA 15108
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**CENTER TOWNSHIP SANITARY AUTHORITY
MUNICIPAL WASTELOAD MANAGEMENT REPORT
OPERATING YEAR 2024**

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**CENTER TOWNSHIP SANITARY AUTHORITY
MUNICIPAL WASTELOAD MANAGEMENT REPORT
OPERATING YEAR 2024**

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CENTER TOWNSHIP SANITARY AUTHORITY MUNICIPAL WASTELOAD MANAGEMENT REPORT OPERATING YEAR 2024

PURPOSE AND SCOPE

This report is submitted to satisfy the requirements of Chapter 94 - Municipal Wasteload Management, of the Pennsylvania Code for National Pollutant Discharge Elimination System (NPDES) Permit No. PA0037940. This report presents the following:

1. Hydraulic loading graph.
2. Organic loading graph.
3. A discussion of the hydraulic and organic loadings and projections methodology.
4. A description of all sewer extensions approved and all sewer extensions constructed in the year reported.
5. A description of the operation and maintenance program for the sewer system including monitoring.
6. A discussion of the condition of the sewer system.
7. A discussion of the condition and capacity of the sewage lift stations within the collection system.
8. A description of industrial waste dischargers.
9. A sludge management inventory report.

Center Township Sanitary Authority (CTSA) owns, operates, and maintains one Sewage Treatment Plant (Elkhorn Run), eleven wastewater pumping stations, and the wastewater collection and conveyance system.

SECTION 1: HYDRAULIC LOADING GRAPH (§ 94.12.(a)(1))

Figure 1 contained in Appendix A presents the hydraulic loading graph illustrating flows as recorded at the Elkhorn Run Sewage Treatment Plant (STP) for the period of time between 2020 and 2024. Figure 1 also presents flow projections for the coming five-year period (2025 through 2029). The data is presented in tabular form appended as Table 1. Section 3 of this report provides discussion of the past and projected future hydraulic loadings. Also shown on Figure 1 is the permitted hydraulic capacity (2.0 mgd).

SECTION 2: ORGANIC LOADING GRAPH (§ 94.12.(a)(2))

Figure 2 contained in Appendix A presents the organic loading tributary to the Elkhorn Run STP for the most recent five-year period (2020 through 2024) and projects organic loading for the coming five-year period (2025 through 2029). Historic loading data is provided in tabular form appended as Table 2. Section 3 of this report discusses past and projected future organic loading. Figure 2 also presents the design influent BOD₅ loading (3,400 lbs/day).

SECTION 3: DISCUSSION OF HISTORIC HYDRAULIC AND ORGANIC LOADINGS AND PROJECTIONS (§ 94.12.(a)(3))

Historic Hydraulic Loading

The annual average flow to the STP during 2024 was 1.118 mgd as shown on Table 1 and Figure 1. The five-year average of the annual average flow (2020 through 2024 period of record) is 1.107 mgd.

The 90-day sustained flow recorded at the STP is computed at 1.553 mgd in 2024, occurring during the months of March, April, and May. The five-year average of the annual 90-day sustained flow rate is computed at 1.541 mgd, and the five-year average of the 90-day sustained hydraulic loading / annual average hydraulic loading is 1.39. During

the most recent five-year period of record, the 90-day sustained recorded flow rates did not exceed the hydraulic design flow capacity of 2.0 mgd. There were no three consecutive months where the monthly average flow exceeded the hydraulic design capacity of the plant. Therefore, based upon reporting criteria as defined by Title 25, Chapter 94.1 of the Pennsylvania Code, the Sewage Treatment Plant was not hydraulically overloaded in 2024.

As required by Chapter 94 regulations, the calibration certificate for the sewage treatment plant flow meter is provided in Appendix B.

Historic Organic Loadings

The annual average loading to the treatment plant in 2024 was computed to be 1,187 lbs BOD₅/day as shown on Table 2 and Figure 2. The 2024 maximum month loading (February) was found to be 1,641 lbs BOD₅/day. The maximum month organic loading was below the design organic loading of 3,400 lbs. BOD₅/day. Therefore, based upon reporting criteria as defined by Title 25, Chapter 94.1 of the Pennsylvania Code, the STP was not organically overloaded in 2024.

Projected Future Hydraulic Loadings

The base datum for hydraulic loading projections is the five-year annual average hydraulic loading of 1.107 mgd. Per PaDEP regulations, 100 gpcd was utilized. Projections of yearly increases are based upon additional EDUs as detailed in Section 4 of this report. The 5-year 90-day sustained hydraulic loading / annual average hydraulic loading (1.39) was used to project maximum flow rates. Table 3 presents a summary of the projected hydraulic loading. As shown on Figure 1, the projected 90-day sustained flow does not exceed the hydraulic design capacity in years 2025 through 2029. No hydraulic overload is projected.

Projected Future Organic Loadings

Projected future organic loadings were computed similarly to the projected hydraulic loadings using a “base datum”. The base datum for the organic loading projections is the 5-year annual average organic loading of 1,034 lbs BOD₅ per day. Projections of yearly increases are based upon additional EDUs as detailed in Section 4 of this report. Per PaDEP regulations, 0.17 lbs BOD₅ per day per person was utilized. Table 4 presents a summary of the projected organic load. Maximum monthly loads were projected based upon a historic ratio of maximum month to annual average of 1.51 derived as shown on Table 2. As shown on Figure 2, the maximum month loading is not projected to exceed the design BOD₅ Loading (3,400 lbs/day) in the coming 5-year period. Therefore, an organic overload is not projected.

SECTION 4: SEWER EXTENSIONS (§ 94.12.(a)(4))

In 2024, 72 taps/EDUs were made according to CTSA records. Appendix C contains a detailed listing of these taps and also a summary of anticipated taps for 2025-2030. The table below summarizes the current status of known developments in the CTSA service area.

Development	Type	Estimated EDUs/Flow	Status / Phase
Heritage Valley	Commercial	22 EDU	Completed 2018
Village at Riverside NVR/Ryan Homes	Residential	79 EDU	Completed 2018-2021
Allegheny Health Network Cancer Center	Commercial	32 EDU	Completed 2018
Shell – Main Plant	Commercial	21,000 gpd	Completed 2018-2022
Shell – Support Buildings	Commercial	7,375 gpd	Completed 2018-2022
Beaver Valley Mall Outparcels	Commercial	6 EDU	Completed 2019
Western PA Surgery Center	Commercial	20 EDU	Completed 2019
Eagles Landing at Mateer Farms	Residential	125 EDU	Completed 2018
Hilton Garden Inn	Commercial	52 EDU	Completed 2018

Development	Type	Estimated EDUs/Flow	Status / Phase
CTWA Temporary Water Plant Sludge Discharge	Commercial	15 EDU	Completed 2018
Primanti's Restaurant	Commercial	7 EDU	Completed 2019
BASF Corporation	Commercial	11 EDU	Completed 2021
GetGo	Commercial	5 EDU	Completed 2021
Firehouse Subs	Commercial	2 EDU	Completed 2023
Chipotle	Commercial	7 EDU	Completed 2023
Planet Fitness	Commercial	5 EDU	Completed 2023
Brodhead Apartments–Building 1	Residential	23 EDU	Completed 2024
Highland Meadows Phase 1	Residential	25 EDU	Completed 2019-2024
Highland Meadows Phase 2	Residential	7 EDU 19 EDU	Completed 2024 Future Construction
Highland Meadows Phase 3	Residential	25 EDU	Future Construction
Lakeview Farms Phase 5	Residential	76 EDU 7 EDU	Completed 2021-2024 Future Construction
Joe Hall Apartments	Residential	42 EDU	Future Construction
Glade Bluffs Apartments	Residential	182 EDU	Planning
Glade Bluffs Phase III	Commercial	50 EDU	Planning
Lincoln Learning Center	Commercial	10 EDU	Planning
Old Glass Dump Property	Commercial	10 EDU	Planning
Vacant 3-Acre Parcel	Commercial	5 EDU	Planning

As indicated above, Shell constructed an ethane cracker plant in the service area. Development has been spurred by the Shell plant and growth is expected to continue. It is not possible to make accurate predictions of the amount and location of development. For purposes of Chapter 94 reporting, the table below provides estimates for the coming five-year period based upon known information and historic data.

Year	Number of EDUs	Notes/Explanation
2016 (Actual)	141	Taps Purchased
2017 (Actual)	284	Taps Purchased (includes Shell)
2018 (Actual)	258	Taps Purchased
2019 (Actual)	76	Taps Purchased
2020 (Actual)	39	Taps Purchased
2021 (Actual)	51	Taps Purchased

2022 (Actual)	26	Taps Purchased
2023 (Actual)	63	Taps Purchased
2024 (Actual)	72	Taps Purchased
2025 (Estimated)	32	Refer to Sewer Tap Summary Table (Appendix C)
2026 (Estimated)	30	Refer to Sewer Tap Summary Table (Appendix C)
2027 (Estimated)	247	Refer to Sewer Tap Summary Table (Appendix C)
2028 (Estimated)	69	Refer to Sewer Tap Summary Table (Appendix C)
2029 (Estimated)	35	Refer to Sewer Tap Summary Table (Appendix C)
2030 (Estimated)	27	Refer to Sewer Tap Summary Table (Appendix C)

No sanitary sewer line extensions were constructed in 2024.

