



woodardcurran.com

COMMITMENT & INTEGRITY DRIVE RESULTS

HULL WATER POLLUTION CONTROL FACILITY

November
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 November 2022.

- No lost-time incidents for the month of November.
- Continuing Covid-19 awareness- adhering to W&C, Town of Hull, and CDC guidelines and sharing any protocol updates.
- There were 150 effluent samples taken in November.
- There were no alarm calls afterhours that required a response by W&C staff.
- There was one resident sewage odor complaint in November.
- The Asset Management Accounts summaries for contract year #8 is attached- latest revision date is 11/1/22.
- There were three E-One grinder pump calls in November.
- 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
12/30/2022***

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 *November*

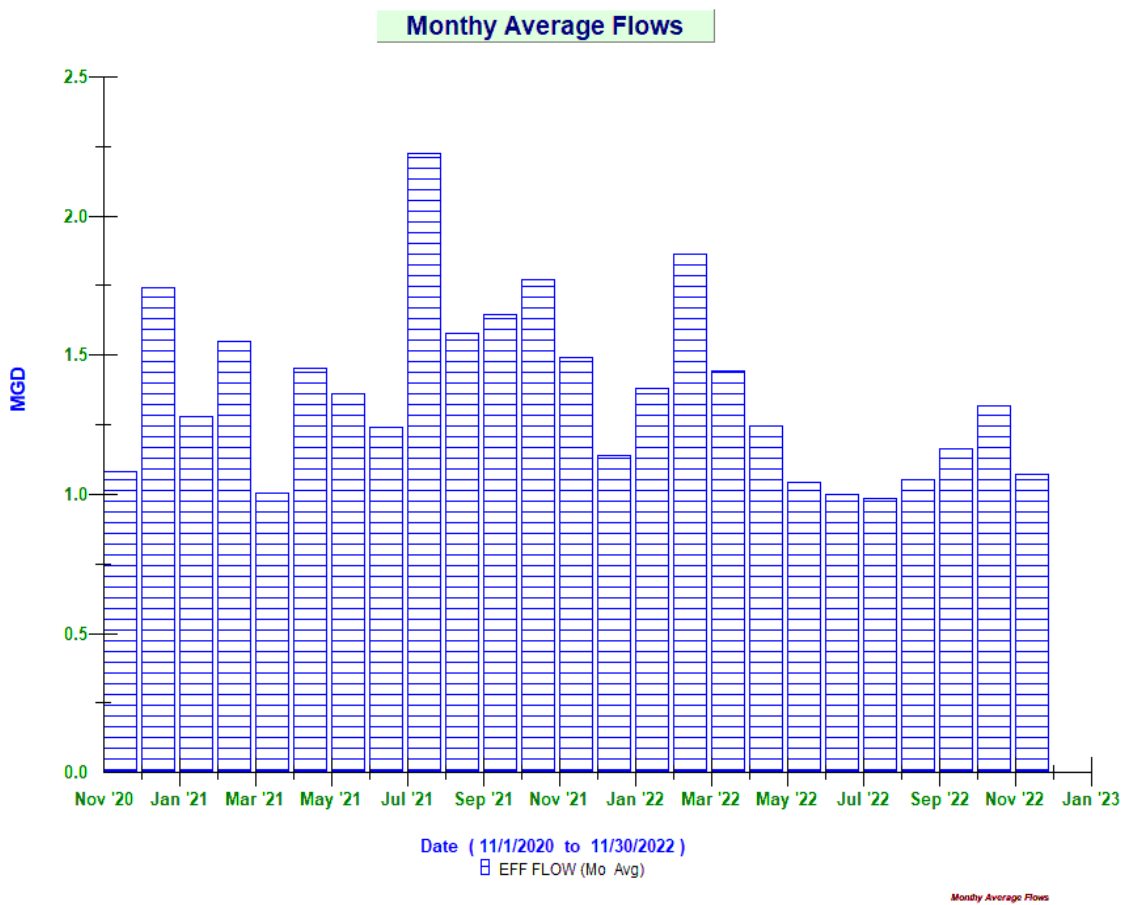
Month / Year	Eff Flow	Inf Flow	Inf BOD	Inf TSS	Eff BOD	EFF TSS
	MGD	MDG	LBS	LBS	LBS	LBS
Nov '20	1.08		1,221.85	2,323.02	38.25	132.26
Nov '21	1.49	1.54	2,210.73	5,383.55	40.16	86.05
Nov '22	1.07	1.18	1,518.88	1,650.65	32.06	99.48

* 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.

On November 9th Ray Ferland of True North was onsite to calibrate all plant and pump station flowmeters.

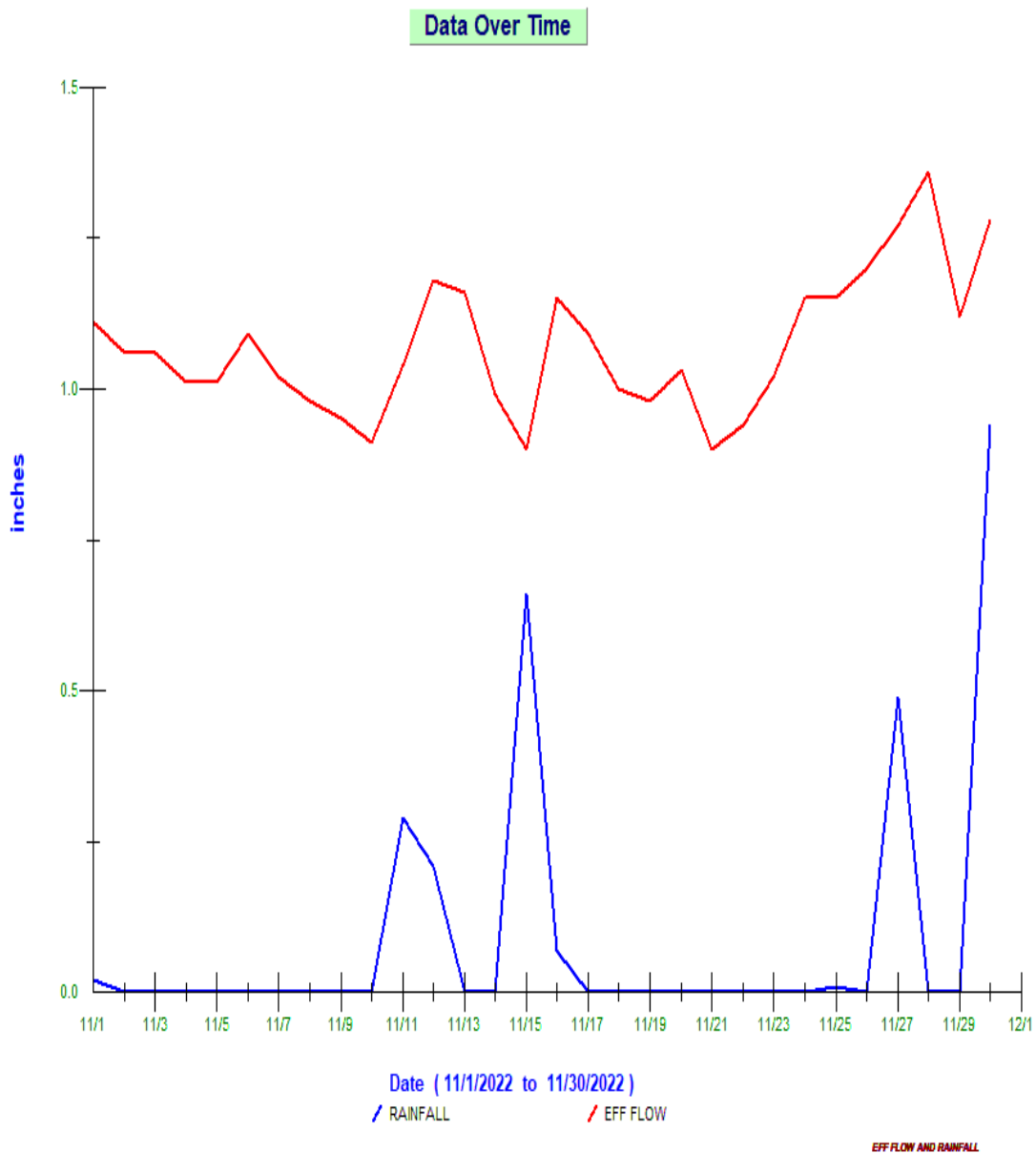
A. AVERAGE EFFLUENT MONTHLY FLOWS – 2+ YEAR COMPARISON

The monthly average flow for November was 1.07 MGD, slightly more than 1.04 MGD in October. Total precipitation for November was 2.69 inches, less than October's 4.86 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.

