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COMMITMENT & INTEGRITY DRIVE RESULTS

HULL WATER POLLUTION CONTROL FACILITY

October
2022

MONTHLY OPERATING REPORT



NPDES NO. MA0101231

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1 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 2022.

- No lost-time incidents for the month of October
- Continuing Covid-19 awareness- adhering to W&C, Town of Hull, and CDC guidelines and sharing any updates.
- There were 148 effluent samples taken in the month of October- details on page 11.
- There were no alarm calls afterhours that required a response by W&C staff.
- There was one odor complaint in October.
- The Asset Management Accounts summaries for contract year #8 is attached. Latest revision date: 11/1/22.
- There was one E-One grinder pump call in October.
- 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 Bio Bot Covid-19 wastewater sampling & monitoring program continued with W&C staff assisting Brian Kiley of the HSD when needed.

***Mike Sullivan – Plant Manager
Town of Hull WPCF
12/7/2022***

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.

2 FLOWS AND LOADINGS



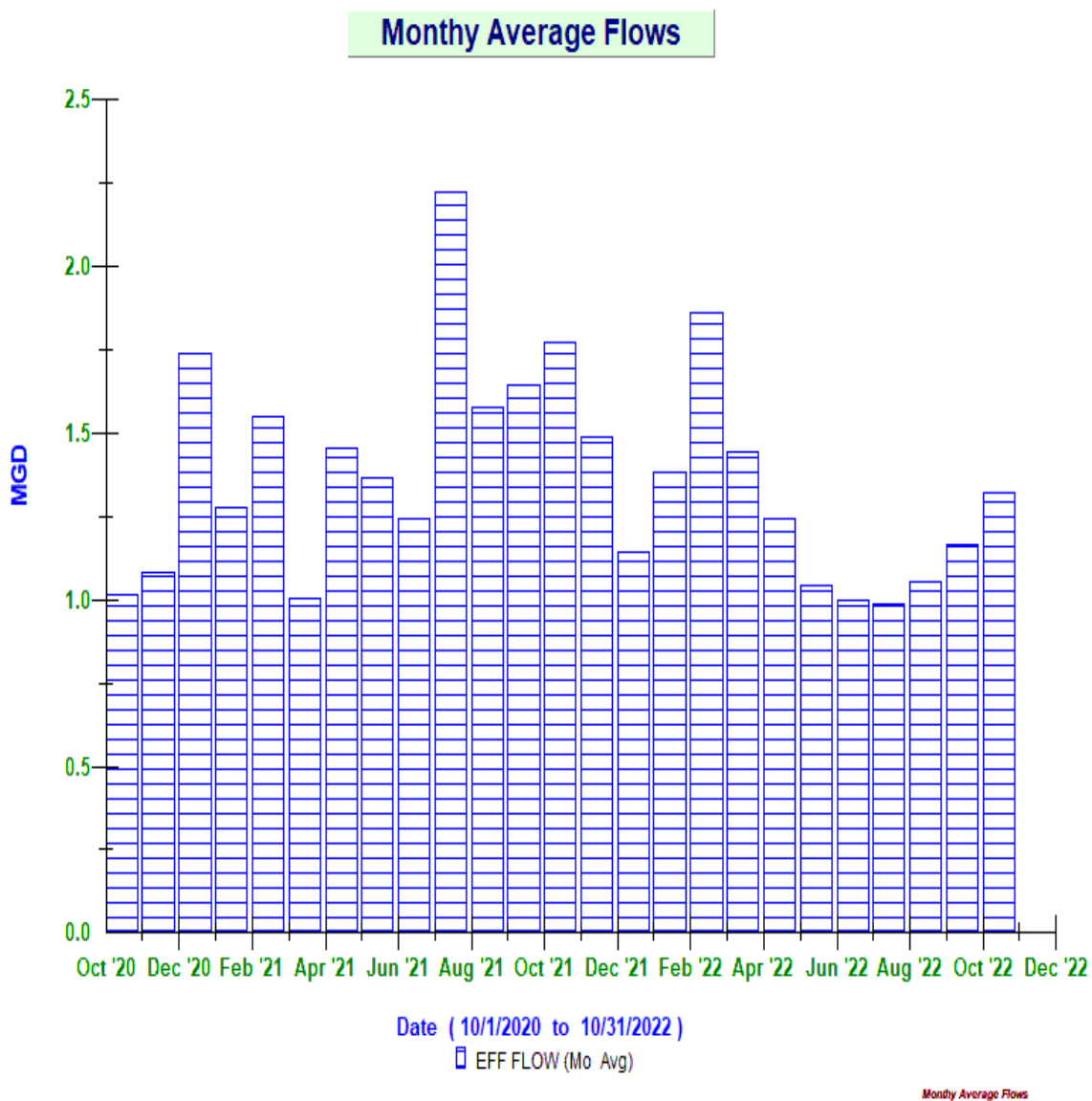
Average Daily Flows and Loadings for October

Month / Year	Eff Flow	Inf Flow	Inf BOD	Inf TSS	Eff BOD	EFF TSS
	MGD	MDG	LBS	LBS	LBS	LBS
Oct '20	1.02	*	1,919.87	2,800.66	97.64	157.17
Oct '21	1.77	1.75	3,216.53	5,865.58	80.03	186.27
Oct '22	1.32	*	1,243.39	2,242.98	42.79	142.74

* 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.

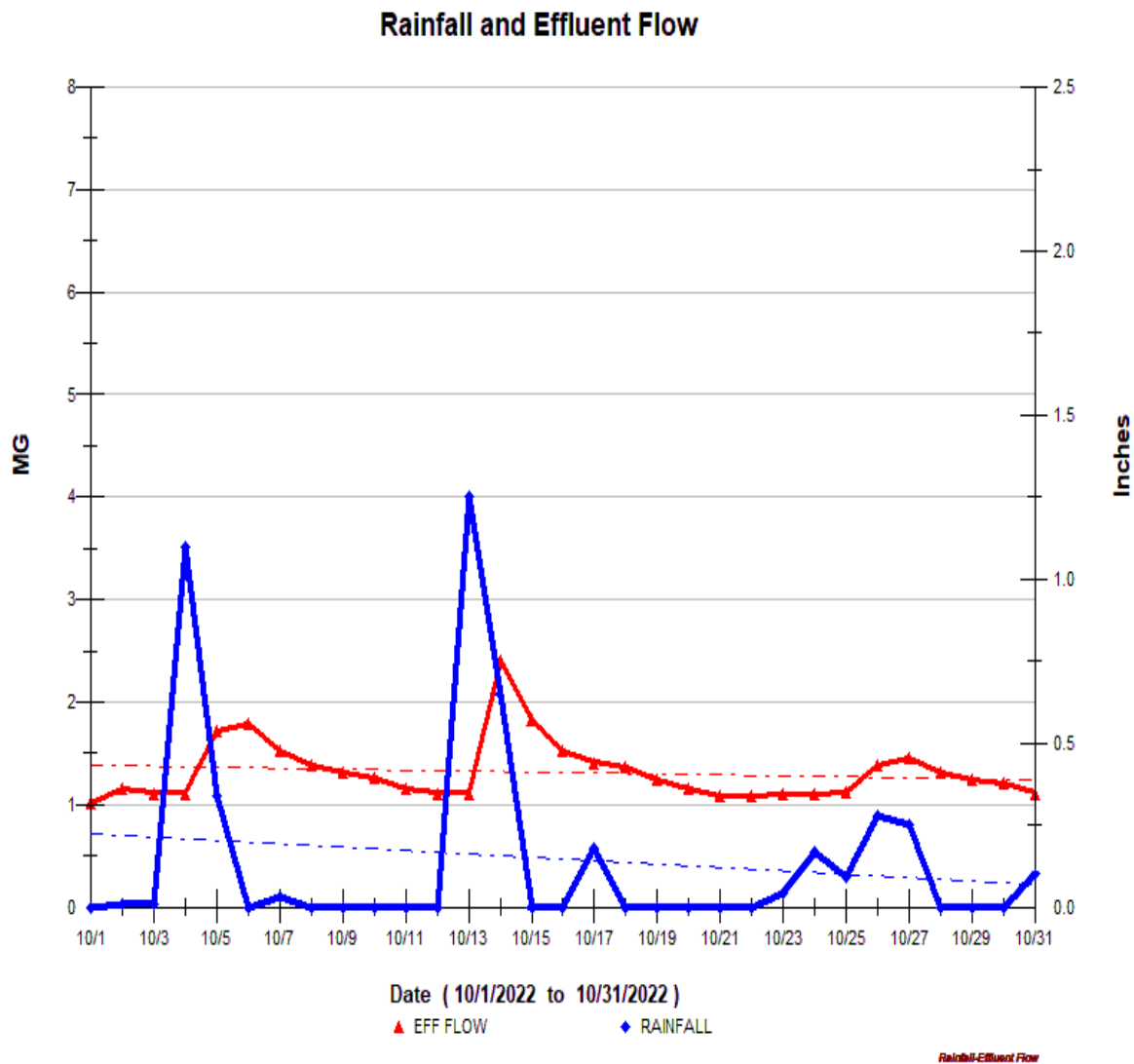
A. AVERAGE EFFLUENT MONTHLY FLOWS – 2+ YEAR COMPARISON

The monthly average flow for October was 1.04 MGD, slightly less than 1.17 MGD in September. Total precipitation for October was 4.86 inches, more than September's 2.99 inches, but still no impact on plant flow, due to the somewhat dry conditions. The graph shows the 2-plus year summary of the monthly average flows.

