



# HULL WATER POLLUTION CONTROL FACILITY

July  
2021

## MONTHLY OPERATING REPORT



[woodardcurran.com](http://woodardcurran.com)

COMMITMENT & INTEGRITY DRIVE RESULTS

NPDES NO. MA0101231

# **Table of Contents**

1	Executive Summary .....	3
2	Flows and Loadings.....	4
2.1	Average effluent monthly flows – 2+ year comparison .....	5
2.2	Monthly Summary of Rainfall and the Influence on Effluent Flows .....	6
3	Compliance .....	8
4	Key Performance Indicators .....	15
4.1	Water Quality – july 2021.....	15
5	Odor Control .....	18
6	Maintenance Summary .....	21
6.1	Tasks Completed this Month .....	21
6.2	Asset Management Accounts .....	25
7	Safety.....	26
8	Staff Development.....	27
9	Collection System .....	28
9.1	Wet Well Cleaning .....	28
9.2	Collection System Maintenance .....	28
10	Project Management & Administration .....	30
10.1	On-Going Projects and Support Items .....	30

## **Cover pictures:**

[top] Aeration tank #3 – broken air piping, loss of mixing

[bottom] Close-up of in tank cleaning – aeration tank #3. [failed pipe section in background]

# 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 July 2021.**

- No lost-time incidents for the month of July.
- Continued/On-going covid-19 safety operations: Regular daily operations and staff scheduling, adhering to company and CDC guidelines and updates. Staffing levels normal as it pertains to covid19.
- There were **148** effluent samples taken in the month of July [details on page (12).] All effluent samples collected were compliant. The average daily flow for the month was 2.22 MGD. A total of 10.39 inches of rainfall was recorded, with the highest daily total amount recorded on 7/1 [2.54"]. Process conditions remained compliant. Additional staff coverage and remote assistance provided to maintain plant systems during the high flow periods.
- There were no Sanitary System Overflows [SSO] reported.
- The plant and collection system odors were low to moderate as flows were high early in the month. Remote monitoring with the Vapor-Link to monitor H2S levels.
- The MCC #2 electrical incident corrective work continued, with the installation of one new aeration blower variable frequency drive, wiring replacement, and Scada programming. W&C worked with the HSD on providing information and assistance for the insurance company inspectors.
- Continued operation of the aerated grit system with modified air header piping. Grit removal continued to be moderate.
- Aeration Tank #3 – a section of diffused aeration piping failed on 7/26/21, where support hardware corroded/failed, and the plastic piping broke apart. The tank was taken off-line for cleaning and evaluation. Tank #2 with mechanical aeration was put online.
- The Asset Management Accounts summaries for contract year #7 is attached. Latest revision date: 10/25/21.
- There were four grinder pump replacement call outs during the month of July.
- Infra-Red scanning done for all plant & pump station electrical panels by EESCO.
- W&C O&M continued to support the Engineering projects – pump station #9, plant influent and secondary system design calls, and pump station #4 discussions.
- Plant Staffing – Plant O&M Tech 1 – recruitment process continued. Job position offered and accepted by Excel program applicant, with target start date in early August.
- Weekly Bio Bot sampling continued in July. [Covid-19 Wastewater Monitoring Program].

**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



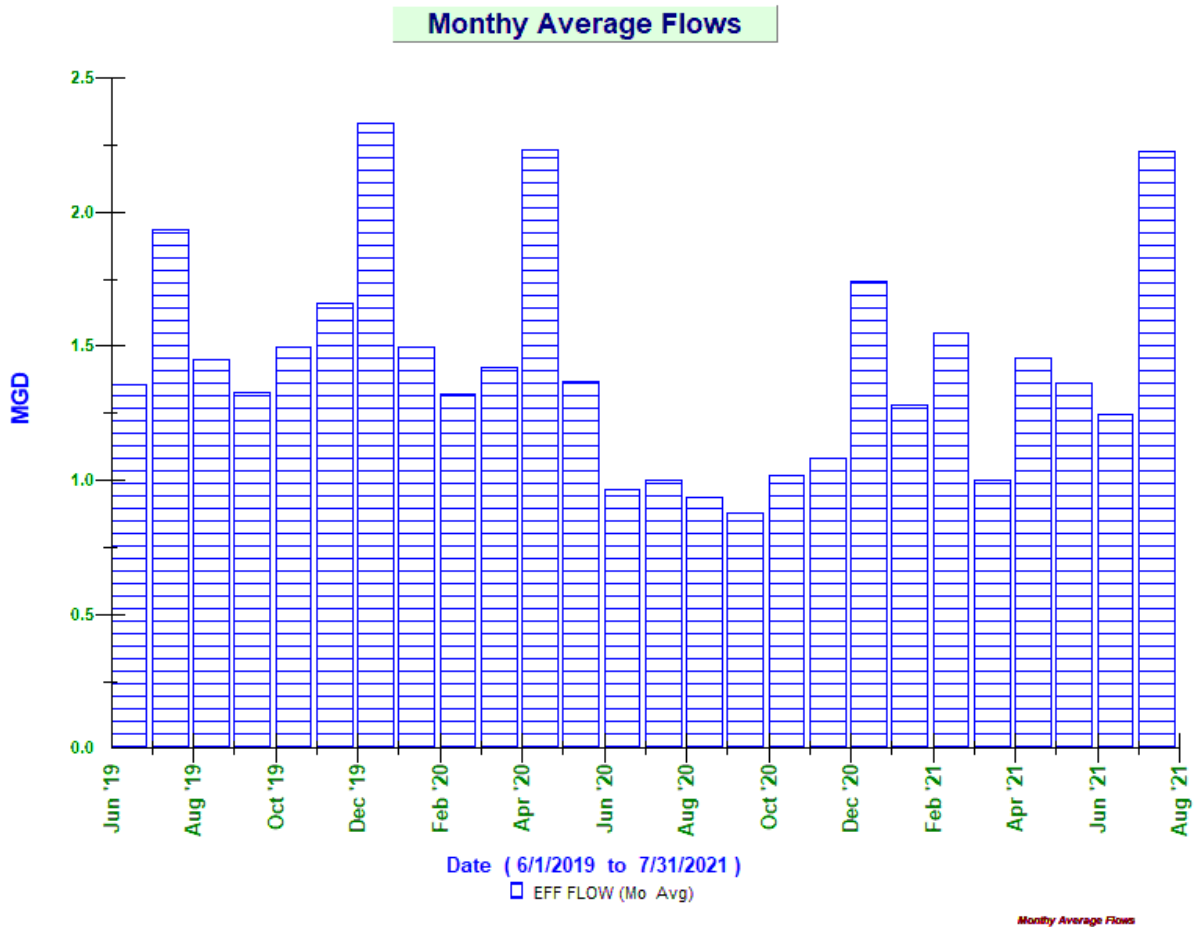
### Average Daily Flows and Loadings for the Month:

	Eff Flow MGD	Inf Flow MGD	Inf BOD LBS	Inf TSS LBS	Eff BOD LBS	EFF TSS LBS
July 2019	1.937	2.044 *	4374	9130	67	215
July 2020	1.002	1.121*	1846	2258	81	185
July 2021	2.224	<b>2.195*</b>	1556	3099	67	225

\* On-Going -The influent flow meters are strap on doppler flow meters, and the internal pipe condition prevents getting a strong signal. The staff utilizes the area velocity meter in the aeration tank inlet channel as well as the headworks influent Parshall Flume meter. 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. Flows in 2020-2021 are lower due to improvements in the collection system to reduce inflow and infiltration.

