



1111 Nantasket Avenue
Hull, MA 02045

woodardcurran.com

HULL, MA WATER POLLUTION CONTROL FACILITY

OCTOBER 2023

MONTHLY OPERATING REPORT



0217319.00

Town of Hull, MA

Permit No. MAG590037

TABLE OF CONTENTS

SECTION	PAGE NO.
EXECUTIVE SUMMARY	ES-1
1. FLOWS AND LOADING.....	1-1
1.1 Average Daily Flows and Loadings – October 2023	1-1
1.2 Average effluent monthly flows – 2+ year comparison.....	1-2
1.3 Two Month Summary of Rainfall and the Influence on Effluent Flows.....	1-3
2. COMPLIANCE.....	2-4
2.1 Plant Effluent.....	2-4
2.2 Secondary Processes.....	2-5
2.3 Permit Compliance	2-7
2.4 Solids Handling & Odor Control.....	2-9
3. MAINTENANCE SUMMARY	3-1
3.1 Maintenance Summary.....	3-1
3.2 Asset Management Accounts.....	3-2
4. SAFETY.....	4-1
5. STAFF DEVELOPMENT.....	5-1
5.1 Training.....	5-1
5.2 Staffing Updates.....	5-1
6. COLLECTION SYSTEM.....	6-1
6.1 Wet Well Maintenance	6-1
6.2 Collection System Maintenance	6-2
7. PROJECT MANAGEMENT & ADMINISTRATION	7
7.1 Ongoing Projects and Support Items- October Updates:.....	7

EXECUTIVE SUMMARY

This Monthly Operating Report provides a summary of the pertinent information and activities that occurred at Hull WPCF during the month of October 2023.

- No lost-time incidents for the month of October.
- There were 157 effluent samples taken in October.
- There were no after-hours alarm calls that required a response by W&C staff.
- The Asset Management Accounts summaries for contract year #9 is attached- the latest revision date is 10/7/2023.
- There was one call from a resident for an E-One grinder pump issue.
- W&C's O&M continued its efforts to support the various ongoing engineering projects and upgrades at the plant- see the projects section.
- The weekly BioBot Covid-19 wastewater sampling & monitoring program continued with W&C staff sampling the influent.

Woodard & Curran strives to deliver a high-quality operations service and is responsive to our customers' concerns. Please feel free to request any modifications to the format or content of this report.

Mike Sullivan – Plant Manager
Town of Hull WPCF
12/7/2023

1. FLOWS AND LOADING



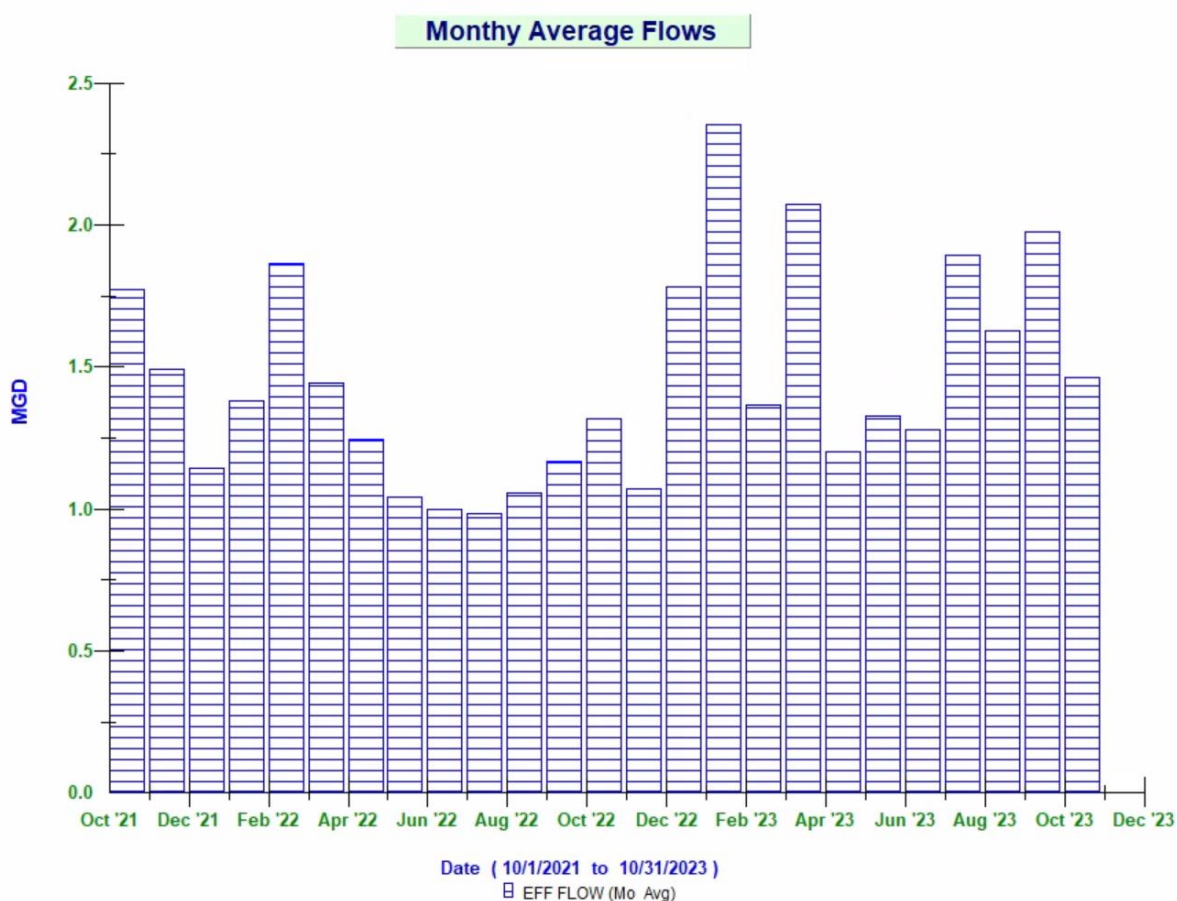
1.1 Average Daily Flows and Loadings – October 2023

Month / Year	Eff Flow	Inf Flow	Inf BOD	Inf TSS	Eff BOD	Eff TSS
	MGD	MDG	LBS	LBS	LBS	LBS
Oct '21	1.77	1.75	3,216.53	5,865.58	80.03	186.27
Oct '22	1.32	1.65	1,243.39	2,242.98	42.79	142.74
Oct '23	1.46	1.60	1,169.94	4,246.74	96.10	179.55

* On-Going -the existing influent flow meters are strap-on doppler flow meters, and the existing pipe condition prevents getting a strong signal. An area velocity meter in the aeration tank inlet channel is used as well as the headworks influent Parshall Flume meter to monitor influent flows. All reported loadings are based on the effluent flow meter [new mag meter April 2021]. All meters are tied into the Scada system so that influent flows can be monitored.

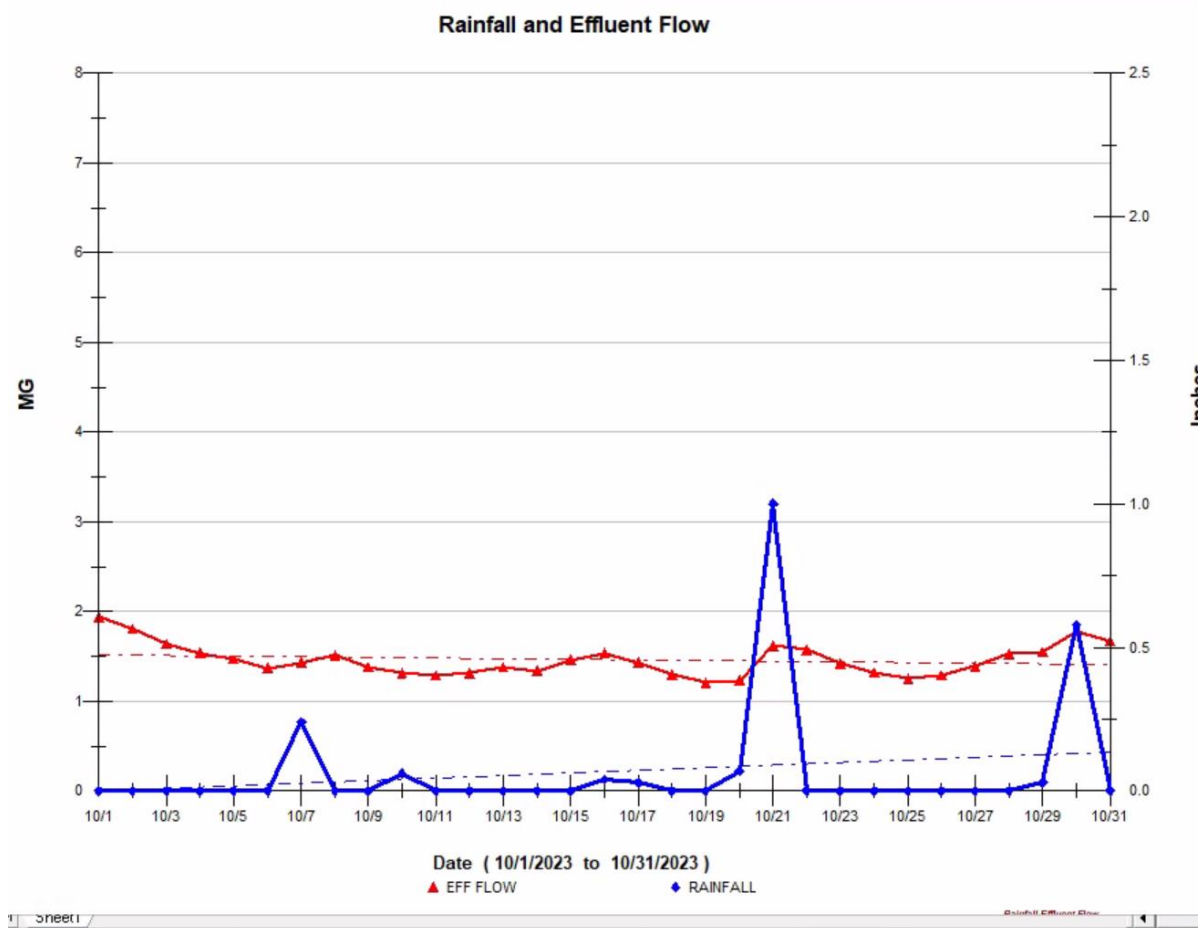
1.2 Average effluent monthly flows – 2+ year comparison

The monthly average flow for October was 1.46 MGD, a bit more than the 1.37 MGD in September. The total precipitation for October was 2.05 inches, very well less than September's 6.48 inches, yet it had no impact on the plant's process conditions. The graph below shows the 2-plus year summary of the monthly average flows.



1.3 Two Month Summary of Rainfall and the Influence on Effluent Flows

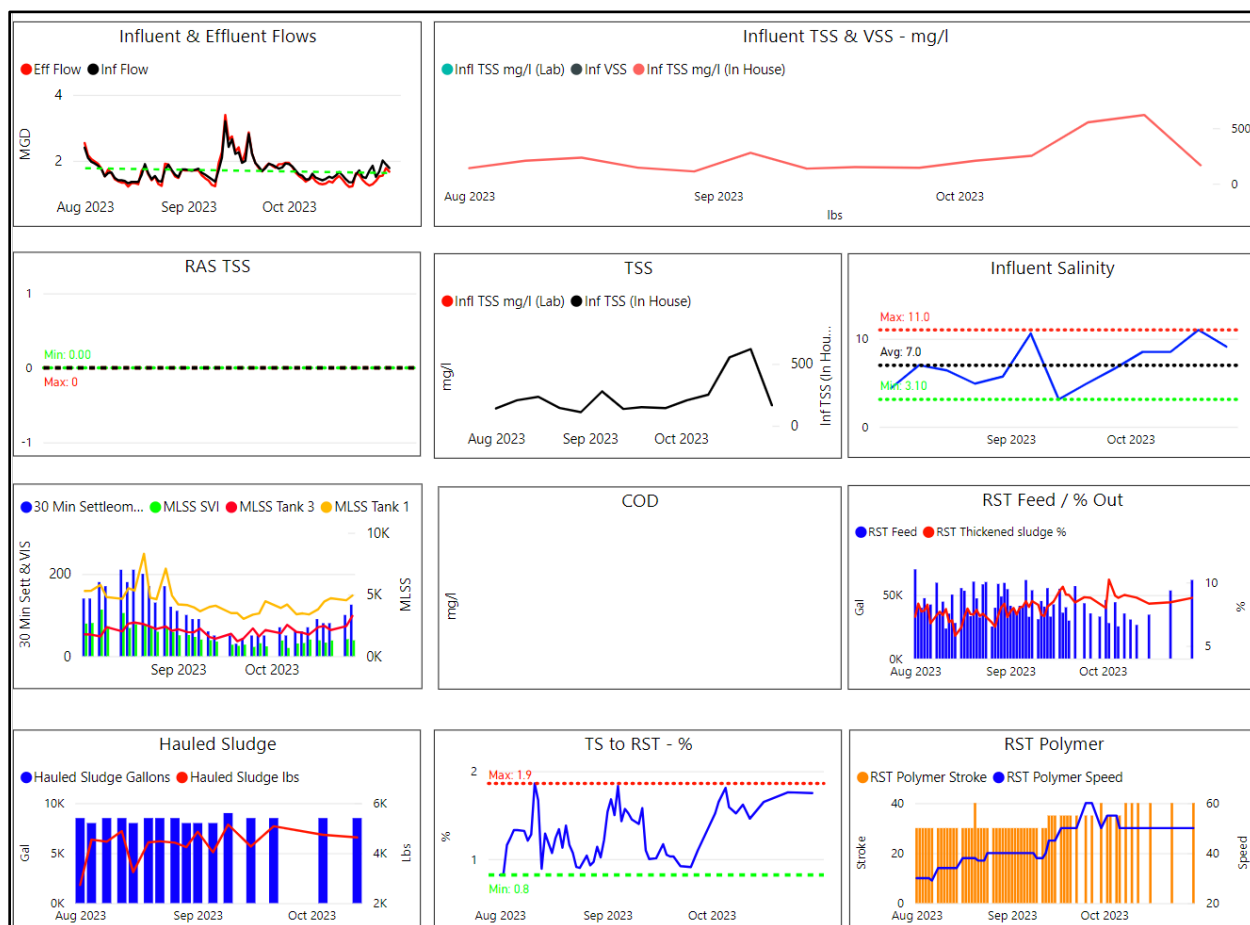
The graph shows the days where precipitation occurred [rainfall] [Blue Peaks].