SECTION 5: SEWER SYSTEM MONITORING, MAINTENANCE, REPAIR AND REHABILITATION (§ 94.12.(a)(5))

The Center Township Sanitary Authority (CTSA) owns, operates and maintains the sewage collection, conveyance, pumping and treatment facilities within its service area. The CTSA system includes separate sanitary sewers, eleven lift stations, and one sewage treatment plant. Responsibilities include the administration, operation, maintenance, and monitoring of the plant, pump stations, and sewer system.

CTSA maintains a staff of employees to perform maintenance and operate the sewers, pumping stations and wastewater treatment facility. Part-time and seasonal personnel are hired as needed. The Operations Supervisor, under the direction of the Authority Board of Directors, is responsible for the operation and administration of the sewer system, pumping stations and wastewater treatment facility. Two full-time employees are responsible for the administrative duties. The operations crew includes:

- Robert J. Martini, Operations Supervisor, Certification Number: S16819
- Lance Elias, Lab Supervisor/Lab Technician, Certification Number: S16821
- Kirk Johns, Chief Operator/Laborer, Certification Number: S18605
- Walt Reynolds, Laborer

- Richard Nicasro, Operator, Certification Number: S20891

Sampling is conducted by CTSA personnel. The 2024 Lab Equipment Calibration Report is provided in Appendix B. As of July 2018, all samples are analyzed at the CTSA Certified Laboratory onsite (Lab ID # 04-03013). Required monitoring parameters per the NPDES Permit are presented in the table below.

PARAMETER	FREQUENCY	LOCATION	SAMPLE TYPE
Total Flow	Continuous	Effluent	Recorded
BOD₅ / CBOD₅	Twice per week	Influent and Effluent	8-hour composite
Suspended Solids	Twice per week	Influent and Effluent	8-hour composite
Fecal Coliform	Twice per week	Effluent	Grab
pH	Once per day	Effluent	Grab
Dissolved Oxygen	Once per day	Effluent	Grab
Total Residual Chlorine	Once per day	Effluent	Grab
Total Kjeldahl Nitrogen	Quarterly	Effluent	8-hour composite
Ammonia (as Nitrogen)	Twice per week	Effluent	8-hour composite
Total Phosphorus	Quarterly	Effluent	8-hour composite

The current NPDES Permit became effective on April 1, 2017 and expired on March 31, 2022. The Draft NPDES Permit was received on February 9, 2023. CTSA submitted comments to PaDEP regarding the Draft NPDES Permit on March 22, 2023; CTSA is awaiting issuance of the NPDES Permit by PaDEP.

The following provides a summary of repair and maintenance performed within the collection and conveyance system in past years. Appendix D contains a more detailed listing of repairs and maintenance performed in 2024. Appendix D also includes a listing of preventative maintenance performed at each lift station.

CTSA utilized outside contractors for heavy / specialty maintenance and repair of the gravity sewers, force mains and lift stations, including:

- Penn Power

- Stefanik's Next Generation Contracting Company, Inc.
- PumpMan
- VAG Industries, LLC
- Halama Brothers Electric, Inc.
- Lanco Controls Group, LLC
- Umbrella Roofing

Equipment owned by CTSA for operation and maintenance of the system includes a skid loader, dump truck, tractor, two utility trucks, two pick-up trucks, two mowers, tow trailer, safety equipment, push camera, and various hand tools and equipment.

In 2014, approximately 1,180 feet of sewer main was inspected and 8,000 feet of sewer main was cleaned. The Authority made an emergency repair of an 8-inch sewer line located off of Woods Avenue and 18-inch sewer line located along Elkhorn Run. During the repair of the sewer off of Woods Avenue, the Authority televised sewer runs upstream of the repair and confirmed the pipes need replaced. The construction project consisted of the replacement (by pipe bursting method) of two 8-inch sewer runs totaling approximately 520 LF. 58 manhole inspections were completed and 5 repairs were made.

In 2015, approximately 2,265 feet of sewer main was inspected and 14,400 feet of sewer main was cleaned. 404 feet of service lateral was inspected and 6,400 feet of sewer was smoke tested. The Authority replaced approximately 570 feet of 8-inch sewer main. Three manholes and reestablished service connection along Woods Avenue. Forty-two (42) manhole inspections were completed and five repairs were made.

In 2016, approximately 4,000 feet of sewer was televised and approximately 12,000 feet of sewer was cleaned in 2016. Construction was completed on the Moon Run Trunk Sewer Replacement project in 2016. The project involved replacement of approximately 1,100 LF of 8-inch and 15-inch sewer. Approximately 960 LF of sewer main was lined on Bainbridge Drive and 120 LF of sewer main was lined on Shadyside Drive. Approximately 215 LF of 10-inch sewer was replaced in the vicinity of the Community

College of Beaver County during the summer of 2016. A program was initiated in 2016 to prepare a Geographic Information System (GIS) for mapping and management of the sewer system over a three-year period. This resulted in approximately 50 manholes being located that were previously unable to be located. Three manholes were rehabilitated on Chapel Road. The pumps, controls and generator were replaced at the New College Lift Station. Increasing its capacity to 2,000 gpm for the Shell Project.

In 2017, approximately 13,000 feet of sewer was televised and approximately 8,100 feet of sewer was cleaned. Approximately 75 LF of sewer was replaced and approximately 1,875 of sewer was CIPP lined. Additionally, 14 manholes were rehabilitated. Approximately 1,900 LF of sewer was rehabilitated via pipe bursting on Woods Avenue and Wilhelm Drive.

In 2018, approximately 15,250 feet of sewer was televised and approximately 16,975 feet of sewer was cleaned. Additionally, one lamp hole was replaced. A nighttime flow isolation study was performed on the Sylvan Crest area tributary to the Markey's Run Lift Station.

In 2019, approximately 2,500 feet of sewer line was televised and approximately 14,450 feet of sewer line was cleaned. Approximately 225 feet of 6-inch sewer line was replaced; 40 feet of 8-inch sewer line was replaced by conventional excavation and 193 feet of 8-inch sewer line was replaced by pipe bursting method; and 807 feet of 8-inch sewer line was lined with a cured-in-place liner.

In 2020, approximately 12,200 feet of sewer line was televised and approximately 3,100 feet of sewer line was cleaned. Approximately 1,300 feet of 12-inch sewer line and 70 feet of 10-inch sewer line were replaced by conventional excavation. Additionally, a forcemain was repaired at Gardenview Estates; 4,556 linear feet of 8-inch diameter sanitary sewer line and 31 sanitary manholes were installed within the Lakeview Farms Phase 5 development; 424 linear feet of 8-inch diameter sanitary sewer line and one

sanitary manhole were installed to serve Children’s Choice Daycare; and a private wastewater pumping station and 953 linear feet of sanitary forcemain were constructed to serve BASF Corporation.

In 2021, approximately 4,865 feet of sewer line was televised and approximately 10,400 feet of sewer line was cleaned. Approximately 3,826 feet of 10-inch sewer line was replaced with 15-inch PVC and/or 16-inch HDPE by conventional excavation and pipe burst along Upper Moon Run Interceptor. Two clarifiers at the sanitary sewer plant were replaced and the remaining two clarifiers were rehabilitated.

In 2022, approximately 1,750 feet of sewer line was televised and approximately 11,450 feet of sewer line was cleaned. Construction was completed on the Upper Moon Run Interceptor Upgrade including 3,826 feet of 15” PVC. Design of the Chapel Road Interceptor Upgrade was completed; the expected construction start date is April 2023. This project includes approximately 4,000 linear feet of 10-inch sewer line to be upsized to 15-inch PVC and/or 16-inch DIP.

In 2023, approximately 8,883 feet of sewer line was televised and approximately 14,083 feet of sewer line was cleaned. Construction was completed on the Chapel Road Interceptor Upgrade including 96 feet of 8” PVC, 42 feet of 12” SRJ DIP, 3,249 feet of 15” PVC, 207 feet of 16” SRJ DIP and 28 sanitary manholes. Influent and Effluent flow-proportioned automatic samplers were installed at the Elkhorn Run Sewage Treatment Plant to comply with the forthcoming NPDES Permit. Four (4) 1,200 GPM Return Activated Sludge Pumps were replaced with four (4) 1,700 GPM Return Activated Sludge Pumps to comply with the NPDES Permit to be issued by PaDEP increasing the permitted hydraulic loading from 2.0 MGD to 2.5 MGD.

In 2024, approximately 2,285 feet of sewer line was televised and approximately 10,850 feet of sewer line was cleaned.

Flow monitoring and sewer system modeling were conducted in 2017 in response to potential development interest, particularly in the vicinity of the Beaver Valley Mall. As a result of the information provided by this study, the below listed capital improvements are recommended to address potential hydraulic capacity needs resulting from proposed future development.