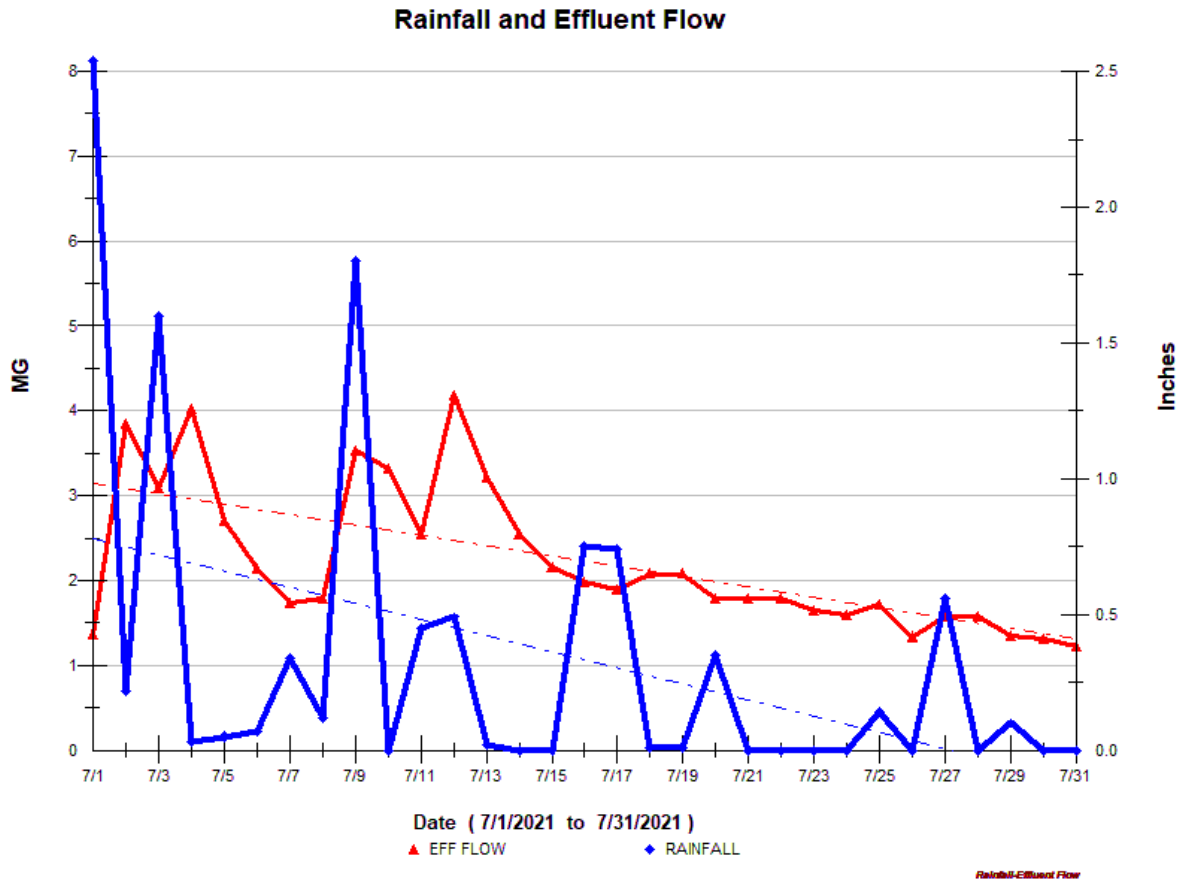
## 2.1 AVERAGE EFFLUENT MONTHLY FLOWS – 2+ YEAR COMPARISON

ery

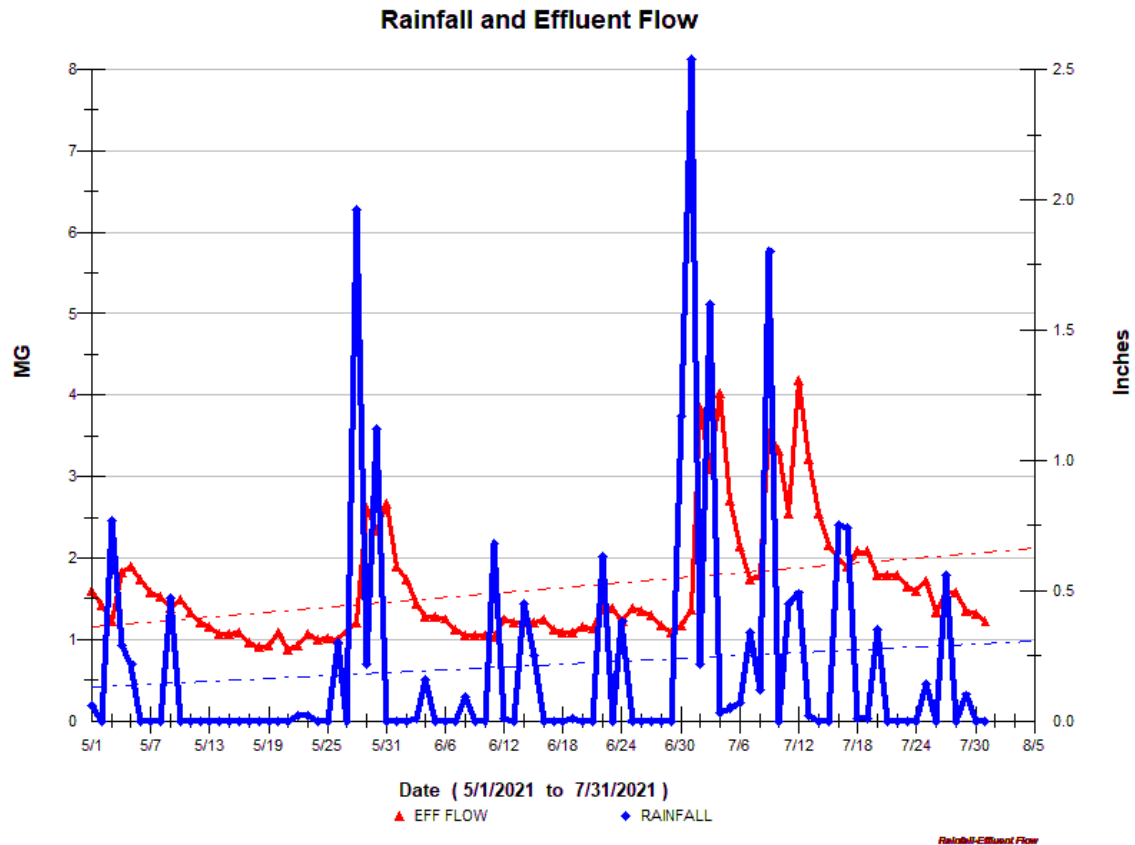


The monthly average flow for June was 2.22 MGD, about 1 MGD higher than the previous month. The total precipitation for the month was 10.39 inches, with 2.54 inches of rain on 7/1. The graph shows the 2-plus year summary of the monthly average flows.

## 2.2 MONTHLY SUMMARY OF RAINFALL AND THE INFLUENCE ON EFFLUENT FLOWS



This graph shows the days where precipitation occurred [rainfall] [Blue Peaks]. This graph indicates that there were several wet weather days in July. The wet weather had impact on the plant flows early in the month.



This graph shows the data from the last 3 months and indicates the times when rainfall impacted the plant flows. 3.75 inches of rain fell during the 6/30-7/1 period.

### 3 COMPLIANCE



#### ➤ Plant Effluent

There were no permit exceedances in the month of July.

- Plant process conditions were stable during the month, even as the daily flow average was 1 MGD higher for the month. Approximately 7.5 inches of rainfall recorded for the 10-day period 6/30-7/9. With the large amount of flow variations, the facility mode process mode was changed from modified to full contact stab mode as needed.
- On 7/26 the aeration system diffused air piping grid in tank #3 failed, and it was necessary to take this tank offline, and redirect flow to aeration tank #2, which has a mechanical aerator. The process mode then changed from a modified step feed arrangement to a complete mix arrangement where RAS flow was returned to both aeration tanks.



Aeration tank #3 loss of air due to piping failure    Aeration tank #2 – mechanical aerator

- The MA DEP was informed of the aeration equipment failure and process change. No compliance issues.

- High flow management activity–
  - 7/2 - Early start for staff due to high flows due to rain [2.56"]. Hi & HI HI influent wetwell alarms. Remote in to Scada system and close influent gate. Then staff there put PC2 put online. Plant to full contact stab mode. Remote checks again at 4am for all Pump Stations. D Street ok. PS9 almost to high wetwell alarm but ok. PS 1, A,4,9,3 all had extended pump run hours
  - 7/3 - Influent gate used for period 7pm to 12 midnight to hold plant flows, tried to keep at around 5MG, but could not, so the SC #2 tank was filled, and gate reopened from 15% to 100% by 12 midnight. Adj influent and effluent pump order as needed to manage high flows that reached 5.0+ for the morning hours. By mid-day gate was fully opened and flows at 4.0MG.
  - 7/4 - AV, ES, JT on site today. Early AM completion of process changes made late on Sat. AV remote in again at 4:30am and adjust influent pumps, Q's at 4.2+, and arrive at plant at 6am.
  - 7/9 - Hurricane ELSA today; HFM planning. Review various preparedness items with staff. Various tanks left online.
  
- A Copy of the monthly NPDES reports for July 2021 was submitted to the EPA & DEP and then forwarded to the Hull Sewer Dept.
  
- Complete and submit DMRQA Study 41 data to ERA for Hull.
  
- Completed the NEIWPCC New England Biosolids Survey based on 2019 data. NEIWPCC is collecting information about sludge generation and management throughout the region to assess stressors on the sludge market and inform future discussions and collaborative efforts. They are doing this in coordination with the Northeast Biosolids and Residuals Association and as part of the U.S. National Biosolids Data Project.

Pictured [L to R]: Aeration tank #1, #3, SC #2, SC #1, PC #2





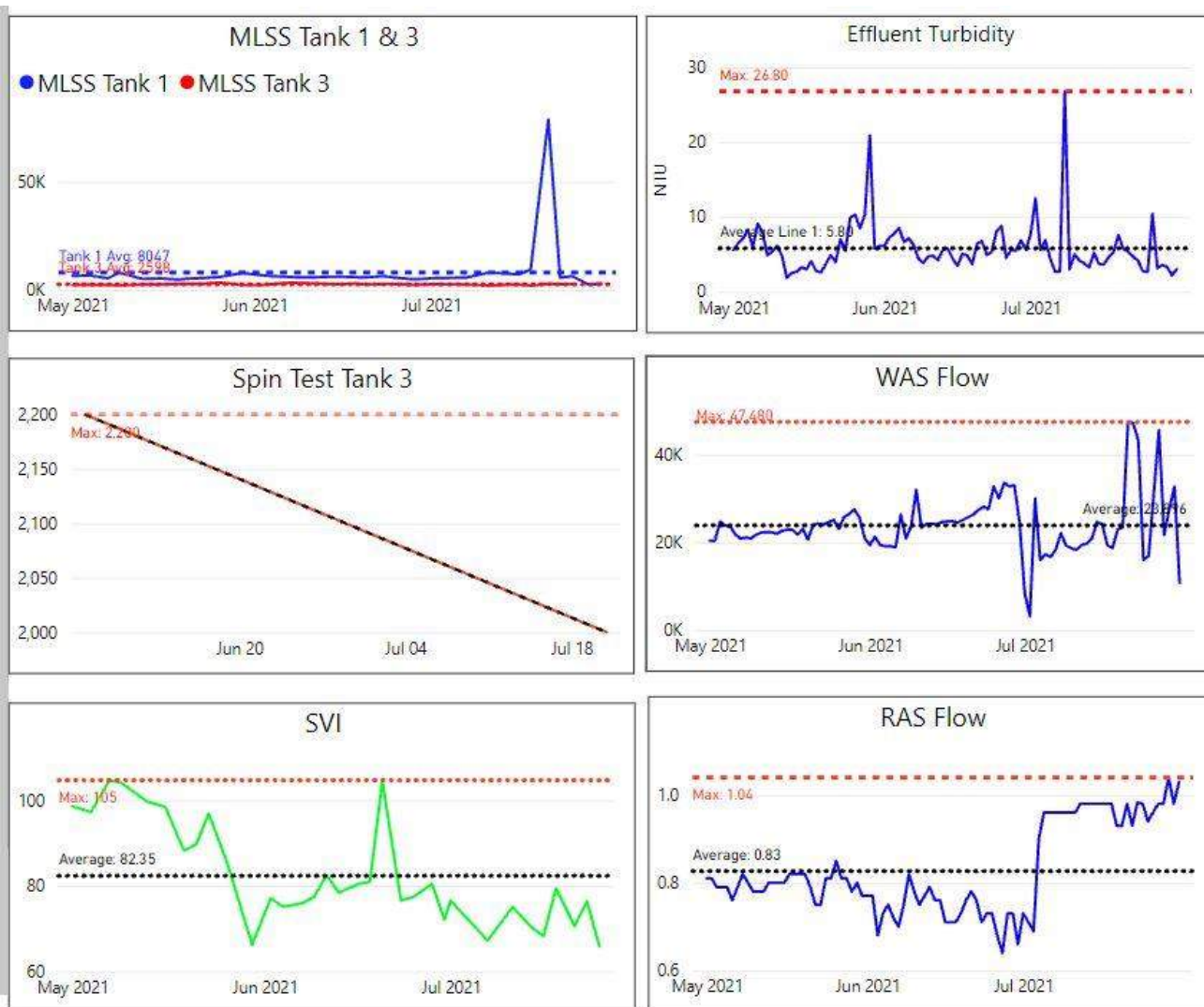
# Hull Wastewater Treatment Facility

7/1/2021

7/31/2021



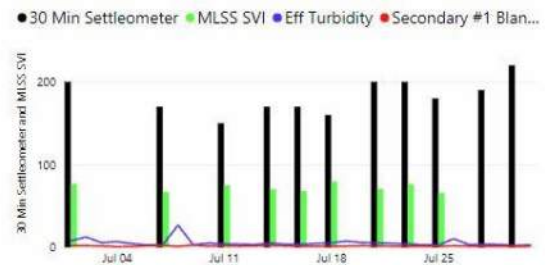
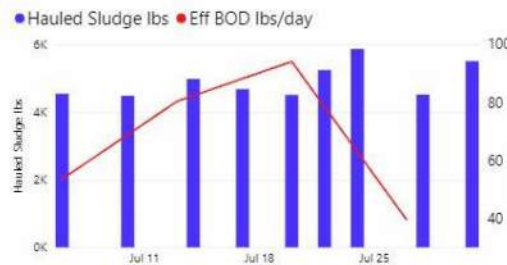
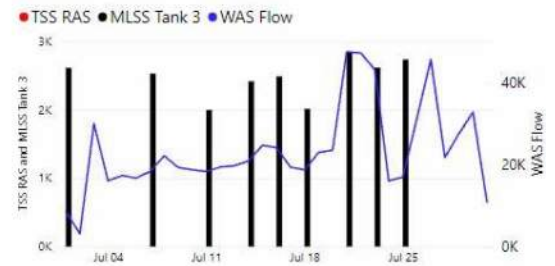
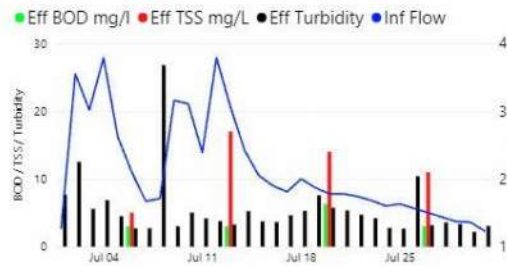
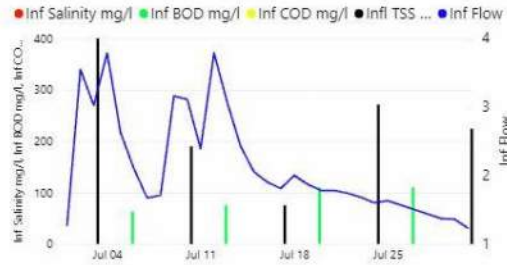
Monthly Process Summary graphs from power BI – July 2021.