2. COMPLIANCE

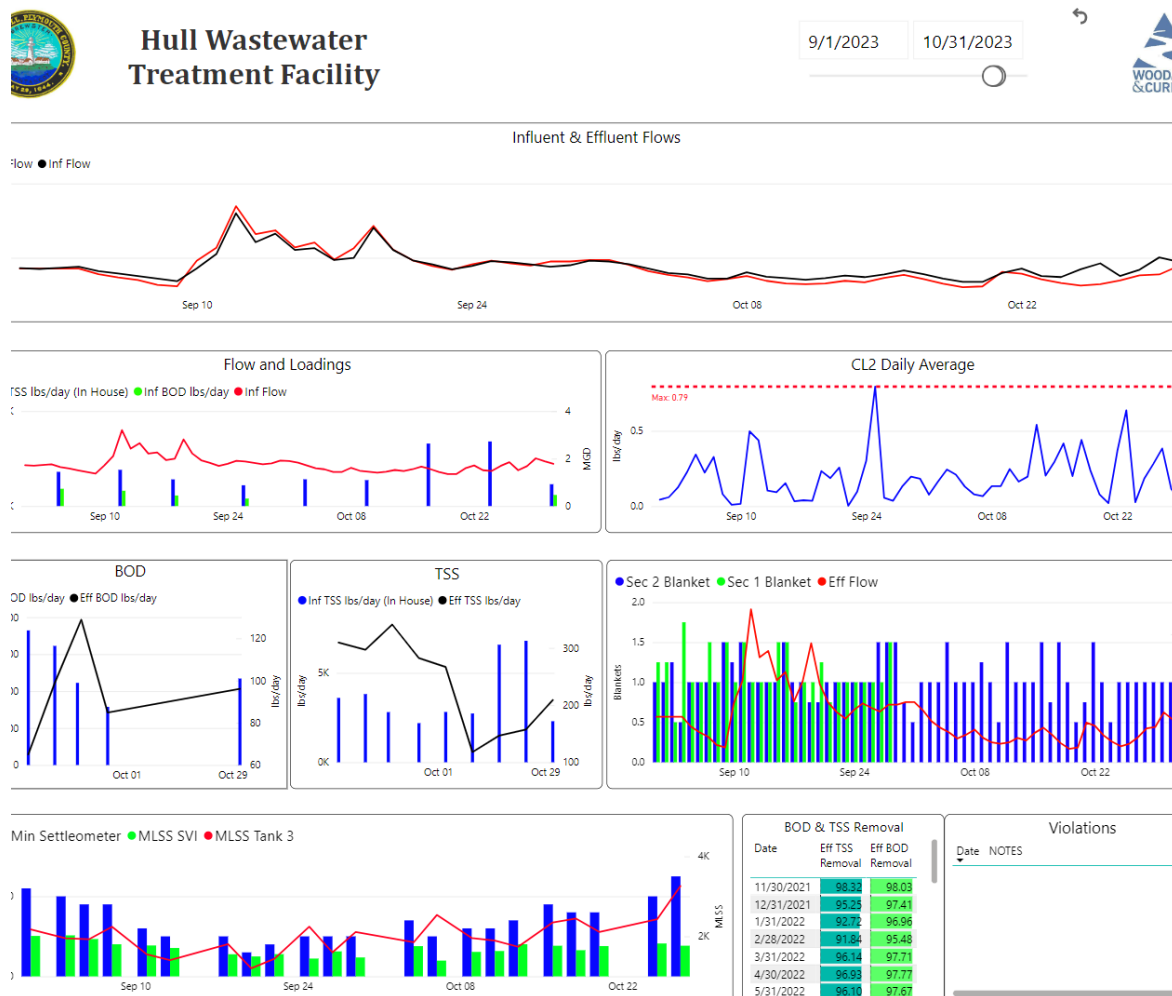
2.1 Plant Effluent

The plant process conditions through October were steady. Below are Process Summary Graphs produced on the Power BI dashboard illustrating trends year-to-date.

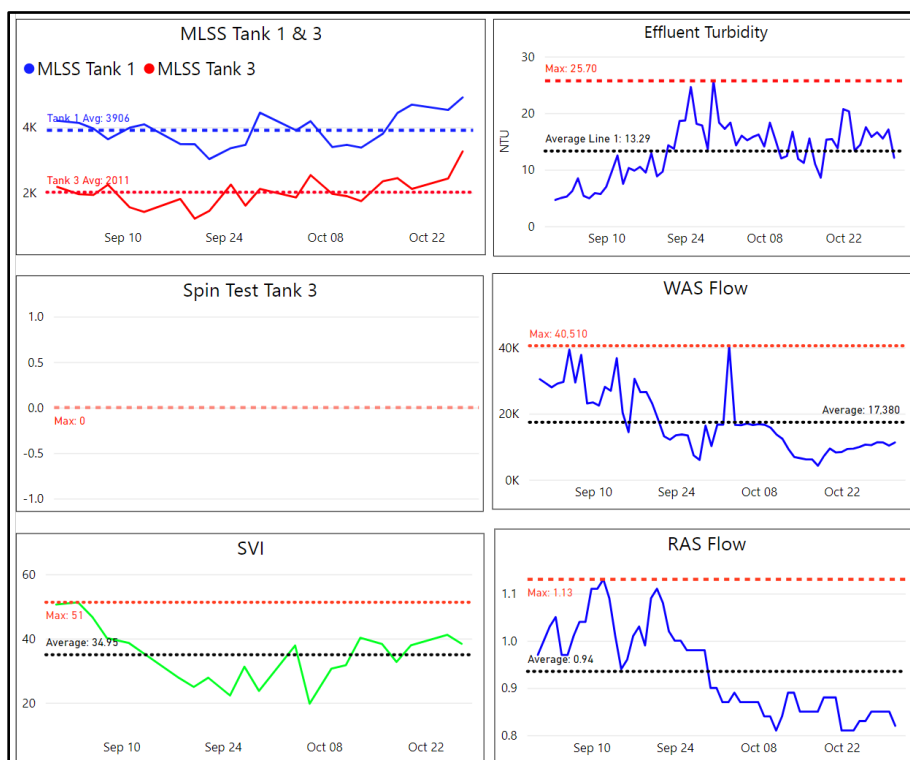


2.2 Secondary Processes

Below are Process Summary Graphs produced on the Power BI dashboard illustrating trends over a 2-month period ending on 10-31-2023.



Secondary Processes continued...



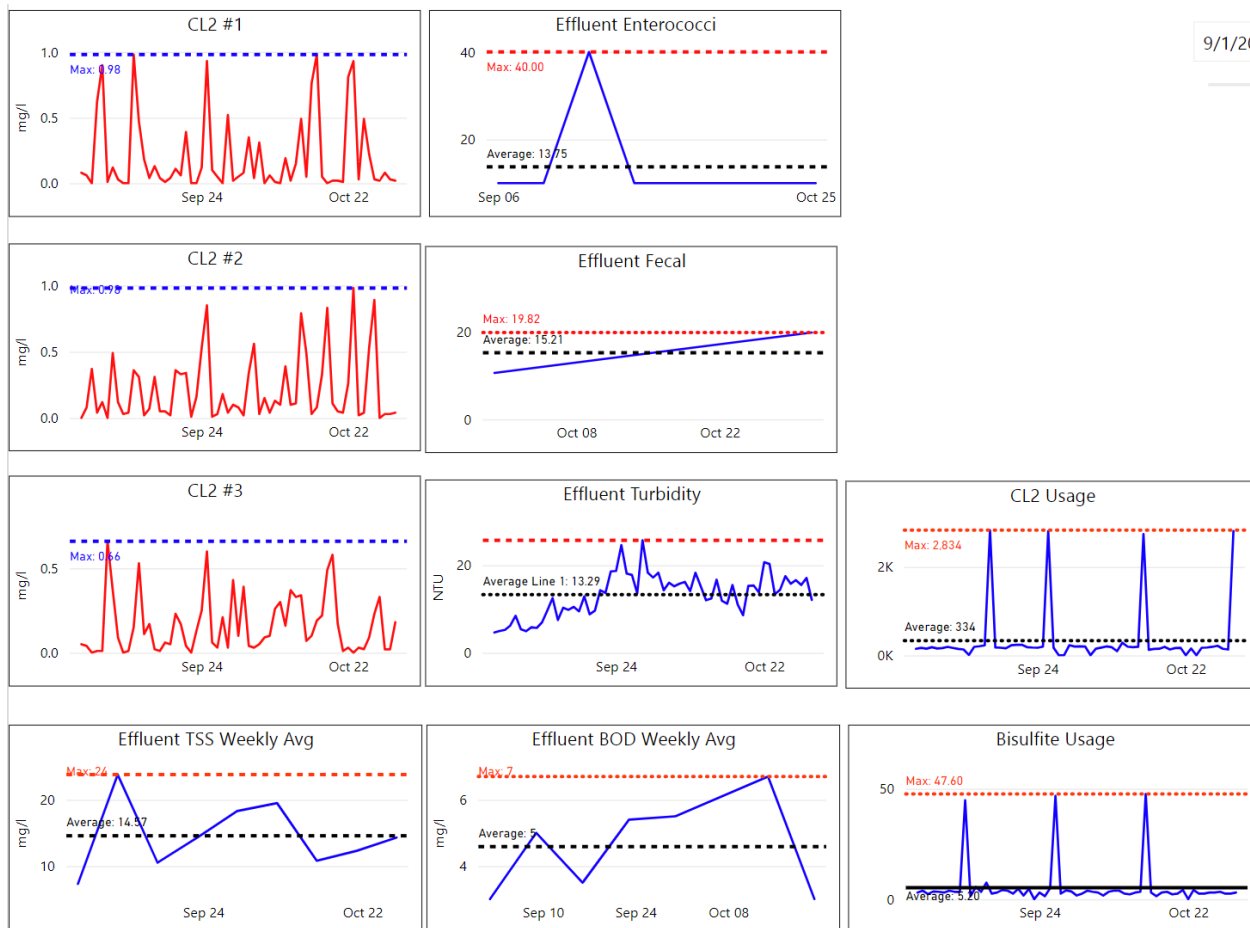
2.3 Permit Compliance

There were 152 effluent samples taken in the month of October. A table summarizing the results of these samples is shown below. The quality of effluent was satisfactory, and turbidity (NTU) levels were normal.