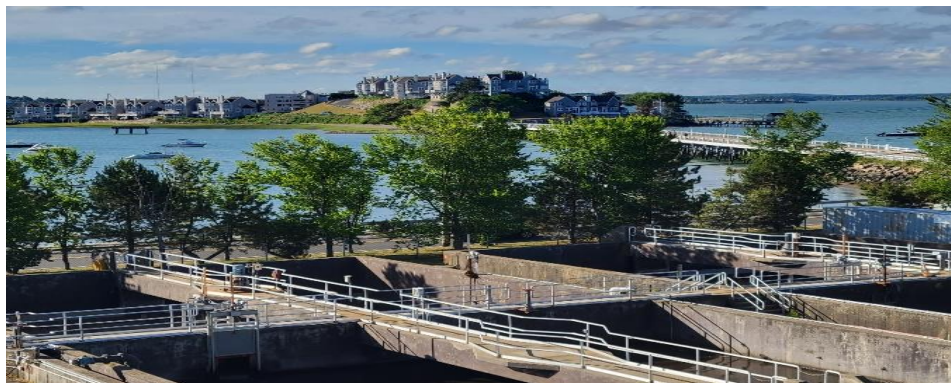


B. TWO MONTH SUMMARY OF RAINFALL AND THE INFLUENCE ON EFFLUENT FLOWS

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

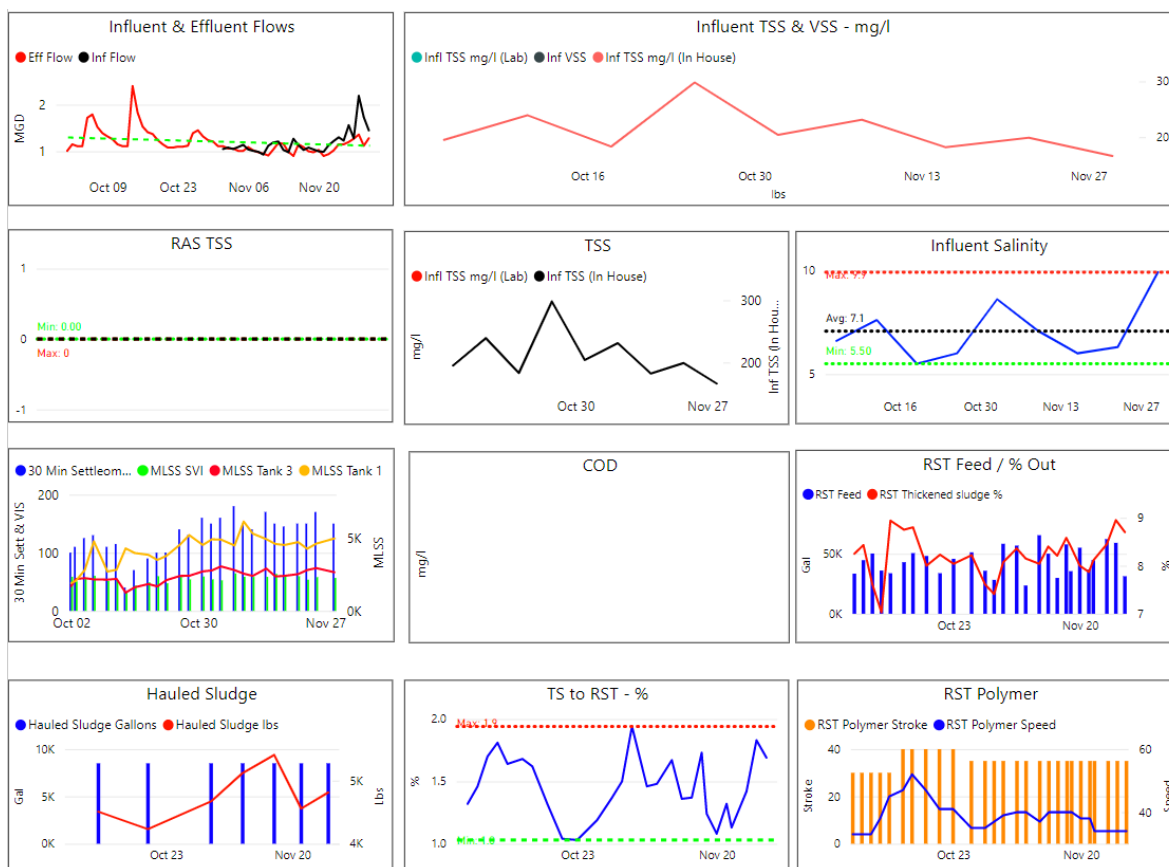


3 COMPLIANCE



➤ Plant Effluent

- The plant process conditions through November were well improved after some problems back in September and early October. The turbidity (NTU) levels seen are back to 5-12 NTU consistently.



Monthly Process Summary graphs from power BI: October- November 2022

Hull Wastewater Treatment Facility

10/1/2022 11/30/2022

Influent & Effluent Flows

● Eff Flow ● Inf Flow

Flow and Loadings

● Inf TSS lbs/day (In House) ● Inf BOD lbs/day ● Inf Flow

CL2 Daily Average

Max 0.71

BOD

● Inf BOD lbs/day ● Eff BOD lbs/day

TSS

● Inf TSS lbs/day (In House) ● Eff TSS lbs/day

Sec 2 Blanket

● Sec 2 Blanket ● Sec 1 Blanket ● Eff Flow

30 Min Settler & MLSS SVI

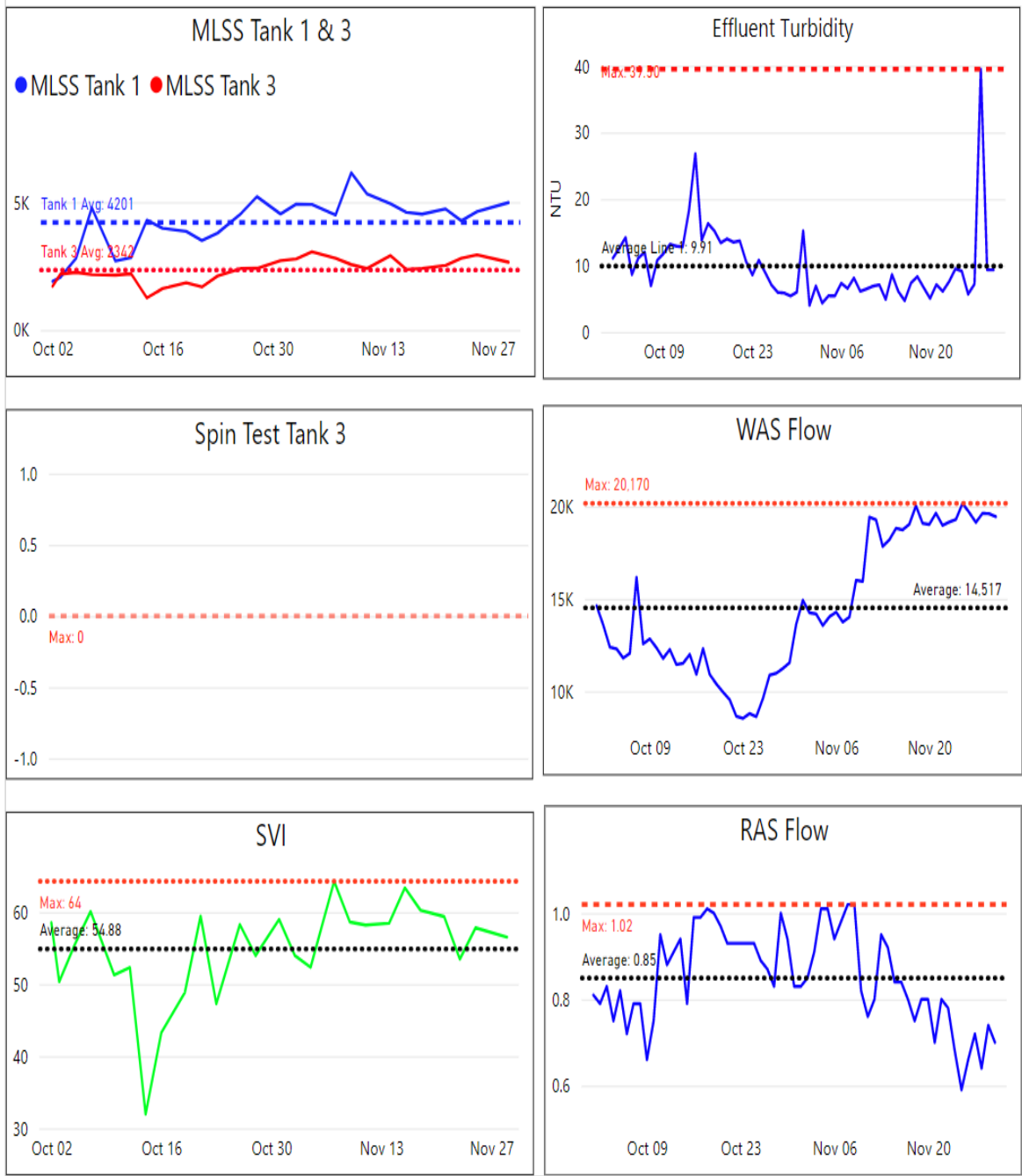
● 30 Min Settleometer ● MLSS SVI ● MLSS Tank 3

BOD & TSS Removal		
Date	Eff TSS Removal	Eff BOD Removal
12/31/2020	94.4%	96.8%
1/31/2021	98.2%	99.3%
2/28/2021	94.9%	96.1%
3/31/2021	98.1%	99.0%
4/30/2021	94.7%	96.7%
5/31/2021	96.2%	97.4%
6/30/2021	97.0%	97.2%

Violations

Date NOTES

November 2022



Additional Power BI Graphs showing trends of various processes – 10/1-11/30 2022

4 KEY PERFORMANCE INDICATORS



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	11.5	7.8	21.3	5	0
Eff TSS	184	LBS			1152	768	1 X Week	99.5	61.1	197.2	5	0
% TSS Rem	208	%		85			1 X Month	94.2			1	0
Eff BOD	108	MG/L	50		45	30	1 X Week	3.7	3.0	6.3	5	0
Eff BOD	185	LBS			1152	768	1 X Week	32.1	22.5	58.8	5	0
% BOD Rem	207	%		85			1 X Month	97.9			1	0
Eff Chlorine	142	MG/L	1			0.7	3 X Day	0.18	0.00	0.62	90	0
Eff Fecal	111	#/100 ML	260			88	1 X Week	10.0	10.0	10.0	5	0
Eff pH	136	SU	8.5	6.5			1X Daily	6.6	6.5	6.9	30	0
Enterococci	255	#/100 ML	276			35	1 X Week	10	10	10	5	0

There were 150 effluent samples taken in November with no violations.