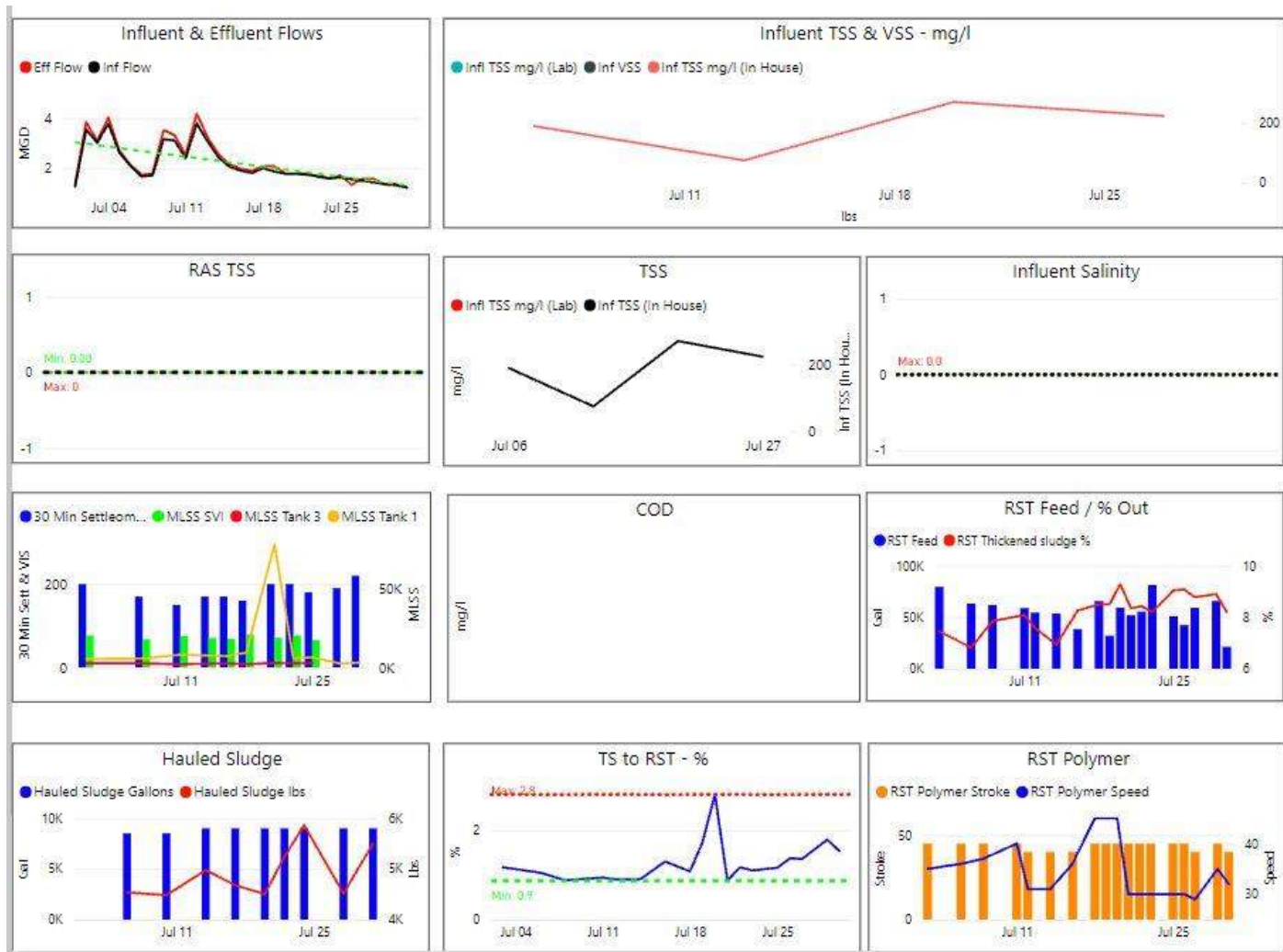
Graphs shows trending of secondary processes using Power BI for the 3-month period ending on 7/31/21. The tank solids levels under aeration showed minimal change, and wasted gallons were stable until the end of the month when the aeration system piping issue arose. The sludge settling that is measured as SVI [sludge volume index] remained low [a positive sign]. Effluent turbidity was stable.

## Hull Wastewater Treatment Facility Drylet Parameters

7/1/2021 7/31/2021



Various Power BI Graphs [related to Drylet] shows trending of various processes – July 2021.



Additional Power BI Graphs that show trending of various parameters – July 2021

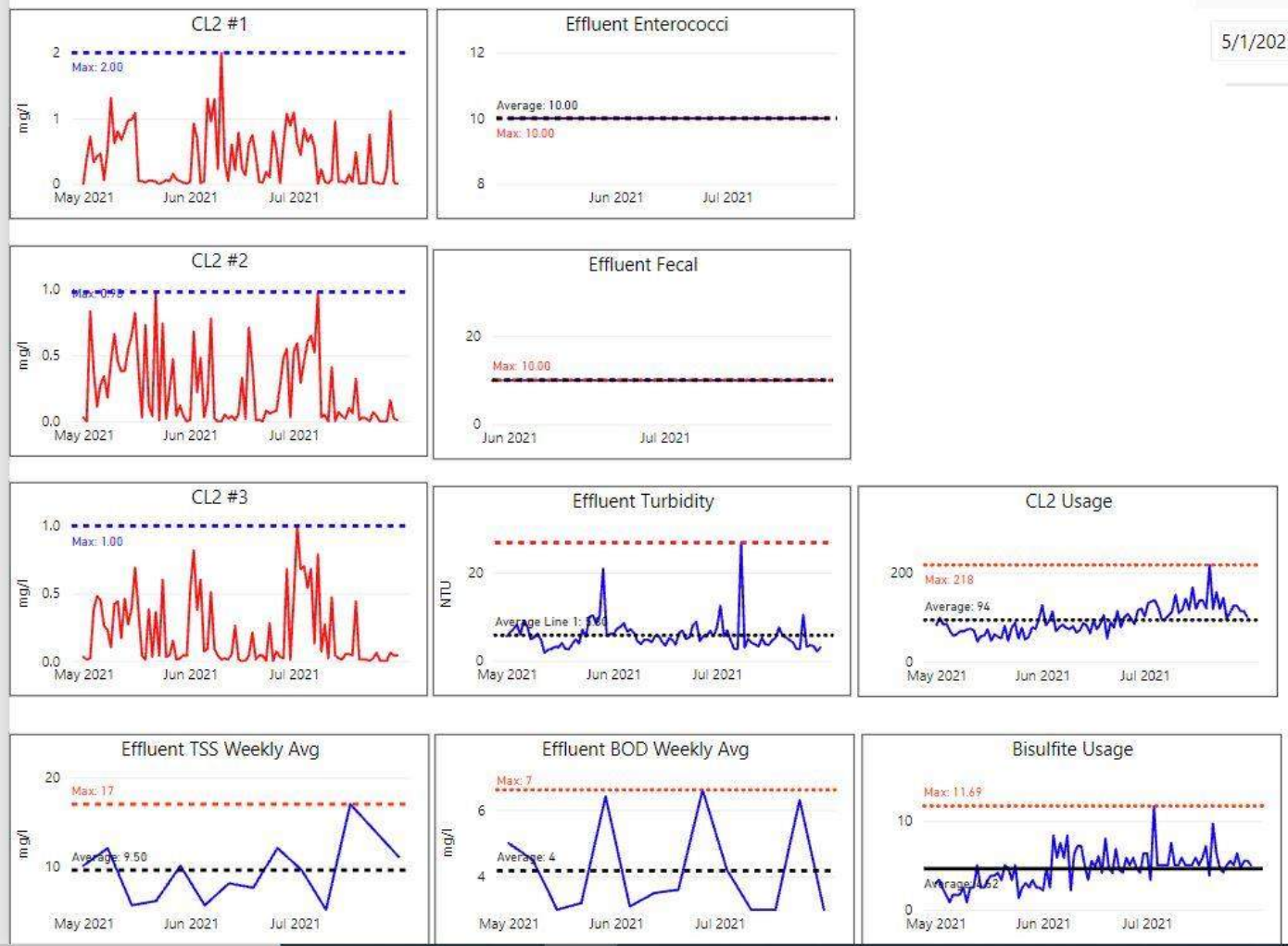
## 4 KEY PERFORMANCE INDICATORS



### 4.1 WATER QUALITY – JULY 2021

Parameter Info		Permit Requirements					Results				
Parameter	Units	Daily Allowed Max in month	Min %	Weekly Avg. Max Allowed in month	Monthly Avg	Freq	Period Monthly Avg.	Period Weekly Min	Period Daily Max	# Of Samples	# Of Violations
Eff TSS	MG/L	50		45	30	1 X Week	11.8	5.0	17.0	4	0
Eff TSS	LBS			1152	768	1 X Week	224.6	89.2	455.1		0
% TSS Rem	%		85			1 X Month	93.8				0
Eff BOD	MG/L	50		45	30	1 X Week	3.8	3.0	6.3	4	0
Eff BOD	LBS			1152	768	1 X Week	66.9	39.5	94.1		0
% BOD Rem	%		85			1 X Month	95.7				0
Eff Chlorine	MG/L	1.0			0.7	3 X Day	0.24	0.00	0.74	93	0
Eff Fecal	#/100 ML	260			88	1 X Week	10	10	10	4	0
Eff pH	SU	8.5	6.5			1X Daily	6.8	6.6	7.1	30	0
Enterococci	CFU/100 ML	276			35	1 X Week	10	10	10	4	0

There were **148** effluent samples taken in the month of July.