- Upgrade Markey’s Run Interceptor Sewer (Completed 2019)
- Upgrade Markey’s Run Lift Station (Completed 2019)
- Upgrade a portion of the Upper Moon Run Interceptor Sewer Line (Completed in 2021)
- Perform a rerating study at the Elkhorn Run Sewage Treatment Plant to pursue additional available hydraulic capacity. (Completed in 2021)
- Upgrade a portion of the Chapel Road Interceptor Sewer Line (Completed in 2023)
- Upgrade a portion of the Moon Run Interceptor Sewer Line (Design / Permitting)

SECTION 6: CONDITION OF THE SEWER SYSTEM (§ 94.13.(a)(6))

Center Township is divided into four drainage areas: Elkhorn Run, Moon Run, Markey’s Run and Raccoon Creek. Construction of the sewer system began in January 1961 and additions to the sewer system were constructed in 1972-1973. Later, sewer extensions were constructed in the Todd Lane and Stobo areas. Most of the development has occurred in the Elkhorn Run and Moon Run drainage areas. The Elkhorn Run area is served by approximately 43 miles of sanitary sewers and six sewage pumping stations. The Moon Run area is served by approximately 45 miles of sanitary sewers and three sewage pumping stations. The Markey’s Run area is served by approximately 7.5 miles of sanitary sewers and two sewage pumping stations.

SECTION 7: LIFT STATIONS (§ 94.12.(a)(7))

Eleven sewage lift stations receive and convey wastewater flow within the CTSA system to the Elkhorn Run Sewage Treatment Plant. A summary of the lift station operating data is provided on Table 5 included in Appendix A.

SECTION 8: INDUSTRIAL WASTE DISCHARGES (§ 94.12.(a)(8))

Presently, there are no industrial dischargers to the sewage system. The Authority does not have ordinances or regulations controlling industrial discharge to the system as they are currently not necessary.

During 2019, the Center Township Sanitary Authority accepted wastewater used for hydrostatic testing of water storage tanks at the Shell ethane cracker plant. A summary of the volume of hydrostatic testing wastewater is detailed below:

Month	Volume (Gallons)
May, 2019	150,000
June, 2019	500,000
July, 2019	900,000
August, 2019	2,000,000
September, 2019	1,450,000
October, 2019	500,000
November, 2019	710,000
Total	6,210,000

SECTION 9: SLUDGE MANAGEMENT INVENTORY

Aerobically digested sewage sludge is dewatered on site using a belt filter press. Dewatered sludge is disposed at the Joseph J. Brunner Landfill. According to Discharge Monitoring Reports completed by CTSA in 2024, approximately 110 dry tons of dewatered sludge was disposed. Appended to the report is a copy of the sludge

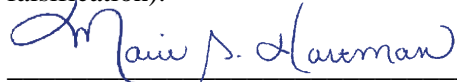
management inventory sludge generation calculation for the 2024 calendar year and a summary table. The calculation represents the mass balance of influent vs. effluent solids. It is noted that the actual dry tons of sludge leaving the plant for calendar year 2024 is less than 15% of the projected amount of sludge calculated by the sludge generation calculator. Actual sludge produced in 2024 was 110 dry tons; theoretical sludge production for 2024 is 129 dry tons.

SECTION 10: SIGNATURES

To comply with the requirements of the Chapter 94 Municipal Wasteload Management Program, the following signatures are provided.

Preparer:

I certify under penalty of law that this document and all attachments were prepared by me or otherwise under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).



Marie S. Hartman, P.E.
LSSE Civil Engineers and Surveyors

3/25/2025

Date

Permittee:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).



Robert Martini, Operations Supervisor
Center Township Sanitary Authority

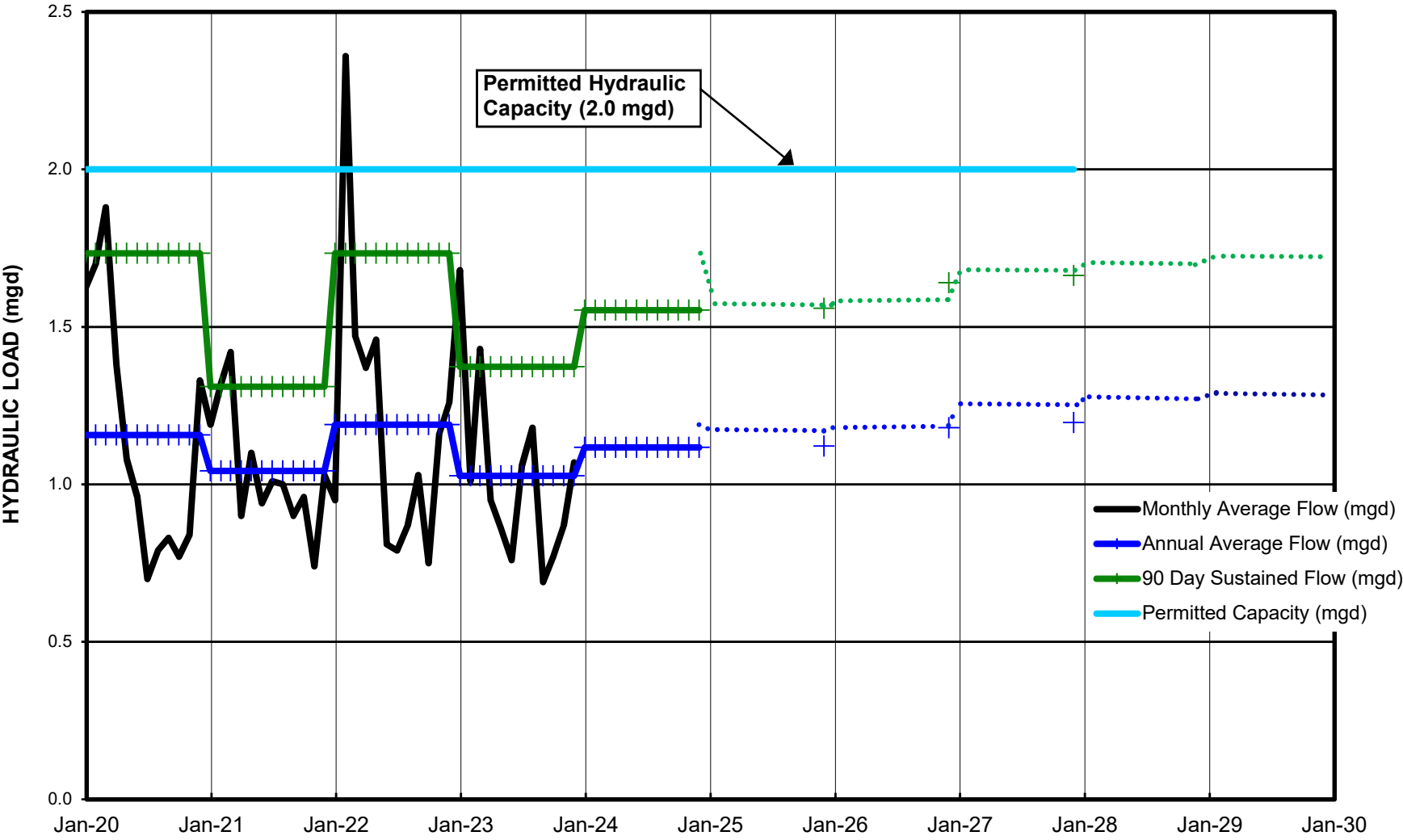
3/25/2025

Date

APPENDIX A

TABLES AND FIGURES

Sewage Treatment Plant Hydraulic Loading Graph
Center Township Sanitary Authority, Beaver County, PA
Figure 1



Sewage Treatment Plant Organic Loading Graph
Center Township Sanitary Authority, Beaver County, PA
Figure 2