EFFLUENT COMPLIANCE POWER BI GRAPHS

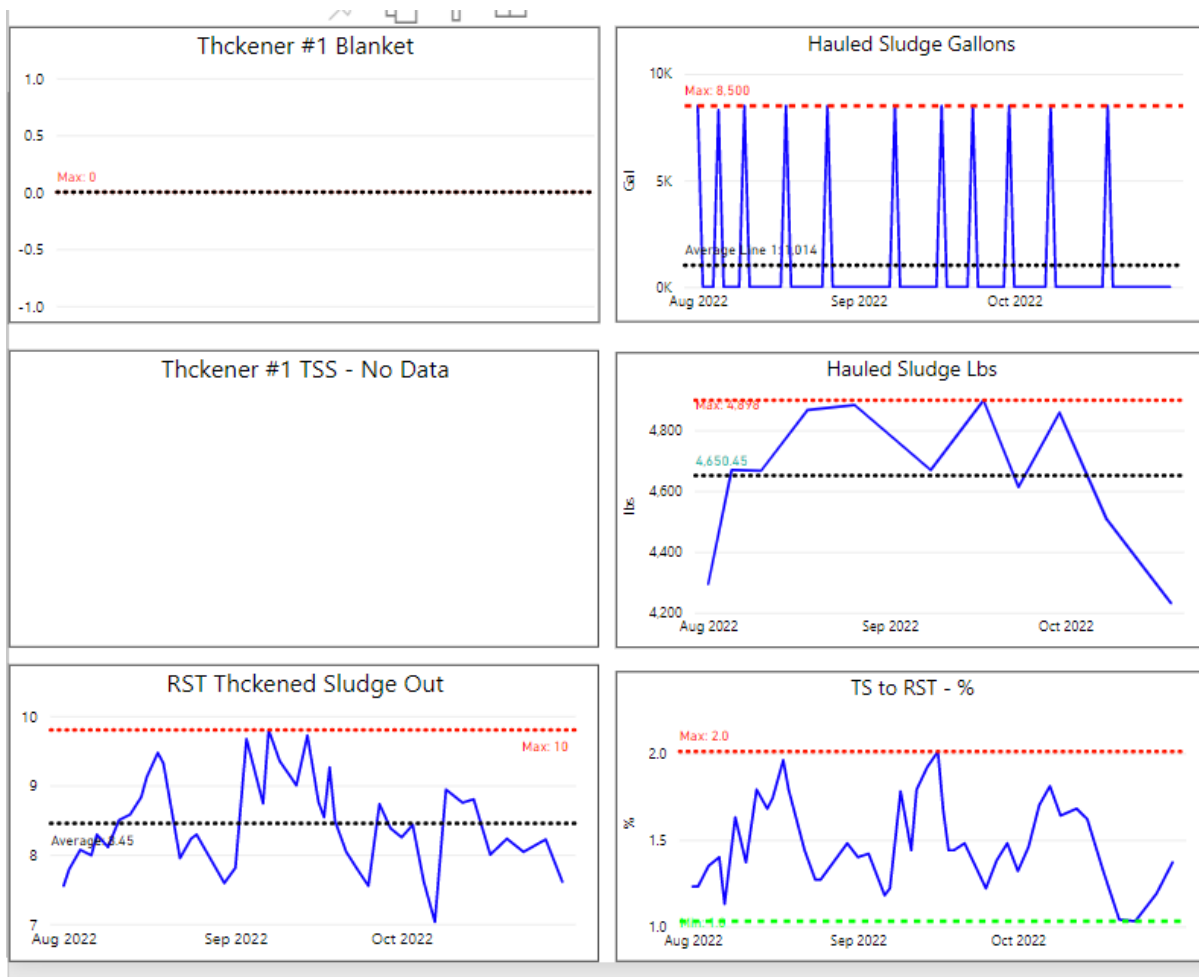


Quality of the effluent was satisfactory, as turbidity NTU levels returned to normal.

Sewage Gallons Treated vs Sludge Disposed

Month	Effluent Treated, MG	Sludge Disposed, Gals
November 2020	32.44	34,500
November 2021	44.72	51,000
November 2022	32.11	42,500

Additional Power BI graphs for sludge solids for 3-month period ending 11/30/22

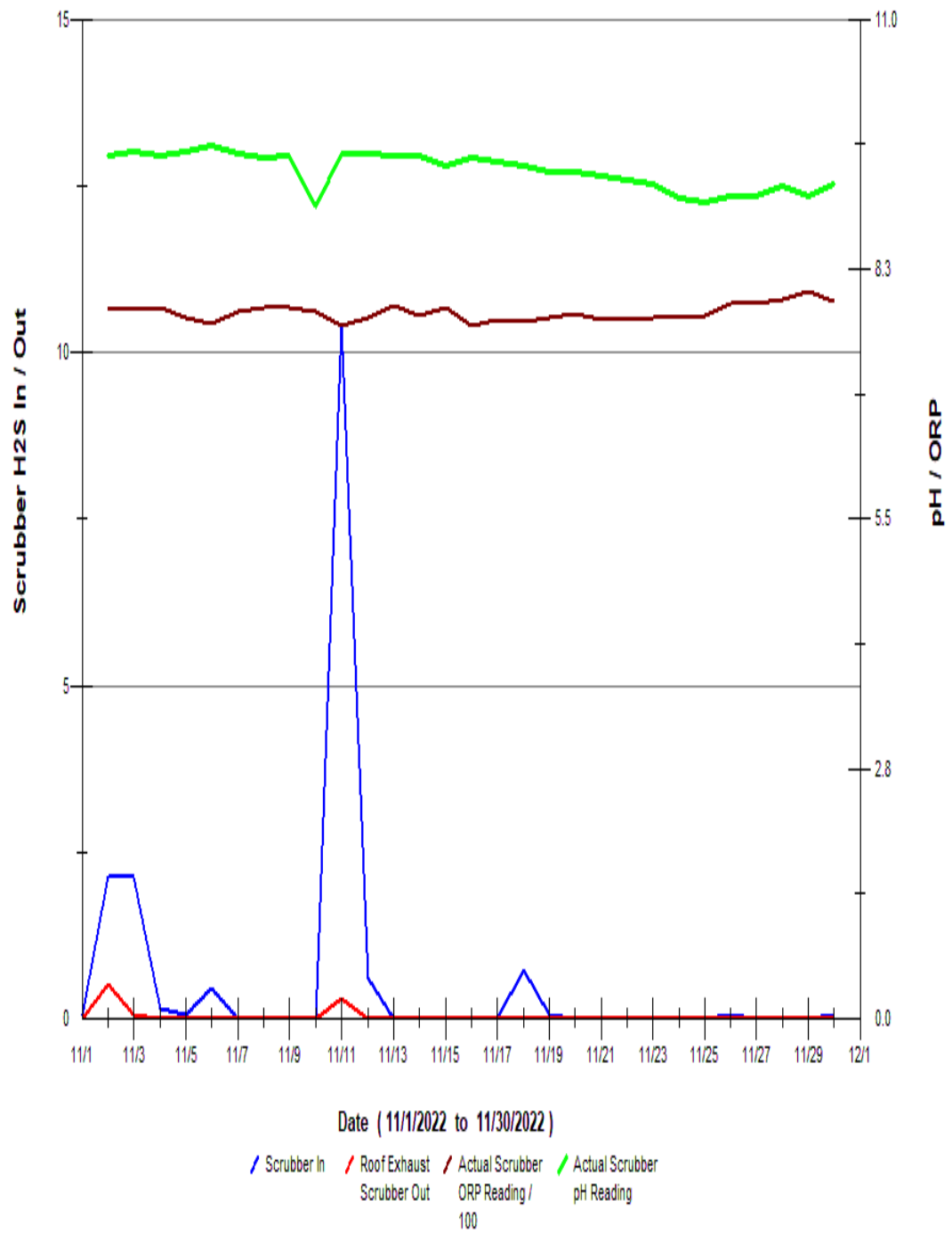


There was one sewage odor complaint call received on 11/1-the source of the odors was found to be some puddles formed from leaking discharge pipe joints in the basement of the building. A plumber was called to address problems.

The Bioxide system was on, and the feed rates were steady 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 November was about 100 gallons per day.