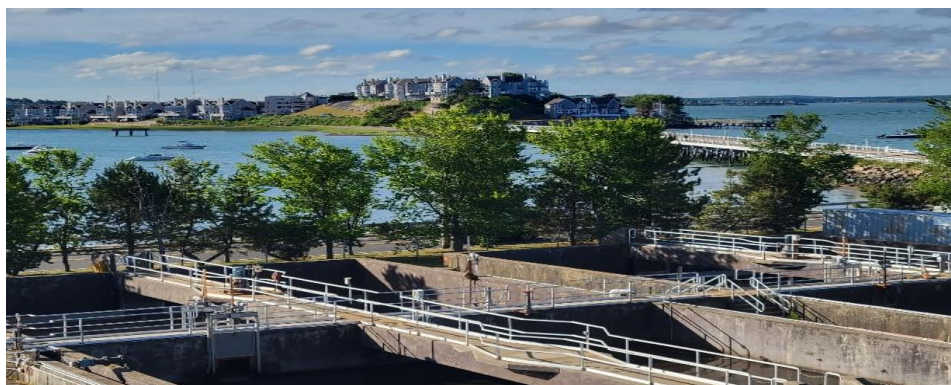


B. TWO MONTH SUMMARY OF RAINFALL AND THE INFLUENCE ON EFFLUENT FLOWS

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

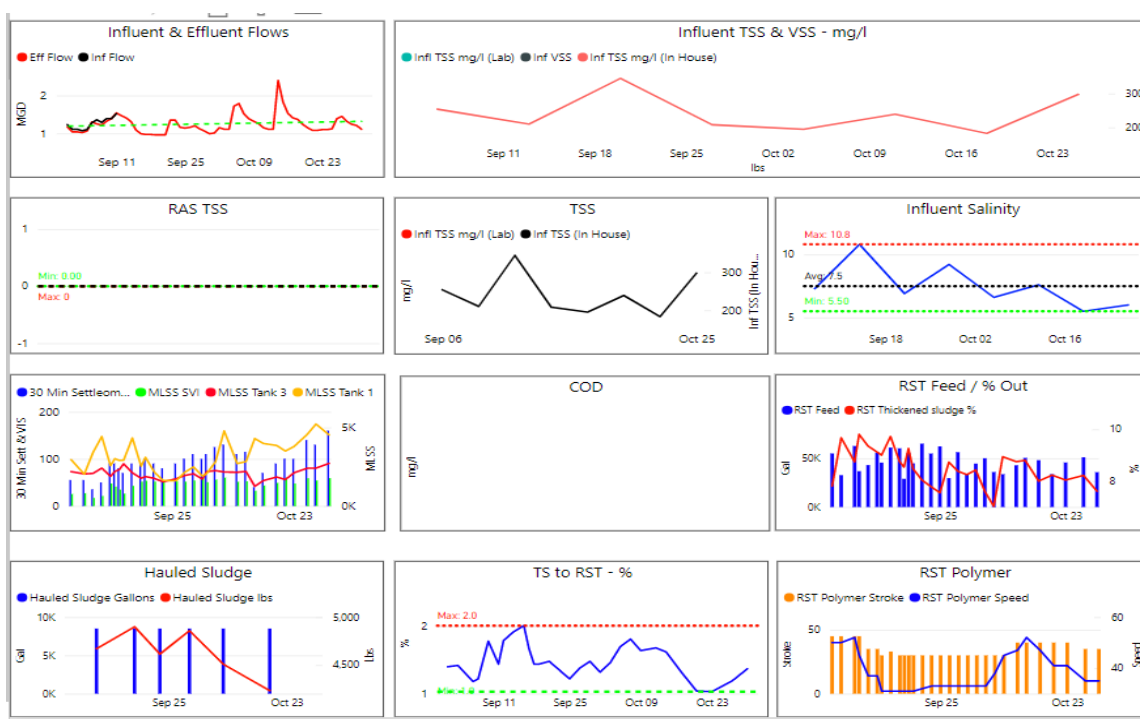


3 COMPLIANCE



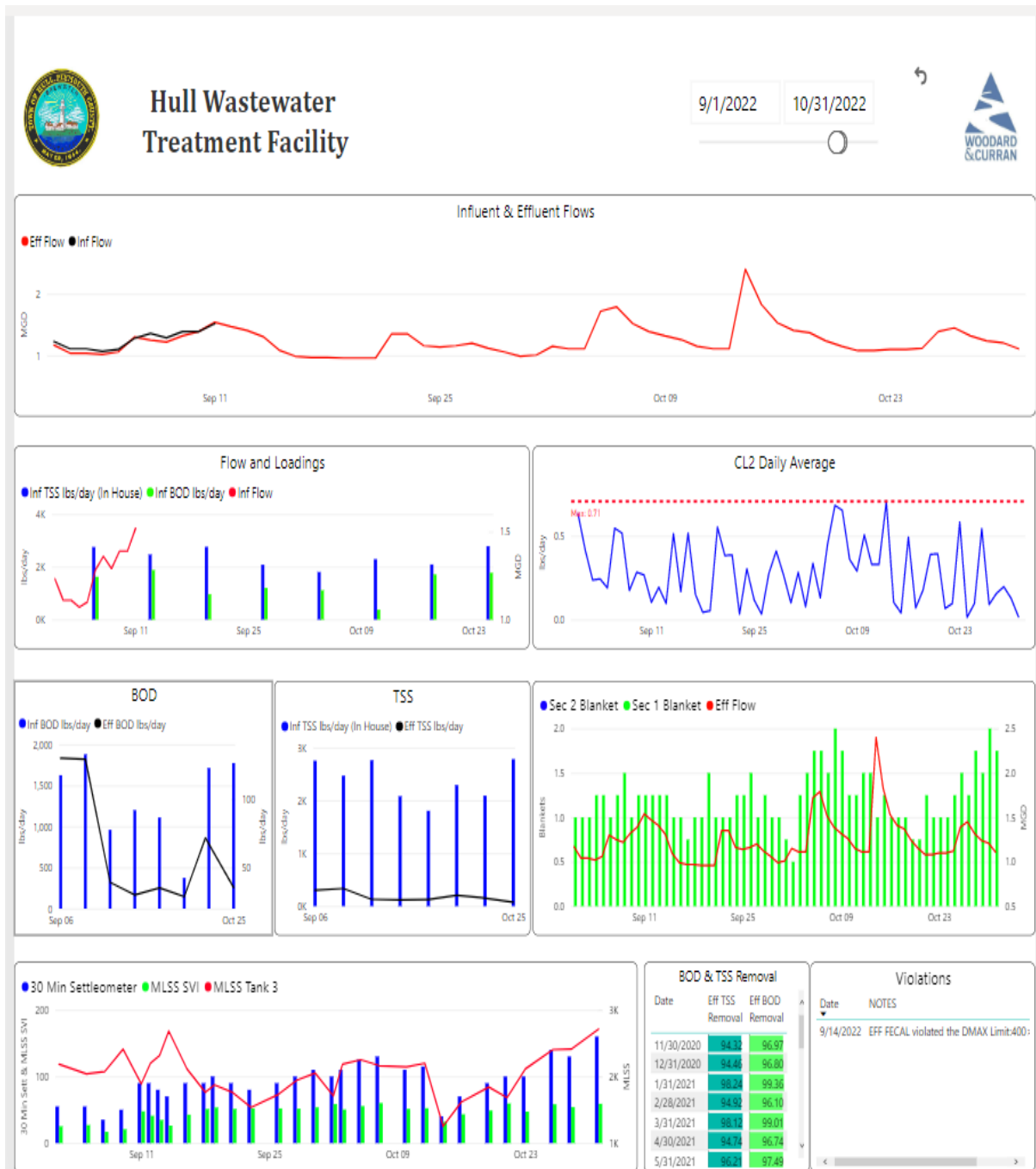
➤ Plant Effluent

- The plant process conditions in early October were well improved after some problems in early September. The turbidity levels (NTU) seen were back to 8-12 NTU consistently- as the tank configuration for process was changed early in late September.

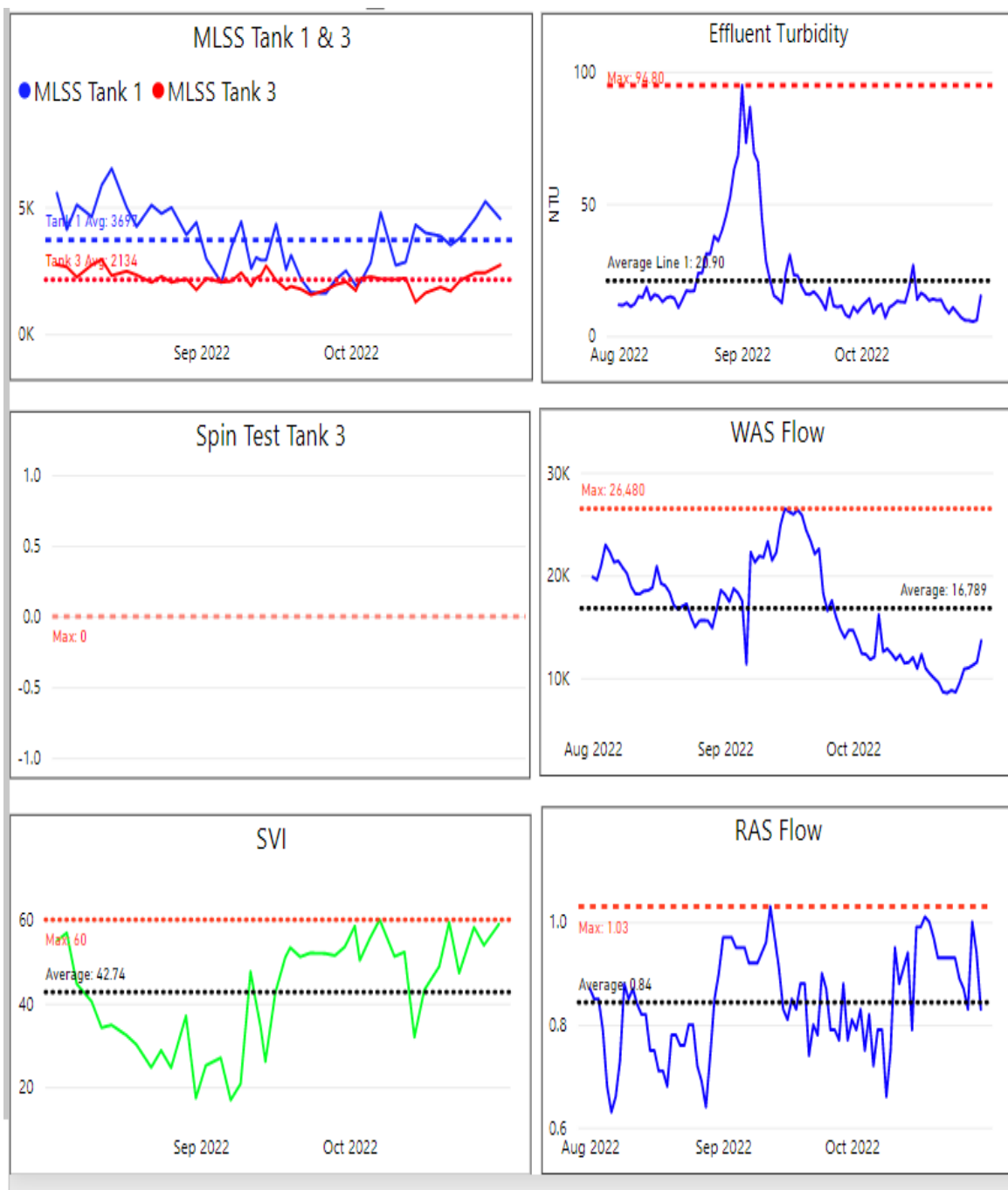


Monthly Process Summary graphs from power BI: September- October 2022.

SECONDARY PROCESSES – POWER BI GRAPHS



2-month period ending on 10/31/22.



Additional Power BI Graphs showing trends of various processes – September- October 2022