Permit Compliance												
Parameter Info			Permit Requirements					Results				
Parameter	Hach WIMS Variable #	Units	Daily Max	Daily Min	Weekly Avg Max	Monthly Avg Max	Freq	Period Avg	Period Min	Period Max	# of Samples	# of Violations
Eff TSS	104 / 999081	MG/L	50		45	30	1 X Week	14.4	10.8	19.5	5	0
Eff TSS	184	LBS			1152	768	1 X Week	179.5	118.0	266.7	5	0
% TSS Rem	208	%		85			1 X Month	96.0			1	0
Eff BOD	108	MG/L	50		45	30	1 X Week	5.5	3.0	6.9	5	0
Eff BOD	185	LBS			1152	768	1 X Week	96.1	96.1	96.1	1	0
% BOD Rem	207	%		85			1 X Month	95.9			1	0
Eff Chlorine	142	MG/L	1			0.7	3 X Day	0.21	0.02	0.64	93	0
Eff Fecal	111	#/100 ML	260			88	1 X Week	26.5	10.0	90.0	13	0
Eff pH	136	SU	8.5	6.5			1X Daily	6.9	6.5	7.2	31	0
Enterococci	255	#/100 ML	276			35	1 X Week	10	10	10	4	0
Totals											157	0

Effluent Quality

9/1/202

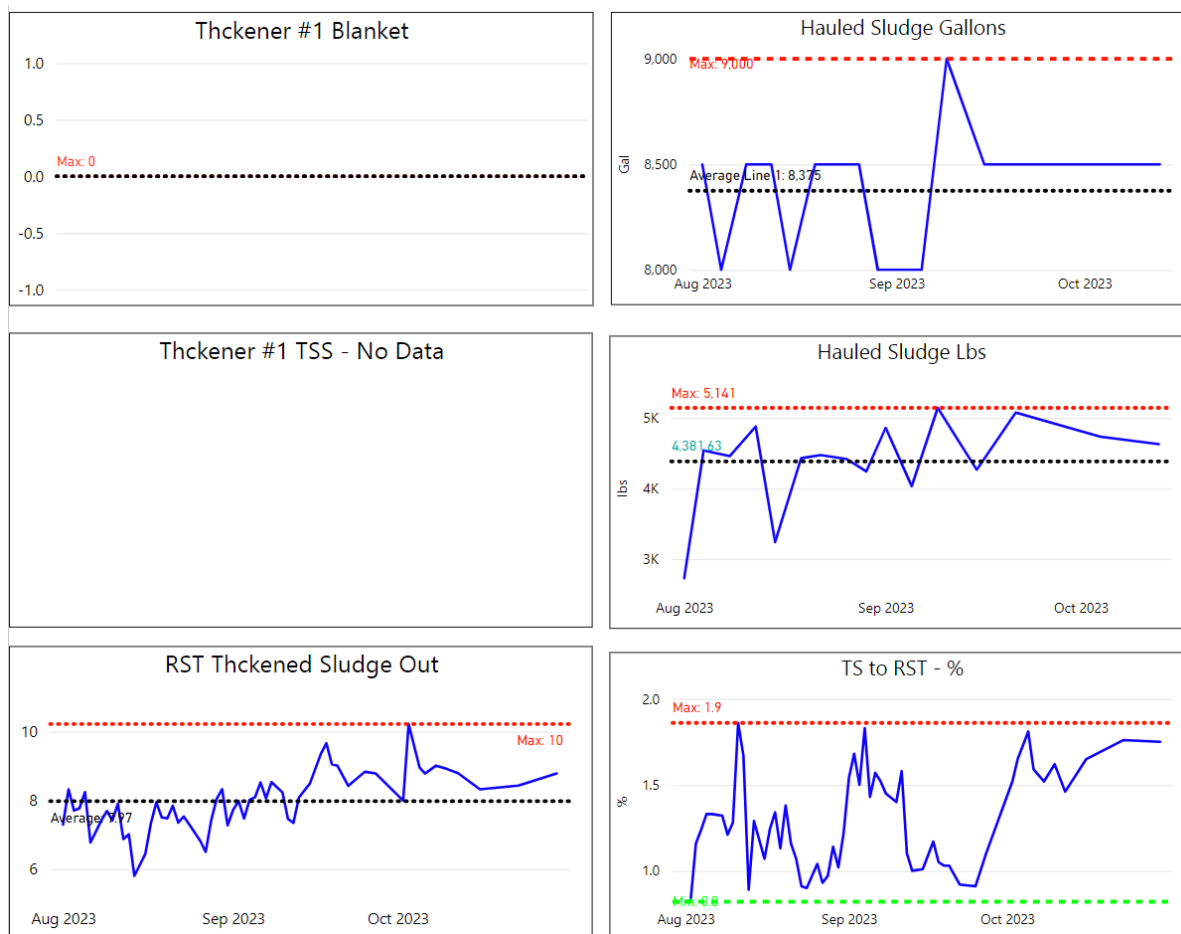


2.4 Solids Handling & Odor Control

Sewage Gallons Treated vs Sludge Disposed

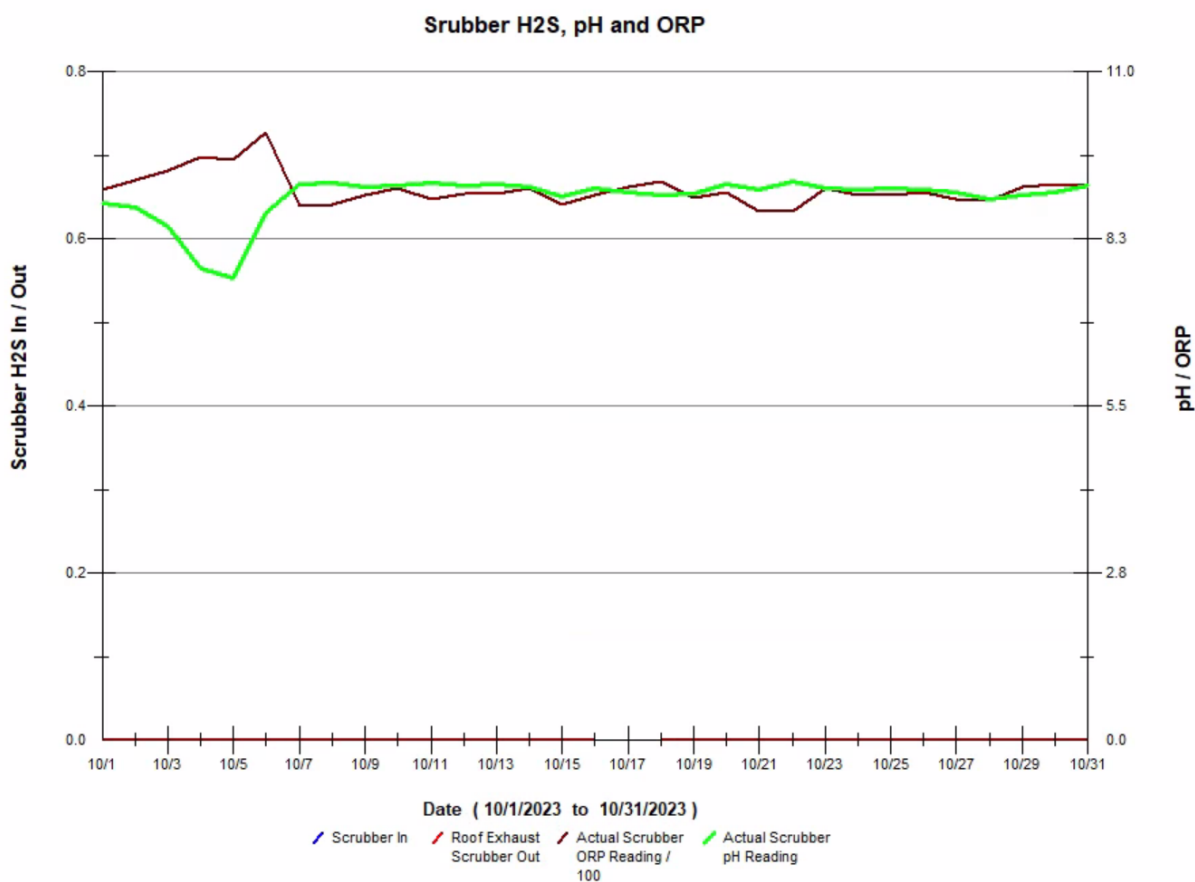
Month	Effluent Treated, MG	Sludge Disposed, Gals
Oct 2021	54.9	68,500
Oct 2022	40.9	17,000
Oct 2023	45.2	17,000

Graphs illustrating sludge/solids handling parameters over a 3-month period (ending 03-31-2022) generated by Power BI are shown below.

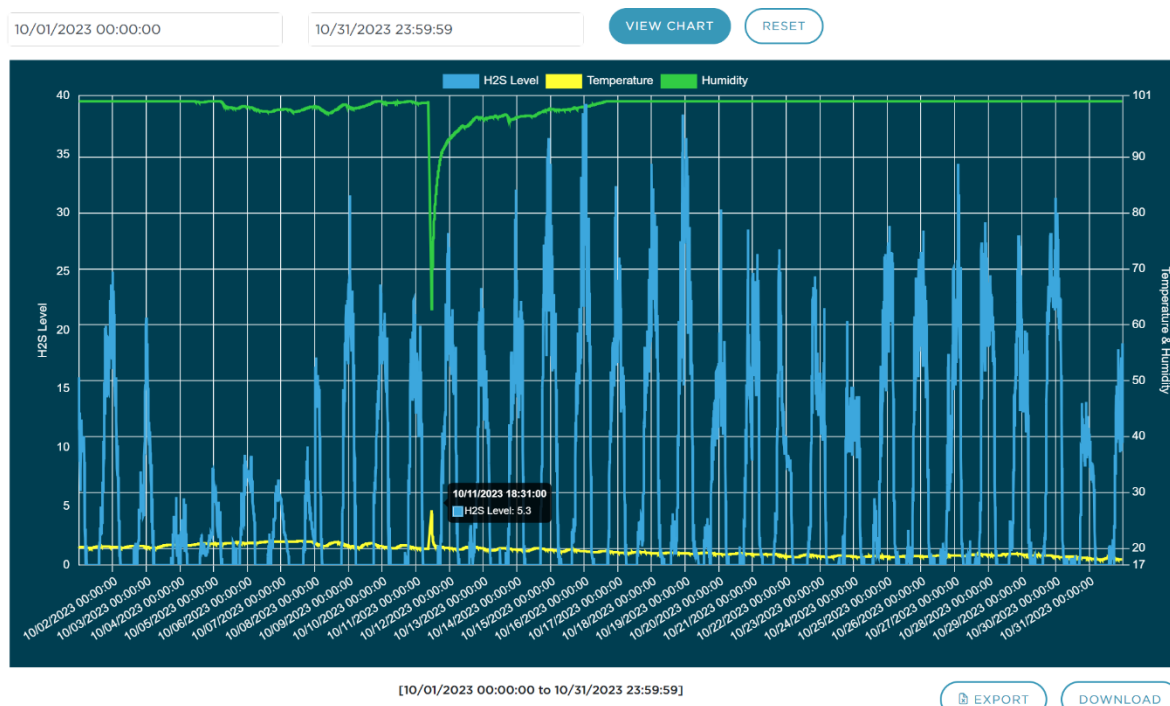


The Bioxide system was on, but the feed rates were minimal, as normal seasonal temperatures were cooler. Monthly graphs are attached below, and the daily average Bioxide use for October was about 110 gallons per day.

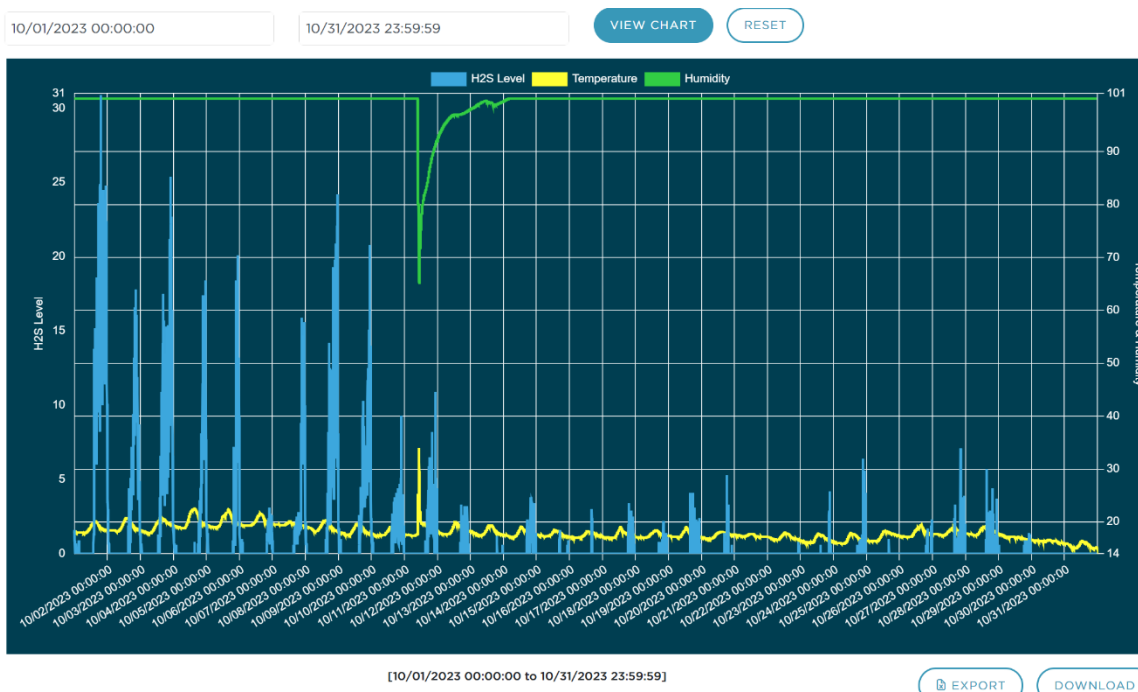
- The "In-Pipe" bacteria containers in the collection system manholes were changed out on October 10th and 26th.
- Slight changes - Hydrogen sulfide (H₂S) monitoring units were recording and trending on the odor scrubber. [inlet and outlet]. Increased scrubber fan speed slightly. See graph below:



The odor data logging unit at XYZ monitoring locations, recording the overall H₂S levels close to the plant, are shown in the graph below. During the month of October there was normal H₂S detected at this monitoring location.