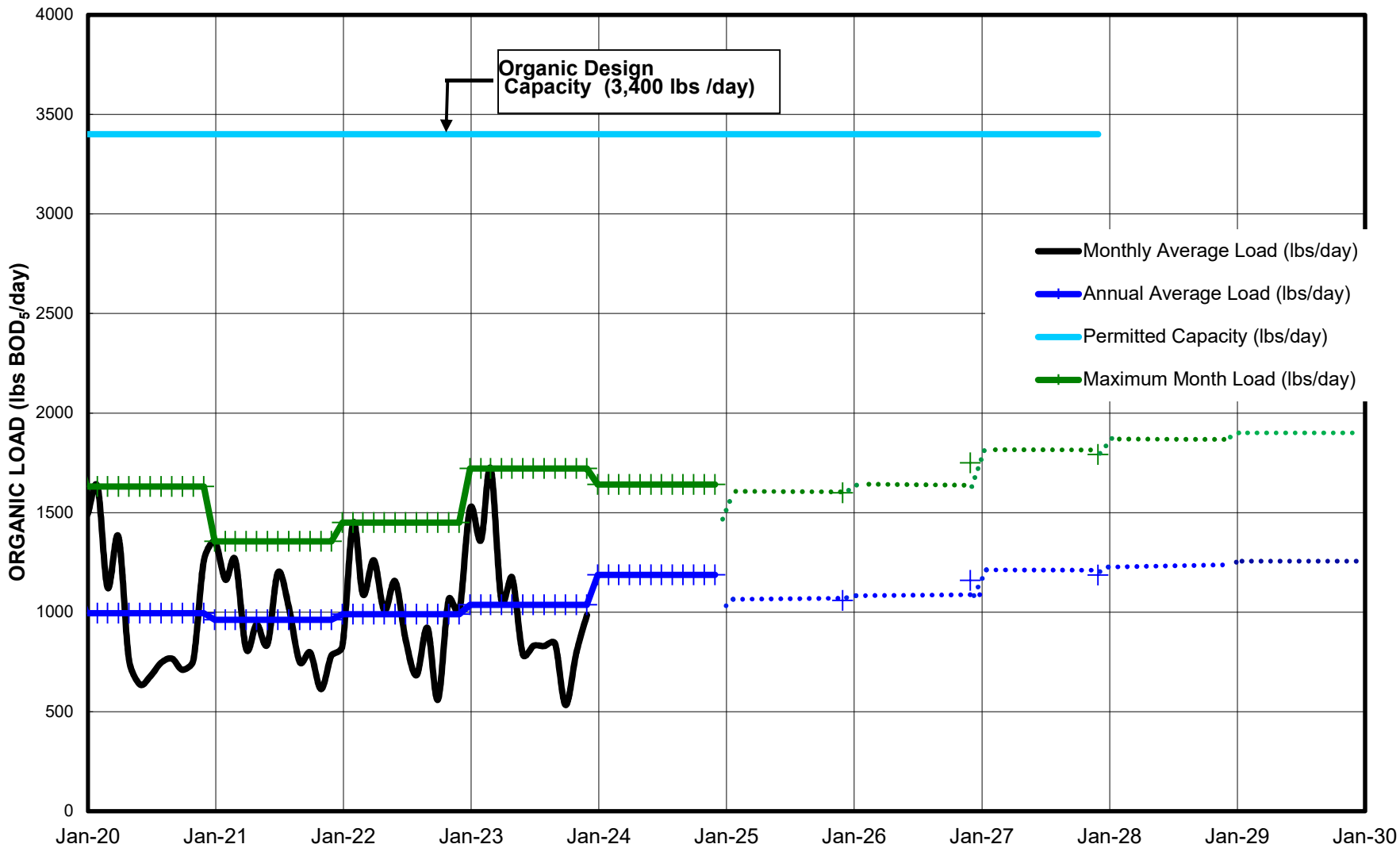


TABLE 1
CENTER TOWNSHIP SANITARY AUTHORITY
ELKHORN RUN SEWAGE TREATMENT PLANT
HYDRAULIC LOADING DATA SUMMARY
JANUARY 2020 THROUGH DECEMBER 2024

DATE	2020		2021		2022		2023		2024	
	January	1.620	*	1.190	*	0.950		1.680	*	1.800
February	1.700	*	1.320	*	2.360	*	1.010	*	1.130	
March	1.880	*	1.420	*	1.470	*	1.430	*	1.530	*
April	1.380		0.900		1.370	*	0.950		1.990	*
May	1.080		1.100		1.460		0.860		1.140	*
June	0.960		0.940		0.810		0.760		0.770	
July	0.700		1.010		0.790		1.060		0.710	
August	0.790		1.000		0.870		1.180		1.020	
September	0.830		0.900		1.030		0.690		0.710	
October	0.770		0.960		0.750		0.770		0.680	
November	0.840		0.740		1.160		0.870		0.880	
December	1.330		1.030		1.260		1.070		1.050	
Annual Average (mgd)	1.157		1.043		1.190		1.028		1.118	
90 Day Sustained Flow Rate (mgd)	1.733		1.310		1.733		1.373		1.553	
Ratio (90-Day Sustained to Annual Average)	1.50		1.26		1.46		1.34		1.39	
5-Year 90-Day Sustained/Annual Average Ratio	1.39									
5-Year Annual Average Hydraulic Loading (mgd)	1.107									
5-Year 90-Day Sustained Hydraulic Loading (mgd)	1.541									

*Maximum 3-month flow period.

TABLE 2
CENTER TOWNSHIP SANITARY AUTHORITY
ELKHORN RUN SEWAGE TREATMENT PLANT
ORGANIC LOADING DATA SUMMARY
JANUARY 2020 THROUGH DECEMBER 2024

DATE	2020	2021	2022	2023	2024
January	1,482	1,356	830	1,521	1,538
February	1,631	1,163	1,450	1,361	1,641
March	1,124	1,262	1,089	1,721	1,124
April	1,379	815	1,261	1,055	1,627
May	763	938	1,008	1,175	1,016
June	637	839	1,155	787	643
July	677	1,200	861	831	1,039
August	746	1,024	683	830	1,285
September	767	750	921	842	1,024
October	711	797	560	534	828
November	758	614	1,064	798	1,041
December	1,258	784	999	986	1,444
Annual Average (LBS BOD₅/Day)	994	962	990	1,037	1,187
Maximum Month (LBS BOD₅/Day)	1,631	1,356	1,450	1,721	1,641
Ratio (Maximum Month to Annual Average)	1.64	1.41	1.46	1.66	1.38
5-Year Maximum Month/Annual Ratio Average	1.51				
5-Year Annual Average Organic Loading (LBS BOD₅/Day)	1,034				

**TABLE 3
CENTER TOWNSHIP SANITARY AUTHORITY
5 YEAR HYDRAULIC LOADING PROJECTION**

PROJECTED HYDRAULIC LOAD						
YEAR	ANNUAL AVERAGE FLOW (mgd)			90 DAY SUSTAINED FLOW (mgd)		
	BASE FLOW	ADDITIONAL FLOW ⁽²⁾	TOTAL	AVERAGE	RATIO ⁽³⁾	FLOW
2025 ⁽¹⁾	1.107	0.0076	1.114	1.114	1.39	1.549
2026	1.114	0.0071	1.122	1.122	1.39	1.559
2027	1.122	0.0585	1.180	1.180	1.39	1.640
2028	1.180	0.0164	1.196	1.196	1.39	1.663
2029	1.196	0.0083	1.205	1.205	1.39	1.675

⁽¹⁾ 2025 Base Flow utilizes the 5-year Annual Average Hydraulic Loading (2020 to 2024).

⁽²⁾ Additional flow assumes 2.37 pph (2020-2024 Center Township US Census Data), 100 gpcd, and the annual additional EDUs discussed in the report (Appendix C).

⁽³⁾ 5-Year 90-Day Sustained /Annual Average Ratio.

**TABLE 4
CENTER TOWNSHIP SANITARY AUTHORITY
5 YEAR ORGANIC LOADING PROJECTION**

YEAR	PROJECTED ORGANIC LOAD					
	ANNUAL AVERAGE LOAD (#/day)			MAXIMUM MONTH LOAD (#/day)		
	BASE LOADING	ADDITIONAL LOADING ⁽²⁾	TOTAL	ANNUAL AVERAGE	RATIO ⁽³⁾	TOTAL
2024 ⁽¹⁾	1,034	13	1,047	1,047	1.51	1,581
2025	1,047	12	1,059	1,059	1.51	1,599
2026	1,059	100	1,159	1,159	1.51	1,749
2027	1,159	28	1,186	1,186	1.51	1,791
2028	1,186	14	1,200	1,200	1.51	1,813

⁽¹⁾ 2024 Base Organic Loading utilizes the 5-year Annual Average Organic Loading (2020 to 202

⁽²⁾ Additional organic loading assumes 2.37 pph (2020 - 2024 Center Township US Census Data), 0.17 lb/cap/day, and the annual additional EDUs discussed in the report (Appendix C).

⁽³⁾ 5-Year Maximum Month / Annual Ratio Average.

TABLE 5
Center Township Sanitary Authority
2024 Chapter 94 Report

Lift Station Data ⁽¹⁾

	New College ⁽³⁾	Logstown Run	Stobo	Markey's Run	Shirley Drive	Cherrywood (Walnut Grove)	Spruce Drive	Bunker Hill (Biggins)	Krisana Woods	Franklin (SR18)	Stoney Ridge
Pumping Capacity (gpm)	2,000	300	80	400	80	80	100	80	80	312	80
Pumping Capacity (gpd)	2,880,000	432,000	115,200	576,000	115,200	115,200	144,000	115,200	115,200	449,280	115,200
January	934,548	184,181	9,074	72,077	960	39,871	29,052	5,884	7,757	18,962	10,529
February	703,607	85,950	6,171	56,400	840	25,029	30,664	3,429	5,211	9,561	11,571
March	910,452	122,923	7,324	63,406	759	28,754	35,865	3,608	6,844	14,614	10,281
April	1,209,900	110,700	25,616	96,320	1,280	45,424	46,740	5,392	9,936	18,034	13,152
May	642,774	92,206	6,674	54,658	728	29,837	40,839	3,221	4,397	15,701	13,037
June	986,700	56,460	5,888	48,800	640	20,128	46,240	2,864	3,584	17,722	12,624
July	993,484	49,297	4,614	45,832	650	20,052	24,406	2,710	3,375	20,592	11,179
August	1,174,065	69,039	7,339	53,110	774	24,914	27,232	9,615	4,723	21,437	13,037
September	784,200	53,160	4,480	46,480	704	18,960	23,660	2,144	2,944	10,358	9,776
October	469,161	51,213	3,948	43,123	712	18,426	23,265	2,245	3,577	9,662	15,128
November	570,600	67,200	4,576	50,720	736	20,432	21,780	3,088	3,248	8,674	31,072
December	662,516	95,110	4,862	53,806	728	24,000	20,652	4,057	3,701	9,602	22,963
Annual Average	836,834	86,453	7,547	57,061	793	26,319	30,866	4,021	4,941	14,576	14,529
Maximum Month	1,209,900	184,181	25,616	96,320	1,280	45,424	46,740	9,615	9,936	21,437	31,072
⁽²⁾	1,224,594	187,864	26,128	98,246	1,306	46,332	47,675	9,808	10,135	21,866	31,693

⁽¹⁾ Flow (gpd) calculated from total hours pumped as reported by operations staff and pumping capacity of each pump.