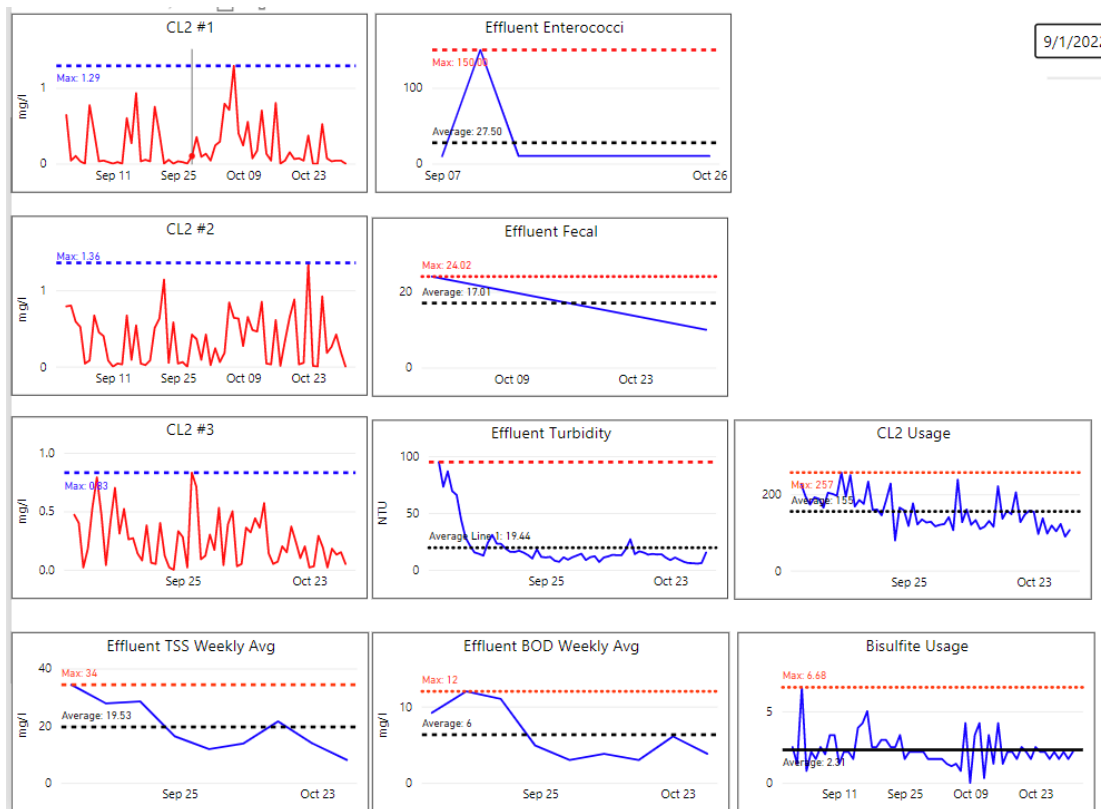
4 KEY PERFORMANCE INDICATORS



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	1X Week	14.3	8.0	21.5	4	0
Eff TSS	184	LBS			1152	768	1X Week	142.7	74.7	206.2	4	0
% TSS Rem	208	%		85			1X Month	93.8			1	0
Eff BOD	108	MG/L	50		45	30	1X Week	4.2	3.0	6.1	4	0
Eff BOD	185	LBS			1152	768	1X Week	42.8	28.8	71.7	4	0
% BOD Rem	207	%		85			1X Month	96.7			1	0
Eff Chlorine	142	MG/L	1			0.7	3X Day	0.28	0.01	0.71	93	0
Eff Fecal	111	#/100 ML	260			88	1X Week	10.0	10.0	10.0	4	0
Eff pH	136	SU	8.5	6.5			1X Daily	6.7	6.5	6.9	31	0
Enterococci	255	#/100 ML	276			35	1X Week	10	10	10	4	0
								Totals			148	0

There were 148 effluent samples taken in October.

EFFLUENT COMPLIANCE POWER BI GRAPHS

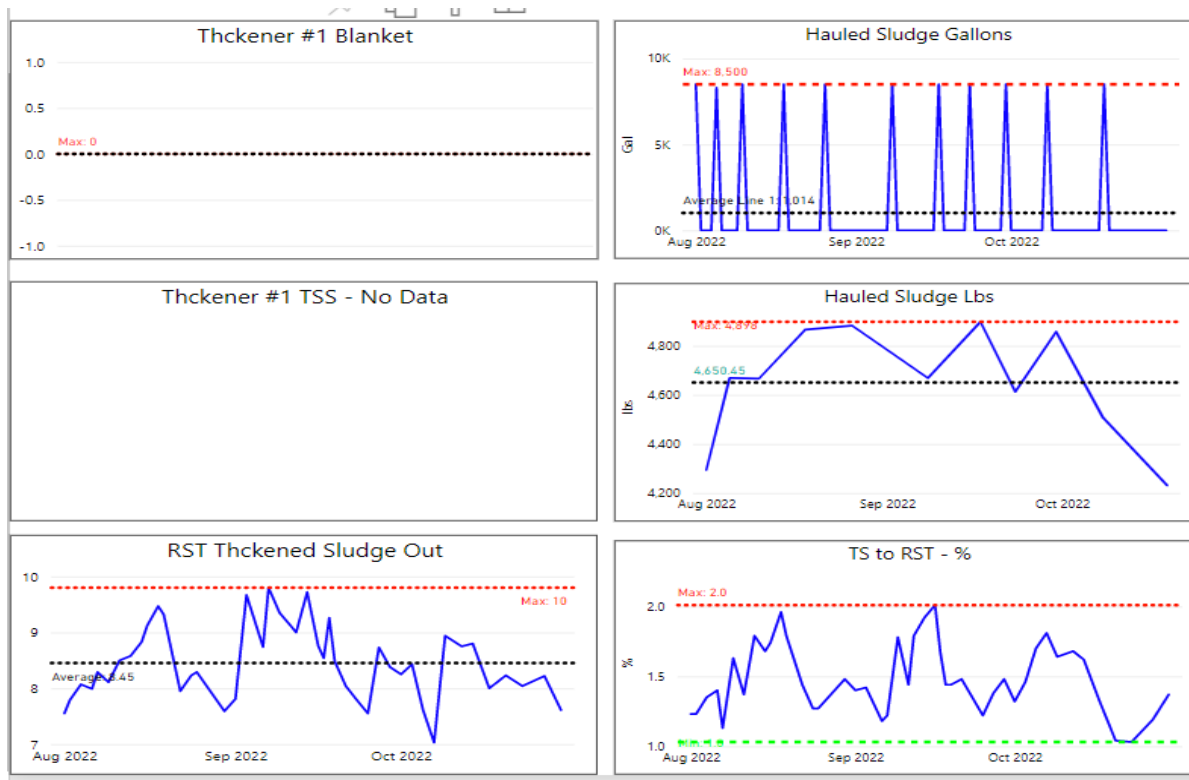


Quality of the effluent was satisfactory, but the turbidity trended higher early in month, and trended back to normal after the change to the Plug Flow process.

Sewage Gallons Treated vs Sludge Disposed

Month	Effluent Treated, MG	Sludge Disposed, Gals
October 2020	31.52	25,500
October 2021	54.91	68,500
October 2022	40.88	17,000

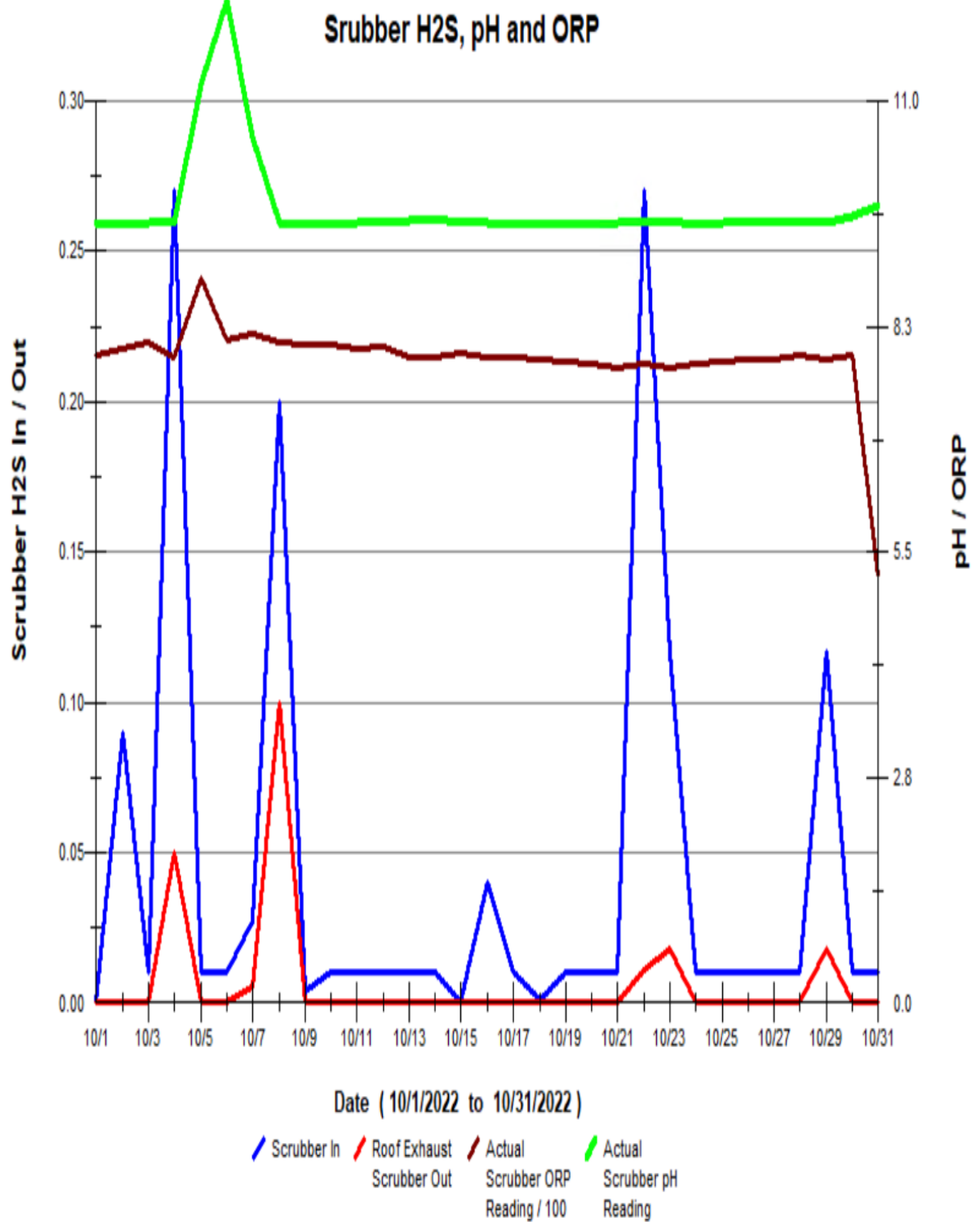
Additional Power BI graphs for sludge solids for 3-month period ending 10/31/22



There was one odor complaint call received on October 26th, which W&C and HSD staff also noted, over by the yacht club area on Nantasket Avenue. Collection system H₂S levels were still high due to continuing low flows, higher loading, and some rather warm fall weather. However, with the cooler fall weather the Bioxide feed rates had been lowered, contributing to the odors detected.

The Bioxide system was on, and the feed rates were raised up to meet the higher hydrogen sulfide (H₂S) generation in the system, as necessary. The changes and adjustments were made according to data seen at Nantasket/Water MH and XYZ/Nantasket MH. Warm fall temperatures and lower flows were still having a significant impact on H₂S formation in the collection system. The monthly graphs are attached below, the daily average Bioxide use for October was 116 gallons per day.

- The “In-Pipe” bacteria containers in collection system were changed out on October 6th & 20th
- 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



Pictured below:

Scrubber trend and trending graphs for H2S levels recorded from the vapor link system cellular at XYZ Street/Nantasket Ave and Nantasket Ave/Water Street manholes.