Pump station #3 - H₂S is monitored at the end of the force main in the manhole at Nantasket Ave & Water Street. Bioxide is added to allow excess nitrate in the sewage system to treat the additional H₂S from other parts the system – such as PS #4, contributions from lines feeding the interceptor - PS #5, PS #6, PS #9, Spinnaker Island, etc., all the way to the wastewater plant. H₂S levels through October were minimal with generally mild temps for Fall, and adjustments for substantially less Bioxide feed were made.



3. MAINTENANCE SUMMARY

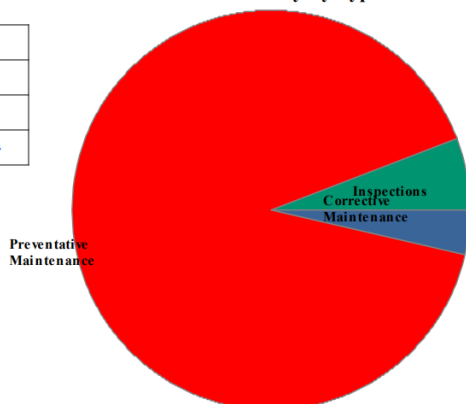


Maintenance History Report Hull Wastewater

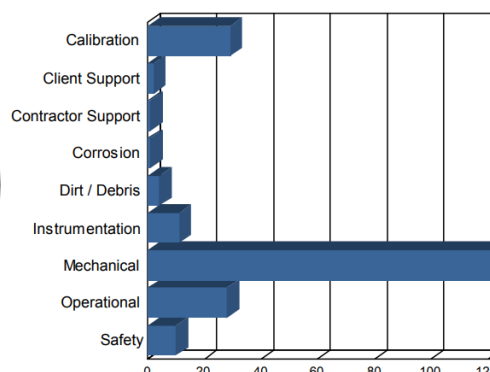
Start Date: 10/1/
End Date: 10/31/

Corrective Maintenance	8
Inspections	13
Preventative Maintenance	203
Total Work Orders	224

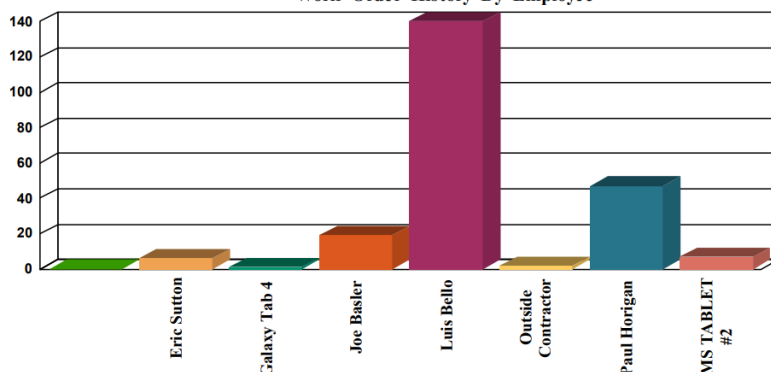
Work Order History By Type



Work Order History by Reason



Work Order History By Employee



Employee	WO Count	Labor Hours
Eric Sutton	6	18
Galaxy Tab 4	1	1
Joe Basler	19	11
Luis Bello	140	3
Outside Contractor	2	0
Paul Horgan	47	26
SEMS TABLET #2	7	0
Unassigned	2	3
Totals	224	60

The SEMS monthly work order summary for February is attached for review.

3.1 Maintenance Summary

- On October 5 Hi-Voltage Electric evaluated all the pump stations for any electrical deficiencies or issues of concern. A report of all their findings was submitted citing all issues found and the priority of the repairs.
- A new pump head was required on the Watson-Marlow peristaltic pump for the hypochlorite going to the H2S odor scrubber. The scrubber system combines sodium hypochlorite (NaOCl) with sodium hydroxide (NaOH) to minimize odors at the plant. The scrubber system was seen to not be performing well and upon investigating W&C staff noted the hypochlorite pump not functioning properly.
- South Shore Generator (SSG) was out to LS A on Valley Beach Rd.as the emergency generator would not start. It was determined to be a fuel delivery issue and new fuel lines & seals were installed. It was recommended to W&C staff to allow the generator engine to run longer during its weekly No Load running to use up more of the diesel fuel. Diesel deteriorates over time,

and we can add more fuel to freshen up the tanks. All the other pumps station generators about town have been previously converted to run on natural gas.

- Lydon Millwrights were onsite Oct. 11 for the bi-annual inspection of Secondary Clarifier #1. The tank was drained empty and cleaned out for the Lydon crew's inspection. No issues were found, and the tank is again ready for duty.
- On Oct. 1 Chlorine Contact Chamber (CCC) #1, there are two such chambers, was cleaned out as some floating sludge was seen in the channel and there can be a scum build up on the tank sidewalls. The CCC tank was isolated from any effluent flow and drained empty, the chamber is then hosed out clean of all debris.
- Weston & Sampson was contracted to address the low-pressure system areas of the collection system on Oct 16-17. The Rockview Ave, N. Truro Rd, and the Straights Pond areas where the houses have EOne grinder pumps which use such low-pressure lines. Most of that area's manholes had not been opened in years, and many had bolt down covers that needed cutting and or hammer drilling to be opened. With the manholes open any standing water was pumped out and the line valves were exercised.

3.2 Asset Management Accounts

Please see the attached summary totals and planned expenditures for the Asset Management accounts for contract year (8). Most recent through 10/12/23.

4. SAFETY



It is Woodard & Curran's policy to maintain a safe and healthy working environment for all employees and to comply with all applicable occupational health & safety regulations.

- There were no lost time incidents reported for October.
- Monthly PM's - emergency eyewash and shower inspections, fire extinguishers, and emergency lighting inspections completed.
- Monthly calibrations were performed on all MX4 & Max XT11 gas meters.
- W&C's Pure Safety topic for October was Bloodborne Pathogens.
- W&C's monthly safety inspection checklist for the plant and stations was completed.
- The staff's monthly SPARKS safety meeting was held on October 26th, including a look at W&C's monthly "Lessons Learned!" - which is a review of all safety related incidents occurring at other W&C projects.

5. STAFF DEVELOPMENT

5.1 Training

Training is an important part of any operation to ensure that employee health and safety is assured, quality standards are supported, staff skills are improved, career opportunities become available, and higher productivity is achieved.

Listed is a general outline of training that the staff received over the course of the month:

- All staff completed W&C's monthly Pure Safety training module. The staff's monthly SPARKS safety meeting was held on October 26. Topics discussed were forklift operation, sitework trenching, and guarding floor & wall openings on the jobsite. Staff also reviewed the "near-miss" incidents occurring at all W&C projects during the month of September in "Lessons Learned!"
- Ben P. & Clyde L. went to the Plymouth WWTP on Oct 18 for Hazzard Awareness & Confined Space Entry (CSE) training.
- On Oct 30 & 31, Mike S., Eric S, and Luis B. all took W&C required First AID, CPR, & AED training with Joan Taverna at the Town Hall.

5.2 Staffing Updates

- Plant continues to have weekend coverage supplemented with part-time staffers Roger Boltrushek and Ryan Holman, in addition to Mike S, Joe B, Luis B, Eric S, Clyde L, and Ben P.
- O&M Specialists Paul Horigan and Jody St George continue to assist as needed with plant O&M projects as needed.

6. COLLECTION SYSTEM

6.1 Wet Well Maintenance

Pump stations are maintained by the operations team at the Hull WPCF. Below is a maintenance summary for the pump stations owned by the Town of Hull.

Table Key:

"X" – Pump Station Cleaned

■ – Pump Station Inspected

■ – See notes for additional information

blank – No Work Performed

Month	Pump Station							
	A	1	3	4	5	6	9	D
May 2023								
June 2023								
July 2023								
August 2023								
September 2023								
October 2023								
November 2023								
December 2023								
January 2024								
February 2024								
March 2024								
April 2024								

All pump stations, excluding Pump Station 3 and Station D, have an aerator/mixer in the wet wells.

6.2 Collection System Maintenance

Collection system work is documented and tracked in Utility Cloud [UC]. A summarized report for October has been included as an attachment to the Monthly Operating Report.

Woodard & Curran assisted/conducted camera work and sewer system support in the Hull collection system at the following areas during the month of October. Ongoing backup and blockage call outs requiring an increase in labor and time to support. A summary of W&C's efforts at the various call out locations is as follows:

- There was one call for E-One Grinder pump service on October 25. Upon investigation W&C staff found that the circuit breaker for the pump was off-and not tripped! The homeowner offered no explanation of why it was turned off.
- There was one sewer backup call on October 4th from a resident at 636 Nantasket Avenue. An investigation by a plumber revealed tree roots had infiltrated the lateral.
- There was one odor complaint called in from the homeowners at 97 Nantasket Avenue on October 5th- no source of odor was found to be evident. However, the parents own the home next door #95 Nantasket Ave, and W&C staff noticed a spongy depression in that front yard, which was tentatively from a leaking potable water supply line. Wier river Water was called to further address the matter.
- Pump station emergency generator testing consists of a weekly no load running and a monthly loaded running.
- All Pump station wet wells were inspected in October- monthly station inspections are completed and combined with the monthly station PM's.
- Upload new or updated tie-cards to the UC as required.
- Dig-Safe mark outs are completed throughout the Town of Hull as needed to assist and facilitate scheduled and emergency gas repairs, broken water mains, roadway paving projects, and other residential and town projects. All are listed in the UC summary.

7. PROJECT MANAGEMENT & ADMINISTRATION



7.1 Ongoing Projects and Support Items- October Updates:

- Phase 1 construction work in the operations building is fully complete.
- Phase 2 Influent upgrade contractor Barletta Heavy Division and other subcontractors are onsite regularly.
- Plant Manager Mike S. and Assistant Plant Manager Joe B. are meeting weekly with John S. and Tom M. to discuss the Hull Sewer Department operations, any treatment plant issues, the collection system maintenance, and any upcoming projects.