⁽²⁾ Flow projections based on "Added Flow" from Table 3 for New College Lift Station and the addition of 1% to the maximum month flow base flow per year for each of the remaining 9 lift stations.

⁽³⁾ New College Pump Station flow (gpd) calculated from total hours pumped as reported by operations staff and typical pump operation point of 1500 gpm.

APPENDIX B

CALIBRATION CERTIFICATE

Customer Service Report
Total Instrument Maintenance
 423 Stoneybrook Drive • Elizabeth, PA 15037
 412-384-3818

1/2024
TIM

INVOICE # T.I.M.-3292

<p align="center">BILL TO ADDRESS</p> <p>C.T.S.A. 224 Ctr. Grange Rd. Aliquippa, Pa 15001</p>	<p align="center">SITE ADDRESS</p> <p>W.W.T.P.</p> <p>PHONE # _____ / _____</p>
--	--

REQUESTED SERVICE: Flow meter calibrations

PO # / SO # _____ MODEL # <u>SDXm1000</u> SERIAL # <u>0500W00243</u>	OTHER _____ _____ _____
--	-------------------------------

DESCRIPTION / CAUSE OF PROBLEM:	QTY	PART/PRODUCT NUMBER	AMOUNT
<u>See above.</u>			
CORRECTIVE ACTION / WORK PERFORMED:			
<u>Cleaned, checked & calibrated the Plant Influent & Effluent Ultrasonic flow x mtrs. The Influent, Waste & Return flow recorders & totalizers. The Return, Waste, Return Sludge #1 & #2. Checked outputs & indications at 0-25-50-75-100%. Made slight zero & span adjustments on the three flow recorders.</u>			
	[A] PARTS TOTAL		➤
	LABOR (REG)	HRS @ /HR	
	LABOR (O.T.)	HRS @ /HR	
	TRAVEL	HRS @ /HR	
	[B] LABOR TOTAL		➤ \$ 680 00
	EXPENSES (TOLLS, ROOMS, MEALS)		
	MILEAGE	MILES @ /MILE	
	AIR AND/OR CAR RENTAL		
	[C] EXPENSE TOTAL		➤
	[D] SHIPPING CHARGES		➤
	TOTAL [A] + [B] + [C] + [D]		➤ 680 00
FUTURE ACTION/WORK REQUIRED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> % COMP <u>100</u>	C. A. CODE	[]	
	SALES TAX OR TAX ID #	[]	
	COUNTY TAX OR TAX ID #	[]	
TERMS: NET 30 DAYS	FINAL AMOUNT DUE		➤ \$ 680 00

I HEREBY ACCEPT AND APPROVE ALL WORK AS DEFINED ABOVE.

<u>Prybylski</u> TECH (PRINT)	<u>Kim Ruffalo</u> TECH (SIGNATURE)	<u>2/1/24</u> DATE	<u>Kirk Johns</u> CUSTOMER (PRINT)	<u>2/1/24</u> DATE
----------------------------------	--	-----------------------	---------------------------------------	-----------------------

Invoice



Total SP LLC

*Laboratory & Pharmacy Balances & Scales
Service, Sales, Calibration & Repair*
22 Crest Drive Monongahela PA 15063-1081
Phone (724) 825-6872 or email: totalsp22@gmail.com

CALIBRATION REPORT

DATE OF SERVICE: October 8, 2024
NEXT CALIBRATION DUE DATE: October 31, 2025

CENTER TOWNSHIP
ELKHORN TREATMENT PLANT
ATTN: LANCE ELIAS
996 BISKUP LANE
MONACA PA 15061

TEMPERATURE: 22.9 °C
RELATIVE HUMIDITY: 52.7 %

Nr.	ID	Model Nr	Serial Nr.	Location	Cal. Procedure	Service			In Tolerance or Not / Serviced
						Reading	Total SP Reading	Correction Factor	
1	THERMO INCUBATOR THERMOMETER	ERTCO 2020	268394	LAB	TO-02	20.5 °C	20.0 °C	-0.5 °C	IN TOLERANCE
2	HEATING BLOCK THERMOMETER	DRB200	11060C0159	LAB	TO-02	LEFT 117 °C	120.1 °C	+ 3.1 °C	IN TOLERANCE
						RIGHT 117 °C	120.3 °C	+ 3.3 °C	
						LEFT 144 °C	149.8 °C	+ 5.8 °C	
						RIGHT 144 °C	149.9 °C	+ 5.9 °C	
3	HEATING BLOCK THERMOMETER	DR104115	4133	LAB	TO-02	NOT SERVICED			
4	MILLIPORE INCUBATOR THERMOMETER	XX6310000 XX63200045	1921	LAB	TO-02	NOT SERVICED - REMOVED FROM SERVICE			
5	KENMORE REFRIGERATOR THERMOMETER	ERTCO	23195	LAB	TO-02	4.0 °C	3.9 °C	-0.1 °C	IN TOLERANCE
6	PRECISION OVEN THERMOMETER	ERTCO ECONOMY	68N010556 8221	LAB	TO-02	104 °C	103.7 °C	-0.3 °C	IN TOLERANCE
7	FISHER FURNACE THERMOMETER	126	96N10003	LAB	TO-02	550 °C	570.9 °C	+ 20.9 °C	IN TOLERANCE
8	VWR THERMOMETER		201824	LAB	TO-02	22 °C	22.0 °C	± 0.0 °C	IN TOLERANCE

CALIBRATION INSTRUMENT(S): FLUKE ASSETS #53760403MV, SOP #TO-02. CALIBRATION INFORMATION: CALIBRATED 29 DECEMBER 2023. EXPIRES 29 DECEMBER 2024. CERTIFICATE #678208. CALIBRATION PERFORMED IS TO THE MANUFACTURERS SPECIFICATIONS FOLLOWING DOCUMENTED PROCEDURE, USING N.I.S.T. TRACEABLE EQUIPMENT IN ACCORDANCE WITH ANSI/ISO Z 540-1-1994, MIL STANDARDS 45662A AND ISO 10012-1. COLLECTIVE UNCERTAINTY OF THE CALIBRATION PROCEDURES ARE DECLARED AT A 95% CONFIDENCE LEVEL. UNCERTAINTY RATIO IS NOMINALLY FOUR TO ONE UNLESS OTHERWISE NOTED. TOTAL SP LLC WILL NOT BE HELD RESPONSIBLE FOR DAMAGES RESULTING FROM THE USE OF THIS INSTRUMENT.

Marian E Brna, Pres.

October 9, 2024
Date

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◇ NIST Traceable Weights Certification ◇ Antistatic Products & Accessories ◇