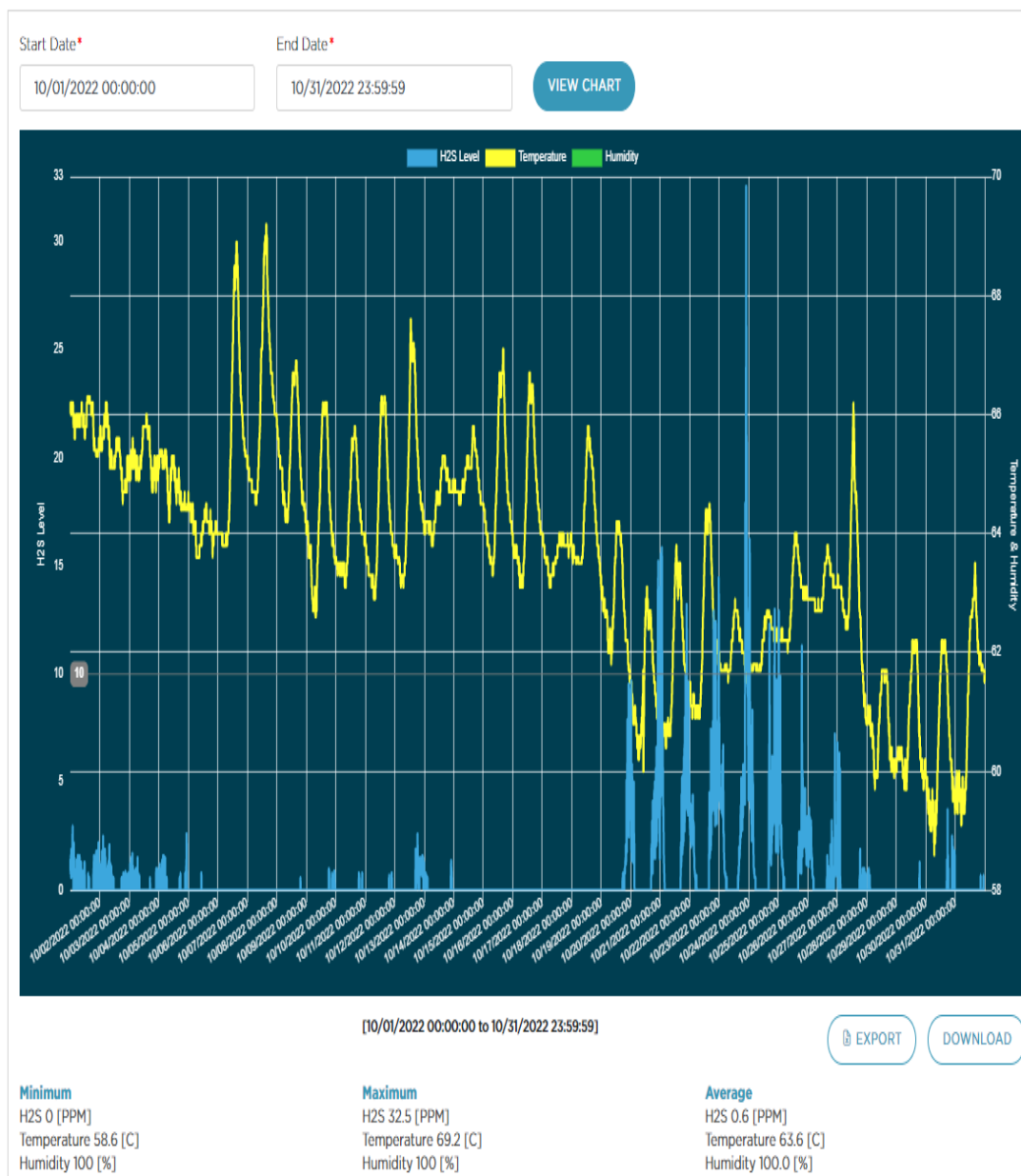
XYZ – Nantasket Ave [closest to plant]



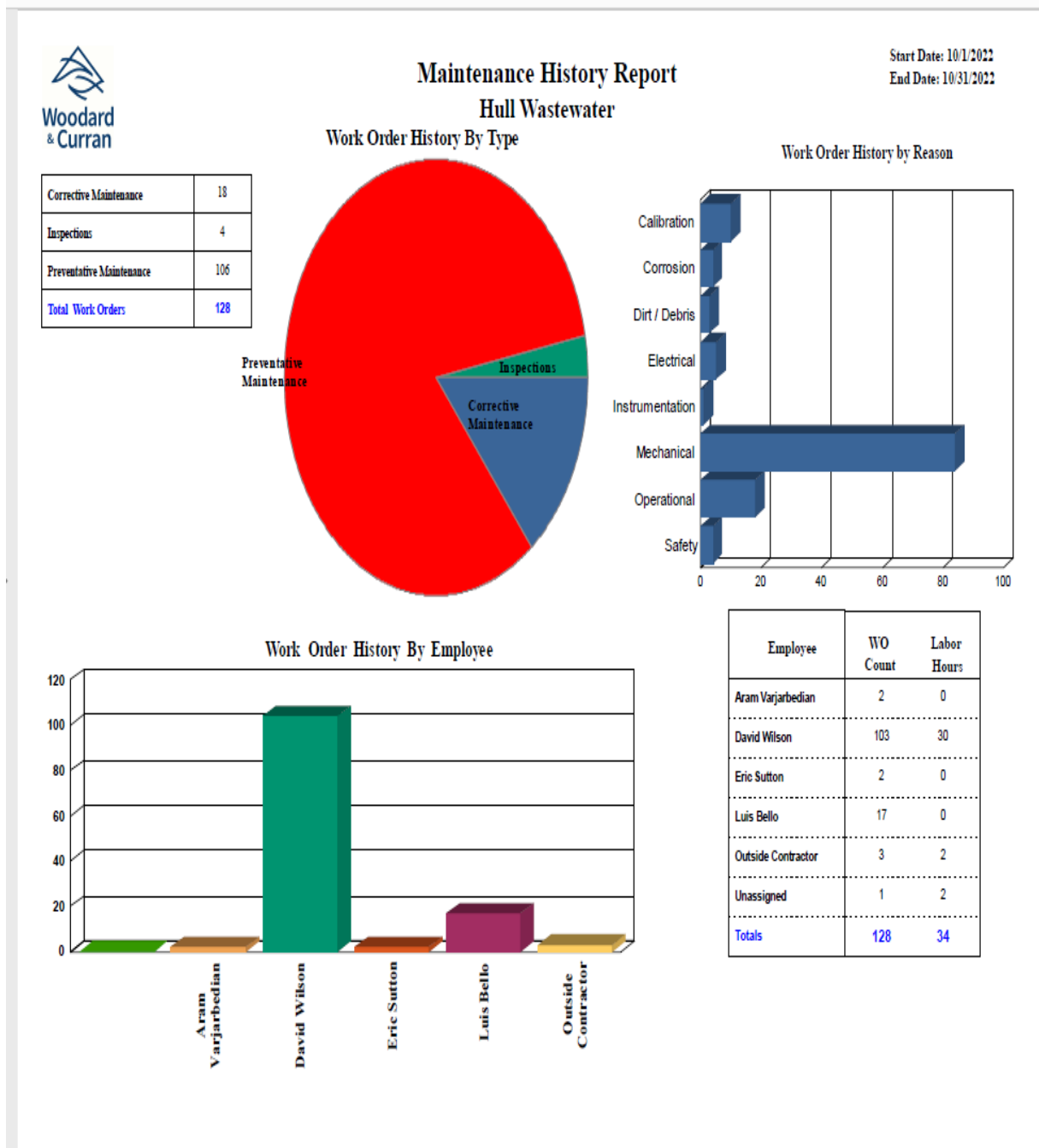
The odor data logging unit at XYZ monitoring the overall H2S levels close to the plant. From the graph, the daily pattern of H2S levels see a rise in the mid-afternoon until late evening/early AM.

Nantasket Ave/Water Street [at end of PS 3 force main and PS 4 discharge]

Pump station #3 - H2S is monitored at the end of the force main at the MH at Nantasket Ave & Water Street. Bioxide is added to allow excess nitrate in the sewage system to treat the additional H2S added 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.



6 MAINTENANCE SUMMARY



A. TASKS COMPLETED THIS MONTH

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

Additional key items of note are listed below:

- A newly rebuilt RAS #2 pump was installed on October 7th- Sea Coast came later to install the new cartridge style mechanical seals that use a tank to supply distilled water.
- Gravity Thickener #1 was readied for winter duty, which required a Confined Space Entry permit. The rotating assembly was found to be missing some hardware was updated, which lead to misalignment issues, stainless steel, the rotation re-aligned, and a new motor was installed and wired in by Hi-Voltage Electric.
- A new influent #1 pump was installed, wired in, the impeller height adjusted, and was put in service.
- D&C Construction installed a new steel door and frame at Pump Station D.
- On October 25 & 26 South Shore Generator did minor Preventative Maintenance (PMs) on all the 2 plant and all pump station emergency generators.
- A factory rebuilt control keypad for the de-ragger system at Pump Station #3 was installed.
- Riley Brothers Construction was onsite 10/22 and to repair the sidewalks that were torn out for the installation of the natural gas line into plant from Nantasket Avenue.
- The Chevy 2500 truck went to Frederickson's of Norwell for its annual snowplow service and any necessary repairs for the coming snow season.

B. ASSET MANAGEMENT ACCOUNTS

- **Please see the attached summary totals and planned expenditures for the Asset Management accounts for contract year (8). Most recent through 11/1/22**

5 SAFETY



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

- 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.
- On-going Covid-19 Pandemic awareness with daily review and as needed. Keeping in daily contact with all contractors regarding Hull and W&C covid-19 protocols. W&C's Pure Safety topic for October was bloodborne pathogens.
- On October 25 & 26 Hull hosted W&C's annual training on Hazard Awareness & Confined Space Entry.
- The monthly W&C staff safety meeting was held on 10/27. Topics discussed were hard hats, power tool use, carbon monoxide, and a review of W&C's Lessons Learned from October.
- W&C's monthly safety inspection checklist for the plant was completed.

6 STAFF DEVELOPMENT

Training is an important part of any operation to ensure 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 Pure Safety training and the monthly safety meeting was held on October 27. Topics discussed were hard hats, power tool use, carbon monoxide, and reviewing the "near-miss" incidents occurring at all the W&C projects in September.
- Regular, usually daily, operational updates and process control discussions, pump station operations, Dig Safes, and the HVAC construction project work scope ongoing at the plant. Daily safety briefings and Covid-19 protocol updates if necessary.

Staffing related items:

- Plant continued to have Sunday coverage supplemented with part-time staffer Roger Boltrushek in addition to Aram and Mike.
- O&M Specialists Paul Horigan and Jody St George continue to assist as needed with plant O&M projects.
- Mike Sullivan went to San Antonio, TX October 11-14th for Woodard & Curran's annual O&M Conference.

7 COLLECTION SYSTEM

A. WET WELL CLEANING

The actual schedule for wet well cleaning: May 2022 to April 2023:

(X-Cleaned) - (Orange – Inspected) - (Green – See notes) - (blank – no work done)

Frequency of cleaning	Pump Station							
	A	1	3	4	5	6	9	D
May, 2022								
June, 2022	X			X				
July, 2022								
Aug., 2022								
Sept. 2022								
Oct., 2022								
Nov, 2022								
Dec., 2023								
Jan., 2023								
Feb., 2023								
March 2023								
April 2023								

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

B. COLLECTION SYSTEM MAINTENANCE

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

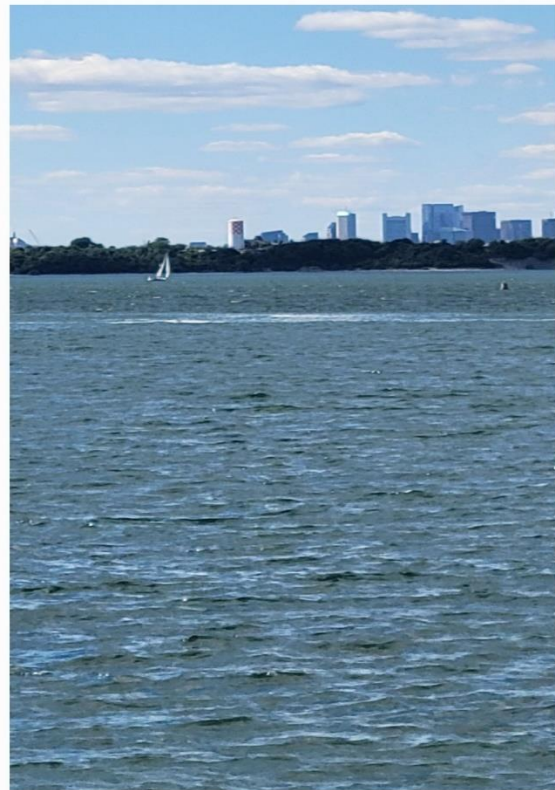
Woodard & Curran assisted/conducted camera work and sewer system support in the Hull collection system at the following areas during the month of October:

4 Arthor Street, Gallups Hill Road, Bluff Road @ Breaker Lane, Douglas Avenue, and 1149-1165 Nantasket Avenue.

Ongoing backup and blockage call outs requiring an increase in labor and time to support.