woodardcurran.com

Date	Asset ID	Asset Description	Asset Class	Name
10/12/2023 13:37	01-021	5 ARTHUR ST	Hull Parcels	Sutton, Eric
10/16/2023 9:33	05-086	3 JAMES AVE	Hull Parcels	Sutton, Eric
10/20/2023 13:24	09-047	948 NANTASKET AVE	Hull Parcels	Sutton, Eric
10/20/2023 13:22	13-062	28 S STREET	Hull Parcels	Sutton, Eric
10/20/2023 13:19	13-069	35 R STREET	Hull Parcels	Sutton, Eric
10/3/2023 8:31	13-145	49 P STREET	Hull Parcels	Sutton, Eric
10/27/2023 11:28	16-015	37 CADISH AVE	Hull Parcels	Sutton, Eric
10/27/2023 11:24	16-077	36 CADISH AVE	Hull Parcels	Sutton, Eric
10/12/2023 9:23	16-187	40 CENTRAL AVE	Hull Parcels	Sutton, Eric
10/14/2023 7:21	19-011	5 WESTON STREET	Hull Parcels	Sutton, Eric
10/5/2023 9:49	19-049	23 LEWIS STREET	Hull Parcels	Sutton, Eric
10/27/2023 13:05	19-089	191 A SAMOSET AVE	Hull Parcels	Sutton, Eric
10/4/2023 14:39	19-112	636 NANTASKET AVE	Hull Parcels	Sutton, Eric
10/12/2023 9:14	20-088	2 MAPLE ST	Hull Parcels	Sutton, Eric
10/12/2023 13:55	21-059	110 MANOMET AVE	Hull Parcels	Sutton, Eric
10/10/2023 11:26	21-104	141 SAMOSET AVE	Hull Parcels	Sutton, Eric
10/9/2023 13:23	22-159	87 LYNN AVE	Hull Parcels	Sutton, Eric
10/9/2023 13:20	23-032	178 KINGSLEY RD	Hull Parcels	Sutton, Eric
10/9/2023 13:21	23-065	113 SAMOSET AVE	Hull Parcels	Sutton, Eric
10/12/2023 13:45	23-106	110 SAMOSET AVE	Hull Parcels	Sutton, Eric
10/27/2023 14:00	24-078	81 WARFIELD AVE	Hull Parcels	Sutton, Eric
10/16/2023 9:46	25-083	51 BEACH AVE	Hull Parcels	Sutton, Eric
10/9/2023 13:25	26-055	27 RUSSELL ST	Hull Parcels	Sutton, Eric
10/3/2023 9:01	26-056	29 RUSSELL ST	Hull Parcels	Sutton, Eric
10/3/2023 9:07	26-056	29 RUSSELL ST	Hull Parcels	Sutton, Eric
10/12/2023 13:59	26-103	38 REVERE ST	Hull Parcels	Sutton, Eric
10/16/2023 9:37	27-017	17 MANOMET AVE	Hull Parcels	Sutton, Eric
10/20/2023 13:11	28-090	25 KINGSLEY RD	Hull Parcels	Sutton, Eric
10/10/2023 11:40	30-012	111 EDGEWATER RD	Hull Parcels	Sutton, Eric
10/20/2023 12:53	32-060	0 CLIFTON AVE	Hull Parcels	Sutton, Eric
10/25/2023 11:54	34-027	16 HILLSIDE RD	Hull Parcels	Sutton, Eric
10/9/2023 13:18	36-017	47 BAY STREET	Hull Parcels	Sutton, Eric
10/20/2023 14:59	36-141	8 ANDREW RD	Hull Parcels	Sutton, Eric
10/12/2023 9:16	37-010	184 NANTASKET AVE	Hull Parcels	Sutton, Eric
10/27/2023 11:30	39-003	97 NANTASKET AVE	Hull Parcels	Sutton, Eric
10/16/2023 9:59	48-013-A	23 MIDLEDGE AVE	Hull Parcels	Sutton, Eric
10/25/2023 17:41	49-030	5 POND STREET	Hull Parcels	Sutton, Eric
10/5/2023 12:41	51-105	214 ATLANTIC AVE	Hull Parcels	Sutton, Eric
10/19/2023 15:12	51-109	5 SEA VIEW AVE	Hull Parcels	Sutton, Eric
10/3/2023 13:22	52-033	25 A GUN ROCK AVE	Hull Parcels	Sutton, Eric
10/9/2023 13:16	52-042	145 ATLANTIC AVE	Hull Parcels	Sutton, Eric
10/9/2023 13:15	54-010	25 REEF POINT	Hull Parcels	Sutton, Eric
10/25/2023 13:21	54-027	42 SUMMIT AVE	Hull Parcels	Sutton, Eric

10/10/2023 14:55 Bateria UNIT #21	UNIT #21	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 14:53 Bateria UNIT #22	UNIT #22	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 15:07 Bateria UNIT # 8	UNIT # 8	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 15:11 Bateria UNIT #1	UNIT #1	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 15:07 Bateria UNIT #10	UNIT #10	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 14:57 Bateria UNIT #11	UNIT #11	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 14:53 Bateria UNIT #12	UNIT #12	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 14:54 Bateria UNIT #13	UNIT #13	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 14:54 Bateria UNIT #14	UNIT #14	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 14:55 Bateria UNIT #15	UNIT #15	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 14:56 Bateria UNIT #16	UNIT #16	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 15:00 Bateria UNIT #17	UNIT #17	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 14:58 Bateria UNIT #18	UNIT #18	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 14:57 Bateria UNIT #19	UNIT #19	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 15:10 Bateria UNIT #2	UNIT #2	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 15:10 Bateria UNIT #2	UNIT #2	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 15:11 Bateria UNIT #2	UNIT #2	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 14:56 Bateria UNIT #20	UNIT #20	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 14:53 Bateria UNIT #23	UNIT #23	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 15:09 Bateria UNIT #24	UNIT #24	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 14:58 Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 15:09 Bateria UNIT #4	UNIT #4	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 15:08 Bateria UNIT #5	UNIT #5	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 15:09 Bateria UNIT #6	UNIT #6	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 15:08 Bateria UNIT #7	UNIT #7	Hull In Pipe Bacteria Unit	Sutton, Eric
10/10/2023 14:52 Bateria UNIT #9	UNIT #9	Hull In Pipe Bacteria Unit	Sutton, Eric
10/3/2023 11:03 MH-20299	SEMS_Asset	Sanitary Manhole	Sutton, Eric
10/27/2023 9:24 MH-20414	SEMS_Asset	Sanitary Manhole	Sutton, Eric
10/25/2023 11:56 MH-20709	SEMS_Asset	Sanitary Manhole	Sutton, Eric
10/17/2023 14:27 MH-20832	SEMS_Asset	Sanitary Manhole	Sutton, Eric
10/27/2023 13:23 MH-20907	SEMS_Asset	Sanitary Manhole	Sutton, Eric

[illegible]

Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
Hull - In Pipe Bacteria Units	View
MH Frame & Cover Inspection	View
MH Frame & Cover Inspection	View
MH Frame & Cover Inspection	View
Generic WO	View
Generic WO	View



Maintenance History Report

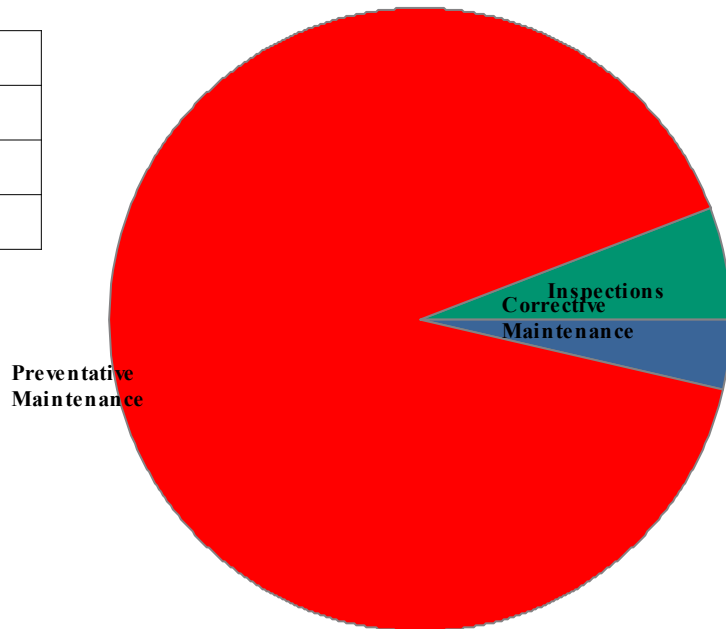
Start Date: 10/1/2023

End Date: 10/31/2023

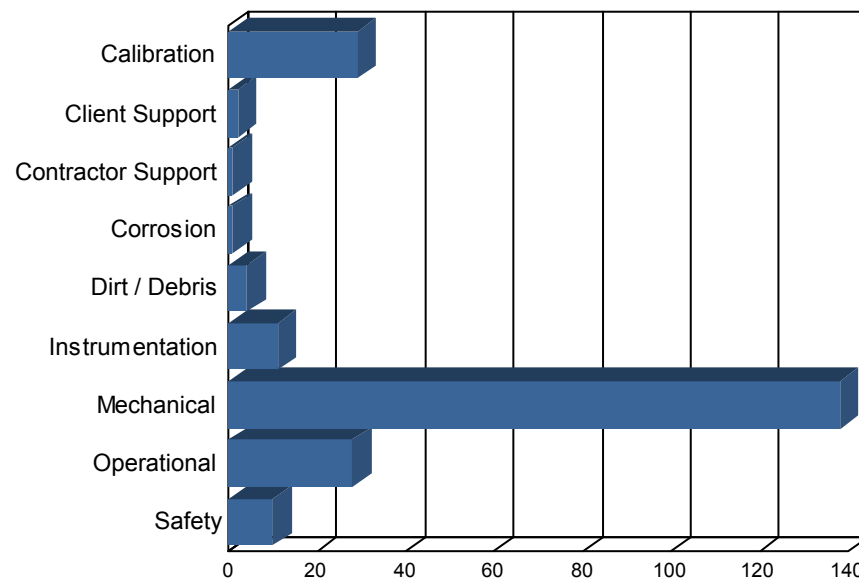
Hull Wastewater

Work Order History By Type

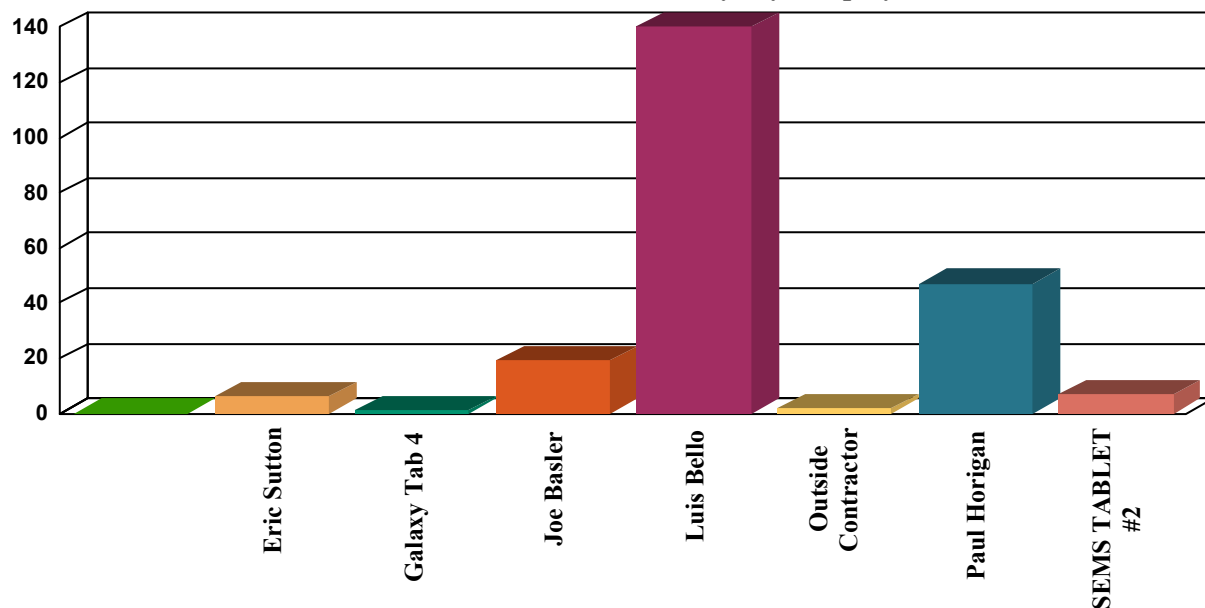
Corrective Maintenance	8
Inspections	13
Preventative Maintenance	203
Total Work Orders	224



Work Order History by Reason



Work Order History By Employee



Employee	WO Count	Labor Hours
Eric Sutton	6	18
Galaxy Tab 4	1	1
Joe Basler	19	11
Luis Bello	140	3
Outside Contractor	2	0
Paul Horigan	47	26
SEMS TABLET #2	7	0
Unassigned	2	3
Totals	224	60

Corrective Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/3/23	18636	30 - WW Treatment Plant - General	Influent pump room	Clyde/ Eric hosed and puddle pumped influent pump room	Eric Sutton	10/3/23	Completed
10/5/23	18637	Caustic System	Foam in sight glass & pump leaking.	Drained and rinsed sight glass & replaced pump head on caustic pump.		10/5/23	Completed
10/11/23	18638	Secondary Clarifiers	Replaced broken water supply connection	Went hardware store bought supplies		10/11/23	Completed
10/18/23	18641	PS Kholer Trailer Mounted Generator	Will not run	Replace fuel filter, clean check valve in fuel line near	Paul Horigan	10/18/23	Completed
10/18/23	18639	22 - WW - sewers/pipes/force mains	W/C , weston sampson on site Inspection of low pressure force main, exercise valves	Opened 16 MHs inspected, exercise d valves	Eric Sutton	10/18/23	Completed
10/19/23	18640	22 - WW - sewers/pipes/force mains	W/C Weston sampson on site straight pond area low pressure force main valve exercise	W/C Weston sampson exercised low pressure force main valves day 3 (8 completed) day 2 (16 completed) day 3 (9 completed)	Eric Sutton	10/19/23	Completed
10/25/23	18642	30 - WW Treatment Plant - General	Es BP CL Lb organized hose shed after new location Es BP swapped out 6" pump from draper Ave Dpw storm station 6b at draper 6a back at plant	Es BP swapped out 6a to 6b 6" trash pumps	Eric Sutton	10/25/23	Completed
10/28/23	18644	RAS Pump 3	Remove debris	LOTO performed pulled pump removed debris. Before flow rate .74mgd after .95 mgd	Joe Basler	10/28/23	Completed