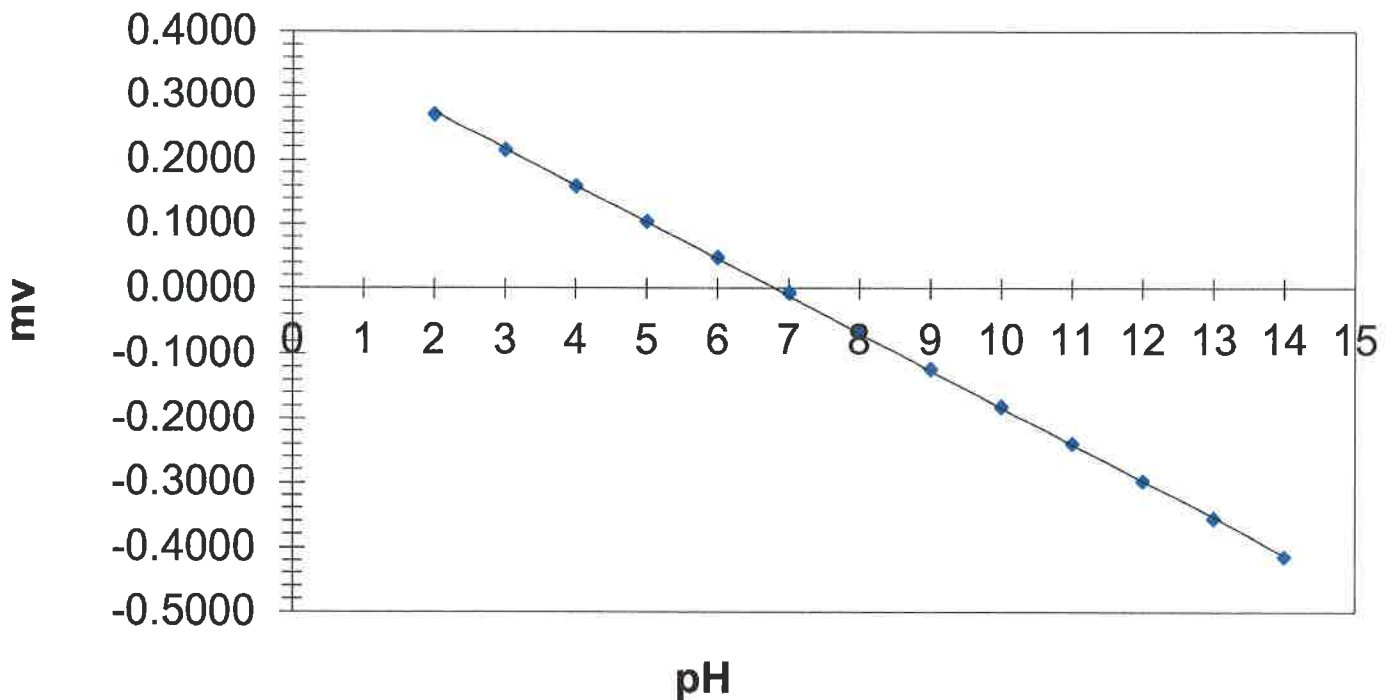
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Laboratory & Pharmacy Balances & Scales
Service, Sales, Calibration & Repair
 22 Crest Drive Monongahela PA 15063-1081
 Phone (724) 825-6872 or email:
 totalsp22@gmail.com

CALIBRATION REPORT

DATE OF SERVICE: October 8, 2024
NEXT CALIBRATION DUE DATE: October 31, 2025

CENTER TOWNSHIP
 ELKHORN TREATMENT PLANT
 ATTN: LANCE ELIAS
 996 BISKUP LANE
 MONACA PA 15061

CENTER TOWNSHIP
 ELKHORN TREATMENT PLANT
 ORION VERASTAR V00938
 pH Meter Calibration
 10/08/2024



ZERO CROSSING = 6.81

CALIBRATION INSTRUMENT(S): REED R5800 ASSET #201090017726, SOP #PH-01, CALIBRATION INFORMATION: CALIBRATED 29 DECEMBER 2023, EXPIRES 29 DECEMBER 2024, CERTIFICATE #769995. CALIBRATION PERFORMED IS TO THE MANUFACTURERS SPECIFICATIONS FOLLOWING DOCUMENTED PROCEDURE, USING N.I.S.T. TRACEABLE EQUIPMENT IN ACCORDANCE WITH ANSI-NCSL Z 540-1-1994, MIL STANDARDS 45662A AND ISO 10012-1. COLLECTIVE UNCERTAINTY OF THE CALIBRATION PROCEDURES ARE DECLARED AT A 95% CONFIDENCE LEVEL. UNCERTAINTY RATIO IS NOMINALLY FOUR TO ONE UNLESS OTHERWISE NOTED. TOTAL SP LLC WILL NOT BE HELD RESPONSIBLE FOR DAMAGES RESULTING FROM THE USE OF THIS INSTRUMENT.

Marian E Brna

Marian E Brna, Pres.

October 9, 2024

Date

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22 Crest Drive Monongahela PA 15063-1081

Phone (724) 825-6872 or email: totalsp22@gmail.com

CALIBRATION REPORT

DATE OF SERVICE: **October 8, 2024**

NEXT CALIBRATION DUE DATE: **October 31, 2025**

CENTER TOWNSHIP
ELKHORN TREATMENT PLANT
ATTN: LANCE ELIAS
996 BISKUP LANE
MONACA PA 15061

TEMPERATURE: 22.9 °C
RELATIVE HUMIDITY: 52.7 %

Nr.	ID	Model	Serial Nr	Set Point	Total SP Reading	Standard Deviation	% Standard Deviation	In Tolerance or Not / Serviced
1	HACH SPECTROPHOTOMETER	DR3900	1720127					
	Absorbance Check			546.1 nm	0.528 abs	0.000	0.05 %	IN TOLERANCE
	Stray Light Check			340 nm	1.940 abs	0.001	0.04 %	IN TOLERANCE
	Wavelength Check			807 nm	807.3 nm	0.212	0.03 %	IN TOLERANCE

CALIBRATION INSTRUMENT(S): AZZOTA FILTER SET Q808. CALIBRATION INFORMATION: CALIBRATED 20 OCTOBER 2023. CERTIFICATE #A21121-1-06. CALIBRATION PERFORMED IS TO THE MANUFACTURERS SPECIFICATIONS FOLLOWING DOCUMENTED PROCEDURE. USING N.I.S.T. TRACEABLE EQUIPMENT IN ACCORDANCE WITH ANS-HNCSL Z 540-1-1994, MIL STANDARDS 45662A AND ISO 10012-1. COLLECTIVE UNCERTAINTY OF THE CALIBRATION PROCEDURES ARE DECLARED AT A 95% CONFIDENCE LEVEL. UNCERTAINTY RATIO IS NOMINALLY FOUR TO ONE UNLESS OTHERWISE NOTED. TOTAL SP LLC WILL NOT BE HELD RESPONSIBLE FOR DAMAGES RESULTING FROM THE USE OF THIS INSTRUMENT.


Marian E Brna, Pres.

October 9, 2024
Date

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 totalsp22@gmail.com

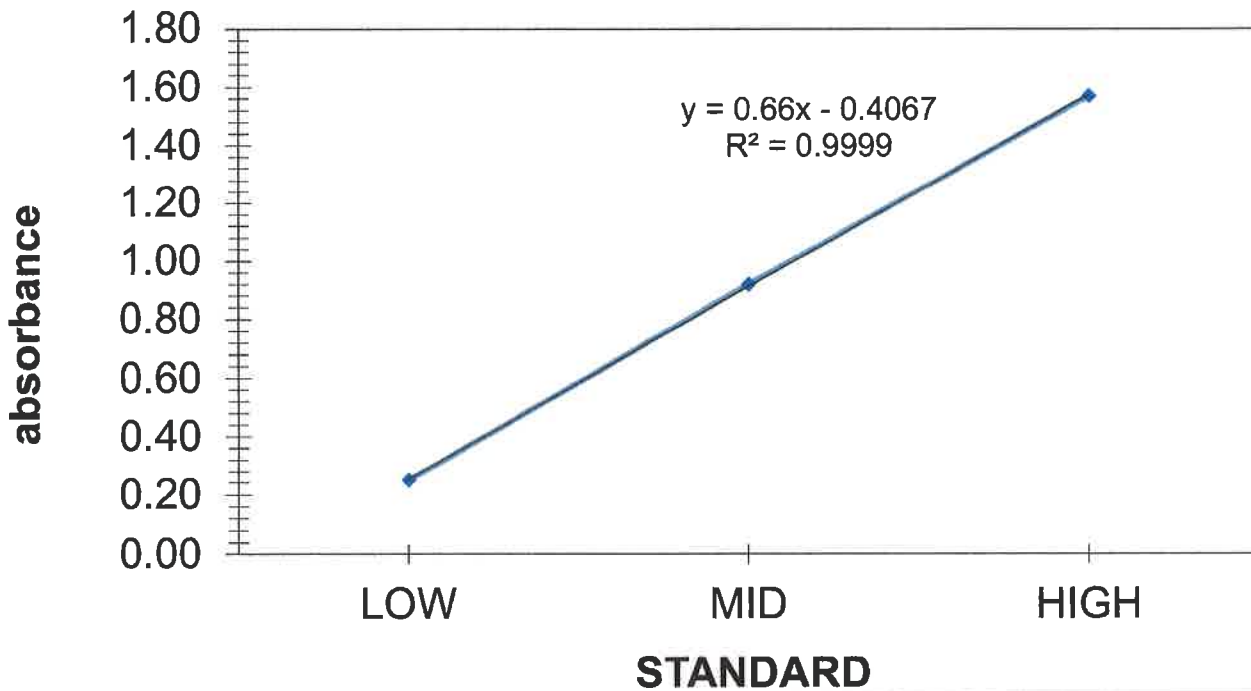
CALIBRATION REPORT

DATE OF SERVICE: October 8, 2024
NEXT CALIBRATION DUE DATE: October 31, 2025

CENTER TOWNSHIP
 ELKHORN TREATMENT PLANT
 ATTN: LANCE ELIAS
 996 BISKUP LANE
 MONACA PA 15061

TEMPERATURE: 22.9 °C
 RELATIVE HUMIDITY: 52.7 %

CENTER TOWNSHIP
 ELKHORN TREATMENT PLANT
 HACH DR3900
 Spectrophotometer Calibration
 10/08/2024



SLOPE = 0.9999

CALIBRATION INSTRUMENT(S): HACH STANDARDS KIT #2635300, CALIBRATION INFORMATION: CALIBRATED DECEMBER 2023, EXPIRES DECEMBER 2025. CALIBRATION PERFORMED IS TO THE MANUFACTURERS SPECIFICATIONS FOLLOWING DOCUMENTED PROCEDURE, USING N.I.S.T. TRACEABLE EQUIPMENT IN ACCORDANCE WITH ANSI-NCSL Z 540-1-1994, MIL STANDARDS 45662A AND ISO 10012-1. COLLECTIVE UNCERTAINTY OF THE CALIBRATION PROCEDURES ARE DECLARED AT A 95% CONFIDENCE LEVEL. UNCERTAINTY RATIO IS NOMINALLY FOUR TO ONE UNLESS OTHERWISE NOTED. TOTAL SP LLC WILL NOT BE HELD RESPONSIBLE FOR DAMAGES RESULTING FROM THE USE OF THIS INSTRUMENT.