Below summarizes W&C's efforts at the various call out locations.

- There was one call for E-One Grinder pump service – see UC summary. The unit's cover was damaged when a vehicle drove over it. However, W&C staff noted some damage to the electrical wiring which will likely lead to other problems. The homeowner was advised to have a qualified electrician do the repairs and let the Sewer Department know when repair is done for inspection.
- Pump station emergency generator testing consists of weekly no load runs and monthly loaded runs.
- All Pump station wet wells were inspected in October- monthly inspections are completed and combined with the monthly station PM's.
- Upload new/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.



8 PROJECT MANAGEMENT & ADMINISTRATION



A. ON-GOING PROJECTS AND SUPPORT ITEMS

October updates:

- Ongoing construction work continued in many areas of the operations building for the Phase 1 HVAC project. W&C staff work closely with the contractors- moving equipment & items as needed in the working areas to allow for the renovation work to continue. W&C staff check in with the general contractor supervisor daily and attend the monthly meeting with Tighe & Bond and all the project sub-contractors.
- A Tecta roofing rep was onsite to assess the roof conditions and discuss the PM contract for the coming year.
- Mike S. and Aram V. continue to meet weekly with John S. and Brian K. to discuss Sewer Department operations, any treatment plant issues, the collection system, and any upcoming projects.



Maintenance History Report

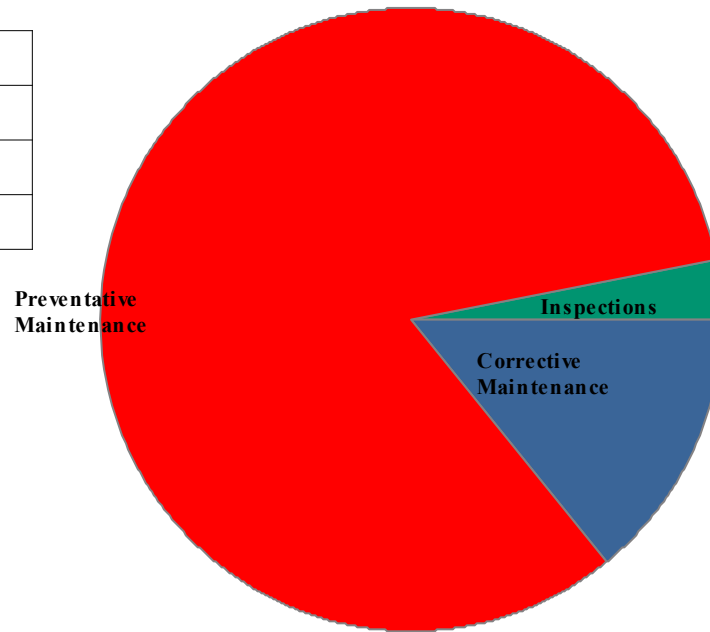
Start Date: 10/1/2022

End Date: 10/31/2022

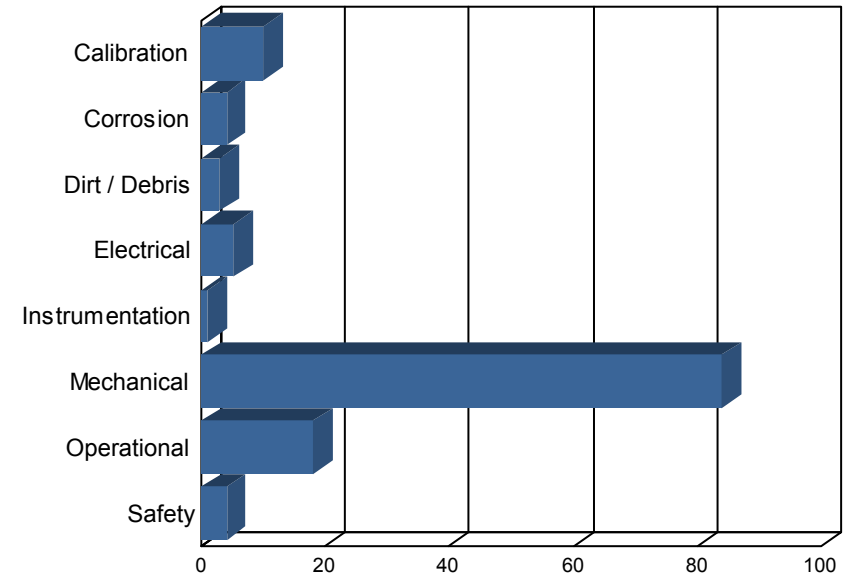
Hull Wastewater

Work Order History By Type

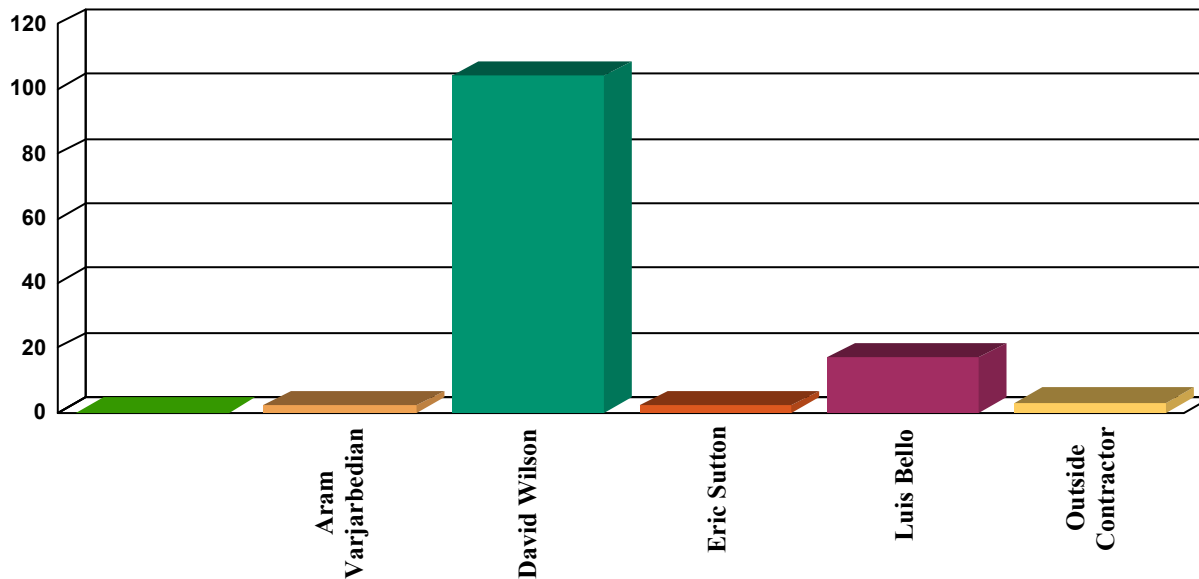
Corrective Maintenance	18
Inspections	4
Preventative Maintenance	106
Total Work Orders	128



Work Order History by Reason



Work Order History By Employee



Employee	WO Count	Labor Hours
Aram Varjarbedian	2	0
David Wilson	103	30
Eric Sutton	2	0
Luis Bello	17	0
Outside Contractor	3	2
Unassigned	1	2
Totals	128	34

Corrective Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/5/22	16763	PS D Pump 2	Diagnose pump not running	Inspected VFD and found drive fault U1. Turned off HOA switch and isolated VFD. Reenergized circuit and checked for faults. None. Switched HOA to Auto. Drive started and observed for five minutes without issue.	David Wilson	10/5/22	Completed
10/6/22	16764	RAS Pump 1	Diagnose low output	LOTO of RAS pump 1. Seperated pump from volute. Cleaned out debris from impeller and volute. Reassembled. Removed cover from check valve. Removed debris from disc. Reassembled and returned to service. Output at 38hZ was .58mgd and is now 1.1mgd. Lowered frequency to 36hZ and output is about .96mgd.	David Wilson	10/6/22	Completed
10/7/22	16766	RAS Pump 2	Repair volute threads and fit test gasket.	Drilled and tapped two bores to accept time certs. Installed time certs. Installed pump with custom gasket. Inner diameter cut too small. Removed pump and gasket to open inner diameter. Reinstalled pump to check fitment.	David Wilson	10/7/22	Completed
10/7/22	16765	RAS Pump 2	Assemble and wire RAS pump 2.	Installed pump assembly. Set impeller height. Installed motor. Installed coupling. Wired motor and tested rotation. Installed buffer tank lines. Locally isolated for Seacoast to set seal.	David Wilson	10/7/22	Completed
10/7/22	16767	Odor Control Wet Scrubber Vessel	Replace failed sensor	Sensor failed to calibrate. Cleaned sensor face and tried again. Failed. Installed new salt bridge and calibrated. Fails to scale at lower pH levels. (Buffer pH 7) Replaced sensor and tested calibration. Good	David Wilson	10/7/22	Completed
10/10/22	16768	RAS Pump 2	Install new spider coupling	Failing upper pump bearing caused excessive heat and coupling to wear prematurely. Verified electrical isolation. Removed old coupling and and installed a new one.	David Wilson	10/10/22	Completed
10/10/22	16769	RAS Pump 1	Diagnose low output (.5mgd)	LOTO of RAS pump 1. Seperated pump from volute. Removed debris from impeller and volute. Removed check valve cover and removed debris from disc. Reassembled pump and valve. Bled out air and returned to service. From .5mgd to .9mgd output	David Wilson	10/10/22	Completed
10/10/22	16770	Gravity Thickener 1	Replace failed hardware on rotating assembly	CSE into Gravity Thickener 1. Previous entry for annual inspection and cleaning. Found hardware concern on main structure and some loose washers and nuts. Verified torque on all hardware. 3/4 316SS threaded rod loose. Missing washers, nut and loose. Removed and installed new hardware.	David Wilson	10/10/22	Completed