Inspections

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/16/23	18196	Emergency Lighting & exit signs	Emergency Lighting Inspection - Monthly		Luis Bello	10/11/23	Completed
10/17/23	17609	30 - WW Treatment Plant - General	Monthly H&S Inspection	Completed as requested	Luis Bello	6/5/23	Completed
10/20/23	17794	PS 1	PS #1 Inspection - Monthly	Ddidnot complete, will complete with next month inspection	Paul Horigan	7/6/23	Completed
10/20/23	17943	PS 1	PS #1 Inspection - Monthly	Needs ww cleaning	Paul Horigan	8/3/23	Completed
10/23/23	18236	PS 1	PS #1 Inspection - Monthly		Luis Bello	10/5/23	Completed
10/26/23	18643	Truck 2 - 2009 Chevy 2500 HD	Perform vehicle inspection	Inspected vehicle - See doFORMS report for full details.	Galaxy Tab 4	10/26/23	Completed
10/26/23	18150	Truck 2 - 2009 Chevy 2500 HD	Monthly vehicle inspection on do-Forms		Luis Bello	9/4/23	Completed
10/26/23	18289	Truck 2 - 2009 Chevy 2500 HD	Monthly vehicle inspection on do-Forms		Luis Bello	10/2/23	Completed
10/26/23	18097	PS 1	PS #1 Inspection - Monthly		SEMS TABLET #2	9/7/23	Completed
10/30/23	18016	Truck 3 - 2015 Chevy 3500 HD	Monthly vehicle inspection on do-Forms	It will be done with the next pm.	Luis Bello	8/7/23	Completed
10/30/23	18140	Truck 1 - 2010 Dodge Ram 1500	Monthly vehicle inspection on do-Forms	Will be done with next pm.	Luis Bello	9/4/23	Completed
10/30/23	18157	Truck 3 - 2015 Chevy 3500 HD	Monthly vehicle inspection on do-Forms	Will be done with next pm.	Luis Bello	9/4/23	Completed
10/30/23	18158	Truck 4 - 2015 Nissan Frontier	Monthly vehicle inspection on do-Forms	Will be done at next pm.	Luis Bello	9/4/23	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/3/23	18060	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load		Luis Bello	9/25/23	Completed
10/3/23	18086	RAS Pump 2	Monthly Check Pump Couplings		Luis Bello	9/6/23	Completed
10/3/23	18201	Generator #1- Emergency Kohler 750	Generator - Monthly Load Test		Luis Bello	10/1/23	Completed
10/3/23	18056	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load		Luis Bello	9/25/23	Completed
10/3/23	18078	Aeration Blower 1	Aeration Blower #1 Air Filter Inspection - monthly		Luis Bello	9/26/23	Completed
10/3/23	18197	Generator #2 - Backup Detroit 500	Generator - Monthly Load Test		Luis Bello	10/1/23	Completed
10/3/23	18079	Aeration Blower 2	Aeration Blower #2 Air Filter Inspection - Monthly		Luis Bello	9/28/23	Completed
10/9/23	18108	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		Luis Bello	9/27/23	Completed
10/9/23	18112	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		Luis Bello	9/27/23	Completed
10/9/23	18118	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		Luis Bello	9/27/23	Completed
10/9/23	18128	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		Luis Bello	9/27/23	Completed
10/9/23	18132	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		Luis Bello	9/27/23	Completed
10/9/23	18122	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		Luis Bello	9/27/23	Completed
10/9/23	18243	PS 1 Generator	PS #1 Generator Inspection and Load Test - Monthly		Luis Bello	10/4/23	Completed
10/9/23	18244	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		Luis Bello	10/4/23	Completed
10/9/23	18248	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		Luis Bello	10/4/23	Completed
10/9/23	18252	PS 3 Generator	PS #3 Generator Inspection and Load Test - Monthly		Luis Bello	10/4/23	Completed
10/9/23	18253	PS 4 Generator	PS #4 Generator Inspection and Load Test - Monthly		Luis Bello	10/4/23	Completed
10/9/23	18254	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		Luis Bello	10/4/23	Completed
10/9/23	18263	PS 9 Generator	PS #9 Generator Inspection and Load Test - Monthly		Luis Bello	10/4/23	Completed
10/9/23	18264	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		Luis Bello	10/4/23	Completed
10/9/23	18268	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		Luis Bello	10/4/23	Completed
10/9/23	18258	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		Luis Bello	10/4/23	Completed
10/9/23	18262	PS 5 Generator	PS #5 Generator Inspection and Load Test - Monthly		Luis Bello	10/4/23	Completed
10/9/23	18316	Generators "All Pump Station"	Generator - Monthly Load Test		Luis Bello	10/1/23	Completed
10/12/23	18189	Portable Generator - Honda	Portable Generator Inspection - Monthly		Luis Bello	10/4/23	Completed
10/12/23	18278	GODWIN Portable Pump	Test Run Godwin Pump-Monthly		Luis Bello	10/4/23	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/12/23	18208	Influent Sluice Isolation Gate	Weekly operate through full range		Eric Sutton	10/4/23	Completed
10/12/23	18305	High level floats	Weekly High Float Alarm test		Luis Bello	10/1/23	Completed
10/12/23	18320	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		Luis Bello	10/1/23	Completed
10/12/23	18306	High level floats	Weekly High Float Alarm test		Luis Bello	10/8/23	Completed
10/12/23	18321	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		Luis Bello	10/8/23	Completed
10/13/23	18234	Sludge Transfer Pump 1	Monthly Check Pump Couplings		Luis Bello	10/4/23	Completed
10/13/23	17652	Sludge Transfer Pump 1	Monthly Check Pump Couplings		Luis Bello	6/7/23	Completed
10/13/23	18235	Sludge Transfer Pump 2	Monthly Check Pump Couplings		Luis Bello	10/4/23	Completed
10/13/23	18209	Influent Sluice Isolation Gate	Weekly operate through full range		Eric Sutton	10/11/23	Completed
10/13/23	18095	Sludge Transfer Pump 1	Monthly Check Pump Couplings		Luis Bello	9/6/23	Completed
10/13/23	18096	Sludge Transfer Pump 2	Monthly Check Pump Couplings		Luis Bello	9/6/23	Completed
10/16/23	18281	PS Kholer Trailer Mounted Generator	Generator Weekly - Test Run no load		Luis Bello	10/16/23	Waiting for Parts
10/16/23	18245	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		Luis Bello	10/11/23	Completed
10/16/23	18249	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		Luis Bello	10/11/23	Completed
10/16/23	18255	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		Luis Bello	10/11/23	Completed
10/16/23	18265	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		Luis Bello	10/11/23	Completed
10/16/23	18269	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		Luis Bello	10/11/23	Completed
10/16/23	18259	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		Luis Bello	10/11/23	Completed
10/17/23	18202	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load		Luis Bello	10/16/23	Completed
10/17/23	18213	Influent Pump 1	Monthly Check Pump Couplings	Completed as requested	Paul Horigan	10/4/23	Completed
10/17/23	18214	Influent Pump 2	Monthly Check Pump Couplings	Completed as requested	Paul Horigan	10/4/23	Completed
10/17/23	18216	Influent Pump 4	Monthly Check Pump Couplings	Completed as requested	Paul Horigan	10/4/23	Completed
10/17/23	18217	Influent Pump 5	Monthly Check Pump Couplings	Completed as requested	Paul Horigan	10/4/23	Completed
10/17/23	18232	Primary Sludge Pump 1	Monthly Check Pump Couplings	Completed as requested	Paul Horigan	10/4/23	Completed
10/17/23	18233	Primary Sludge Pump 2	Monthly Check Pump Couplings	Completed as requested	Paul Horigan	10/4/23	Completed
10/17/23	18226	Wet Scrubber Fan	Scrubber Exhaust Fan PM - Monthly	Completed as requested	Paul Horigan	10/11/23	Completed
10/17/23	18212	Mechanical Screen & Washpress System	Monthly Maintenance	Completed as requested	Paul Horigan	10/2/23	Completed
10/17/23	17257	Pressure Washer	Pressure Washer PM - Annual	Done	Luis Bello	4/13/23	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/17/23	17771	Influent Pump 2	Monthly Check Pump Couplings	Done with most recent pm	Paul Horigan	7/5/23	Completed
10/17/23	17772	Influent Pump 3	Monthly Check Pump Couplings	Done with most recent pm	Paul Horigan	7/5/23	Completed
10/17/23	17776	Influent Pump 5	Monthly Check Pump Couplings	Done with most recent pm	Paul Horigan	7/5/23	Completed
10/17/23	17790	Primary Sludge Pump 1	Monthly Check Pump Couplings	Done with most recent pm	Paul Horigan	7/5/23	Completed
10/17/23	17788	RST Feed Pump 1	Monthly Check Pump Couplings	Done with most recent pm	Paul Horigan	7/5/23	Completed
10/17/23	17789	RST Feed Pump 2	Monthly Check Pump Couplings	Done with most recent pm	Paul Horigan	7/5/23	Completed
10/17/23	17792	Sludge Transfer Pump 1	Monthly Check Pump Couplings	Done with most recent pm	Paul Horigan	7/5/23	Completed
10/17/23	17632	Influent Pump 3	Monthly Check Pump Couplings	Done with most recent pm	Paul Horigan	6/7/23	Completed
10/17/23	17634	Influent Pump 5	Monthly Check Pump Couplings	Done with most recent pm	Paul Horigan	6/7/23	Completed
10/17/23	17691	Plant Water Pump 2	Monthly Check Pump Couplings	Done with most recent pm	Paul Horigan	6/7/23	Completed
10/17/23	17650	Primary Sludge Pump 1	Monthly Check Pump Couplings	Done with most recent pm	Paul Horigan	6/7/23	Completed
10/17/23	17651	Primary Sludge Pump 2	Monthly Check Pump Couplings	Done with most recent pm	Paul Horigan	6/7/23	Completed
10/17/23	17645	RST Feed Pump 1	Monthly Check Pump Couplings	Done with most recent pm	Paul Horigan	6/7/23	Completed
10/17/23	17646	RST Feed Pump 2	Monthly Check Pump Couplings	Done with most recent pm	Paul Horigan	6/7/23	Completed
10/17/23	18227	RAS Pump 1	Monthly Check Pump Couplings		Luis Bello	10/4/23	Completed
10/17/23	18085	RAS Pump 1	Monthly Check Pump Couplings		Luis Bello	9/6/23	Completed
10/17/23	18228	RAS Pump 2	Monthly Check Pump Couplings		Luis Bello	10/4/23	Completed
10/17/23	18229	RAS Pump 3	Monthly Check Pump Couplings		Luis Bello	10/4/23	Completed
10/17/23	18087	RAS Pump 3	Monthly Check Pump Couplings		Luis Bello	9/6/23	Completed
10/18/23	18198	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load		Luis Bello	10/16/23	Completed
10/19/23	18210	Influent Sluice Isolation Gate	Weekly operate through full range		Luis Bello	10/18/23	Completed
10/19/23	18307	High level floats	Weekly High Float Alarm test		Luis Bello	10/15/23	Completed
10/19/23	18322	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		Luis Bello	10/15/23	Completed
10/19/23	18088	RST Feed Pump 1	Monthly Check Pump Couplings		Luis Bello	9/6/23	Completed
10/19/23	17932	RST Feed Pump 1	Monthly Check Pump Couplings		Luis Bello	8/2/23	Completed
10/19/23	18230	RST Feed Pump 1	Monthly Check Pump Couplings		Luis Bello	10/4/23	Completed
10/19/23	18231	RST Feed Pump 2	Monthly Check Pump Couplings		Luis Bello	10/4/23	Completed
10/19/23	17933	RST Feed Pump 2	Monthly Check Pump Couplings		Luis Bello	8/2/23	Completed
10/19/23	18089	RST Feed Pump 2	Monthly Check Pump Couplings		Luis Bello	9/6/23	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/20/23	18144	PS Kholer Trailer Mounted Generator	Generator Weekly - Test Run no load	Ccompleted when repaired	Paul Horigan	9/25/23	Completed
10/20/23	18280	PS Kholer Trailer Mounted Generator	Generator - Monthly Load Test	Completed with repair	Paul Horigan	10/1/23	Completed
10/20/23	17953	PS 9	PUMP STATIONS - QUATERLY PM'S	Ben, eric, clyde, ww is clean, 0%,, plugged in block heater, pump 1 suction valve seized	Paul Horigan	8/1/23	Completed
10/20/23	17946	PS 4	PUMP STATIONS - QUATERLY PM'S	Eric, ben, plugged in block heater, ww 25%,,	Paul Horigan	8/1/23	Completed
10/20/23	17945	PS 3	PUMP STATIONS - QUATERLY PM'S	Eric, ben, ww needs pumping 95%,	Paul Horigan	8/1/23	Completed
10/20/23	17954	PS A	PUMP STATIONS - QUATERLY PM'S	WW at65% coverage, pump 2 off needs new volute	Paul Horigan	8/1/23	Completed
10/23/23	17949	PS 5	PUMP STATIONS - QUATERLY PM'S	Completed as requested, ww 10%,	Paul Horigan	8/1/23	Completed
10/23/23	17950	PS 6	PUMP STATIONS - QUATERLY PM'S	Completed, no aces to ww,	Paul Horigan	8/1/23	Completed
10/23/23	17401	ATI Wet Hydrogen Sulfide Monitor Exhaust	System Maintenance		Luis Bello	4/1/23	Completed
10/23/23	17400	ATI Wet Hydrogen Sulfide Monitor Intake	System maintenace		Luis Bello	4/1/23	Completed