Marian E Brna

 Marian E Brna, Pres.

October 9, 2024

 Date

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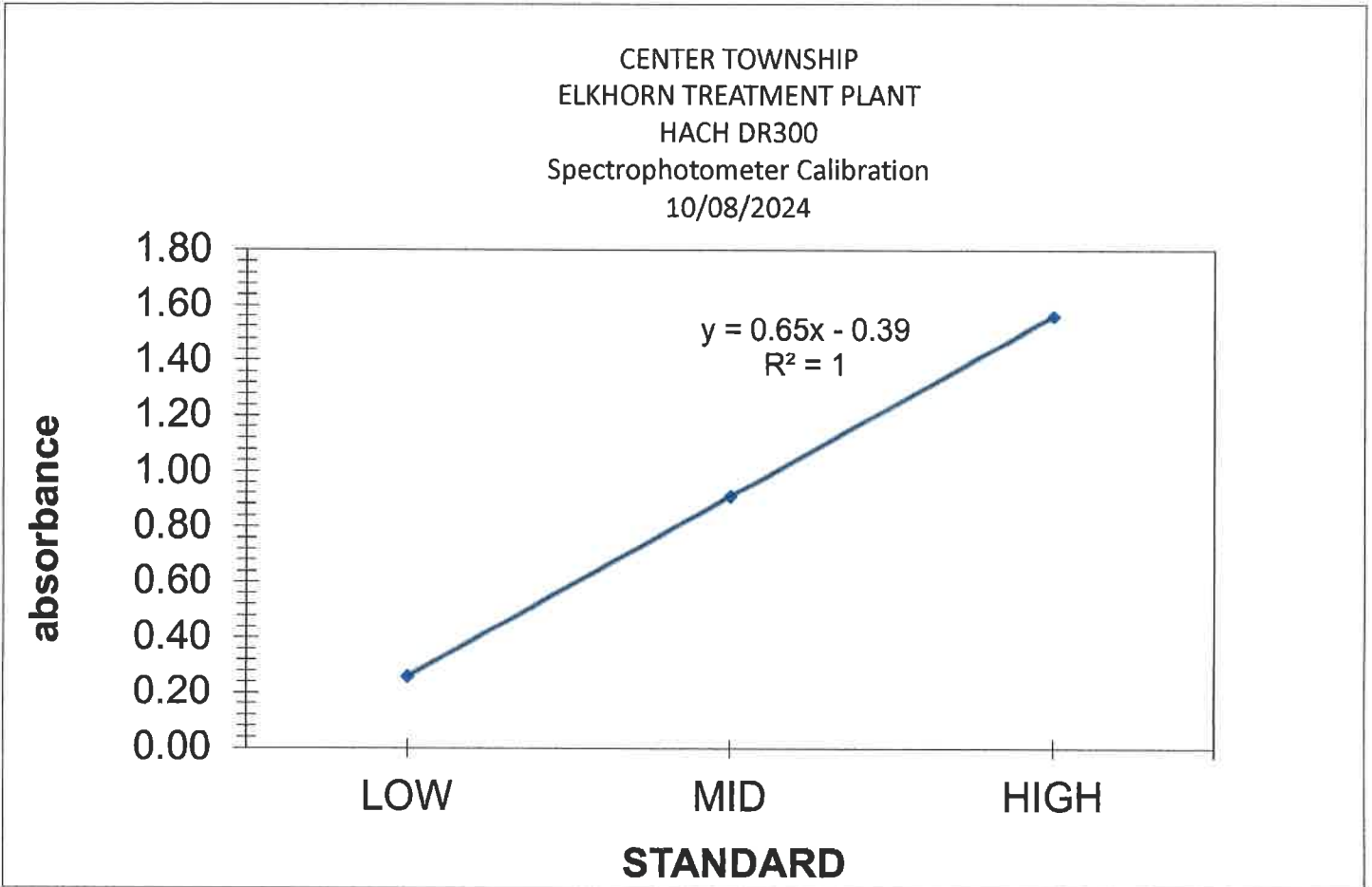
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Service, Sales, Calibration & Repair
 22 Crest Drive Monongahela PA 15063-1081
 Phone (724) 825-6872 or email:
 totalsp22@gmail.com

CALIBRATION REPORT

DATE OF SERVICE: October 8, 2024
NEXT CALIBRATION DUE DATE: October 31, 2025

CENTER TOWNSHIP
 ELKHORN TREATMENT PLANT
 ATTN: LANCE ELIAS
 996 BISKUP LANE
 MONACA PA 15061

TEMPERATURE: 22.9 °C
 RELATIVE HUMIDITY: 52.7 %



SLOPE = 1.0000

CALIBRATION INSTRUMENT(S): HACH STANDARDS KIT #2635300, CALIBRATION INFORMATION: CALIBRATED DECEMBER 2023, EXPIRES DECEMBER 2025. CALIBRATION PERFORMED IS TO THE MANUFACTURERS SPECIFICATIONS FOLLOWING DOCUMENTED PROCEDURE, USING N.I.S.T. TRACEABLE EQUIPMENT IN ACCORDANCE WITH ANSI-NCSL Z 540-1-1994, MIL STANDARDS 45662A AND ISO 10012-1. COLLECTIVE UNCERTAINTY OF THE CALIBRATION PROCEDURES ARE DECLARED AT A 95% CONFIDENCE LEVEL. UNCERTAINTY RATIO IS NOMINALLY FOUR TO ONE UNLESS OTHERWISE NOTED. TOTAL SP LLC WILL NOT BE HELD RESPONSIBLE FOR DAMAGES RESULTING FROM THE USE OF THIS INSTRUMENT.



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October 9, 2024

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APPENDIX C

TAP SUMMARY

Center Township Sanitary Authority Sewer Tap Summary

Development	Actual 2018	Actual 2019	Actual 2020	Actual 2021	Actual 2022	Actual 2023	Actual 2024	Estimated						Remaining	Total Estimated	
								2025	2026	2027	2028	2029	2030			
Heritage Valley - Glade Bluffs	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Village at Riverside - NVR/Ryan Homes	5	29	21	24	0	0	0	0	0	0	0	0	0	0	0	79
Allegheny Health Network Cancer Center	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Beaver Valley Mall Outparcels	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Western PA Surgery Center	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Eagles Landing at Mateer Farms	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125
Hilton Garden Inn	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
CTWA Temporary Water Treatment Facility Sludge Discharge	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Primanti's Restaurant	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
BASF Corporation	0	0	0	7	4	0	0	0	0	0	0	0	0	0	0	11
Get Go #3016	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0	5
Firehouse Subs	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
Chipotle	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	7
Planet Fitness	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	5
Brodhead Apartments - Building 1	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	23
Highland Meadows Phase 1	0	3	6	5	4	6	1	0	0	0	0	0	0	0	0	25
Highland Meadows Phase 2	0	0	0	0	0	0	7	5	5	5	4	0	0	19	26	
Highland Meadows Phase 3	0	0	0	0	0	0	0	0	0	0	0	13	12	25	25	
Lakeview Farms Phase 5	0	0	0	3	4	33	36	7	0	0	0	0	0	7	83	
Joe Hall Apartments	0	0	0	0	0	0	0	5	10	10	10	7	0	42	42	
Glade Bluffs Apartments	0	0	0	0	0	0	0	0	0	182	0	0	0	182	182	
Glade Bluffs Phase III	0	0	0	0	0	0	0	0	0	25	25	0	0	50	50	
Lincoln Learning Center	0	0	0	0	0	0	0	0	0	10	0	0	0	10	10	
Old Glass Dump Property	0	0	0	0	0	0	0	0	0	0	10	0	0	10	10	
Vacant 3 Acre Parcel	0	0	0	0	0	0	0	0	0	0	0	5	0	5	5	
Miscellaneous	7	11	12	9	14	8	5	15	15	15	15	15	15	90	156	
Total	258	76	39	51	26	63	72	32	30	247	69	35	27	440	1025	

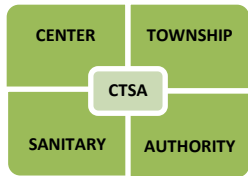
Completed / Built-Out.

Construction in Progress.

Planning Phase.