- The "In-Pipe" bacteria containers in collection system were changed out on November 7th and 23rd.
- 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

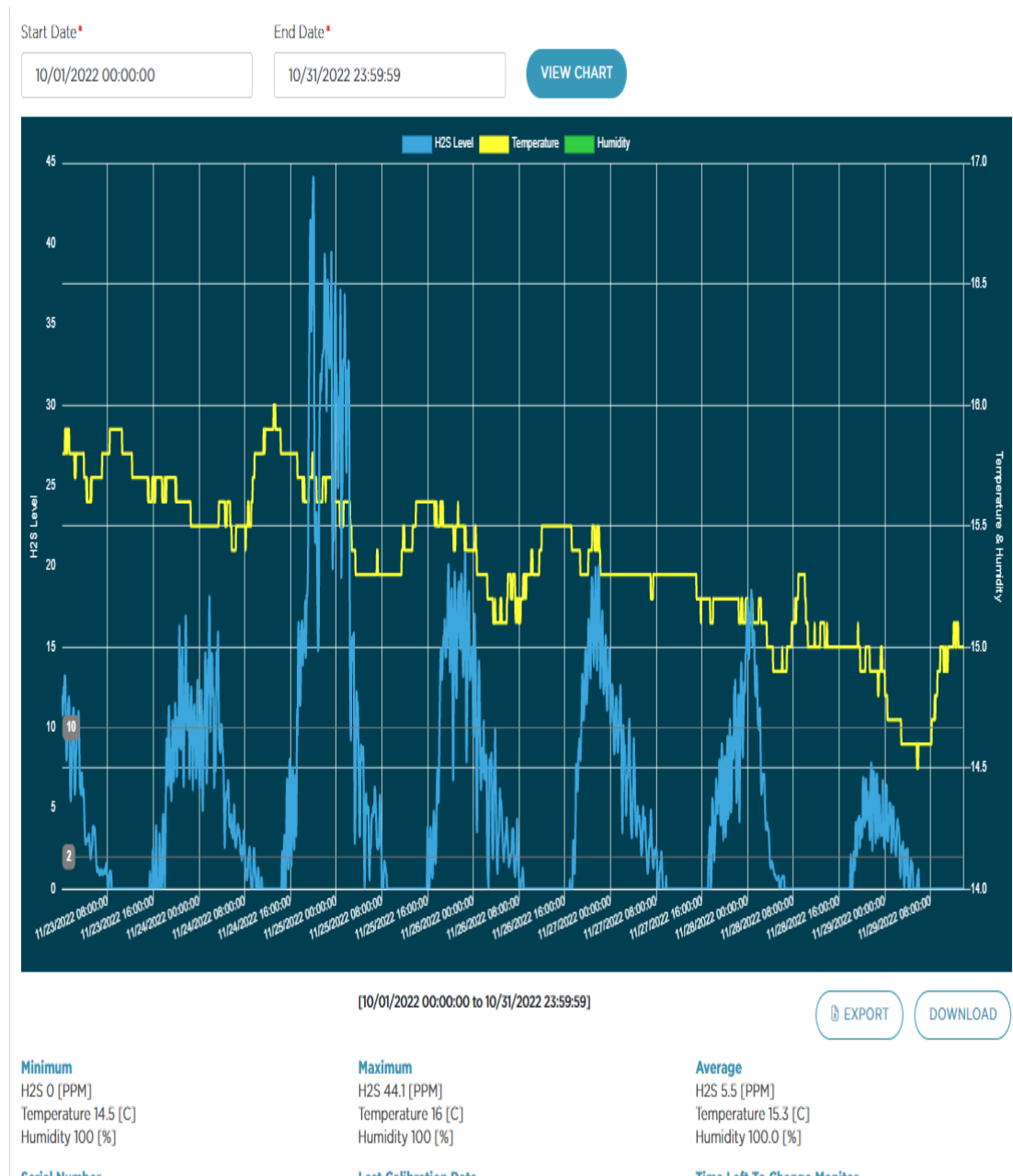
Scrubber H2S, pH and ORP



Scrubber H2S, pH and ORP

[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]



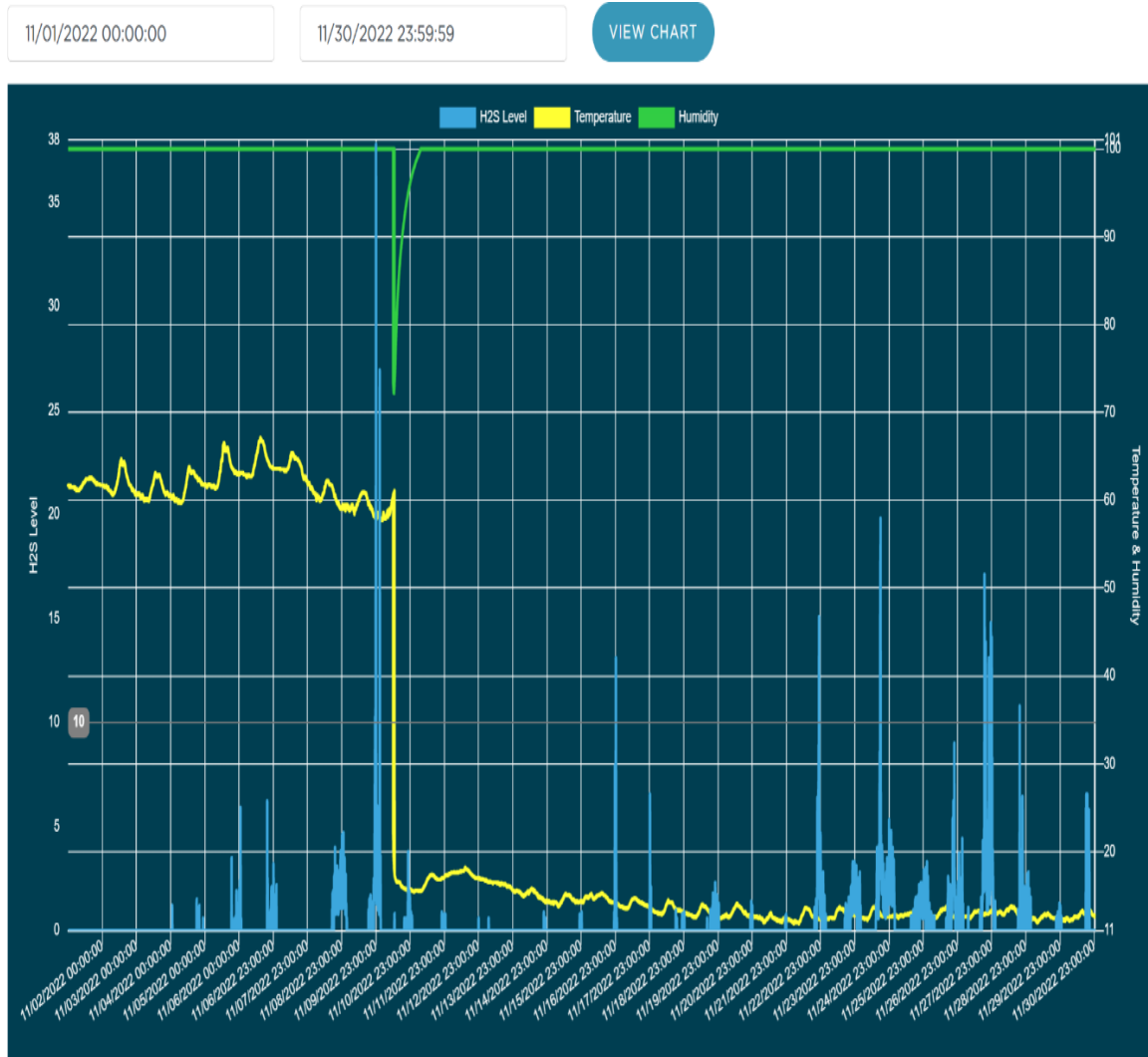
The odor data logging unit at XYZ monitoring the overall H2S levels close to the plant. From the graph, the daily pattern of H2S levels see a rise in the mid-afternoon until late evening/early AM.

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. H2S levels through November were minimal and lessening with cold weather, and adjustments for less Bioxide feed were made over the course of the month.

A new bioxide pump was installed at pump station #3 by the Evoqua techno 11/ 10- the old unit was found to be not pumping out what the remote access was reporting. Reporting is now accurate!

ua



Nantasket Ave

6 MAINTENANCE SUMMARY

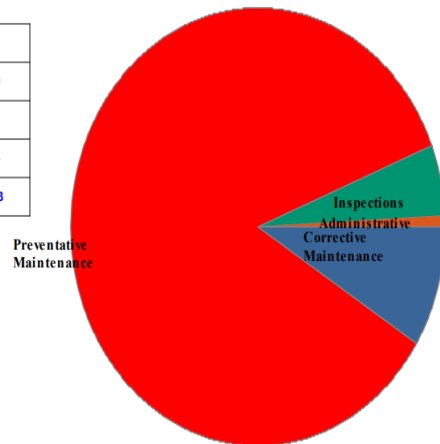


Maintenance History Report Hull Wastewater

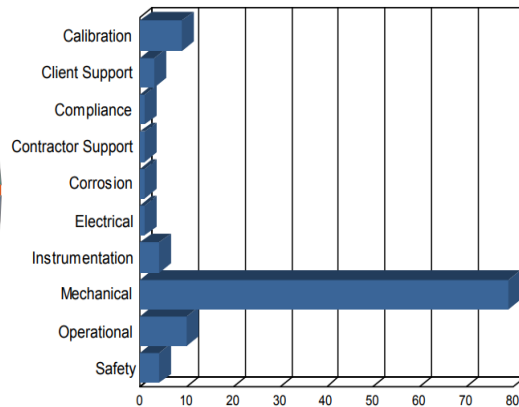
Start Date: 11/1/2022
End Date: 11/30/2022

Administrative	1
Corrective Maintenance	10
Inspections	6
Preventative Maintenance	96
Total Work Orders	113