10/23/23	17295	Odor Control Wet Scrubber Vessel	Chemical wash		Luis Bello	4/1/23	Completed
10/23/23	17294	Wet Scrubber System	Clean and Calibration		Luis Bello	4/1/23	Completed
10/23/23	18266	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		SEMS TABLET #2	10/18/23	Completed
10/23/23	18270	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		SEMS TABLET #2	10/18/23	Completed
10/23/23	18260	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		SEMS TABLET #2	10/18/23	Completed
10/23/23	18256	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		SEMS TABLET #2	10/18/23	Completed
10/23/23	17385	FIRE ALARM SYSTEM	Fire alarm - semi annual		Luis Bello	4/3/23	Completed
10/23/23	17402	Effluent Flow Meter Isolation Valve	Isolation Valve Exercise		Luis Bello	4/7/23	Completed
10/23/23	18250	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		SEMS TABLET #2	10/18/23	Completed
10/23/23	18246	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		SEMS TABLET #2	10/18/23	Completed
10/23/23	17577	ATI Wet Hydrogen Sulfide Monitor Exhaust	System Maintenance		Luis Bello	5/1/23	Completed
10/23/23	17550	Chlorine probe ATI	ATI, change membrane		Luis Bello	5/1/23	Completed
10/23/23	17576	ATI Wet Hydrogen Sulfide Monitor Intake	System maintenace		Luis Bello	5/1/23	Completed
10/23/23	17459	Wet Scrubber System	Clean and Calibration		Luis Bello	5/1/23	Completed
10/23/23	17458	Effluent Pumps	Effluent Pump - Monthly		Luis Bello	5/15/23	Completed
10/23/23	17740	ATI Wet Hydrogen Sulfide Monitor Exhaust	System Maintenance		Luis Bello	6/1/23	Completed
10/23/23	17739	ATI Wet Hydrogen Sulfide Monitor Intake	System maintenace		Luis Bello	6/1/23	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/23/23	17640	Wet Scrubber System	Clean and Calibration		Luis Bello	6/1/23	Completed
10/24/23	18203	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load		Luis Bello	10/23/23	Completed
10/24/23	18199	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load		Luis Bello	10/23/23	Completed
10/24/23	17741	Secondary Effluent Isolation Gate	Isolation Valve Exercise		Luis Bello	6/2/23	Completed
10/24/23	18332	Effluent Flow Meter Isolation Valve	Isolation Valve Exercise		Luis Bello	10/6/23	Completed
10/24/23	17629	Mechanical Screen & Washpress System	Monthly Maintenance		Luis Bello	6/5/23	Completed
10/24/23	17647	Primary Scum Pump	Pen Valley Double Disc pumps - Quarterly		Luis Bello	6/8/23	Completed
10/24/23	17648	Secondary Scum Pump 1	Pen Valley Double Disc pumps - Quarterly		Luis Bello	6/8/23	Completed
10/24/23	17649	Secondary Scum Pump 2	Pen Valley Double Disc pumps - Quarterly		Luis Bello	6/8/23	Completed
10/24/23	17639	Effluent Pumps	Effluent Pump - Monthly		Luis Bello	6/15/23	Completed
10/24/23	17722	Truck 5 - Fork truck Doosan G25E-5	Annual PM		Luis Bello	6/15/23	Completed
10/24/23	17782	Effluent Pumps	Effluent Pump - Monthly		Luis Bello	7/15/23	Completed
10/24/23	17637	Aeration Tank 1 Oxygen Probe	AT #1 DO Probe Clean and Calibrate - Monthly		Luis Bello	6/6/23	Completed
10/24/23	17638	Aeration Tank 3 Oxygen Probe	AT #3 DO Probe Clean and Calibrate - Monthly		Luis Bello	6/6/23	Completed
10/24/23	17780	Aeration Tank 1 Oxygen Probe	AT #1 DO Probe Clean and Calibrate - Monthly		Luis Bello	7/4/23	Completed
10/24/23	17781	Aeration Tank 3 Oxygen Probe	AT #3 DO Probe Clean and Calibrate - Monthly		Luis Bello	7/4/23	Completed
10/24/23	17920	Aeration Tank 1 Oxygen Probe	AT #1 DO Probe Clean and Calibrate - Monthly		Luis Bello	8/1/23	Completed
10/24/23	17921	Aeration Tank 3 Oxygen Probe	AT #3 DO Probe Clean and Calibrate - Monthly		Luis Bello	8/1/23	Completed
10/24/23	17923	Wet Scrubber System	Clean and Calibration		Luis Bello	8/1/23	Completed
10/24/23	18025	pH meter	Clean and Calibrate		Luis Bello	8/1/23	In Process
10/25/23	18211	Influent Sluice Isolation Gate	Weekly operate through full range		Luis Bello	10/25/23	Completed
10/25/23	18308	High level floats	Weekly High Float Alarm test		Luis Bello	10/22/23	Completed
10/25/23	17723	Recirculation pump #1	Monthly Check Pump Couplings		Luis Bello	6/7/23	Completed
10/25/23	17937	Primary Sludge Pump 2	Monthly Check Pump Couplings		Luis Bello	8/2/23	Completed
10/25/23	17938	Primary Sludge Pump 2	Vaughan Centrifugal pump - Semi Annual		Luis Bello	8/17/23	Completed
10/25/23	18094	Primary Sludge Pump 2	Monthly Check Pump Couplings		Luis Bello	9/6/23	Completed
10/25/23	17935	Primary Sludge Pump 1	Vaughan Centrifugal pump - Semi Annual		Luis Bello	8/17/23	Completed
10/25/23	17936	Primary Sludge Pump 1	Monthly Check Pump Couplings		Luis Bello	8/2/23	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/25/23	18093	Primary Sludge Pump 1	Monthly Check Pump Couplings		Luis Bello	9/6/23	Completed
10/25/23	18323	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		Luis Bello	10/22/23	Completed
10/25/23	17894	Generator #2 - Backup Detroit 500	Generator #2 (Backup) PM -Annual		Outside Contractor	8/15/23	Completed
10/25/23	18028	Generators "All Pump Station"	Generator - Annual PM		Outside Contractor	8/15/23	Completed
10/26/23	18287	Ventis MX4 #5 - 4 Gas	4 Gas Meter #5 Calibration - Monthly	Faulty sensor.	Luis Bello	10/26/23	Waiting for Parts
10/26/23	18148	Ventis MX4 #5 - 4 Gas	4 Gas Meter #5 Calibration - Monthly		Luis Bello	9/28/23	Waiting for Parts
10/26/23	18295	GasAlert Max XTII #2	monthly calibration	Bad o2 sensor	Luis Bello	10/26/23	Waiting for Parts
10/26/23	18153	GasAlert Max XTII #2	monthly calibration		Luis Bello	9/28/23	Waiting for Parts
10/26/23	18145	Ventis MX4 #2 - 4 Gas	4 Gas Meter #2 Calibration - Monthly		Luis Bello	9/28/23	Completed
10/26/23	18147	Ventis MX4 #4 - 4 Gas	4 Gas Meter #4 Calibration - Monthly		Luis Bello	9/28/23	Completed
10/26/23	18149	Ventis MX4 #6 - 4 Gas	4 Gas Meter #6 Calibration - Monthly		Luis Bello	9/28/23	Completed
10/26/23	18275	GasAlert Max XTII #1	4 gas meter calibration - monthly		Luis Bello	10/1/23	Completed
10/26/23	18284	Ventis MX4 #2 - 4 Gas	4 Gas Meter #2 Calibration - Monthly		Luis Bello	10/26/23	Completed
10/26/23	18286	Ventis MX4 #4 - 4 Gas	4 Gas Meter #4 Calibration - Monthly		Luis Bello	10/26/23	Completed
10/26/23	18288	Ventis MX4 #6 - 4 Gas	4 Gas Meter #6 Calibration - Monthly		Luis Bello	10/26/23	Completed
10/27/23	18154	Chlorine probe AT1	Weekly calibration		Joe Basler	9/11/23	Completed
10/27/23	17547	Chlorine probe AT1	Weekly calibration		Joe Basler	5/8/23	Completed
10/27/23	17852	Chlorine probe AT1	Weekly calibration		Joe Basler	7/3/23	Completed
10/27/23	17853	Chlorine probe AT1	Weekly calibration		Joe Basler	7/17/23	Completed
10/27/23	18301	Chlorine probe AT1	Weekly calibration		Joe Basler	10/23/23	Completed
10/27/23	17712	Chlorine probe AT1	Weekly calibration		Joe Basler	6/5/23	Completed
10/27/23	18013	Chlorine probe AT1	Weekly calibration		Joe Basler	8/28/23	Completed
10/27/23	18300	Chlorine probe AT1	Weekly calibration		Joe Basler	10/9/23	Completed
10/27/23	18155	Chlorine probe AT1	Weekly calibration		Joe Basler	9/25/23	Completed
10/27/23	17855	Chlorine probe AT1	Change electrolyte		Joe Basler	7/1/23	Completed
10/27/23	18156	Chlorine probe AT1	Change electrolyte		Joe Basler	9/1/23	Completed
10/27/23	18302	Chlorine probe AT1	Change electrolyte		Joe Basler	10/1/23	Completed
10/27/23	17713	Chlorine probe AT1	Weekly calibration		Joe Basler	6/19/23	Completed
10/27/23	18015	Chlorine probe AT1	ATI, change membrane		Joe Basler	8/1/23	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/27/23	17548	Chlorine probe AT1	Weekly calibration		Joe Basler	5/22/23	Completed
10/27/23	17854	Chlorine probe AT1	Weekly calibration		Joe Basler	7/31/23	Completed
10/27/23	18012	Chlorine probe AT1	Weekly calibration		Joe Basler	8/14/23	Completed
10/27/23	17714	Chlorine probe AT1	Change electrolyte		Joe Basler	6/1/23	Completed
10/30/23	18146	Ventis MX4 #3 - 4 Gas	4 Gas Meter #3 Calibration - Monthly	Did not complete, will complete wiyh next months pm	Paul Horigan	9/28/23	Completed
10/30/23	18324	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY	Completed as requested	Paul Horigan	10/29/23	Completed
10/30/23	18219	Aeration Blower 2	Aeration Blower #2 Air Filter Inspection - Monthly	Completed as requested	Paul Horigan	10/26/23	Completed
10/30/23	17912	Influent Pump 4	Monthly Check Pump Couplings	Willcomplete with next months pm	Paul Horigan	8/2/23	Completed
10/30/23	17913	Influent Pump 5	Monthly Check Pump Couplings	Will complete with next months pm	Paul Horigan	8/2/23	Completed
10/30/23	17931	RST Feed Pump 1	Vaughan Centrifugal pump - Semi Annual	Completed as requested	Paul Horigan	8/17/23	Completed
10/30/23	17939	Sludge Transfer Pump 1	Monthly Check Pump Couplings	Completed as requested	Paul Horigan	8/2/23	Completed
10/30/23	17934	RST Feed Pump 2	Vaughan Centrifugal pump - Semi Annual	Completed as requested	Paul Horigan	8/17/23	Completed
10/30/23	17941	Waste Activated Sludge Pump 3	Vaughan Centrifugal pump - Semi Annual	Completed	Paul Horigan	8/17/23	Completed
10/30/23	18069	Influent Pump 1	Monthly Check Pump Couplings	Complete	Paul Horigan	9/6/23	Completed
10/30/23	18080	Aeration Tank 1 Oxygen Probe	AT #1 DO Probe Clean and Calibrate - Monthly	Will complete with next pm	Paul Horigan	9/5/23	Completed
10/30/23	18081	Aeration Tank 3 Oxygen Probe	AT #3 DO Probe Clean and Calibrate - Monthly	Will complete with next pm	Paul Horigan	9/5/23	Completed
10/30/23	18220	Aeration Tank 1 Oxygen Probe	AT #1 DO Probe Clean and Calibrate - Monthly	Completed	Paul Horigan	10/3/23	Completed
10/30/23	18221	Aeration Tank 3 Oxygen Probe	AT #3 DO Probe Clean and Calibrate - Monthly	Completed	Paul Horigan	10/3/23	Completed
10/30/23	17445	Mechanical Screen & Washpress System	Screen & Wash press - Semi annual maintenance	Not done, it will be completed with the next pm	Luis Bello	5/1/23	Completed
10/30/23	17762	Grit Screw Drive	Grit Screw Drive PM - Quarterly	Would be completed with next pm.	Luis Bello	7/14/23	Completed
10/30/23	17918	Secondary Clarifier 1	Clean Launder Screens - Quarterly	We cant do that anymore because it clogs up the plant water strainer.	Luis Bello	8/7/23	Completed
10/30/23	17919	Secondary Clarifier 2	Clean Launder Screens - Quarterly	We cant do it because it messes the plant water system.	Luis Bello	8/7/23	Completed
10/30/23	18026	ORP meter	Clean and Calibrate	It will be done at the next pm.	Luis Bello	8/10/23	Completed
10/30/23	17922	Effluent Pumps	Effluent Pump - Monthly	Will be done with next pm.	Luis Bello	8/15/23	Completed
10/30/23	18166	pH meter	Clean and Calibrate	Will be done with next pm.	Luis Bello	9/1/23	Completed
10/30/23	18070	Influent Pump 2	Monthly Check Pump Couplings	Will be done with next pm.	Luis Bello	9/6/23	Completed
10/30/23	18073	Influent Pump 3	Monthly Check Pump Couplings	Will be done with next pm.	Luis Bello	9/6/23	Completed
10/30/23	18074	Influent Pump 4	Monthly Check Pump Couplings	It will be done with next pm.	Luis Bello	9/6/23	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/30/23	18077	Influent Pump 5	Monthly Check Pump Couplings	It will be done with next pm.	Luis Bello	9/6/23	Completed
10/30/23	18167	ORP meter	Clean and Calibrate	It will be done with the next pm.	Luis Bello	9/10/23	Completed
10/30/23	18084	Wet Scrubber Fan	Scrubber Exhaust Fan PM - Monthly	It was done by someone else, but I am not sure about thr date.	Luis Bello	9/13/23	Completed
10/30/23	18090	Primary Scum Pump	Pen Valley Double Disc pumps - Quarterly	It will be done with next pm.	Luis Bello	9/14/23	Completed
10/30/23	18091	Secondary Scum Pump 1	Pen Valley Double Disc pumps - Quarterly	Will be done with next pm.	Luis Bello	9/14/23	Completed
10/30/23	18092	Secondary Scum Pump 2	Pen Valley Double Disc pumps - Quarterly	Will be completed with next pm.	Luis Bello	9/14/23	Completed
10/30/23	18082	Effluent Pumps	Effluent Pump - Monthly	It will be completed with next pm.	Luis Bello	9/15/23	Completed