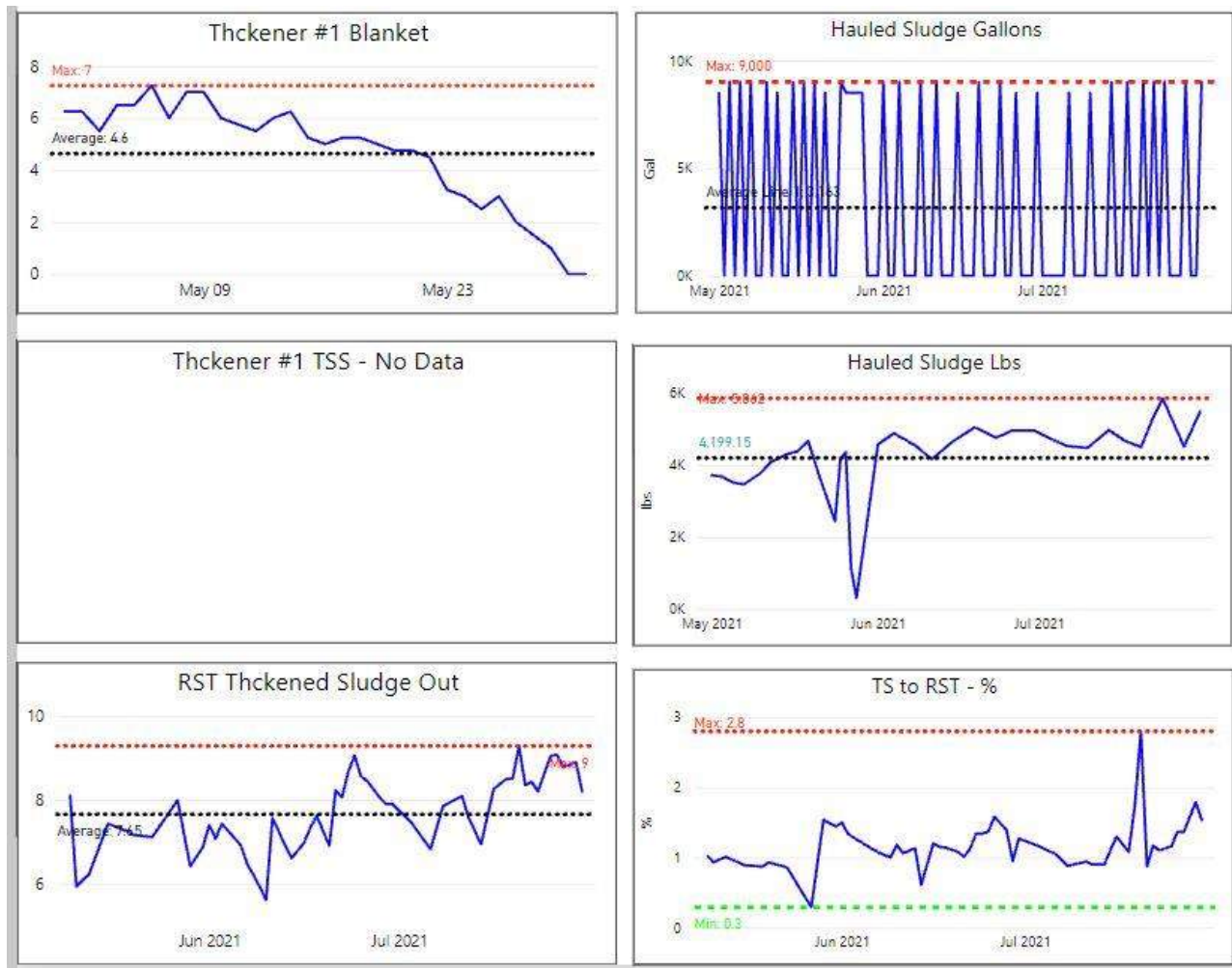


**Power BI graphs showing effluent compliance for the last 3-month period ending on 7/31/21 - chlorine residuals, effluent compliance, & chemical use. Bleach [sodium hypochlorite] & sodium bisulfite stable, and effluent quality was stable.**

### Gallons Treated vs Sludge Disposed

Month	Effluent Treated, MG	Sludge Disposed, Gals
July 2019	60.05	62,500
July 2020	31.06	71,500
July 2021	68.95	80,000

Additional Power BI graphs for sludge solids for 3-month period ending 7/31/21.

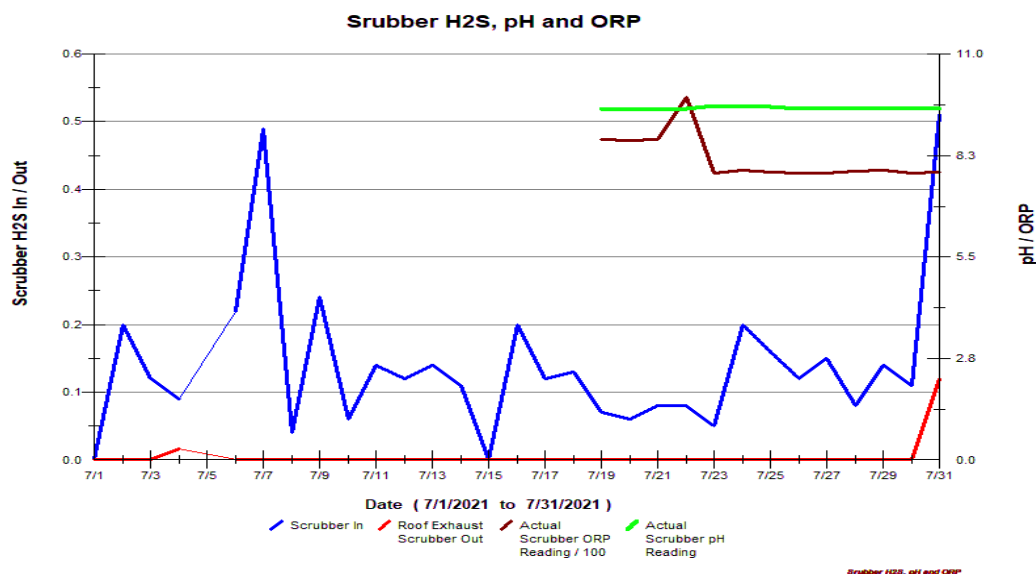


## 5 ODOR CONTROL

There were two odor complaint calls received during the month of July after a call was made to the MA DEP on 7/13 & 7/22 about sewage odor and debris in the Alphabet Street area. The calls went to the MADEP and were relayed to the HSD by Dave Burns of the MADEP. The areas of concern were in the Alphabet St area from A to W street. Brian Kiely checked this out in depth, and nothing found in these areas. Hull had no sewage releases. There was a strong feeling that the recent issue was caused by CSO's in the Boston area, because of the recent rains. The investigation findings were reported back to the local board of health and MADEP.

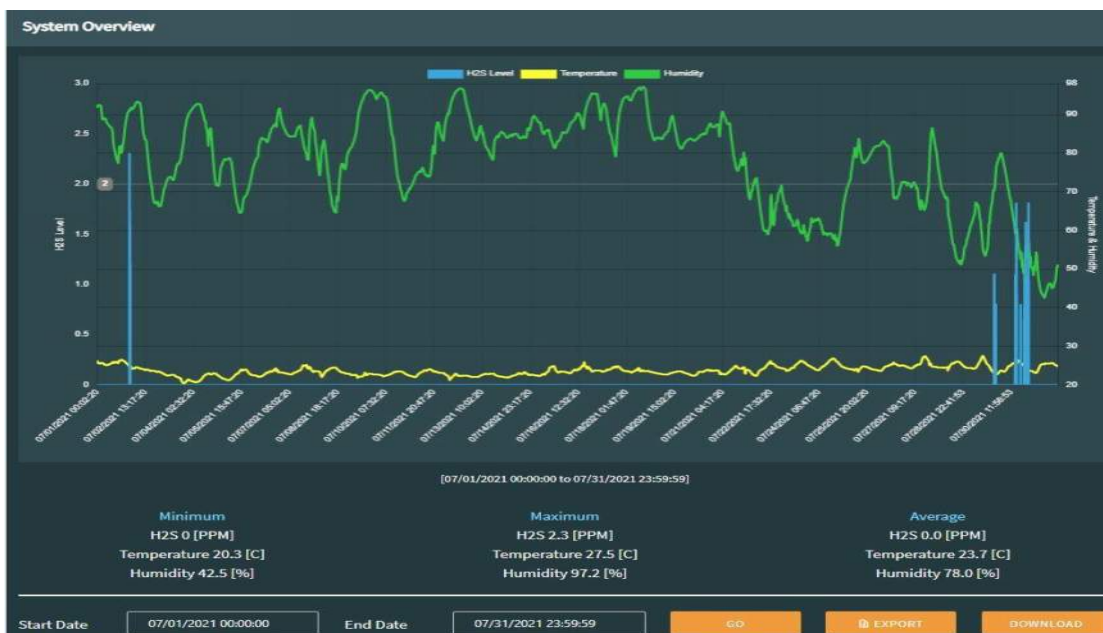
The Bioxide system was on, and the feed rates were adjusted as needed according to data seen at Nantasket/Water MH and XYZ/Nantasket MH. Weekend feed rates increased. The monthly graphs are attached below.

- "In-Pipe" bacteria addition continued with all 24 Microbe Dosing Stations [MDU] operational. The monthly bottle changes were completed 7/28/21. The bi-weekly change outs of the bacteria bottles at three lift stations in the wet wells or manhole just prior to the station. [PS 3, PS 5, PS 9] were done on 7/8/21.
- No changes: Mixing systems/aerators were all functional and in timed mode at the pump stations with, except for pump station #3. [Bioxide addition is at PS 3], and at PS #5, with newer Flygt pumps, as the mixer is causing air entrapment in the new pumps.
- No changes - Hydrogen sulfide monitoring units [H<sub>2</sub>S] were recording and being trended on the odor scrubber for monitoring inlet and outlet H<sub>2</sub>S levels. The scrubber fan speed at approximately 80%. [see graph below]
- Weekly Neighborhood monitoring around the plant done as needed.
- The gravity thickener remained off-line. The Primary tanks were used only as needed for high flow management. [In service for very short duration. Tanks then pumped down and cleaned]
- Evoqua in on 7/28 – inspect and change out the meters, and to check communication.