APPENDIX D

MAINTENANCE SUMMARY



Center Township Sanitary Authority

2024 CSTA Maintenance & Camera Report

- Inspections completed on all authority vehicles.
- Replaced battery in John Deere Tractor
- Monthly pest control.
- Yearly weed control at WWTP.
- All calibrations completed for meters
- Repaired garage door at WWTP.

Collections System

COMPANY	DATE	ITEM	NOTE
Penn Power	1/6/2024	PM's on L/S Generators	PM's - \$5,335
CTSA	1/3/2024	Replaced vacuum pump on pump #1 side Logstown L/S	Replace - \$400
Stefanik's	1/17/2024	Repair invert pipe and invert in manhole ER1678 at 549 Chapel	Repair - \$3,480
Penn Power	1/9/2024	Replace battery charger on generator Franklin L/S	Repair - \$792
Pumpman	1/20/2024	Field service at Logstown L/S.	Repair - \$1,717
VAG Industries / Stefanik's	1/23/2024	Replaced & installed three (3) air release valves on Shell Forced Main.	Replace - \$15,542
Halama Electric	2/6/2024	Electrical Maintenance at Logstown L/S.	Repair - \$827
PumpMan	2/7/2024	Repaired #2 check valve at Logstown L/S.	Repair - \$2,125
Umbrella Roofing	2/27/2024	Replaced roof on Markey's Run Lift Station.	Replace - \$9,267
Penn Power	3/1/2024	Service repairs at Shirley Drive, Stobo & New College L/S.	Repair - \$4,007
Penn Power	5/31/2024	Troubleshoot transfer switch on generator at Spruce Drive L/S	Repair - \$312
Halama Electric	5/15/2024	Replace soft start at Logstown L/S	Replace - \$3,320
Markey's Run	5/28/2024	Replaced fan on control panel at Markey's Run L/S	Replace - \$96
Penn Power	5/31/2024	Replace block heater and battery on generator at Biggins L/S.	Replace - \$1,157
Pumpman	6/18/2024	Repaired priming system at Spruce Drive L/S.	Repair - \$1,519

Pumpman	6/18/2024	Replace suction pipes in wet well at Spruce Drive L/S.	Replace - \$3,613
CTSA	8/22/2024	Replaced block heater on generator at Logstown L/S.	Replace - \$120
Lanco Controls	8/27/2027	Re-wired fault relays on Markey's Run L/S Generator Scada.	Repair - \$1,376
Penn Power	9/12/2024	Service Call Spruce Drive transfer switch.	Repair - \$558
Stefanik's	10/5/2024	Installed two storm catch basins and repaired access road with millings at Biggins L/S.	Repair - \$9,700
Penn Power	9/17/2024	Replace three relays for Logstown Generator Scada.	Repair - \$1,200
Halama Electric	9/30/2024	Electrical repairs at Logstown L/S. Meg motor shorted out.	Repair - \$844
Stefanik's	11/7/2024	Added additional drainage to lower part of access road at Biggins L/S.	Repair - \$5,821
Pumpman	12/11/2024	Repaired motor stator on unrepairable pump to be used a future spare at New College L/S.	Repair - \$3,650

Manhole Repairs / Replacements

MANHOLE #	ISSUE	SOLUTION
ER1678	Invert pipe and invert off line	Replace invert pipe and repair invert for flow.
MR 713	CNO	Opened and inspected
MR 1158	CNO	Opened and inspected
MR 756	CNO	Opened and inspected
MR 827	CNO	Opened and inspected
MR 721	CNO	Opened and inspected
MR 724	CNO	Opened and inspected
MR 725	CNO	Opened and inspected
MR 943	CNO	Opened and inspected
MR 356	CNO	Opened and inspected
MR 692	CNO	Opened and inspected
MR 693	CNO	Opened and inspected
MR 855	CNO	Opened and inspected
MR 856	CNO	Opened and inspected
ER 2138	CNO	Opened and inspected
ER 2030	CNO	Opened and inspected
ER 2119	CNO	Opened and inspected
ER 1252	UTL	Opened and inspected

LR 1325	CNO	Opened and inspected
ER 2093	CNO	Located, raised 12" and inspected
ER 1658	CNO	Located, raised 10" and inspected
ER 2472	CNO	Opened and inspected

Plant & Associated Equipment

COMPANY	DATE	ITEM	NOTE
CTSA	1/7/2024	Repacked effluent pump in blower room #1	Repair - \$45
CTSA	1/9/2024	Parts to repair effluent pump for plant #1 at WWTP	Repair - \$454
LB Water / CTSA	1/16/2024	Replace mud valve at WWTP	Replace - \$83
CTSA	2/8/2024	Replaced bearings on belt press	Repair - \$3,355
CTSA	3/6/2024	Replaced shaft on Effluent Pump #1	Repair - \$1,130
CTSA	3/8/2024	Storm Sewer repair and aggregate at WWTP.	Repair - \$4,448
Stefanik's	4/5/2024	Increase footprint at WWTP	Repair - \$12,297
Kappe	5/15/2024	Repairs to bar screen at WWTP	Repair - \$1,070
Penn Fencing	5/18/2024	Replace and add fencing to WWTP	Replace - \$12,585
Halama Electric	6/30/2024	Replace burned up motor on #1 blower.	Replace - \$17,175
CTSA	7/10/2024	Replace polymer pump for belt press.	Replace - \$2,500
Halama Electric	7/15/2024	Replace HMI control screen on belt press controls.	Replace - \$2,762
PI Engineering	9/27/2024	Trouble shoot roller press and program. Power supply and wiring on belt press.	Repair - \$2,625
DXP / CTSA	10/13/2024	Replace coupling on Blower #2 Blower air pipe.	Repair - \$1,635
DXP / CTSA	12/10/2024	Repair kit for chlorine unit at WWTP.	Repair - \$729
Masterflo	12/11/2024	Replace Effluent pump in Blower Room #1.	Replace - \$11,916
DXP / CTSA	12/18/2024	Replace injector on chlorine unit.	Replace - \$720

Sanitary Sewer Lines High Pressure Cleaned

COMPANY	DATE	LOCATION	LENGTH
Tri - State	1/10/2024	547 Chapel Road	200'
Tri - State	1/10/2024	Fronko Street	300'
Tri - State	5/15/2024	Lines to Markey's Run	2,100'
Tri - State	6/10/2024	Pleasant Drive to East Shaffer	2,700'
Tri - State	9/17/2024	Wagner & Stone Quarry Roads	5,250'
Robinson Pipe	12/18/2024	Fronko Street	300'

Sanitary Wet Wells / Tanks Vacuumed Cleaned / Manholes Flushed

COMPANY	DATE	LOCATION	ITEM
Tri – State	7/1/2024	WWTP	All Tanks Plant #1
Tri – State	6/17/2024	Spruce Drive – Stoney Ridge – Walnut Grove	Wet Wells
Tri – State	8/19/2024	WWTP	All tanks Plant #2

Residential Plunge of Trap & Sewer Line Inspections

COMPANY	DATE	LOCATION	ITEM
CTSA	1/9/2024	112 Radcliff Drive	Inspection
CTSA	1/9/2024	122 Todd Lane	Service/Grinder
CTSA	2/20/2024	132 Cardiff Drive	Plunge
CTSA	2/20/2024	2936 Brodhead Road	Plunge
CTSA	3/25/2024	150 Poplar Drive	Plunge
CTSA	1/22/2024	456 Center Grange Road	Inspection
CTSA	3/13/2024	157 Kings Drive	Inspection
CTSA	7/2/2024	183 Todd Lane	Inspection
CTSA	7/2/2024	111 Michael Drive	Inspection
CTSA	5/20/2024	868 Chapel Road	Inspection
CTSA	5/15/2024	3585 Brodhead Road	Inspection
CTSA	9/18/2024	117 Whitewood Drive	Plunge
CTSA	10/18/2024	502 Cornell Drive	Plunge

Camera Inspection on Sanitary Sewer Lines

COMPANY	DATE	LOCATION	LENGTH
CTSA	2/13/2024	Fath Drive	130'
Tri – State	4/3/2024	Fronko Street	400'
CTSA	6/12/2024	Geneva Drive	300'
CTSA	7/1/2024	Oakland Heights	200'
CTSA	8/27/2024	Richard Drive	175'
CTSA	8/28/2024	Bainbridge Drive	150'
CTSA	8/29/2024	Church Drive	180'
CTSA	9/2/2024	Hall Road	200'
Robinson Pipe	12/18/2024	Center Grange Road	250'
Robinson Pipe	12/18/2024	Bennett Blvd	300'

APPENDIX E

SLUDGE MANAGEMENT INVENTORY REPORT

Submission Details

Details have been submitted successfully. Please review and print the Transaction Receipt for your records.

Reference : 304983

Form Name :

CHAPTER 94 MUNICIPAL WASTELOAD MANAGEMENT ANNUAL REPORT 3800-FM-BPNPSM0507

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Phone Number : (412) 264-4400

Submitted To : Southwest Regional Office

Date Submitted : 03/26/2025

[Print Confirmation](#)

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Pennsylvania Department of Environmental Protection

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