Corrective Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/11/22	16771	PS Onan Trailer mounted generator	Diagnose low operating RPM	Operational test of generator for loaded run at Straits Pond. After about 10 minutes of run time RPMs dropped from 1800 to 950. High engine temp indicator lit up. Shut down generator and inspected all motor connections. Treated with battery terminal cleaner and protection. Located temp sensor. Engine coolant temperature sensor without head temperature sensor. Inspected wiring. Excessive corrosion causing circuit resistance. Replaced flag terminals and taped over to keep out moisture. Reset faults and test ran generator. Brought up to operating temp and verified function.	David Wilson	10/11/22	Completed
10/12/22	16773	RST unit	Diagnose abnormal noise.	Inspected rotating assembly. Found a failed drum wheel. Replaced wheel. Inspected drive chain. Stretched 2.5 inches. Checking side deflection caused chain to break. Replaced drive chain and masterlink. Set chain deflection to 5/8. Cleaned adjuster bolt. Returned to service.	David Wilson	10/12/22	Completed
10/13/22	16774	Influent Pump 5	Replace drive coupling.	Follow up work from monthly inspection. LOTO of Influent pump 5. Set up hoisting gear and separated motor from stand. Removed coupling and cleaned hubs. Installed new coupling and aligned motor. Installed mounting hardware. Cleaned pump assembly and installed guards. Returned to service. Operation tested as good.	David Wilson	10/13/22	Completed
10/16/22	16776	Operations Building	Sanded, primed, and painted garage door header.	LB sanded and primed header door, JT and MS painted header door to prevent corrosion.		10/16/22	Completed
10/17/22	16775	Portable Diesel Pump 6B Thompson 6" 900 - 1000 gpm	Diagnose engine shutdown (Aux 1 fault)	Measured 15.2vdc @2000rpm. Control panel opens circuit at 15.2vdc causing Auxiliary circuit 1 shutdown fault. Isolated battery. Removed alternator. Recently rebuilt alternator had a regulator that shunted at 14.9vdc instead of 14.4. Replaced regulator and installed. Returned to service.	David Wilson	10/17/22	Completed
10/20/22	16777	Gravity Thickener 1	motor failed	HiVoltage Assoc replaced failed expl proof motor and install union on conduit. Test run ok.	Outside Contractor	10/20/22	Completed
10/20/22	16778	Truck 2 - 2009 Chevy 2500 HD	Diagnose CEL Cyl 6 misfire	Use reader to pull code. Located cylinder 6 and removed plug. Plug fouled from misfiring. Checked other plugs and found gap to be out of spec. Replaced all plugs. Inspected ignition wires and found intermittent continuity in socket. Replaced all wires and cleared engine code. Test drove without issues.	David Wilson	10/20/22	Completed
10/25/22	16779	Operations Building	Replace failed door handle.	Removed failed door handle. Installed new assembly	David Wilson	10/25/22	Completed
10/28/22	16780	Influent Pump 1	Install refurbished pump assembly.	Installed pump, motor stand and motor. Set impeller height, adjusted hubs and coupling. Wired motor and verified rotation. Set pump seal and repaired seal water supply. Returned to service. Ran for two hours without any issues.	David Wilson	10/28/22	Completed

Corrective Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/28/22	16781	RAS Pump 2	Diagnose low output	Cleaned and inspected	David Wilson	10/28/22	Completed

Inspections

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/10/22	16424	Blower Room Exhaust Fan 1	Monthly operational inspection		David Wilson	10/1/22	Completed
10/10/22	16425	Blower Room Exhaust Fan 2	Monthly operational inspection		David Wilson	10/1/22	Completed
10/12/22	16772	PS Onan Trailer mounted generator	Load test at DPW facility on Straits Pond bridge.	DW/AV/ES met up at facility with John Struziary and High Voltage Electrical. Verified connections and applied loads. Good overall. Shut down generator and brought back to plant.	David Wilson	10/12/22	Completed
10/17/22	16288	Emergency Lighting & exit signs	Emergency Lighting Inspection - Monthly		Luis Bello	10/12/22	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/3/22	16374	PS Kholer Trailer Mounted Generator	Generator - Monthly Load Test		Luis Bello	10/2/22	Completed
10/3/22	16411	Generators "All Pump Station"	Generator - Monthly Load Test		Luis Bello	10/2/22	Completed
10/5/22	16369	GasAlert Max XTII #1	4 gas meter calibration - monthly		David Wilson	10/1/22	Completed
10/10/22	16321	RAS Pump 1	Monthly Check Pump Couplings		David Wilson	10/5/22	Completed
10/10/22	16322	RAS Pump 2	Monthly Check Pump Couplings		David Wilson	10/5/22	Completed
10/10/22	16323	RAS Pump 3	Monthly Check Pump Couplings		David Wilson	10/5/22	Completed
10/10/22	16341	PS 1 Generator	PS #1 Generator Inspection and Load Test - Monthly		David Wilson	10/5/22	Completed
10/10/22	16337	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		David Wilson	10/5/22	Completed
10/10/22	16342	PS 3 Generator	PS #3 Generator Inspection and Load Test - Monthly		David Wilson	10/5/22	Completed
10/10/22	16343	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		David Wilson	10/5/22	Completed
10/10/22	16351	PS 4 Generator	PS #4 Generator Inspection and Load Test - Monthly		David Wilson	10/5/22	Completed
10/10/22	16347	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		David Wilson	10/5/22	Completed
10/10/22	16352	PS 5 Generator	PS #5 Generator Inspection and Load Test - Monthly		David Wilson	10/5/22	Completed
10/10/22	16366	PS 6 Generator	PS #5 Generator Inspection and Load Test - Monthly		David Wilson	10/5/22	Completed
10/10/22	16353	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		David Wilson	10/5/22	Completed
10/10/22	16362	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		David Wilson	10/5/22	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/10/22	16357	PS 9 Generator	PS #9 Generator Inspection and Load Test - Monthly		David Wilson	10/5/22	Completed
10/10/22	16358	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		David Wilson	10/5/22	Completed
10/10/22	16408	pH meter	Clean and Calibrate		David Wilson	10/1/22	Completed
10/10/22	16241	ORP meter	Clean and Calibrate		David Wilson	9/10/22	Completed
10/10/22	16153	Aeration Blower 2	Aeration Blower #2 Air Filter Inspection - Monthly		David Wilson	9/22/22	Completed
10/10/22	16152	Aeration Blower 1	Aeration Blower #1 Air Filter Inspection - monthly		David Wilson	9/27/22	Completed
10/11/22	16281	Portable Generator - Honda	Portable Generator Inspection - Monthly		David Wilson	10/5/22	Completed
10/11/22	16298	Generator #1- Emergency Kohler 750	Generator - Monthly Load Test		David Wilson	10/2/22	Completed
10/11/22	16289	Generator #2 - Backup Detroit 500	Generator - Monthly Load Test		David Wilson	10/2/22	Completed
10/11/22	16133	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load		David Wilson	9/26/22	Completed
10/11/22	16130	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load		David Wilson	9/26/22	Completed
10/12/22	16409	ORP meter	Clean and Calibrate		David Wilson	10/10/22	Completed
10/13/22	16400	High level floats	Weekly High Float Alarm test		Luis Bello	10/2/22	Completed
10/13/22	16416	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		Luis Bello	10/2/22	Completed
10/13/22	16294	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load		David Wilson	10/10/22	Completed
10/13/22	16290	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load		David Wilson	10/10/22	Completed
10/13/22	16412	Generators "All Pump Station"	Generator Weekly - Test Run no load		Eric Sutton	10/10/22	Completed
10/13/22	16375	PS Kohler Trailer Mounted Generator	Generator Weekly - Test Run no load		Eric Sutton	10/10/22	Completed
10/13/22	16314	Aeration Tank 1 Oxygen Probe	AT #1 DO Probe Clean and Calibrate - Monthly	Cleaned and inspected LDO probe. No issues. Passed calibration. Offset -.56mg/l	David Wilson	10/4/22	Completed
10/13/22	16315	Aeration Tank 3 Oxygen Probe	AT #3 DO Probe Clean and Calibrate - Monthly	Cleaned and inspected LDO probe. No issues. Passed calibration. Offset of -1.24mg/l	David Wilson	10/4/22	Completed
10/13/22	16306	Mechanical Screen & Washpress System	Monthly Maintenance		David Wilson	10/3/22	Completed
10/13/22	16302	Influent Sluice Isolation Gate	Weekly operate through full range		Luis Bello	10/5/22	Completed
10/13/22	16401	High level floats	Weekly High Float Alarm test		Luis Bello	10/9/22	Completed
10/13/22	16417	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		Luis Bello	10/9/22	Completed
10/13/22	16307	Influent Pump 1	Monthly Check Pump Couplings		David Wilson	10/5/22	Completed
10/13/22	16308	Influent Pump 2	Monthly Check Pump Couplings		David Wilson	10/5/22	Completed
10/13/22	16309	Influent Pump 3	Monthly Check Pump Couplings		David Wilson	10/5/22	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/13/22	16310	Influent Pump 4	Monthly Check Pump Couplings		David Wilson	10/5/22	Completed
10/13/22	16311	Influent Pump 5	Monthly Check Pump Couplings	Out of tolerance. Replace coupling.	David Wilson	10/5/22	Completed
10/14/22	16338	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		David Wilson	10/12/22	Completed
10/14/22	16344	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		David Wilson	10/12/22	Completed
10/14/22	16348	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		David Wilson	10/12/22	Completed
10/14/22	16354	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		David Wilson	10/12/22	Completed
10/14/22	16363	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		David Wilson	10/12/22	Completed
10/14/22	16359	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		David Wilson	10/12/22	Completed
10/17/22	16428	Effluent Flow Meter Isolation Valve	Isolation Valve Exercise		David Wilson	10/7/22	Completed
10/17/22	16391	Effluent Pump #1 discharge valve	Isolation Valve Exercise		David Wilson	10/7/22	Completed
10/17/22	16317	Effluent Pumps	Effluent Pump Semi-Annual valve exercise		David Wilson	10/7/22	Completed
10/17/22	16392	Effluent Pump #2 discharge valve	Isolation Valve Exercise		David Wilson	10/7/22	Completed
10/17/22	16393	Effluent Pump #3 discharge valve	Isolation Valve Exercise		David Wilson	10/7/22	Completed
10/17/22	16318	Effluent Pump 1	Isolation Valve Exercise		David Wilson	10/7/22	Completed
10/17/22	16394	Effluent Pump #4 discharge valve	Isolation Valve Exercise		David Wilson	10/7/22	Completed
10/17/22	16156	Effluent Pumps	Effluent Pump - Monthly		David Wilson	9/15/22	Completed
10/17/22	16316	Effluent Pumps	Effluent Pump - Monthly		David Wilson	10/15/22	Completed
10/18/22	16328	Sludge Transfer Pump 1	Monthly Check Pump Couplings	No issues found.	David Wilson	10/5/22	Completed
10/18/22	16329	Sludge Transfer Pump 2	Monthly Check Pump Couplings	No issues found.	David Wilson	10/5/22	Completed
10/18/22	16325	RST Feed Pump 2	Monthly Check Pump Couplings	No issues found.	David Wilson	10/5/22	Completed
10/18/22	16324	RST Feed Pump 1	Monthly Check Pump Couplings	No issues found.	David Wilson	10/5/22	Completed
10/18/22	16326	Primary Sludge Pump 1	Monthly Check Pump Couplings	No issues found.	David Wilson	10/5/22	Completed
10/18/22	16327	Primary Sludge Pump 2	Monthly Check Pump Couplings	No issues found.	David Wilson	10/5/22	Completed
10/18/22	16320	Wet Scrubber Fan	Scrubber Exhaust Fan PM - Monthly	LOTO of equipment. Lubed and insptcd all bearings. Insptcd belt deflection. Verified torque on all hardware. Returned fo service.	David Wilson	10/12/22	Completed
10/19/22	16295	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load		David Wilson	10/17/22	Completed
10/19/22	16291	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load		David Wilson	10/17/22	Completed
10/19/22	16376	PS Kholer Trailer Mounted Generator	Generator Weekly - Test Run no load		David Wilson	10/17/22	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/19/22	16413	Generators "All Pump Station"	Generator Weekly - Test Run no load		David Wilson	10/17/22	Completed
10/19/22	16228	Chlorine probe AT1	Weekly calibration		Aram Varjarbedian	9/12/22	Completed
10/19/22	16229	Chlorine probe AT1	Weekly calibration		Aram Varjarbedian	9/26/22	Completed
10/19/22	16395	Chlorine probe AT1	Weekly calibration		David Wilson	10/10/22	Completed
10/21/22	16303	Influent Sluice Isolation Gate	Weekly operate through full range		David Wilson	10/12/22	Completed
10/21/22	16418	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		David Wilson	10/16/22	Completed
10/21/22	16402	High level floats	Weekly High Float Alarm test		David Wilson	10/16/22	Completed
10/21/22	16304	Influent Sluice Isolation Gate	Weekly operate through full range		David Wilson	10/19/22	Completed
10/21/22	16339	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		David Wilson	10/19/22	Completed
10/21/22	16345	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		David Wilson	10/19/22	Completed
10/21/22	16349	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		David Wilson	10/19/22	Completed
10/21/22	16360	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		David Wilson	10/19/22	Completed
10/21/22	16355	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		David Wilson	10/19/22	Completed
10/24/22	16410	FIRE ALARM SYSTEM	Fire alarm - semi annual	Hart Fire alarm came in for semi annual inspection.	David Wilson	10/3/22	Completed
10/25/22	16296	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load		David Wilson	10/24/22	Completed
10/25/22	16292	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load		David Wilson	10/24/22	Completed
10/25/22	16364	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		David Wilson	10/19/22	Completed
10/27/22	16305	Influent Sluice Isolation Gate	Weekly operate through full range		Luis Bello	10/25/22	Completed
10/27/22	16419	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		Luis Bello	10/23/22	Completed
10/27/22	16414	Generators "All Pump Station"	Generator Weekly - Test Run no load		Outside Contractor	10/24/22	Completed
10/27/22	16377	PS Kholer Trailer Mounted Generator	Generator Weekly - Test Run no load		Outside Contractor	10/24/22	Completed
10/27/22	16403	High level floats	Weekly High Float Alarm test		Luis Bello	10/23/22	Completed
10/28/22	16340	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly	Mid level hand rail assembly missing parts. Fixed ventilation system rotting out at both 90 degree bends as well as joints between straight portions. Will put together parts list.	David Wilson	10/26/22	Completed
10/28/22	16346	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly	About 10% surface solids in wet well.	David Wilson	10/26/22	Completed
10/28/22	16350	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly	About 5% surface solids.	David Wilson	10/26/22	Completed
10/28/22	16356	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		David Wilson	10/26/22	Completed
10/28/22	16365	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		David Wilson	10/26/22	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/28/22	16361	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		David Wilson	10/26/22	Completed
10/28/22	16381	Ventis MX4 #4 - 4 Gas	4 Gas Meter #4 Calibration - Monthly		Luis Bello	10/27/22	Completed
10/28/22	16379	Ventis MX4 #2 - 4 Gas	4 Gas Meter #2 Calibration - Monthly		Luis Bello	10/27/22	Completed
10/28/22	16390	GasAlert Max XTII #2	monthly calibration		Luis Bello	10/27/22	Completed
10/28/22	16383	Ventis MX4 #6 - 4 Gas	4 Gas Meter #6 Calibration - Monthly		Luis Bello	10/27/22	Completed
10/28/22	16380	Ventis MX4 #3 - 4 Gas	4 Gas Meter #3 Calibration - Monthly		Luis Bello	10/27/22	Completed
10/28/22	16382	Ventis MX4 #5 - 4 Gas	4 Gas Meter #5 Calibration - Monthly		Luis Bello	10/27/22	Waiting for Parts
10/31/22	16312	Aeration Blower 1	Aeration Blower #1 Air Filter Inspection - monthly		David Wilson	10/25/22	Completed
10/31/22	16313	Aeration Blower 2	Aeration Blower #2 Air Filter Inspection - Monthly		David Wilson	10/27/22	Completed
Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
10/12/22	16287	Eyewash Stations	All Portable Eye wash stations - semi annual		David Wilson	10/1/22	Completed