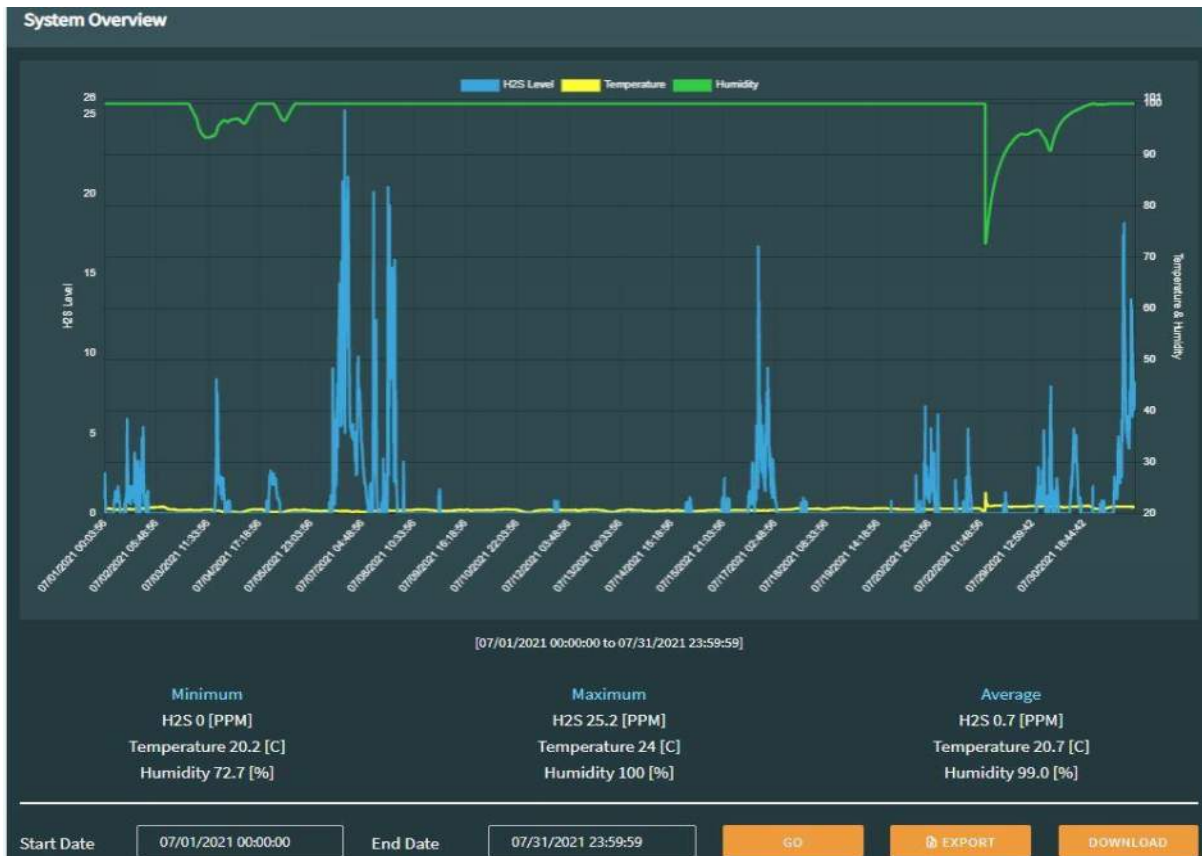
[pictured below: Scrubber trend, and trending graphs for H2S levels recorded from the vapor link system cellular at manhole at XYZ Street/Nantasket Ave and Nantasket Ave/Water Street.

XYZ – Nantasket Ave [closest to plant]



The odor data logging unit at XYZ that was being used to monitor overall H2S levels close to the plant has had little or no H2S present. There were only a few low-level spikes seen. The additional odor logger in this manhole to collect data that confirmed little or no H2S present at this location.

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



Pump station #3 - Bioxide stored here and where the chemical is added. The H2S level is monitored at the end of the force main at Nantasket & Water Street. The goal is for the excess nitrate concentration remaining in the sewage to be available to treat the additional H2S added from other parts of the system – PS4, contributions from lines feeding the interceptor, PS5, PS6, etc. all the way to the plant.

There were spikes in H2S levels in the system for July, because of increased loading since July is a very busy vacation month. Adjustment to dose rate as needed.

# 6 MAINTENANCE SUMMARY

## 6.1 TASKS COMPLETED THIS MONTH

The SEMS monthly work order summary for July is compiled and attached for review.

Additional key items of note are listed below.

- Continue working on MCC2 issues. [see below]
- Clean PS #3 pumps and check valves at PS3 prior to Deragger installation. WC staff, electrician, and Vendor representatives at the station for electrical and instrumentation set up. There was success to get the deragger installed and performing well for pump #1. The use of the Deragger on Pump #2 was not attainable to a different style VFD, which would not allow reverse rotation. Several calls to the manufacturer of the drive were made, and further research needed. The theory for use and success of the deragger is noted below.

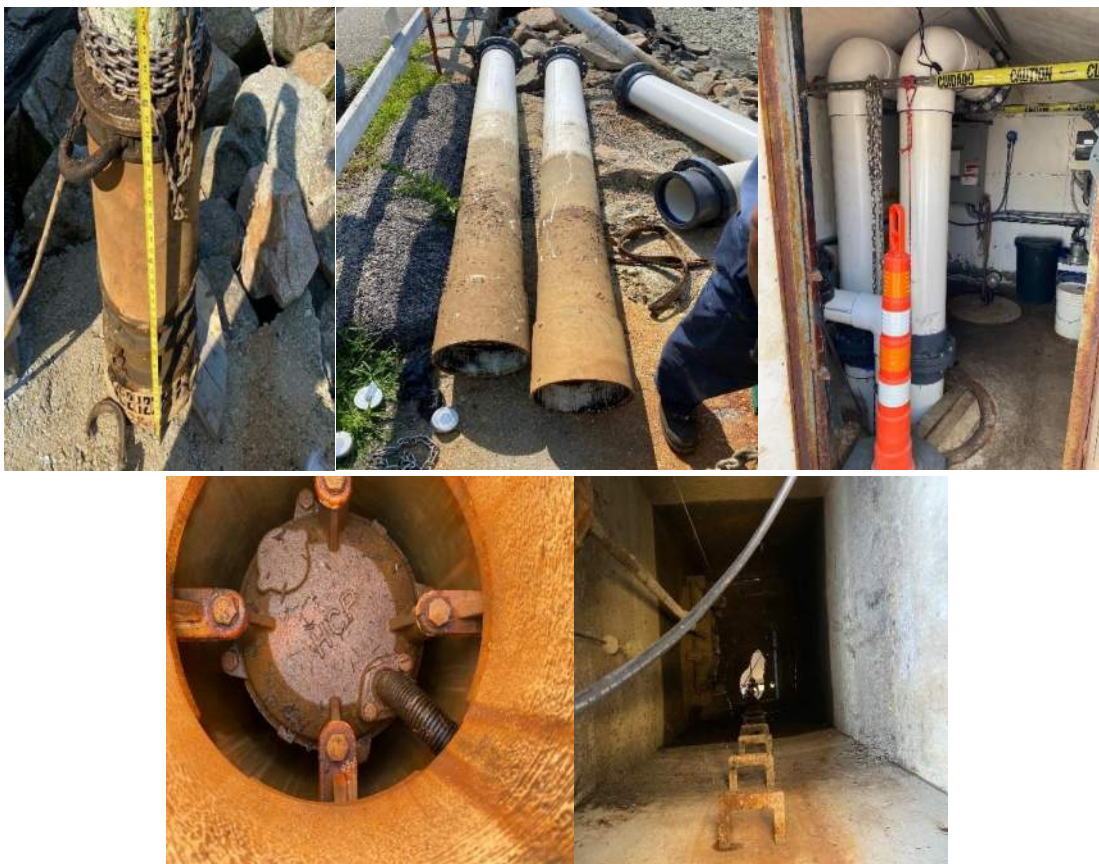
***The DERAGGER+ constantly monitors the torque signature of a pump's motor and can dislodge and pass rags in Real Time should they become stuck on or inside the impeller/volute. This is achieved with a tuneable "clean cycle" involving a brief and unique series of forward and reverse motions of the impeller.***

- Work on Universal waste consolidation – old fluorescent light bulbs and old ballasts.
- MCC2 recovery effort - HI Voltage Associates [electrical contractor] & WC Scada in for several visits. Provided updates on equipment repairs & recovery. Responded to questions on possible insurance claim. VFD #1 was ordered and installed. Approximately one week after the MCC2 incident, VFD #2 failed [most likely from heat damage]. A second VFD was ordered. To keep operating, the aeration blower was directly wired from the MCC breaker, and the output flow was regulated by the blower intake valve. This mode of operation continued until the new #1 VFD was installed and wired up to the motor.
  - 7/2 - working on MCC #2 repairs. Rewire 480 wires for RST bucket, new wires to blower #2 motor, meg out motors for blowers OK. All other MCC equip wires replaced as needed. Remove & save Blower #1 MCC components. Blower room REFs back online.
  - 7/2 – WC O&M summary letter submitted by R. Scott on the staff response on 6/30 and immediate corrective actions taken to return plant to operation during 6/30-7/1 period.
  - Remove & save Blower #1 MCC components. Blower room REF's back online
  - 7/6 - working on blower room MCC. S. Rose in also, working on Scada wiring and got signals for blower #2 back.
  - 7/7 - Check exhaust fans in blower room, both operational - no issues.

- continue working on MCC2 wiring and conduit work. VFD for blower #2 failed causing breakers to trip. All reset and blower wired directly off the circuit breaker.
  - A representative from ISE, who has been hired by the insurance company visited the Plant on 7/15. Electrical investigators reviewed the fire damage and discussed the possibility of taking the damaged equipment for further investigation.
  - 7/21 – Hi-Voltage assessment letter received and indicated that “catastrophic VFD failure was cause for the MCC fire and no apparent external causes found.
  - 7/26 – S. Rose, Hi-Voltage, and Pioneer Electric here to finalize new VFD #1 installation and programming and started up aeration blower #1.
  - 7/30 - Hi-Voltage Elec onsite for blower #2 work, S. Rose in working on VFD wiring for some Scada and monitoring control.
- 
- 7/21 - Had Chris Nobile from First Electric come in – Yaskawa VFD Rep – to take pictures of all Yaskawa drives at plant and pump stations for inventory purposes. [Paul H assisted]
  - 7/1 - Bob Lee from CBS in to work on control room AC unit. Install new and larger condensate pump.
  - Polymer system issues to RST – changed suction tubing and clean out LMI pump and various components, since filled with clumps of old polymer.
  - 7/12-13 - EESCO [tech and electrician] on site and had Paul H accompany them for IR scanning of plant equipment. This work had been arranged for late April but scheduling with contractor delayed due to their busy schedule. They inspected the main switchgear, and nearly all of the pumps at the plant. All operating equipment was rotated for some run time, to collect the necessary data. EESCO and Paul H also visited and did IR scanning at the pump stations, except for PS #3, and remaining plant equipment. A summary of all the equipment [assets] was prepared by Paul H which could be used for future IR work. [see Ongoing Projects section]
  - The new replacement plant water pump check valves came in and installed by Jody S.



- 7/27 - Industrial Pump at D Street in for service - pump removal, inspection, and zinc anode replacement.



- 7/27-29 - aeration tank #3 cleaning, using plant pumps, septic pump truck and vector truck. Removed a lot of rags that had accumulated on the air grid piping and brackets. Many of the grid brackets and support/plates were found to be worn & loose. Two loads of heavy gritty sludge and rags were dumped into the landfill pit and then RosanoDavis pumped out 4500 gallons of this material from the pit for disposal off site.