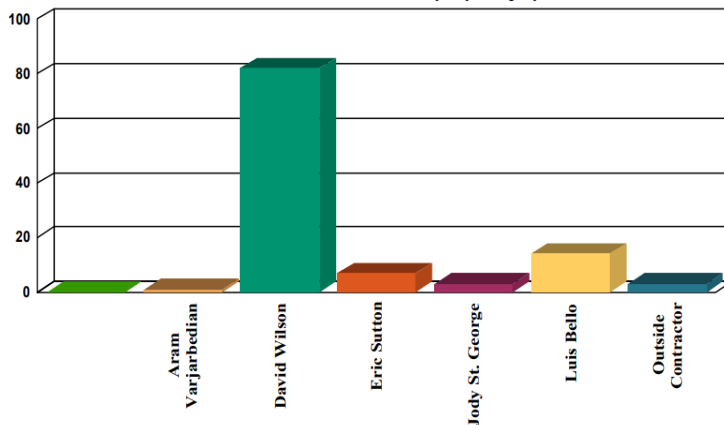
Work Order History By Type



Work Order History by Reason



Work Order History By Employee



Employee	WO Count	Labor Hours
Aram Varjarbedian	1	6
David Wilson	82	4
Eric Sutton	7	7
Jody St. George	3	16
Luis Bello	14	0
Outside Contractor	3	6
Unassigned	3	3
Totals	113	42

A. TASKS COMPLETED THIS MONTH

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

Additional key items of note are listed below:

- Sea Coast was onsite 11/3 to inspect the mechanical cartridge seal on the newly rebuilt and installed RAS #2 which was put back into service in October- pump was OK!
- On 11/2 Hi-Voltage Electric was onsite to update the wiring in the junction box to the chlorine contact chamber and assessed the Auma actuator on the aeration tanks- there is power going to the unit, but a mechanical issue- the local tech rep will be called.
- A Duperon technician was onsite November 29 & 30 to fully address the headworks flex rake & bar screen. The machine was fully power washed clean for the inspection and maintenance. A new Royce bearing assembly and grease whip was installed, as well as replacing all the wear points on the rake assembly. All the wash press bearings were found to be in very good condition, and it was decided to leave them in use.
- The newly installed door at the D Street Pump Station was painted in a neutral gray tone
- On 11/30 the influent gate was fully closed for an hour to allow W&C staff get into the influent channel via a confined space entry. They cleaned out the channel rails in which the fiberglass panels slide down into in order to redirect the inflow.
- Also, on the 30th, Lydon Millwrights commenced working in Secondary Clarifier #2. The center well and scrapers on the rake arm assembly will be addressed.

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 November.
- 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.
- The monthly W&C SPARKS safety meeting was held on 11/29. Topics discussed were forklift operation, hot work, fire extinguishers, and a review of W&C's Lessons Learned from October.
- W&C's monthly safety inspection checklist for the plant was completed.
- On November 15th W&C staff practiced an annual fire drill, required by O&M every year. The drill was performed under the supervision of Captain Alquist of the Hull Fire Department- he was well pleased with our response and offered us some constructive criticism.

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 November 29. Topics discussed were forklifts, hot work, fire extinguishers, and reviewing the "near-miss" incidents occurring at all the W&C projects in October.
- 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.

7 COLLECTION SYSTEM

A. WET WELL CLEANING

The actual schedule for wet well cleaning: May 2022 to June 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.

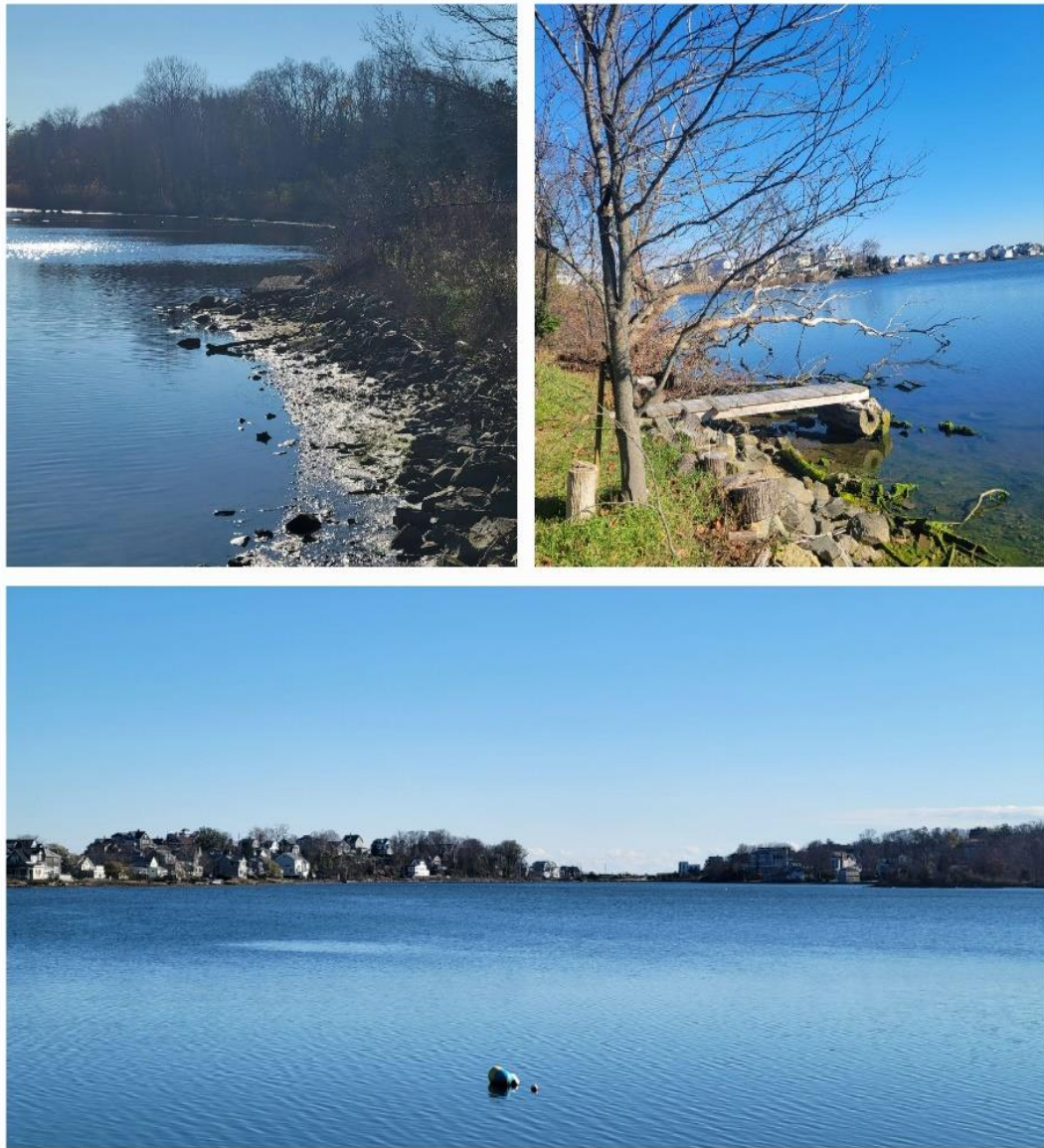
B. COLLECTION SYSTEM MAINTENANCE

Collection system work is being documented and tracked in Utility Cloud [UC] and a summarized report for September 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 September. 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 were three calls for E-One Grinder pump service – see UC summary.

- Pump station emergency generator testing consists of weekly no load runs and monthly loaded runs.
- All Pump station wet wells were inspected in November- monthly 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.



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.
- 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.

Date	Asset ID	Asset Description	Asset Class	Name	Workflow Class
11/22/2022 11:30	03-057	28 OCEAN AVE	Hull Parcels	Sutton, Eric	Hull - Markout
11/2/2022 12:13	03-058	3 BAY VIEW ST	Hull Parcels	Sutton, Eric	Hull - Markout
11/2/2022 12:42	03-058	3 BAY VIEW ST	Hull Parcels	Sutton, Eric	Generic WO
11/22/2022 11:32	05-068	15 HIGHLAND AVE	Hull Parcels	Sutton, Eric	Hull - Markout
11/7/2022 14:46	06-076	27 JAMES AVE	Hull Parcels	Sutton, Eric	Hull - Markout
11/10/2022 8:30	06-076	27 JAMES AVE	Hull Parcels	Sutton, Eric	Hull - Markout
11/18/2022 12:41	11 Richards Rd	11 Richards Rd Grinder Pump	Hull Grinder Pumps	Sutton, Eric	Hull - Grinder Pump Maintenance
11/15/2022 13:36	11-026-A	26 WINTHROP AVE	Hull Parcels	Sutton, Eric	Hull - Markout
11/15/2022 13:45	13-013	23 T STREET	Hull Parcels	Sutton, Eric	Hull - Markout
11/2/2022 8:57	15-058	63 H STREET	Hull Parcels	Sutton, Eric	Hull - Sewer Backup
11/22/2022 11:01	15-159	0 O STREET	Hull Parcels	Sutton, Eric	Hull - Markout
11/1/2022 12:09	18 Nantasket Ave	18 Nantasket Ave Grinder Pump	Hull Grinder Pumps	Sutton, Eric	Hull - Grinder Pump Maintenance
11/16/2022 12:29	31-031	207 NANTASKET RD	Hull Parcels	Sutton, Eric	Hull - Markout
11/3/2022 14:25	34-020	22 BAY STREET	Hull Parcels	Sutton, Eric	Hull - Markout
11/23/2022 10:35	34-026	18 HILLSIDE RD	Hull Parcels	Sutton, Eric	Hull - Markout
11/23/2022 13:19	34-026	18 HILLSIDE RD	Hull Parcels	Sutton, Eric	Hull - Markout
11/9/2022 9:23	49-067	9 STATE PARK RD	Hull Parcels	Sutton, Eric	Hull - Markout
11/10/2022 11:34	52-061	0 GUN ROCK AVE	Hull Parcels	Sutton, Eric	Generic WO
11/23/2022 10:46	53-029	0 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout
11/15/2022 13:33	56-009-A	1174 NANTASKET AVE	Hull Parcels	Sutton, Eric	Hull - Markout
11/1/2022 14:42	Bacteria UNIT #21	UNIT #21	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:16	Bacteria UNIT #21	UNIT #21	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:21	Bacteria UNIT #22	UNIT #22	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:11	Bateria UNIT # 8	UNIT # 8	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:07	Bateria UNIT #1	UNIT #1	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:11	Bateria UNIT #10	UNIT #10	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:14	Bateria UNIT #11	UNIT #11	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:19	Bateria UNIT #12	UNIT #12	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:18	Bateria UNIT #13	UNIT #13	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:16	Bateria UNIT #14	UNIT #14	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:17	Bateria UNIT #15	UNIT #15	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units