Asset Management Accounts - Year 9							
		Actual to date			Projected for Final Estimate		
Account		Budgeted Amount	Spent to Date	Delta	Projected costs and incl PO's	Final est	Delta
09M-101A	Preventive Maint	\$242,712.26	\$80,319.85	\$162,392.41	\$114,140.00	\$194,459.85	\$48,252.41
09M-102B	Capital and Major Repairs	\$140,000.00	\$34,151.12	\$105,848.88	\$70,500.00	\$104,651.12	\$35,348.88
09M-103A	Major Sub Contractors	\$206,459.14	\$99,441.00	\$107,018.14	\$179,000.00	\$278,441.00	(\$71,981.86)
blank							
	Asset Management	\$589,171.40	\$213,911.97	\$375,259.43	\$363,640.00	\$577,551.97	\$11,619.43

\$375,259.43

Budget expended	Time Status	
	NOW=	12/5/2023
	Start	5/1/2020
33.1%	359.8%	326.7%
24.4%	359.8%	335.4%
48.2%	359.8%	311.7%
36.3%	359.8%	323.5%

09S	D Street	\$7,500.00	\$4,222.43	\$3,277.57	\$0.00	\$4,222.43	\$3,277.57
-----	----------	------------	------------	------------	--------	------------	------------

56.3%	359.8%	303.5%
-------	--------	--------

09C	Odor Control Chemicals	\$100,000.00	\$122,384.00	(\$22,384.00)	\$0.00	\$122,384.00	(\$22,384.00)
-----	------------------------	--------------	--------------	---------------	--------	--------------	---------------

122.4%	359.8%	237.5%
--------	--------	--------

\$352,875.43

Estimated total
remaining 09M,
09C (\$10,764.57)

Hull 2022-2023 - 09M Projects, Tasks, and Needs - (MS)								
Maintenance Account - Year 9 - 05_01_23 to 04_30_24								
FOR 2023 M.O.R.					\$363,640.00			12/5/2023 9:45
Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
1	Mechanical Work Labor by O&M specialists	Pending		101A	\$25,000.00			Placeholder for Jody St. George, Paul Horigan & WC Support Staff - Total budget \$25,000;
1	Pump and Motor Repairs/Replacements [invoiced and pcard]	Pending		101A	\$20,000.00			to keep existing equipment running - utilize various outside contractor repair shops, new purchases. orig budget \$20,000;
1	Lubricants	Pending		101A	\$1,000.00			Various Suppliers for oil and grease. Budgeted \$1000.
1	Generator Prev. Maintenance and Repairs	Pending		101A	\$21,698.61			Orig budget \$25,000. General PM and CM Repair Work - Placeholder
1	Fire Alarm Inspections and Service	Pending		101A	\$4,000.00			Original Budget \$4,000 - Semi Annual - Flight Alarm Co.Inspections, central station, and service calls
2	Universal waste disposal	Pending		101A	\$500.00			Placeholder - \$500
1	Service the Forklift	Pending		101A	\$400.00			Placeholder \$400 - Annual cost - outside vendor.
1	Overhead Hoist Inspection & repairs	Pending		101A	\$1,700.00			Annual task - Applied Dynamics - Inspection Work - due in spring/summer 2023
1	Flow meter verification and calibration	Pending		101A	\$1,200.00			Placeholder \$1,200 - Annual - Ray Ferland or other 1 visit annually -
1	Facility Building - Roof Inspection	Pending		101A	\$2,800.00			\$2800 Annual Placeholder - Established contract with Tecta America. Need for new proposal.
2	Jerome H2S Meter Inspection	Pending		102B	\$11,000.00			Placeholder if new meter is to be planned for. Factors for new meter replacement to be considered.
1	Janitorial Supplies	Pending		101A	\$3,000.00			Orig budget \$3,000 - Estimated annual expenditures
1	Manhole Inspections	Pending		101A				As required,and/or scheduled
2	General mechanical and electrical items/supplies	Pending		101A	\$20,000.00			Grainger, FWWebb, EJP,Hoadley, McMasterCarr, etc; orig budget \$20,000,
1	Thompson Pump repairs	Pending		101A				
2	Large Hoses & fittings	Pending		101A	\$3,000.00			Orig budget \$3,000. Replacements and/or Service - On-Going - As Needed.
1		Pending		102B				
3		Pending		101A				
		Pending		101A				

Hull 2022-2023 - 09M Projects, Tasks, and Needs - (MS)								
Maintenance Account - Year 9 - 05_01_23 to 04_30_24								
FOR 2023 M.O.R.					\$363,640.00			12/5/2023 9:45
Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
1	Lab Equip Calibration	Pending		101A	\$640.00			Annual service \$640
1		Pending		101A				
	Duperon Service Call	Pending		102B				recommended services per last visit, need repair report[s]
2		Pending		101A				
1		Pending		102B				
2	New Magnetic flow meters for RAS and WAS	Pending		102B	\$9,000.00			hardware - does not include installation [estimate for Equip - \$9,000] May or may not occur. Remove from planned projects for 09M.
2		Pending		102B				
1		Pending		102B				
1		Pending		102B				
1		Pending		102B				
3	Sanitaire hardware purchase for aer tk 1	Pending		102B				Purchase more hardware ??
1		Pending		102B				
2		Pending		102B				
2	Pump Station #3 - spare rotating, assy, or pump	Pending		102B				TBD- estimates being obtained
3	New 4-inch valves or 6-inch valves for pri building between the tanks & Installation	Pending		102B				Valves - cost: \$3000, sub-contracted labor - either WC or outside co.\$5,000 - totl estim \$8,000
3	Odor log data loggers & calibr kit	Pending		102B				if funds avail
3		Pending		102B				
3	Gravity Thickener #1 sandblasting/painting	Pending		102B				Estimate \$50,000+ - would need to go out for competitive bid request

Hull 2022-2023 - 09M Projects, Tasks, and Needs - (MS)								
Maintenance Account - Year 9 - 05_01_23 to 04_30_24								
FOR 2023 M.O.R.					\$363,640.00			12/5/2023 9:45
Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
2		Pending		102B				
1	Grit classifier system parts	Pending		102B	\$4,500.00			Plan for additional tail shaft assy and housing & bushings. Pricing out items/costs by various vendors incl Mfr. 3/16 update - recommendations provided for spare parts
	Plant Water System [Pump and/or parts]	Pending		102B	\$6,000.00			consider spare motor or complete unit. Under review/hold [est \$6,000].
1		Pending		102B				
1	Electrical Work	Pending		103A	\$35,000.00			Orig budget \$35,000. Electricians: Glen Fellows, HiVoltage, or other;
1	SCADA Work - service calls, etc	Pending		103A	\$6,000.00			Steve Rose and the SCADA Support Team; budget \$6,000;
1	E-One Repairs and Replacement	Pending		103A	\$65,000.00			Orig budget: \$65,000. Based on historica/recent costs.
1	Automatic Transfer Switch inspection and servicing	Pending		101A	\$2,400.00			\$2400 - Annual Service planned for NETS - Transfer Switch
1	Wetwell Inspections and Cleaning - Plant/Pump Stations	Pending		103A	\$8,000.00			As required, plant or pump stations; orig budget \$8,000;
1	Sewer Line Cleaning - Emergencies, pump & haul	Pending		103A	\$10,000.00			Placeholder - As required for various sub-contractors; could be Hoadley, Truax, WindRiver, BMC, or other, collection system & plant; budget \$10,000
1	Collection System and plant - emerg & unplanned calls - Jetting & CCTV work - various contractors	Pending		103A	\$15,000.00			Budget - 15,000, Plan to be developed
1		Pending		102B				
3		Pending		103A				
3	SHT1 - demo of equip, air piping & diffuser install/materials	Pending		103A				demo concrete in tank - \$15,000 - sub-contractor and installation of new equip -additional new equip \$6,000; air piping to the tank \$10,000; Total estimate: \$31k to 35K ??. For consideration with outside contractor
4	Generators - Load Bank Testing Plant & Pump Stations	Pending		103A				Look at 09M -last done under 06M. SSGen - review cost estimates.
1	Generators and portable pumps - Annual repairs	Pending		103A	\$20,000.00			SSGen - \$20,000
1	MCC work at the Pump Stations & IR scan for plant and pump s	Pending		103A				Review recent propsal and develop plan
3	Low pressure sewer valve box insp & mtce	Pending		103A				placeholder for contractor O&M inspections and potential repairs; Looking at Rosano-Davis or another contractor & W&C to investigate;come up with plan to rempve covers and inspect
1	Grit screw installation	Pending		102B	\$40,000.00			\$40,000 placeholder installation.

Hull 2022-2023 - 09M Projects, Tasks, and Needs - (MS)								
Maintenance Account - Year 9 - 05_01_23 to 04_30_24								
FOR 2023 M.O.R.					\$363,640.00			12/5/2023 9:45
Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
1		Pending		102B				
1		Pending		101A				
	HDWK fiberglass slide gate	Pending		101A	\$3,500.00			Soliciting estimates for at least one new slide gate. Placeholder [Jan 2023] \$3,000; Adjust estimate up to \$3,500 for one gate. No orders placed yet. 3/16 [AV]
1	SC #1 Structural Steel Repairs	Pending		103A	\$20,000.00			Based on T&M - center supports, scrapers, other - IPC Lydon.
TOTAL					\$360,338.61			