- NETS still waiting for Eaton on the needed time delay relay for the ATS and generator #2 testing.
- Work with Verizon Tech for Lift Station A communication issues on 7/12-7/13. Issue resolved, connection issue on rooftop of the building.
- During July, several process tanks were cleaned out because of high flow management needs and process equipment failure. Storm event planning for potential TS “Elsa”. Tanks cleaned included both primary clarifiers, one secondary clarifier, and one aeration tank. The tanks were cleaned quickly to avoid any odor issues within and around the facility.



## 6.2 ASSET MANAGEMENT ACCOUNTS

- Please see the attached summary totals and planned expenditures for the Asset Management accounts for contract year (7). Most recent through **10/25/21**.
- Planned expenditure list updated & priority ratings updated/inserted. Monthly review & update.
- 07C budget has approximately \$40,000 in chemical funds remaining.
- Work on 06M account consolidation summary

## 7 SAFETY



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

- No lost time incidents reported for July
- Mount AED unit in front hallway.
- Monthly PM's - Emergency eyewash and shower inspections, fire extinguisher and emergency lighting inspections completed. Monthly facility safety inspection completed.
- On-going Coronavirus Covid-19 awareness and updates discussed – daily & as needed. Post updated signage, discuss covid protocol changes. Ongoing: Work with onsite contractors to ensure that Covid-19 procedures in place and being followed.
- On-going – daily safety briefing meetings with staff, covid updates & reminders, site specific safety policies for sub-contractors, safety tailgate meetings. Pure Safety topic– July – Respiratory Protection.
- Monthly staff safety meeting conducted on 7/30/21. Major topics discussed: Covid updates, living well reminders, hot weather & hydration reminders. Job Aid – Lab Safety, cuts, and puncture wounds. common ways to avoid injuries.
- Other safety related issues around the plant:
  1. Caution tape around area for MCC2 work [2<sup>nd</sup> floor]
  2. Faulty outlet box for sump pump in sludge pump room repaired
  3. 7/8 - Steve Lindeman and Rob Scott in for plant issues/review of MCC2 area, and building ventilation
  4. 7/2 - Fire alarm was set off accidentally due to dust from cleaning in blower room. HFD did respond - reset panel.
  5. Tropical storm briefing – preparedness updates
  6. Set up additional spill skid for diesel jugs in garage.



## 8 STAFF DEVELOPMENT

**Training is an important part of any operation to ensure employee health and safety is assured, quality standards are maintained, 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:**

- Monthly staff Safety training – completed – Pure Safety and monthly safety meeting. W&C “near-miss” incidents at all projects for June discussed.
- Regular [usually daily] operational updates and process control discussions, pump station operations, especially with construction projects going on at the plant and pump stations. Safety Covid-19, dig-safes, etc.

### **Staffing related items:**

- The regular staff labor was supplemented by the two O&M Specialists as needed to cover all the necessary shifts, since the regular staff was reduced by one person. Paul Horigan and Jody St. George provided the additional assistance.
- Weekend staff schedule updated and continued to have some Saturday & Sunday staff coverage on overtime basis and with use of part-time staff. Sunday coverage rotation continued with Aram, Roger, and Joe.
- Mass Maritime [MM] intern – working full time.
- New hire recruitment process on going, with an eventual offer for employment made and accepted. New person, Luis Bello to start in early August.

## 9 COLLECTION SYSTEM

### 9.1 WET WELL CLEANING

The actual schedule for wet well cleaning: May 2021 to April 2022:

(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, 2021								
June, 2021	X							
July, 2021								
Aug., 2021								
Sept. 2021								
Oct., 2021								
Nov, 2021								
Dec., 2021								
Jan., 2022								
Feb., 2022								
March 2022								
April 2022								

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

### 9.2 COLLECTION SYSTEM MAINTENANCE

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

- In-Pipe units – on-going maintenance of dosing units as needed. Staff conducts board troubleshooting, dosing pump repairs and replacements, and works with “In-Pipe” technician on these issues.
- All Pump station generators loaded, and non-loaded generator runs were done for the month.
- All Pump station wet wells were inspected in July. Monthly Pump Station Inspections completed and combined with monthly station PM's.
- Upload new/updated tie-cards to the UC as requested.

- Grinder pump summary:
  - 1 Dighton
  - 28 Barnstable Rd.
  - 13 Eastman Rd.
  - 16 Dellawanda

### **Dig Safe mark outs:**

- On-going Dig-Safe mark outs. These are completed throughout the Town of Hull to assist/facilitate scheduled and emergency gas repairs, broken water mains, upcoming roadway paving projects, and other residential and town projects and are listed in the UC summary.

### **Collection system support: Ongoing backup and blockage call outs requiring an increase in manpower and time to support. Below summarizes W&C's efforts at the various call out locations.**

- Complete emergency dig-safe requests when able to complete them. Many of the calls were for water main breaks/gas company emergencies.
- 7/3 - ES & JB out to Meade Ave. to use push camera per John S request [sink hole seen out there] - no issues or pipe break found but did find an offset pipe joint.
- 7/6 - 24 Dig Safes completed on Atlantic Ave for Gas Co; 8 Porazzo Ave Emergency Dig Safe
- 7/8 - Brian K took late day [5pm] call for blockage at 169 Atlantic Ave. Gravity sewer line was plugged. Truax was called and came in. The cleaning was difficult due to the heavy grease accumulation. Cleared all obstructions by 11:30pm. 510 ft cleaned/vac.
- 7/9 - Emergency Dig Safe completed on Atlantic Ave 4:30 AM, Tow down and set up 6" Thomson pump at D street as additional pump if needed.
- 7/12-13 - COMM Fail loss at LS A. Reported to Verizon. Tech came out late & would need to return. Intermittent callout alarms from PS A during the evening/early morning. Verizon fully restored communication by 10:30 am.
- 7/22 - MH 20815 - Merrill Rd - use push camera to locate lateral for #39.
- 7/26 - 2:30 am callout - notified by JSS of emergency dig safe at 5 Porazzo Rd. ES responded to confirm mark out already done.
- 7/28 - 46 Beacon - assist HSD with push camera. Could not get through to locate a service due to blockage in line.
- 13 Eastman – grinder pump control box presented an issue, as there was no access since a deck had been built covering the panel door. An electrician was contacted to shut of the system power inside the house, while the pump was changed out.

### **Collection system work is being documented and tracked in Utility Cloud and a summarized report for the month of July has been included as an attachment with the Monthly Operating Report.**

# 10 PROJECT MANAGEMENT & ADMINISTRATION



## 10.1 ON-GOING PROJECTS AND SUPPORT ITEMS

### July updates:

- Ongoing – support of engineering projects with review and feedback provided. As able to participate in the discussion calls.
- W&C Electrical team visited the site on Friday July 2<sup>nd</sup>, 2021. W&C met with plant staff members and John Struzziery to investigate the MCC-2 fire damage. High Voltage staff had the MCC-2 disconnected in a safe manner and were disassembling the MCC VFD buckets. High Voltage Associates checked the MCC bus, blower feeder cables and blower motor. Results indicated that there was no insulation damage to conductors or the MCC structure. Some internal control cabling was replaced due to the fire. W&C Electrical investigated the surrounding locations for indications that any other equipment that may have experienced damage, but nothing was found.



Cutler-Hammer, the manufacturer of the motor control center [MCC] was contacted for replacement components, to repair the VFD #1 part of the MCC, but they would not supply component parts. They did indicate that a complete MCC was an option for repair, however, the replacement cost was very high and lead time was long. Hi-Voltage Associates was able to find a spare bucket within the MCC that would support a new 150-amp breaker, which would feed the aeration blower motor. The components were then ordered.

- Project **On Hold**: Sludge holding tank #1, diffuser piping. Consider for possible 2022 project [year #8]
- PST #4 – The work was halted after finding additional issues with the existing suction pipes, cracked flanges on the incoming 8-inch pipes that come from the wet well into the pump room at the wall. The poor condition of the pipes and flanges was found partially masked by recent concrete work done at the station. D&C Construction has proposed new six-inch piping that could be fused and sleeved in the existing 8-inch pipe between the pump room and the wet well. A change order proposal was submitted for review. W&C is also looking into replacement pump costs, that could occur later.



- 7/1 - Dean from TCS Communications came in for radio signal testing. Set up an antenna at plant and then went to all pump stations for signal testing/strength check. [radio project for pump station monitoring] WC staff [Paul H] checked out all Scada cabinets at the remote stations and forwarded to the WC Scada group, related to the new equipment expected in. The site survey report included the following: FCC License info, Pictures and Install comments, Radio equipment spec, RF CAD & Topo, Site Survey and Summary.

The next steps would be as follows:

- Obtain a material list from TCS (in progress)
- Review installation details (TCS & W&C)
- Detail a material list that includes radios, antenna's, cable, connectors, power supplies, miscellaneous items
- Prepare a quotable document (DT working on draft with Sue Hines)
- Send request for quote to three vendors

- WC had looked at some options for improving the pumping at LS A and based upon the current condition of the pumps. There are some differences between the two existing pumps, and the wear condition is considered moderate. There is still an outstanding repair on a failed motor to be resolved. Next steps are to perform station drawdown testing to determine the actual flows that each of the pumps is delivering. Tentatively scheduled for August with Jason Kriel.
- On July 12<sup>th</sup> and 13<sup>th</sup> Paul Horigan escorted EESCO along with their electrician to perform an Infra-Red Survey at the Hull Plant and Pump Stations. They were escorted around to the panels, turned motors and pumps on/off as needed to continue to perform the scanning. During that time WC was able to identify assets that were not on the list (previous years report) for them to do and added them with this survey. A list of the issues that were found and assets added [17 additional added] was prepared. The areas of concern were not considered high priority at this time but would be addressed in the upcoming plant electrical shutdown.
- Assist Town on data requests from SCADA system related to the 2013 incident. S. Rose and R. Scott.
- **Ongoing [noted last month]:** Influent FM pipes in sub-basement – an area of concern and being monitored. No change in status.
- Pending & possibly could be a 2022 project: GT1 sandblasting/painting – determined not feasible in 2021.
- New Sludge Transfer pump was delivered to plant – finalized review of the quotes for the pump installation and piping modifications. Industrial Pump awarded the work.
- Ongoing work with Lydon for resolution on clarifier drive motor failure. Fall River Electric agreed to paying for motor replacement and electrician's time.
- Hull Illumination Event contribution made to the Hull Lifesaving Museum – W&C has supported this group for the past 5 to 6 years.

Asset Management Accounts - Year 7							
Account		Actual to date			Projected for Final Estimate		
		Budgeted Amount	Spent to Date	Delta	Projected costs and incl PO's	Final est	Delta
07M-101A	Preventive Maint	\$213,028.73	\$63,455.29	\$149,573.44	\$68,600.00	\$132,055.29	\$80,973.44
07M-102B	Capital and Major Repairs	\$140,000.00	\$80,589.96	\$59,410.04	\$128,900.00	\$209,489.96	(\$69,489.96)
07M-103A	Major Sub Contractors	\$180,465.81	\$95,952.69	\$84,513.12	\$109,000.00	\$204,952.69	(\$24,486.88)
blank					#REF!		
	<b>Asset Management</b>	<b>\$533,494.54</b>	<b>\$239,997.94</b>	<b>\$293,496.60</b>	<b>#REF!</b>	<b>\$546,497.94</b>	<b>(\$13,003.40)</b>

#REF!