Date	Asset ID	Asset Description	Asset Class	Name	Workflow Class
11/11/2022 13:15	Bateria UNIT #16	UNIT #16	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:12	Bateria UNIT #17	UNIT #17	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:14	Bateria UNIT #18	UNIT #18	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:13	Bateria UNIT #19	UNIT #19	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:07	Bateria UNIT #2	UNIT #2	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:15	Bateria UNIT #20	UNIT #20	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:20	Bateria UNIT #23	UNIT #23	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:06	Bateria UNIT #24	UNIT #24	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/1/2022 14:44	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:13	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/1/2022 14:45	Bateria UNIT #4	UNIT #4	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:04	Bateria UNIT #4	UNIT #4	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:09	Bateria UNIT #5	UNIT #5	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:08	Bateria UNIT #6	UNIT #6	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:10	Bateria UNIT #7	UNIT #7	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/11/2022 13:21	Bateria UNIT #9	UNIT #9	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units
11/21/2022 12:41	MH-20859	SEMS_Asset	Sanitary Manhole	Sutton, Eric	Sewer Main Cleaning & CCTV
11/21/2022 12:46	MH-20859	SEMS_Asset	Sanitary Manhole	Sutton, Eric	Generic WO



Maintenance History Report

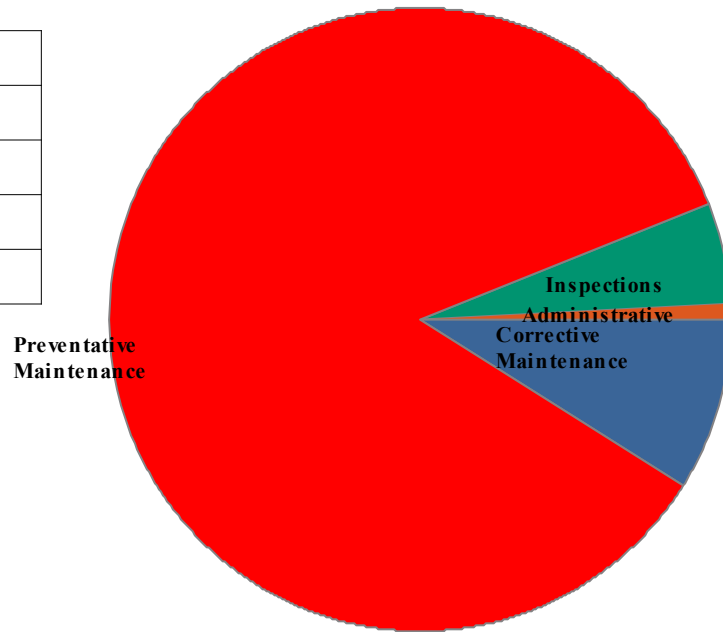
Start Date: 11/1/2022

End Date: 11/30/2022

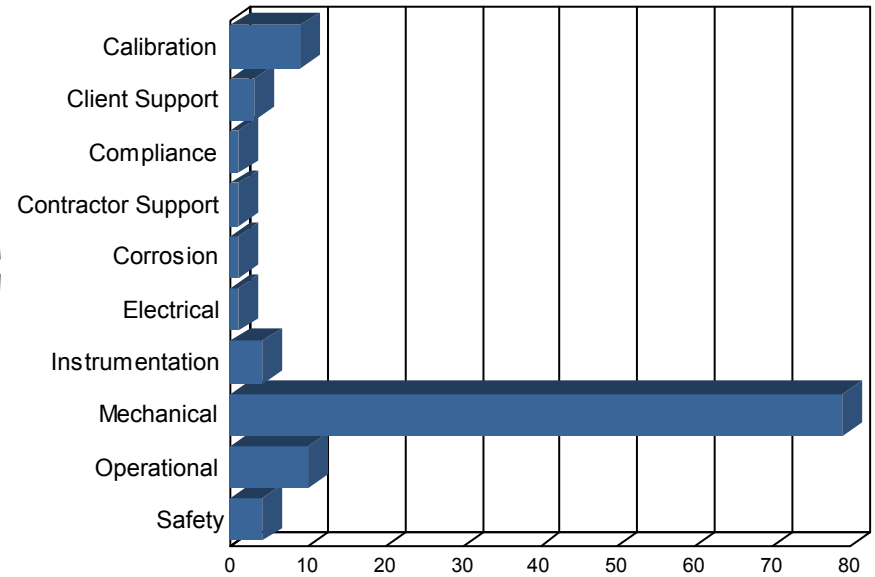
Hull Wastewater

Work Order History By Type

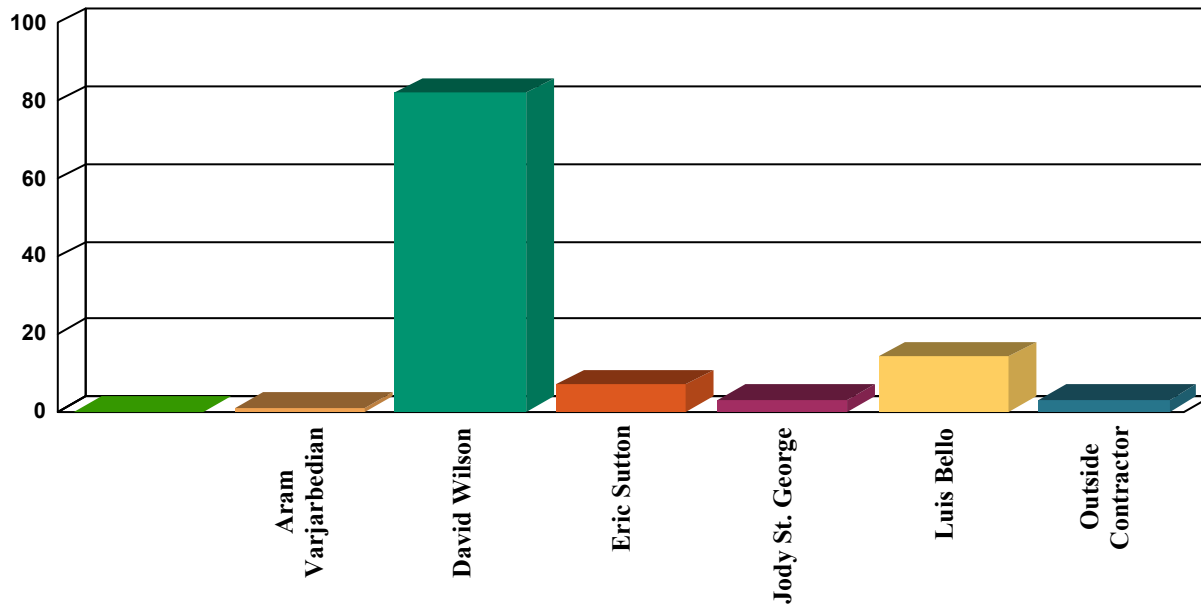
Administrative	1
Corrective Maintenance	10
Inspections	6
Preventative Maintenance	96
Total Work Orders	113



Work Order History by Reason



Work Order History By Employee



Employee	WO Count	Labor Hours
Aram Varjarbedian	1	6
David Wilson	82	4
Eric Sutton	7	7
Jody St. George	3	16
Luis Bello	14	0
Outside Contractor	3	6
Unassigned	3	3
Totals	113	42

Corrective Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
11/4/22	16920	PS D - DPW Stormwater Pump Station	Paint new door	Paint door		11/4/22	Completed
11/9/22	16928	RAS Pump 2	replaced failing valve and check valve on pump discharge.	Replace old components with new. JS & DW. DW rust transform pump exterior.	Jody St. George	11/9/22	Completed
11/9/22	16921	MH 20012	Shut sses water valve	Confine space entry MS, ES, DW, LB, JT,BK and Detail cop. MH 20012 shut sses water valve	Eric Sutton	11/9/22	Completed
11/15/22	16927	RAS Pump 3	replace discharge side check valve and valve	Remove failed components and install new check valve and valve. JS & DW. DW transform rust surfaces.	Jody St. George	11/15/22	Completed
11/16/22	16922	Plant water yard hydrants	Out of service tags were used to mark inoperable plant water hydrants.	Placed out of service tags on four plant water hydrants that are no longer operable.		11/16/22	Completed
11/17/22	16923	20 - WW - collections - general	Cctv catch basins Harborview area	Used camera CCTV catch basins on CHRISTINE RD, HARBORVIEW, NANTASKET AVE AREA. TOTAL LENGTH 606 FT	Eric Sutton	11/17/22	Completed
11/22/22	16924	30 - WW Treatment Plant - General	Sludge actuator panel red light replacement	In garage sludge truck actuator red panel light to back tank needed replaced. When removing light bulb came out without casing, election on site disconnected power and safely removed casing new bulb was installed.		11/22/22	Completed
11/22/22	16925	Plant Water System	Install new isolation valve in sludge pump room by the incinerator.	JS and AV separate section of PW system that used to feed the MHF and blank off portion and install 4 inch gate valve and flush connection.	Aram Varjarbedian	11/22/22	Completed
11/22/22	16929	Aeration Tank 1	inlet AUMA actuator will not work.	Mike Page from AquillaNeptun On site and determined failed motor. Swapped with motor from crossover between tanks 2 and 4. New motor still 8 week lead time. Corroded components. Assisted by AV.	Outside Contractor	11/22/22	Completed
11/23/22	16926	PS D - DPW Stormwater Pump Station	Repaint door	Sand door repaint door 1 st coat completed	Eric Sutton	11/23/22	Completed