Date	Asset ID	Asset Description	Asset Class	Name	Workflow Class
10/1/2022 14:14	01-029	4 ARTHUR ST	Hull Parcels	Sutton, Eric	Generic WO
10/4/2022 12:00	01-029	4 ARTHUR ST	Hull Parcels	Sutton, Eric	Hull - Markout
10/24/2022 14:00	01-031	1 MILDRED ST	Hull Parcels	Sutton, Eric	Hull - Markout
10/21/2022 12:53	03-096	21 LAFAYETTE RD	Hull Parcels	Sutton, Eric	Hull - Markout
10/4/2022 11:59	05-017	60 VAUTRINOT AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/21/2022 13:18	06-076	27 JAMES AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/11/2022 11:06	08-010	1060 NANTASKET AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/17/2022 12:02	10-008	51 PT ALLERTON AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/4/2022 14:13	10-046	47 HOLBROOK AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/31/2022 14:18	10-090	42 BEACON RD	Hull Parcels	Sutton, Eric	Hull - Markout
10/19/2022 14:52	10123	8" PVC Pipe	Hull Sewer Main	Sutton, Eric	Sewer Main Cleaning & CCTV
10/17/2022 8:04	10267	6" VC Pipe - no access MH or CO	Hull Sewer Main	Sutton, Eric	Sewer Main Cleaning & CCTV
10/1/2022 14:07	13 Eastman Rd	13 Eastman Rd Grinder Pump	Hull Grinder Pumps	Sutton, Eric	Hull - Grinder Pump Maintenance
10/24/2022 13:55	13-071	39 R STREET	Hull Parcels	Sutton, Eric	Hull - Markout
10/12/2022 13:19	13-080	154 CADISH AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/4/2022 11:34	15-164	774 NANTASKET AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/4/2022 11:43	15-182	779 NANTASKET AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/4/2022 10:34	19-007	656 NANTASKET AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/7/2022 13:24	19-020	54 A STREET	Hull Parcels	Sutton, Eric	Hull - Markout
10/24/2022 13:58	19-163	141 BEACH AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/27/2022 11:43	20-019	641 NANTASKET AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/21/2022 13:31	22-032	4 TOURAINE AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/25/2022 11:08	24-067	1 WARFIELD AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/8/2022 16:41	25-001	59 BEACH AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/24/2022 13:57	25-135	67 SAMOSET AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/27/2022 10:28	26 Rockview Rd	26 Rockview Rd Grinder Pump	Hull Grinder Pumps	Sutton, Eric	Hull - Grinder Pump Maintenance
10/8/2022 10:35	26-078	25 REVERE ST	Hull Parcels	Sutton, Eric	Hull - Markout
10/12/2022 12:34	26-100	50 REVERE ST	Hull Parcels	Sutton, Eric	Hull - Markout
10/8/2022 10:37	26-142	41 REVERE ST	Hull Parcels	Sutton, Eric	Hull - Markout
10/6/2022 10:26	26-210	452 NANTASKET AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/27/2022 8:16	27-159	80 MOUNTFORD RD	Hull Parcels	Sutton, Eric	Hull - Markout
10/25/2022 11:06	30-053	102 EDGEWATER RD	Hull Parcels	Sutton, Eric	Hull - Markout
10/17/2022 11:59	32-050	99 CLIFTON AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/19/2022 10:39	33-142	0 MERRILL RD	Hull Parcels	Sutton, Eric	Hull - Markout
10/17/2022 11:57	34-018	26 A BAY STREET	Hull Parcels	Sutton, Eric	Hull - Markout
10/21/2022 13:41	37-008	213 NANTASKET AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/11/2022 12:00	39-120	50 WYOLA RD	Hull Parcels	Sutton, Eric	Hull - Markout
10/19/2022 10:26	41-008	10 NANTASKET AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/27/2022 8:36	42-100	1 GATEHOUSE LANE	Hull Parcels	Sutton, Eric	Hull - Markout
10/3/2022 12:49	43-008	0 WYOLA RD	Hull Parcels	Sutton, Eric	Hull - Markout
10/17/2022 11:56	43-009	72 WYOLA RD	Hull Parcels	Sutton, Eric	Hull - Markout
10/19/2022 10:14	45-085	10 ORLEANS ST	Hull Parcels	Sutton, Eric	Hull - Markout
10/10/2022 9:33	48-006	276 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/31/2022 14:21	49-036	9 SCHOOL ST	Hull Parcels	Sutton, Eric	Hull - Markout
10/4/2022 10:42	49-067	9 STATE PARK RD	Hull Parcels	Sutton, Eric	Hull - Markout
10/11/2022 11:58	51-024	0 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/17/2022 11:53	52-062	6 GUN ROCK AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/31/2022 14:23	53-028-B	0 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/21/2022 13:10	56-009-A	1174 NANTASKET AVE	Hull Parcels	Sutton, Eric	Hull - Markout
10/6/2022 14:51	Bacteria UNIT #21	UNIT #21	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:36	Bacteria UNIT #21	UNIT #21	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:41	Bacteria UNIT #22	UNIT #22	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:32	Bateria UNIT # 8	UNIT # 8	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:30	Bateria UNIT #1	UNIT #1	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:33	Bateria UNIT #10	UNIT #10	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:35	Bateria UNIT #11	UNIT #11	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:39	Bateria UNIT #12	UNIT #12	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:38	Bateria UNIT #13	UNIT #13	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:37	Bateria UNIT #14	UNIT #14	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:36	Bateria UNIT #15	UNIT #15	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:35	Bateria UNIT #16	UNIT #16	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:33	Bateria UNIT #17	UNIT #17	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:34	Bateria UNIT #19	UNIT #19	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:30	Bateria UNIT #2	UNIT #2	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:35	Bateria UNIT #20	UNIT #20	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units

Date	Asset ID	Asset Description	Asset Class	Name	Workflow Class
10/20/2022 13:40	Bateria UNIT #23	UNIT #23	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:29	Bateria UNIT #24	UNIT #24	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/6/2022 14:51	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:34	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/6/2022 14:50	Bateria UNIT #4	UNIT #4	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:29	Bateria UNIT #4	UNIT #4	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:31	Bateria UNIT #5	UNIT #5	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:30	Bateria UNIT #6	UNIT #6	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:31	Bateria UNIT #7	UNIT #7	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/20/2022 13:41	Bateria UNIT #9	UNIT #9	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
10/3/2022 12:46	MH-20011	SEMS_Asset	Sanitary Manhole	Sutton, Eric	Sewer Main Cleaning & CCTV
10/17/2022 8:23	MH-20012	SEMS_Asset	Sanitary Manhole	Sutton, Eric	Sewer Main Cleaning & CCTV
10/17/2022 8:16	MH-20113	SEMS_Asset	Sanitary Manhole	Sutton, Eric	Sewer Main Cleaning & CCTV
10/25/2022 14:09	MH-20458	SEMS_Asset	Sanitary Manhole	Sutton, Eric	MH Frame & Cover Inspection
10/17/2022 8:19	MH-30104	SEMS_Asset	Sanitary Manhole	Sutton, Eric	Sewer Main Cleaning & CCTV

Asset Management Accounts - Year 8							
	FOR M.O.R. SEPTEMBER 2022	Actual to date			Projected for Final Estimate		
Account		Budgeted Amount	Spent to Date	Delta	Projected costs and incl PO's	Final est	Delta
08M-101A	Preventive Maint	\$227,514.68	\$74,422.49	\$153,092.19	\$54,500.00	\$128,922.49	\$98,592.19
08M-102B	Capital and Major Repairs	\$140,000.00	\$148,525.24	(\$8,525.24)	\$65,800.00	\$214,325.24	(\$74,325.24)
08M-103A	Major Sub Contractors	\$192,737.48	\$168,992.52	\$23,744.96	\$46,000.00	\$214,992.52	(\$22,255.04)
blank							
	Asset Management	\$560,252.16	\$391,940.25	\$168,311.91	\$166,300.00	\$558,240.25	\$2,011.91

\$168,311.91

Budget expended	Time Status	
	NOW=	11/28/2022
	Start	5/1/2020
32.7%	258.0%	225.3%
106.1%	258.0%	151.9%
87.7%	258.0%	170.3%
70.0%	258.0%	188.0%

08S	D Street	\$7,500.00	\$8,391.00	(\$891.00)	\$0.00	\$8,391.00	(\$891.00)
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111.9%	258.0%	146.1%
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08C	Odor Control Chemicals	\$100,000.00	\$121,192.00	(\$21,192.00)	\$0.00	\$121,192.00	(\$21,192.00)
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121.2%	258.0%	136.8%
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Estimated total remaining 08M, 08C (\$19,180.09)

[illegible]

Maintenance Account - Year 8 - 05_01_22 to 04_30_23	
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FOR OCTOBER 2022 M.O.R.