Budget expended	Time Status	
	NOW=	11/1/2021
	Start	5/1/2021
29.8%	150.5%	120.7%
57.6%	150.5%	93.0%
53.2%	150.5%	97.4%
45.0%	150.5%	105.5%

10/25/

07S	D Street	\$7,500.00	\$2,383.39	\$5,116.61	\$0.00	\$2,383.39	\$5,116.61
-----	----------	------------	------------	------------	--------	------------	------------

31.8%	150.5%	118.8%
-------	--------	--------

07C	Odor Control Chemicals	\$100,000.00	\$81,192.00	\$18,808.00	\$0.00	\$81,192.00	\$18,808.00
-----	------------------------	--------------	-------------	-------------	--------	-------------	-------------

81.2%	150.5%	69.3%
-------	--------	-------

For July M.O.R  
2021

Estimated total  
remaining 07M,  
07C, 07S

\$10,921.21

**Hull 2021-2022 - 07M Projects, Tasks, and Needs - (AV)**  
**Maintenance Account - Year 7 - 05\_01\_21 to 04\_30\_22**

FOR JULY 2021 MOR

#REF!

11/1/2021 10:34

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	\$20,000.00			Jody St. George, Paul Horigan & WC Support Staff - Total budget \$25,000; incl annual scrubber cleaning, remove old blowers [mech]; other items as needed
1	Pump and Motor Repairs [invoiced and pcard]	On Going		101A	\$10,000.00			to keep existing equipment running - utilize various outside contractor repair shops, new purchases. orig budget \$20,000;
1	Lubricants	On Going		101A	\$1,500.00			Various Suppliers for oil and grease. Budgeted \$3500.
1	Generator Repairs	On Going		101A	\$3,000.00			General Repair Work - Original Placeholder \$3,000; pending invoice for water solenoid main gen oct 2020
1	Fire Alarm Inspections and Service	On Going		101A	\$3,000.00			Semi Annual - Hart Security [October & April, central station, & Service] Orig budget \$3000.
2	Universal waste disposal	Pending		101A	\$500.00			Placeholder - \$500; zero the budget, will incur if needed
1	Service the Forklift	Pending		101A	\$400.00			Placeholder \$400 - Annual cost - outside vendor
1	Overhead Hoist Inspection	Pending		101A	\$1,500.00			Annual task - Applied Dynamics - PO is usually issued for April. \$1500
1	Flow meter verification and calibration	Pending		101A	\$1,000.00			Placeholder - Annual - Ray Ferland 1 visit annually [orig budget \$1,000
1	Facility Building - Roof Inspection	Pending		101A	\$2,800.00			\$2800 Annual Placeholder - Established contract with Tecta America
1	Pump Station #9 - Repairs Immediate	completed		101A		\$6,900.00		Costs from D&C to be charged to budget Oct 2021
2	Jerome H2S Meter Inspection	Pending		101A				\$1100 - Placeholder for Annual Inspection - sent out includes annual service \$1100; not done in year #6 [remove placeholder 10/25]
1	Janitorial Supplies	On Going		101A	\$2,500.00			Estimated annual expenditures - Orig budget \$4,000;
1	Manhole Inspections	Pending		101A				As required, and/or scheduled
2	General mechanical and electrical items/supplies	On Going		101A	\$9,000.00			Grainger, FWWebb, EJP, Hoadley, McMasterCarr, etc; orig budget \$18,000, adjust to \$9,000 on 10/20;
1	IR Survey	completed		101A				Done in 2021 [September]
2	Hoses	completed		101A				Replacements and/or Service - On-Going - As Needed; Purchased three 6-inch hoses, close out budget Oct 2021
1	Replace UPS batteries - plant and pump stations & town trailer	On Going		101A	\$3,000.00			in process - started Oct 2021
1	Spare A-C pump rotating assembly repair	On Going		101A	\$4,200.00			10/18 - currently in shop for repairs at Seacoast Supply. No PO issued.

**Hull 2021-2022 - 07M Projects, Tasks, and Needs - (AV)**

**Maintenance Account - Year 7 - 05\_01\_21 to 04\_30\_22**

FOR JULY 2021 MOR

#REF!

11/1/2021 10:34

Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
2	Misc. Materials	On Going		101A	\$1,200.00			Hardware Store - \$200.00 per month - reoccurring expense; orig budget \$2,400;
4	Install a flow meter on the generator cooling water system - plant water	Pending		101A				Have an estimate [Oct 2018]; possible after 5/1/20
1	Lab Equip Calibration	completed		101A				Annual service \$600- usually Jan/Feb. Last done May 2021; process invoice Oct 2021
1	Mech seal[s] for RAS pumps 1 & 2	On Going		101A	\$5,000.00			P1 repairs in progress as of 10/1/21; estim cost \$5,000. No PO issued.
2	Tecta Roof Repairs - proposed per 2021 inspection	Pending		102B				TBD
2	yard hydrants - installation	Pending		102B	\$5,000.00			sub-contractor labor - pending; Have materials on hand
1	Pump Station #4 - purchase two new pumps	Completed		102B				Cost: On a PO with MSI - # estim \$35,000 - by AEPump
1	Pump Station #4 - install new pumps	Completed		102B	\$10,000.00			Most likely by D & C
1	Effluent Pump #3 - repairs	On Going		102B	\$25,000.00			Currently the 60HP pump is at Flygt Repair shop - estimated repairs and new power cord - \$25,000
1	Sanitaire hardware purchase for aer tk 1	Completed		102B	\$12,500.00			Purchase more hardware - done June/July 2021 [not billed yet]
1	Additional Sanitaire hardware/equip needs	Pending		102B	\$3,000.00			Additional 350 membrane diffusers for aeration tank #1 [ordered 10/19/21
3	Replace 6" potable water valve in basement and misc. valves	Pending		102B				While doing project check/replace 1 1/4 valves as needed - Requires a water shutdown, on hold until after HVAC project completed. Orig planned cost \$3,000.
2	New 6" portable trash pump	On Going		102B	\$60,000.00			Purchase from either Sourcewell or other -best estimate:
1	New Effluent Flygt Pump #4	On Going		102B				20 HP pump ordered October 2021. on a PO Estim cost: <b>\$17,000 plus freight</b>
3	New 4-inch valves for pri building between the tanks installation	Pending		102B				Valves - cost: \$2500, sub-contracted labor - either WC or outside co.\$4,000 - <b>totl estim \$6,500</b>
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
3	Gravity Thickener #1 sandblasting/painting	Pending		102B				Estimate \$45,000+ - would need to go out for competitive bid request, Target late spring/early summer 2022 ?
2 of 4 <sup>2</sup> 11/1/2021	AUMA spare electric actuator	Pending		102B	\$4,400.00			one spae unit, for inventory - Quoted by A&N. PO requested.

2020\_05\_01\_07M\_Checkbook\_YTD draft

07M Planned Costs

## Hull 2021-2022 - 07M Projects, Tasks, and Needs - (AV)

Maintenance Account - Year 7 - 05\_01\_21 to 04\_30\_22

FOR JULY 2021 MOR

#REF!

11/1/2021 10:34

Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
1	Grit classifier system parts	Pending		102B	\$9,000.00			No spare parts - tail shaft housing, tail shaft, bushing, retainer plate, etc. Estimate from DGMarshall, and Envirodyne
2	Replacement Pumps LS A	Pending		102B				Pump efficiency lower than desired - new pumps may be needed. Estimate ?
1	Electrical Work	On Going		103A	\$12,000.00			Electricians: Glen Fellows, HiVoltage, other; remv old blowers lighting, sec bldg elec outlets - \$2,000/month; orig budget \$25,000
1	SCADA Work	On Going		103A	\$12,500.00			Steve Rose and the SCADA Support Team; orig budget \$25,000;
1	E-One Repairs and Replacement	On Going		103A	\$12,000.00			Based on historical costs. E1 repairs where cost-effective & new replacement pumps; control panels, other equip; Orig budget \$25,000; More replacement pumps versus repairs. Reduce budget to 15K on 10/6; adj to 12K on 10/25
1	Annual Generator Inspection	Pending		103A	\$5,000.00			placeholder 2021 Annual \$4,900 - MSElectrical Power - Generator PM/Service work - due in November, Early Dec target completion.
1	Automatic Transfer Switch inspection and servicing	Pending		103A	\$2,400.00			\$2400 - Annual Service planned for April Highland Power - NETS - Transfer Switch; Part of Gen Svc PO.
1	Wetwell Inspections and Cleaning - Plant/Pump Stations	On Going		103A	\$8,000.00			As required, plant or pump stations; orig budget \$10,000
1	Sewer Line Cleaning - Emergencies	On Going		103A	\$5,000.00			Placeholder - As required for various sub-contractors; could be Hoadley, Truax, WindRiver, BMC, or other, collection system & plant; orig budget \$10,000; adj budget down to \$5,000 10/20
1	Collection System and plant - emerg & unplanned calls - Jetting & CCTV work - various contractors	On Going		103A	\$10,000.00			Budget - 15,000, adj down to 10K on 10/20;
1	Mersino 6" pump rental	On Going		103A	\$10,000.00			approx 3k per month
1	Aer tank repairs [labor] through September	completed		103A				4 days - millwrights - Lydon \$8000
2	Aer tank repairs [labor] for diffuser membrane replacement	On Going		103A	\$2,100.00			2 days - millwrights - Lydon \$6300; Aeration tank #3, aeration tank #1
3	Regen Aeration System - Pump Station #5	Pending		103A				Orig est \$1,500 -Tie into the SCADA system - Glen Fellows; .
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: \$31,000. Maybe year 8M project ?
4	Generators - Load Bank Testing Plant & Pump Stations	Pending		103A				Look at under 08M - recently done under 06M.
1	EESCO electrical MCC work - plant	On Going		103A	\$12,000.00			In progress as of September 2021, and to be completed October 2021
1	EESCO MCC work at the Pump Stations	Pending		103A				TBD quoted for Oct/Nov 2021
1	Low pressure sewer valve box insp & mtce	Pending		103A				placeholder for contractor O&M inspections and potential repairs; Looking at Rosano-Davis or another contractor & W&C to investigate; budget of \$7,500 on hold
1	LS A pumps - Repairs to P2 by Industrial Pump	On Going		101A				Placeholder - 4/12 - Evaluating cost for pump repair while replacement costs for parts or new pumps are looked at..
1	PC #2 rake repairs - Lydon	On Going		103A	\$18,000.00			Time and materials per proposal

Hull 2021-2022 - 07M Projects, Tasks, and Needs - (AV)

Maintenance Account - Year 7 - 05\_01\_21 to 04\_30\_22

FOR JULY 2021 MOR

#REF!

