WPCA COMMUNICATIONS AND REPORTS

May 2, 2023

The following is a monthly report from the Superintendent of Pollution Control as an appendix to the Water Pollution Control Authority meeting.

General Information

Dan Kruger

Dan Kruger was hired in September 2022 as an entry level operator. On April 17, 2023 Dan passed the CT DEEP Class I Wastewater Operator exam making him a CT DEEP Class I Operator-in-Training. Upon completion of one year of working in a wastewater treatment facility Dan will be certified as a Class I Operator.

Odor Control Improvements



The Pure Air Carbon odor control system has been installed on the gravity thickeners and has been placed into service. The units have been on-line for less than a week and have been effectively eliminating the odor from the tanks.

The Pure Air Carbon system for the sludge storage tanks has been put on order and will be installed as soon as possible. There is a 20 week lead time. As we wait for the delivery of the material the proper site work and utility preparations will be made for a quick installation.

Treatment Plant and Collection Systems

Treatment Plant

Process

TREATMENT PLANT	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	AVERAGE
AVG FLOW (MGD)	3.12	2.55	2.39	2.10	2.06	2.20	2.23	2.35	2.58	3.25	2.91	3.29	2.59
BOD REMOVAL	98.9%	99.0%	98.7%	98.4%	98.0%	98.4%	98.5%	97.8%	98.4%	98.4%	99.0%	99.1%	98.5%
TSS REMOVAL	99.0%	99.1%	99.0%	99.1%	98.0%	98.2%	98.8%	97.8%	98.6%	98.8%	99.2%	99.2%	98.7%
NITROGEN LBS. (106 LBS. LIMIT)	96	84	95	100	85	94	89	93	92	98	89	91	92
NITROGEN mg/L	3.7	3.9	4.7	5.5	4.9	4.9	4.6	4.6	4.2	3.8	3.5	3.3	4.3

Maintenance

- Performed semiannual maintenance on Anoxic Mixers.
- Replaced faulty electrical components on Secondary Clarifier 2. Cleaned and inspected clarifier while it was down.
- Assisted with install of new Ammonia/Nitrate Probe for effluent.
- Installed and calibrated level transmitter on Sludge Storage Tank 1.
- Startup work for UV in preparation for disinfection season, including installing wipers, testing bulbs and calibrating UVT.
- Cleaned all Secondary Clarifiers, Parshall flume, and Secondary Clarifier 1 & 2 effluent channels.
- Continued valve repair in Sludge Storage gallery.
- Assisted electricians with work to run power to new odor control carbon units at the Gravity Thickeners.
- Completed semiannual exercising of Treatment Plant Sluice Gates.

Collection System

COLLECTION SYSTEM	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	TOTAL FT
CCTV (FEET)	4,681	0	3,033	5,129	3,695	2,282	1,642	0	2,655	8,414	14,525	8,722	46,056
CLEANING (FEET)	1,500	1,739	4,413	7,047	6,275	4,883	5,546	4,748	1,800	5,339	13,903	5,500	57,193

- Performed quarterly exercises on pump station bypass valves.
- Completed annual submersible pump station maintenance.
- Degreased Benedict Drive Pump Station and serviced air relief/vacuum break valves.
- Performed CCTV and line cleaning work.

Call Outs

CALL OUTS	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	TOTAL
TREATMENT PLANT	0	2	3	2	2	1	3	5	4	2	1		25
PUMP STATIONS	0	2	1	5	2	2	1	2	4	2	3		24
SEWER BLOCKAGES	0	0	1	0	0	0	0	0	0	1	0		2
CALL BEFORE YOU DIG	0	0	1	0	1	0	0	2	1	1	1		7
ODOR COMPLAINT	7	5	8	1	0	3	2	1	0	1	2		30

Capital Improvement Project Updates

Clark Street, Benedict Drive, Pleasant Valley Pump Station Upgrades

• Waiting to complete design for Pleasant Valley Pump Station.

Next Steps:

- Submit design to DEEP for review and approval (min. 90-day review).
- WPCA and Town Council Resolution to enter into CWF agreement
- Bid project.

Aeration Weir Gate Improvements

The WPCA approved transferring \$750,000 from FY21/22 CIP (Phase IV Part 1 Sewer System Improvements) to complete critical improvements to the aeration basin weir gates. An additional \$50,000 was approved with the FY22/23 CIP budget increasing the total project budget to \$800,000. Project was awarded to C.H. Nickerson for \$552,345.

- Preconstruction Meeting was held with Nickerson, Weston & Sampson, and the Town on April 19th.
- The Notice to Proceed was issued for May 1, 2023.

American Rescue Plan Act (ARPA) Funded Projects

Phase IV Sewer System Improvements

This project has been approved utilizing American Rescue Plan Act funds. The budget for this project is \$1,100,000.

Project retainage (\$47,933) will be held for 1 year and released November 2023.

UV Disinfection Upgrade

This project has been approved utilizing American Rescue Plan Act funds. The original budget for this project was \$1,300,000. In February 2022 the Authority approved transferring \$120,000 from this project to the Clark Street Bypass Valve project.

- Final design is being completed for Town review and comments.
- Expected bid date has been pushed back until early May.

Clark Street Bypass Valve

This project has been approved utilizing American Rescue Plan Act funds. The original budget for this project was \$100,000. In February 2022 the Authority approved transferring \$120,000 from the UV Disinfection Upgrade project to the Clark Street Bypass Valve project.

Project retainage (\$12,515.50) being held for one year and will be released December 2023.

Collection of Sewer User Fees and Delinquent Accounts

Collection Rates Through March 31, 2023:

Sewer Collection Rate	2021 Grand List	2022 Grand List	2023 Grand List
Commercial	99.79%	99.84%	n/a
Residential	n/a	96.19%	96.98%

Delinquent Balances	Commercial	Residential
2008-2021/2022 Grand List	.00	72,871.70
2022 Grand List	3,159.60	N/A
2023 Grand List	N/A	131,903.37
Total Delinquent Balance	3,159.60	204,475.07

Respectfully submitted by: Tony Manfre, Superintendent of Pollution Control