

WPCA COMMUNICATIONS AND REPORTS

September 5, 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

Plug-in Hybrid Fleet Vehicle



The WPCF took delivery of a 2023 Hyundai Tucson Plug-in Hybrid to replace Truck 80, a 2009 Ford Explorer. Truck 80 serves our department as a frontline nonutility vehicle used by supervisors, transportation for staff trainings, responding to nonemergency requests, among other uses. The vehicle is all wheel drive, has an all-electric range of 33 miles and up to 35 MPG combined. We are able to charge the batteries through our existing electrical infrastructure at the treatment plant.

Treatment Plant and Collection Systems

Treatment Plant

Process

TREATMENT PLANT	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	AVERAGE
AVG FLOW (MGD)	2.06	2.20	2.23	2.35	2.58	3.25	2.91	3.29	3.02	3.04	3.17	3.16	2.77
BOD REMOVAL	98%	99%	98%	98%	98%	99%	99%	99%	99%	98%	99%	99%	98.6%
TSS REMOVAL	98%	99%	98%	99%	99%	99%	99%	99%	99%	98%	99%	99%	98.8%
NITROGEN LBS. (106 LBS. LIMIT)	85	94	89	93	92	98	89	91	96	111	90	104	94
NITROGEN mg/L	4.9	4.9	4.6	4.6	4.2	3.8	3.5	3.3	3.7	5.2	4.4	5.0	4.3

Maintenance

June

- Cleaned and inspected Primary Clarifier 3.
- Performed semiannual gear reducer oil changes on all Secondary Clarifiers.
- Performed annual preventative maintenance on Internal Recycle Pump 2.
- Continued valve repair in Sludge Storage gallery.
- Pulled both UV banks for cleaning an inspection. Replaced faulty ballast.
- Assisted with diagnosing and resolving electrical issue with Aeration Blower 3.
- Performed launder draw down on Secondary Clarifiers 3 and 4 and cleaned Parshall flume, Secondary 1 and 2 channel, and all Secondary Clarifiers.

- Replaced two plug valves in Gravity Thickener Gallery.

July

- Staff began residing the camera van bay.
- Cleaned and inspected Sludge Storage Tank 2 in preparation for epoxy coating work.
- Installed new polymer pump for GBT.
- Replaced impeller on Bobcat Snowblower attachment.
- Cleaned and inspected Grit Chamber 2.
- Worked with Aaron Associates on updates to SCADA Client computers and MCC Industrial Computers as well as updates to Win911 system.
- Worked on flood protection system for high and low bay by cutting and fitting new lumber as well as color coating the material for quick installation.

Collection System

COLLECTION SYSTEM	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-22	Jul-22	TOTAL FT
CCTV (FEET)	3,695	2,282	1,642	0	2,655	8,414	14,525	8,722	15,978	4,027	13,831	5,129	80,900
CLEANING (FEET)	6,275	4,883	5,546	4,748	1,800	5,339	13,903	5,500	7,400	3,200	2,850	7,047	68,491

June

- Performed annual pump station heater maintenance.
- Degreased Benedict Drive pump station and removed/repairs faulty vacuum relief valve in manhole at Pine Tree and Benedict.
- Performed annual electrical preventative maintenance at all pump stations.
- Continued with line cleaning and CCTV work including work on cross country easements.

July

- Completed quarterly pump station bypass valve exercises.
- Degreased Benedict Drive pump station.
- Replaced both hydraulic valves on Truck 86 hose reel.
- Continued with line cleaning and CCTV work including work on cross country easements.
- Installed new Homa Pump at Quarry Brook pump station.
- Repaired 2 inoperable bypass valves at Scantic 1 Pump station and 3 inoperable valves at Scantic 2 Pump Station.

Call Outs

CALL OUTS	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Column1	Mar-23	Apr-23	May-23	Jun-23	Jul-23	TOTAL
TREATMENT PLANT	2	1	3	5	4	2	1	1	2	3	3	3	30
PUMP STATIONS	2	2	1	2	4	2	3	0	1	2	1	1	21
SEWER BLOCKAGES	0	0	0	0	0	1	0	0	0	0	1	0	2
CALL BEFORE YOU DIG	1	0	0	2	1	1	1	0	0	0	1	1	8
ODOR COMPLAINT	0	3	2	1	0	1	2	2	6	4	8	0	29

Capital Improvement Project Updates

Clark Street, Benedict Drive, Pleasant Valley Pump Station Upgrades

- Finalizing Pleasant Valley Pump Station design.

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.

- Equipment is on order.

Next Steps:

- *Construction will be scheduled once equipment is delivered.*

Odor Control Improvements

The WPCA approved \$245,000 with the FY2024 CIP budget. An additional \$1,300,000 was allocated to the project from the State Bond Commission in July 2023.

- State Bond Commission allocated \$1.3 million towards odor control improvements.
- Working on securing a contract with the State to begin utilizing the funds.
- Request for Proposals was sent out to on-call engineering consultants for the design and construction administration services for improvements on the west side of the facility.
- A pre-submittal meeting was held on site on August 29th with potential proposers.
- RFP response deadline is September 12th.

Next Steps:

- *Complete RFP process.*
- *Select consultant*

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 completed.*

Next Steps:

- *Release project retainage (\$47,933) in 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.

- *Met with energy consultant and Eversource representative to review the projects eligibility and sequence of events.*
- *Project is expected to be bid in the near future.*

Next Steps:

- *Bid project.*
- *Select contractor.*
- *Submit proposed equipment to Eversource as part of the grant application.*

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 completed.*

Next Steps:

- *Release project retainage (\$12,515.50) in December 2023.*

Collection of Sewer User Fees and Delinquent Accounts

Report will be distributed at the meeting.

Respectfully submitted by: Tony Manfre, Superintendent of Pollution Control