\$166,300.00

11/28/2022 14:56

Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
1	Mechanical Work Labor by O&M specialists	On Going		101A	\$14,000.00			Placeholder for Jody St. George, Paul Horigan & WC Support Staff - Total budget \$25,000; adjust 8/30; adjust budget 9/20.Adjust budget 11/28
1	Pump and Motor Repairs/Replacements [invoiced and pcard]	On Going		101A	\$9,000.00			to keep existing equipment running - utilize various outside contractor repair shops, new purchases. orig budget \$20,000; adj 8/30; adj 9/26; adj 11/28 to \$9,000
1	Lubricants	On Going		101A	\$900.00			Various Suppliers for oil and grease. Budgeted \$2000. Cut placeholder \$\$ to \$900;
1	Generator Prev. Maintenance and Repairs	On Going		101A	\$16,500.00			General PM and CM Repair Work - Placeholder - New PO needs to be issued; reduce by minor PM costs/invoices paid 11/28 - reduce by \$3,500.
1	Fire Alarm Inspections and Service	On Going		101A	\$1,700.00			Semi Annual - Hart Security [October & April , central station, & Service]budget \$3000. Semi-annual services completed in mid April. Adj 8/30; Oct Service completed.
2	Universal waste disposal	Pending		101A	\$500.00			Placeholder - \$500 - Unlikely to be used in year 8
1	Service the Forklift	completed		101A		\$231.00		Placeholder \$400 - Annual cost - outside vendor. Completed June 2022
1	Overhead Hoist Inspection & repairs	completed		101A		\$1,666.52		Annual task - Applied Dynamics - Inspection Work - May 2022 \$1500 plus some corrective actions, \$1500 left to do for repairs [completed Aug 2022];
1	Flow meter verification and calibration	completed		101A		\$1,175.00		Placeholder - Annual - Ray Ferland or other 1 visit annually - Targeting June 2022. Vendor needs to be contacted. Early Nov targeted date. Nov. Service completed.
1	Facility Building - Roof Inspection	completed		101A		\$2,800.00		\$2800 Annual Placeholder - Established contract with Tecta America. Completed May 2022
2	Jerome H2S Meter Inspection	Pending		101A	\$1,100.00			Placeholder if meter is sent out for calibration - \$1,100; Update Sept 2022 - meter evaluation needed and if new meter should be considered.
1	Janitorial Supplies	On Going		101A	\$2,000.00			Orig budget \$3,000 - Estimated annual expenditures - adjust 8/30; Adjust 10/31.
1	Manhole Inspections	Pending		101A				As required,and/or scheduled
2	General mechanical and electrical items/supplies	On Going		101A	\$3,000.00			Grainger, FWWebb, EJP,Hoadley, McMasterCarr, etc; orig budget \$20,000, adjust tdown as year progresses; adj 8/30; adjust in Sept to 5,000. Adjust 11/28 to \$3,000
1	Thompson Pump repairs 6TS-244 [6A]	completed		101A				Rotating assembly failure - bearings, shft, mech seal parts & labor. Est labor \$6500. Seacoast repair. All bills to post by end of September
2	Large Hoses & fittings	On Going		101A	\$1,800.00			Orig budget \$3,000. Replacements and/or Service - On-Going - As Needed; adj budget Sept. NIR and Wolf Creek.
1	hypo room access/entry door	Pending		102B	\$6,500.00			D&C Quoted - waiting for updated quote with FRP door - Estimate \$6,500
3	Misc. Materials	on Going		101A	\$1,000.00			Hardware Store - \$200.00 per month - reoccurring expense; budget \$2,400; Adjust 8/30; Adj 9/20; adj 11/28.
1 of 4 11/28/2022	New Hach Spec Meter for chlorine	completed		101A	2022_05_01_08M_Checkbook_YTD.xlsx			replace older/failing unit [DR700]; new unit purchased May 2022
08M Planned Costs								

Hull 2022-2023 - 08M Projects, Tasks, and Needs - (AV)								
Maintenance Account - Year 8 - 05_01_22 to 04_30_23								
FOR OCTOBER 2022 M.O.R.					\$166,300.00			11/28/2022 14:56
Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
1	Lab Equip Calibration	completed		101A				Annual service \$640
1	RAS pumps - spare impeller	On Going		101A	\$3,000.00			4-6 week lead time ARO. Ordered July 2022; Waiting for updated delivery date. Confirmed Nov 2022 piece is being made.
	Duperon Service Call	completed		101A		\$2,500.00		Service done - September 2022. Recommendations made.
2	6" plug valves [4]	completed		101A		\$3,713.40		RAS pump #3 discharge & other. Pratt plug valves -Qty 4. ordered May 2022; received Aug 2022. GT1 outlet valve repaired and install flush connection. Difficult to remove due to limited access.
1	Duperon Service Call - Additional needs	On Going		102B				Issued PO 105426 - \$8,269
2	New Magnetic flow meters for RAS and WAS	Pending		102B				hardware - does not include installation [estimate for Equip - \$8,500] May or may not occur. Remove from planned projects for 08M.
2	yard hydrants - installation	Pending		102B	\$6,000.00			sub-contractor labor - pending; Have materials on hand. Spring 2022. Targeting Nov 2022.
1	Mech seals for new PS4 pumps & barrier tanks	completed		102B		\$10,068.55		Items ordered after approval. Installed & in service Aug 2022.
1	Pump Station #4 -New Pumps install	completed		102B		\$12,237.61		by D & C. Late June 2022 - revised estimated installation cost. Work completed July 2022.
1	Effluent Pump #3 - repairs	completed		102B		\$26,840.20		pump has been returned to facility
3	Sanitaire hardware purchase for aer tk 1	Pending		102B				Purchase more hardware ??
1	D&C plant water and potable water system repairs, upgrades various. Replace 6" potable water valve in basement and misc. valves	completed		102B		\$43,499.70		Also check/replace 1 1/4 valves as needed - Requires a water shutdown, other drainage piping, etc. T&M. Estimate \$43,000
2	new effluent P1 - Flowserve	completed		102B				Update 2/8 to AquaSolutions - purchase of new spare effluent pump #1 - 60HP pump delivered in late September. Cost encumbered in 07M. Pump received and paid for 07M.
2	Pump Station #3 - spare rotating, assy, or pump	Pending		102B				TBD- estimates being obtained
3	New 4-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				Current units obsolete and not supported by company, possibly look at under 05C if funds avail; remove the \$6,000 on 2/6/20 - 06C or 06M
3	Jerome meter replacement	Pending		102B				replace unit, if done \$11,000; evaluating options
3	Gravity Thickener #1 sandblasting/painting	Pending		102B				Estimate \$50,000+ - would need to go out for competitive bid request

Hull 2022-2023 - 08M Projects, Tasks, and Needs - (AV)								
Maintenance Account - Year 8 - 05_01_22 to 04_30_23								
FOR OCTOBER 2022 M.O.R.					\$166,300.00			11/28/2022 14:56
Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
2	Duperon Sumitomo Gear boxes	completed		102B		\$8,500.00		one spare gear box for flex rake and wash compactor [Delte Elec] ordered June 2022. Received in late August 2022. Waiting for invoicing. On Purchase order.
1	Grit classifier system parts	On Going		102B	\$3,500.00			waiting for wear shoes - charge is to 07M - estim \$3500. Wear shoe Items received July 2022. Plan for additional tail shaft assy and housing & bushings. Pricing out items/costs.
	Plant Water System [Pump and/or parts]	On Going		102B				consider spare motor or complete unit. Under review/hold [est \$6,000].
1	Replacement Pumps LS A	completed		102B		\$9,749.96		Repair of rotating assembly - at IPS shop. Returned in September 2022.
1	Electrical Work	On Going		103A	\$2,000.00			Orig budget \$25,000. Electricians: Glen Fellows, HiVoltage, or other; adjust 8/30; adjust budget Sept 20th. Adjust for addit exp 9/28; adj down on 11/28.
1	SCADA Work	On Going		103A	\$7,000.00			Steve Rose and the SCADA Support Team; budget \$20,000; Adj for cyber security protection subscr to \$14k; Reduce placeholder budget to \$7,000.
1	E-One Repairs and Replacement	On Going		103A				Orig budget: \$38,000. Based on historica/recent costs. E1 repairs where cost-effective & new replacement pumps; control panels, other equip; Adjust 8/30. Adj 9/28 to Zero.
1	Automatic Transfer Switch inspection and servicing	completed		101A		\$1,800.00		\$2400 - Annual Service planned for NETS - Transfer Switch; Work comleted July 2022
1	Wetwell Inspections and Cleaning - Plant/Pump Stations	On Going		103A	\$3,000.00			As required, plant or pump stations; orig budget \$8,000; Update acct 9/28;
1	Sewer Line Cleaning - Emergencies, pump & haul	On Going		103A	\$5,000.00			Placeholder - As required for various sub-contractors; could be Hoadley, Truax, WindRiver, BMC, or other, collection system & plant; budget \$10,000 Update acct 9/28;
1	Collection System and plant - emerg & unplanned calls - Jetting & CCTV work - various contractors	On Going		103A	\$5,000.00			Budget - 15,000, 8/30 - reduce budget due to recent work; Update acct 9/28;
1	Effluent Composite sampler	Pending		102B	\$9,800.00			Replace "tired" effluent composite sampler
3	Pump Station #5 jet lines to wetwell and WW cleaning	completed		103A				included with wetwell/collection system work
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 ??. Maybe year 09M project ?
4	Generators - Load Bank Testing Plant & Pump Stations	Pending		103A				Look at under 08M or 09M - recently done under 06M.
1	Rosano Davis Pump & Haul PS9	completed		103A		\$28,800.00		for FM inspection
1	EESCO MCC work at the Pump Stations	Pending		103A				TBD 2 days - request for quotation. Site visit done 10/27 by EESCO & waiting for proposal.
3	Low pressure sewer valve box insp & mtce	Pending		103A				placeholder for contractoror O&M inspections and potential repairs; Looking at Rosano-Davis or another contractor & W&C to investigate; budget of \$7,500 on hold
1	Est grit screw installation	Pending		102B	\$40,000.00			\$ \$40,000 placeholder installation - TBD year 8 or year 9
3 of 4	11/28/2022				2022_05_01_08M_Checkbook_YTD.xlsx			08M Planned Costs
1	Est Grit screw purchase	Pending		102B				placeholder hardware purchase. PO issued Oct 2022 \$48,122

Hull 2022-2023 - 08M Projects, Tasks, and Needs - (AV)								
Maintenance Account - Year 8 - 05_01_22 to 04_30_23								
FOR OCTOBER 2022 M.O.R.					\$166,300.00			11/28/2022 14:56
Priority [1=high]	Description	Status	<i>completed</i>	Task	Estimates & funds remaining	Final Completed Cost	<i>Lead</i>	Comments
1	AUMA actuator repairs & service	On Going		101A				PO# 105407 - issued for service call and 2 motors. \$4,000
1	SC #2 Structural Steel Repairs	On Going		103A	\$24,000.00			Based on T&M - center supports, scrapers, other - IPC Lydon
TOTAL					\$166,300.00			