Inspections

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
11/3/22	16919	Truck 3 - 2015 Chevy 3500 HD	Perform vehicle inspection	Inspected vehicle - See doFORMS report for full details.	Eric Sutton	11/3/22	Completed
11/3/22	16398	Truck 3 - 2015 Chevy 3500 HD	Monthly vehicle inspection on do-Forms		Eric Sutton	10/8/22	Completed
11/9/22	16584	Truck 3 - 2015 Chevy 3500 HD	Monthly vehicle inspection on do-Forms		David Wilson	11/7/22	Completed
11/14/22	16605	Blower Room Exhaust Fan 1	Monthly operational inspection		David Wilson	11/1/22	Completed
11/14/22	16606	Blower Room Exhaust Fan 2	Monthly operational inspection		David Wilson	11/1/22	Completed
11/15/22	16463	Emergency Lighting & exit signs	Emergency Lighting Inspection - Monthly		Luis Bello	11/9/22	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
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Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
11/1/22	16297	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load		David Wilson	10/31/22	Completed
11/1/22	16415	Generators "All Pump Station"	Generator Weekly - Test Run no load		David Wilson	10/31/22	Completed
11/1/22	16293	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load		David Wilson	10/31/22	Completed
11/1/22	16378	PS Kholer Trailer Mounted Generator	Generator Weekly - Test Run no load		David Wilson	10/31/22	Completed
11/2/22	16301	Backflow Preventer - HVAC Room Boiler Makeup Feed	Backflow Preventor Test (HVAC Room Boiler) - Semi Annual		Outside Contractor	10/12/22	Completed
11/4/22	16519	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		David Wilson	11/2/22	Completed
11/4/22	16524	PS 1 Generator	PS #1 Generator Inspection and Load Test - Monthly		David Wilson	11/2/22	Completed
11/4/22	16525	PS 3 Generator	PS #3 Generator Inspection and Load Test - Monthly		David Wilson	11/2/22	Completed
11/4/22	16526	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		David Wilson	11/2/22	Completed
11/4/22	16536	PS 4 Generator	PS #4 Generator Inspection and Load Test - Monthly		David Wilson	11/2/22	Completed
11/4/22	16531	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		David Wilson	11/2/22	Completed
11/4/22	16537	PS 5 Generator	PS #5 Generator Inspection and Load Test - Monthly		David Wilson	11/2/22	Completed
11/4/22	16554	PS 6 Generator	PS #5 Generator Inspection and Load Test - Monthly		David Wilson	11/2/22	Completed
11/4/22	16538	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		David Wilson	11/2/22	Completed
11/4/22	16543	PS 9 Generator	PS #9 Generator Inspection and Load Test - Monthly		David Wilson	11/2/22	Completed
11/4/22	16549	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		David Wilson	11/2/22	Completed
11/4/22	16544	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		David Wilson	11/2/22	Completed
11/4/22	16472	Influent Sluice Isolation Gate	Weekly operate through full range		David Wilson	11/2/22	Completed
11/4/22	16458	Portable Generator - Honda	Portable Generator Inspection - Monthly		David Wilson	11/2/22	Completed
11/4/22	16557	GasAlert Max XTII #1	4 gas meter calibration - monthly		David Wilson	11/1/22	Completed
11/4/22	16404	High level floats	Weekly High Float Alarm test		David Wilson	10/30/22	Completed
11/4/22	16420	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		David Wilson	10/30/22	Completed
11/4/22	16488	Aeration Tank 1 Oxygen Probe	AT #1 DO Probe Clean and Calibrate - Monthly	Cleaned and calibrated probe. Offset is -.22 ppm	David Wilson	11/1/22	Completed
11/4/22	16489	Aeration Tank 3 Oxygen Probe	AT #3 DO Probe Clean and Calibrate - Monthly	Cleaned and calibrated ldo probe. Offset is +.64ppm	David Wilson	11/1/22	Completed
11/7/22	16493	RAS Pump 1	RAS Pump #1 PM - Quarterly	Greased all pump and motor bearings. Inspected all seals, hubs and coupling.	David Wilson	11/2/22	Completed
11/7/22	16494	RAS Pump 1	Monthly Check Pump Couplings	LOTO of equipment for inspection. Hub and coupling in good condition.	David Wilson	11/2/22	Completed
11/7/22	16498	RAS Pump 3	Monthly Check Pump Couplings		David Wilson	11/2/22	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
11/7/22	16497	RAS Pump 3	RAS Pump #3 PM - Quarterly		David Wilson	11/2/22	Completed
11/7/22	16495	RAS Pump 2	Monthly Check Pump Couplings		David Wilson	11/2/22	Completed
11/7/22	16496	RAS Pump 2	RAS Pump #2 PM - Quarterly		David Wilson	11/2/22	Completed
11/9/22	16505	PS 1	PUMP STATIONS - QUATERLY PM'S		David Wilson	11/1/22	Completed
11/9/22	16508	PS 3	PUMP STATIONS - QUATERLY PM'S		David Wilson	11/1/22	Completed
11/9/22	16509	PS 4	PUMP STATIONS - QUATERLY PM'S		David Wilson	11/1/22	Completed
11/9/22	16562	PS Kholer Trailer Mounted Generator	Generator - Monthly Load Test		David Wilson	11/6/22	Completed
11/9/22	16595	Generators "All Pump Station"	Generator - Monthly Load Test		David Wilson	11/6/22	Completed
11/10/22	16599	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		Luis Bello	11/6/22	Completed
11/10/22	16586	High level floats	Weekly High Float Alarm test		Luis Bello	11/6/22	Completed
11/14/22	16516	PS 9	PUMP STATIONS - QUATERLY PM'S		David Wilson	11/1/22	Completed
11/14/22	16517	PS A	PUMP STATIONS - QUATERLY PM'S		David Wilson	11/1/22	Completed
11/14/22	16520	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		David Wilson	11/9/22	Completed
11/14/22	16527	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		David Wilson	11/9/22	Completed
11/14/22	16532	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		David Wilson	11/9/22	Completed
11/14/22	16539	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		David Wilson	11/9/22	Completed
11/14/22	16545	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		David Wilson	11/9/22	Completed
11/14/22	16550	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		David Wilson	11/9/22	Completed
11/14/22	16473	Influent Sluice Isolation Gate	Weekly operate through full range		David Wilson	11/9/22	Completed
11/14/22	16512	PS 5	PUMP STATIONS - QUATERLY PM'S		David Wilson	11/1/22	Completed
11/14/22	16513	PS 6	PUMP STATIONS - QUATERLY PM'S		David Wilson	11/1/22	Completed
11/15/22	16594	ORP meter	Clean and Calibrate		David Wilson	11/10/22	Completed
11/15/22	16593	pH meter	Clean and Calibrate		David Wilson	11/1/22	Completed
11/15/22	15963	Aeration Blower 2	Aeration Blower #2 Oil Change - Semi Annual		David Wilson	8/23/22	Completed
11/16/22	16479	Influent Pump 1	Monthly Check Pump Couplings		David Wilson	11/2/22	Completed
11/16/22	16480	Influent Pump 2	Monthly Check Pump Couplings		David Wilson	11/2/22	Completed
11/16/22	16481	Influent Pump 3	Monthly Check Pump Couplings		David Wilson	11/2/22	Completed
11/16/22	16482	Influent Pump 4	Monthly Check Pump Couplings		David Wilson	11/2/22	Completed
11/16/22	16483	Influent Pump 5	Monthly Check Pump Couplings		David Wilson	11/2/22	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
11/16/22	16501	Primary Sludge Pump 1	Monthly Check Pump Couplings		David Wilson	11/2/22	Completed
11/16/22	16502	Primary Sludge Pump 2	Monthly Check Pump Couplings		David Wilson	11/2/22	Completed
11/16/22	16499	RST Feed Pump 1	Monthly Check Pump Couplings		David Wilson	11/2/22	Completed
11/16/22	16500	RST Feed Pump 2	Monthly Check Pump Couplings		David Wilson	11/2/22	Completed
11/16/22	16503	Sludge Transfer Pump 1	Monthly Check Pump Couplings		David Wilson	11/2/22	Completed
11/16/22	16504	Sludge Transfer Pump 2	Monthly Check Pump Couplings		David Wilson	11/2/22	Completed
11/17/22	16521	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		David Wilson	11/16/22	Completed
11/17/22	16528	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		David Wilson	11/16/22	Completed
11/17/22	16533	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		David Wilson	11/16/22	Completed
11/17/22	16540	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		David Wilson	11/16/22	Completed
11/17/22	16546	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		David Wilson	11/16/22	Completed
11/17/22	16551	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		David Wilson	11/16/22	Completed
11/17/22	16596	Generators "All Pump Station"	Generator Weekly - Test Run no load		David Wilson	11/14/22	Completed
11/17/22	16563	PS Kholer Trailer Mounted Generator	Generator Weekly - Test Run no load		David Wilson	11/14/22	Completed
11/17/22	16464	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load		David Wilson	11/14/22	Completed
11/17/22	16467	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load		David Wilson	11/14/22	Completed
11/17/22	16474	Influent Sluice Isolation Gate	Weekly operate through full range		David Wilson	11/16/22	Completed
11/17/22	16490	Effluent Pumps	Effluent Pump - Monthly	Effluent pump 4 output is .93mgd @49hZ Effluent pump 2 output is 1.06mgd @44hZ Effluent pump 3 output is 1.96mgd @44hZ Effluent pump 1 output is 1.36mgd @41hZ Inspected all exposed rail assemblies below access cover. No unusual noises or vibrations.	David Wilson	11/15/22	Completed
11/17/22	16587	High level floats	Weekly High Float Alarm test		David Wilson	11/13/22	Completed
11/17/22	16600	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		David Wilson	11/13/22	Completed
11/17/22	16478	Mechanical Screen & Washpress System	Monthly Maintenance	Cleaned and inspected assembly.	David Wilson	11/7/22	Completed
11/17/22	16477	Mechanical Screen & Washpress System	Screen & Wash press - Semi annual maintenance	Pressure washed flexrake and washpress. Inspected all scrapers, circlips, links and pins. Greased all bearings and inspected drive assemblies for leaks.	David Wilson	11/7/22	Completed
11/17/22	16397	Chlorine probe AT1	Change electrolyte		David Wilson	10/1/22	Completed
11/17/22	16396	Chlorine probe AT1	Weekly calibration		David Wilson	10/24/22	Completed

Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
11/17/22	16582	Chlorine probe ATI	Change electrolyte		David Wilson	11/1/22	Completed
11/17/22	16583	Chlorine probe ATI	ATI, change membrane		David Wilson	11/1/22	Completed
11/22/22	16468	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load		Luis Bello	11/21/22	Completed
11/22/22	16465	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load		Jody St. George	11/21/22	Completed
11/22/22	16597	Generators "All Pump Station"	Generator Weekly - Test Run no load		Eric Sutton	11/21/22	Completed
11/22/22	16564	PS Kholer Trailer Mounted Generator	Generator Weekly - Test Run no load		Eric Sutton	11/21/22	Completed
11/22/22	16588	High level floats	Weekly High Float Alarm test		Luis Bello	11/20/22	Completed
11/22/22	16601	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		Luis Bello	11/20/22	Completed
11/27/22	16579	GasAlert Max XTII #2	monthly calibration		Luis Bello	11/24/22	Completed
11/27/22	16568	Ventis MX4 #2 - 4 Gas	4 Gas Meter #2 Calibration - Monthly		Luis Bello	11/24/22	Completed
11/27/22	16569	Ventis MX4 #3 - 4 Gas	4 Gas Meter #3 Calibration - Monthly		Luis Bello	11/24/22	Completed
11/27/22	16570	Ventis MX4 #4 - 4 Gas	4 Gas Meter #4 Calibration - Monthly		Luis Bello	11/24/22	Completed
11/27/22	16572	Ventis MX4 #6 - 4 Gas	4 Gas Meter #6 Calibration - Monthly		Luis Bello	11/24/22	Completed
11/27/22	16571	Ventis MX4 #5 - 4 Gas	4 Gas Meter #5 Calibration - Monthly		Luis Bello	11/24/22	Waiting for Parts
11/29/22	16469	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load		Luis Bello	11/28/22	Completed
11/29/22	16466	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load		Luis Bello	11/28/22	Completed

Administrative

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
11/9/22	15568	Effluent Flow Meter	Calibration	True North Systems calibrated all plant and pump station valves.	Outside Contractor	5/1/22	Completed

Asset Management Accounts - Year 8							
	FOR M.O.R. NOVEMBER 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	\$83,120.23	\$144,394.45	\$26,100.00	\$109,220.23	\$118,294.45
08M-102B	Capital and Major Repairs	\$140,000.00	\$167,849.80	(\$27,849.80)	\$50,000.00	\$217,849.80	(\$77,849.80)
08M-103A	Major Sub Contractors	\$192,737.48	\$173,915.74	\$18,821.74	\$44,000.00	\$217,915.74	(\$25,178.26)
blank							
	Asset Management	\$560,252.16	\$424,885.77	\$135,366.39	\$120,100.00	\$544,985.77	\$15,266.39

\$135,366.39

Budget expended	Time Status	
	NOW=	1/3/2023
	Start	5/1/2020
36.5%	267.8%	231.2%
119.9%	267.8%	147.9%
90.2%	267.8%	177.5%
75.8%	267.8%	191.9%

08S	D Street	\$7,500.00	\$8,391.00	(\$891.00)	\$0.00	\$8,391.00	(\$891.00)
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111.9%	267.8%	155.9%
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08C	Odor Control Chemicals	\$100,000.00	\$131,788.00	(\$31,788.00)	\$0.00	\$131,788.00	(\$31,788.00)
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131.8%	267.8%	136.0%
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Estimated total
remaining 08M,
08C (\$16,521.61)

Hull 2022-2023 - 08M Projects, Tasks, and Needs - (AV)								
Maintenance Account - Year 8 - 05_01_22 to 04_30_23								
FOR NOVEMBER 2022 M.O.R.					\$120,100.00			1/3/2023 8:54
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	\$12,000.00			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; adjust budget 12/19 by 2K.
1	Pump and Motor Repairs/Replacements [invoiced and pcard]	On Going		101A				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; Reduce budget to ZERO [PS4 rebuilt assy]
1	Lubricants	On Going		101A				Various Suppliers for oil and grease. Budgeted \$2000. Cut placeholder \$\$ to \$900; Adjust to zero 1/3/23
1	Generator Prev. Maintenance and Repairs	On Going		101A	\$10,000.00			Orig budget \$20,000. 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. Adj placeholder down to \$10,000 [12/19].
1	Fire Alarm Inspections and Service	On Going		101A				Semi Annual - Hart Security [October & April , central station, & Service]budget \$3000. Semi-annual services completed in mid April. Adj 8/30; Oct Service completed. Adjust budget down to ZERO.
2	Universal waste disposal	completed		101A				Placeholder - \$500 - Unlikely to be used in year 8. Will use these funds for electronic waste disposal. Completed Dec 2023
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				Orig budget \$3,000 - Estimated annual expenditures - adjust 8/30; Adjust 10/31. Adjust to zero 1/3/23
1	Manhole Inspections	Pending		101A				As required,and/or scheduled
2	General mechanical and electrical items/supplies	On Going		101A				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; Adjust t zero on 1/3/23
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				Orig budget \$3,000. Replacements and/or Service - On-Going - As Needed; adj budget Sept. NIR and Wolf Creek. ZERO out the budget 12/19/22
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				Hardware Store - \$200.00 per month - reoccurring expense; budget \$2,400; Adjust 8/30; Adj 9/20; adj 11/28. Adjust to zero 1/3/23
	New Hach Spec Meter for chlorine	completed		101A				replace older/failing unit [DR700]; new unit purchased May 2022
1	Lab Equip Calibration	completed		101A				Annual service \$640

Hull 2022-2023 - 08M Projects, Tasks, and Needs - (AV)								
Maintenance Account - Year 8 - 05_01_22 to 04_30_23								
FOR NOVEMBER 2022 M.O.R.					\$120,100.00			1/3/2023 8:54
Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
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	completed		102B				Issued PO 105426 - \$8,269; work completed late Nov 2022.
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	completed		102B				sub-contractor labor - pending; Have materials on hand. Spring 2022. Targeting Nov 2022. Completed Dec 2022 including conduit trench from Sec building to CCT.
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
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.

Hull 2022-2023 - 08M Projects, Tasks, and Needs - (AV)								
Maintenance Account - Year 8 - 05_01_22 to 04_30_23								
FOR NOVEMBER 2022 M.O.R.					\$120,100.00			1/3/2023 8:54
Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
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 [see notes]	completed		102B		\$9,749.96		Repair of rotating assembly - at IPS shop. Returned in September 2022.
1	Electrical Work	On Going		103A				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. Adjust to ZERO on 12/19/22.
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	On Going		102B				Replace "tired" effluent composite sampler. Waiting for PO to be issued. PO issued Dec 2022 for \$9760
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
1	Est Grit screw purchase	Pending		102B				placeholder hardware purchase. PO issued Oct 2022 \$48,122
1	AUMA actuator repairs & service	On Going		101A				PO# 105407 - issued for service call and 2 motors. \$4,000

Hull 2022-2023 - 08M Projects, Tasks, and Needs - (AV)								
Maintenance Account - Year 8 - 05_01_22 to 04_30_23								
FOR NOVEMBER 2022 M.O.R.					\$120,100.00			1/3/2023 8:54
Priority [1=high]	Description	Status	<i>completed</i>	Task	Estimates & funds remaining	Final Completed Cost	<i>Lead</i>	Comments
1	SC #2 Structural Steel Repairs	completed		103A	\$24,000.00			Based on T&M - center supports, scrapers, other - IPC Lydon. Invoice pending
TOTAL					\$120,100.00			