11/1/2021 10:34

Priority [1=high]	Description	Status	completed	Task	Estimates & funds remaining	Final Completed Cost	Lead	Comments
1	Deragger PS3 for Pump #2	On Going		102B				Needs to be completed by MSI
TOTAL					\$308,500.00			



# Maintenance History Report

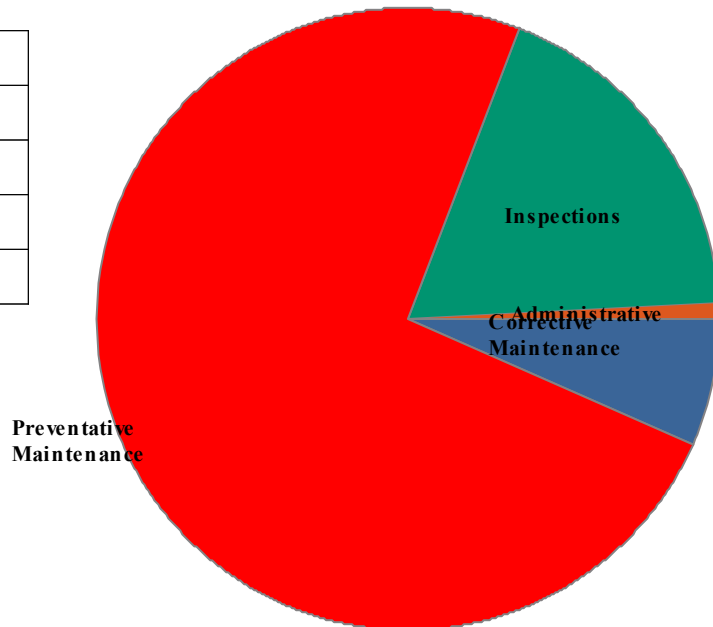
## Hull Wastewater

Start Date: 7/1/2021

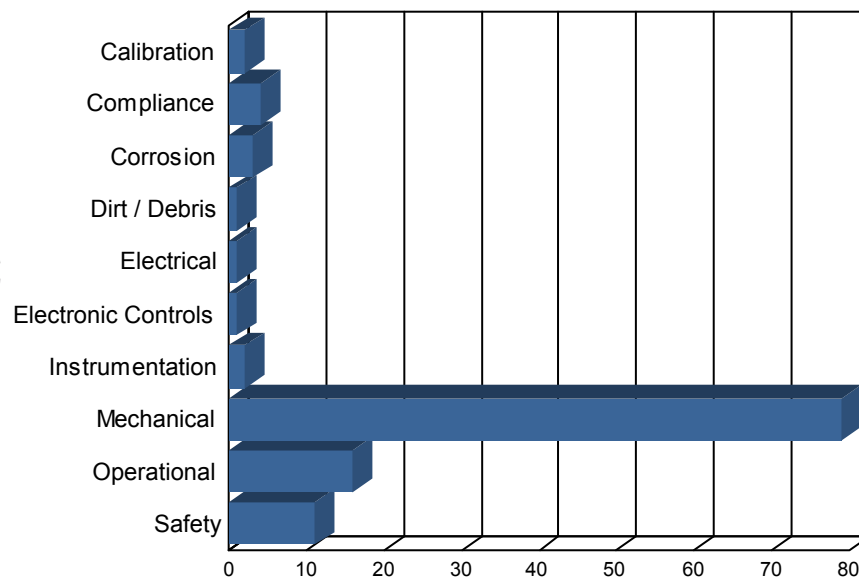
End Date: 7/31/2021

Work Order History By Type

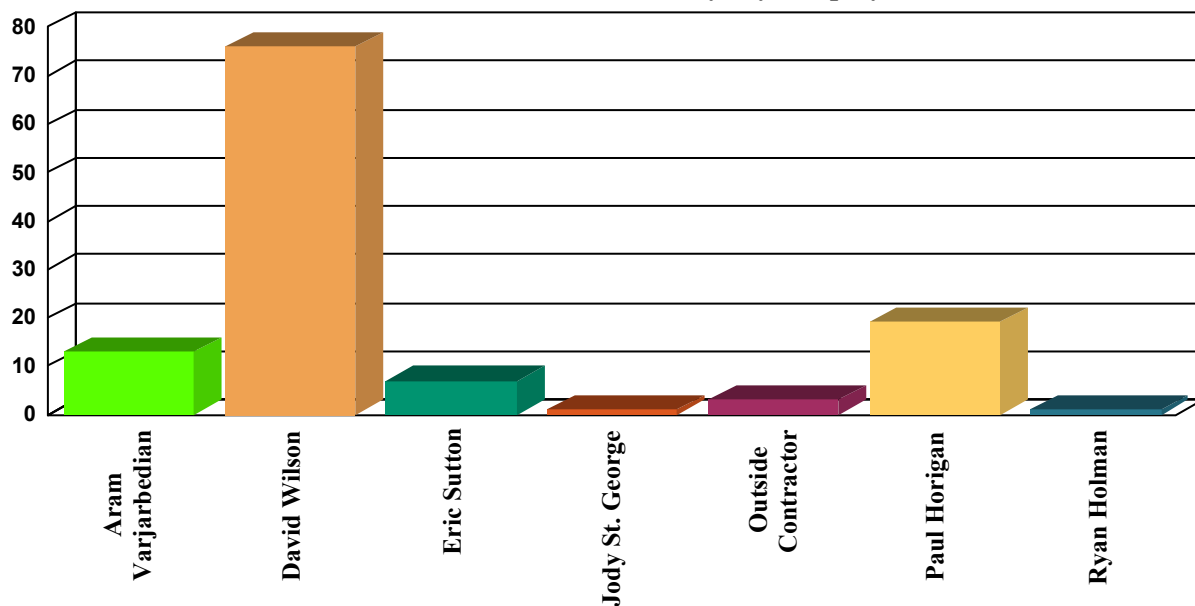
Administrative	1
Corrective Maintenance	8
Inspections	22
Preventative Maintenance	89
<b>Total Work Orders</b>	<b>120</b>



Work Order History by Reason



Work Order History By Employee



Employee	WO Count	Labor Hours
Aram Varjarbedian	13	20
David Wilson	76	10
Eric Sutton	7	8
Jody St. George	1	3
Outside Contractor	3	0
Paul Horigan	19	6
Ryan Holman	1	1
<b>Totals</b>	<b>120</b>	<b>48</b>

## Corrective Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
7/8/21	14309	Plant Water System	Replace both check valves	Completed	Jody St. George	7/8/21	Completed
7/13/21	14311	PS 3 Pump 2	lower output flow	Av and ES isolate and clean dischg check valve and pump volute. Reassemble and test flow - 850+ gpm	Aram Varjarbedian	7/13/21	Completed
7/13/21	14310	PS A Modem	loss of communication	loss of comm on 7/12, call in ticket to Verizon. Vz checked out, and need to come back on 7/13. Found issue where wire comes into bldg and pipe on roof is bent. System now on line. Av, ES, JB took afterhours calls, made addit inspections due to high wet well conditions. Service restored 7/13	Aram Varjarbedian	7/12/21	Completed
7/22/21	14313	30 - WW Treatment Plant - General	Diagnose weather station rain gauge failure.	Set up 8' ladder on roof. Removed rain gauge from mount. Disassembled and cleaned parts. Verified function on scada and reinstalled to mount.	David Wilson	7/22/21	Completed
7/23/21	14314	30 - WW Treatment Plant - General	Locker room sink drain failure	Disassembled drain assembly to identify parts needed. Drain tail piece broken. Installed parts and verified operation.	David Wilson	7/23/21	Completed
7/26/21	14315	Aeration Tank 1	actuator motor for tank 1 to tank 3 not working	set up fall prot equip. Hi Voltage, LOTO motor on gate, and replaced motor. failed due to corrosion and water intrusion. Assisted by plant staff.	Aram Varjarbedian	7/26/21	Completed
7/30/21	14316	30 - WW Treatment Plant - General	Sludge transfer room sump check valve replaced	Replaced check valve on sump	Eric Sutton	7/30/21	Completed
7/30/21	14317	30 - WW Treatment Plant - General	Sludge transfer room sump outlet damage	Observed wall outlet box hanging	Eric Sutton	7/30/21	In Process

## Inspections

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
7/2/21	13781	Universal waste area	Universal Waste Storage Area Inspection	Box up Fluor bulbs, ES, JT	Aram Varjarbedian	6/8/21	Completed
7/2/21	13679	Eyewash Stations	WWTF Eyewash Inspection - Weekly	Inspected all emergency eye wash stations.	David Wilson	6/27/21	Completed
7/5/21	13920	Truck 1 - 2010 Dodge Ram 1500	Monthly vehicle inspection on do-Forms		Eric Sutton	7/5/21	Completed
7/6/21	13878	PS 1	PS #1 Inspection - Monthly	Inspected wet well, fire extinguisher, hubs, coupling and fire extinguisher. Tested high level alarm and sump pump.	David Wilson	7/1/21	Completed
7/6/21	13879	PS 3	PS #3 Inspection - Monthly	Inspected wet well, fire extinguisher, hubs, coupling and fire extinguisher. Tested high level alarm and sump pump.	David Wilson	7/1/21	Completed
7/6/21	13884	PS A	PS #A Inspection - Monthly	Inspected wet well, fire extinguisher, hubs, coupling and fire extinguisher. Tested high level alarm and sump pump.	David Wilson	7/1/21	Completed
7/6/21	13880	PS 4	PS #4 Inspection - Monthly	Inspected wet well, fire extinguisher, hubs, coupling and fire extinguisher. Tested high level alarm and sump pump.	David Wilson	7/1/21	Completed
7/6/21	13881	PS 5	PS #5 Inspection - Monthly	Inspected wet well, fire extinguisher, hubs, coupling and fire extinguisher. Tested high level alarm and sump pump.	David Wilson	7/1/21	Completed

## Inspections

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
7/6/21	13882	PS 6	PS #6 Inspection - Monthly	Inspected wet well, fire extinguisher, hubs, coupling and fire extinguisher. Tested high level alarm and sump pump.	David Wilson	7/1/21	Completed
7/6/21	13883	PS 9	PS #9 Inspection - Monthly	Inspected wet well, fire extinguisher, hubs, coupling and fire extinguisher. Tested high level alarm and sump pump.	David Wilson	7/1/21	Completed
7/9/21	13834	Eyewash Stations	WWTF Eyewash Inspection - Weekly		David Wilson	7/4/21	Completed
7/9/21	13916	Fire Extinguishers	WWTF Fire Extinguisher Inspections - Monthly	Fire extinguisher outside of Aeration Blower room requires recharge.	David Wilson	7/5/21	Completed
7/15/21	13930	Truck 2 - 2009 Chevy 2500 HD	Monthly vehicle inspection on do-Forms		Eric Sutton	7/5/21	Completed
7/15/21	13985	Truck 3 - 2015 Chevy 3500 HD	Monthly vehicle inspection on do-Forms	Circle check fluids	Eric Sutton	7/5/21	Completed
7/16/21	13938	Truck 4 - 2015 Nissan Frontier	Monthly vehicle inspection on do-Forms	Mileage 126600, due for oil chg, fixed tonneau cover	Aram Varjarbedian	7/5/21	Completed
7/18/21	13780	Waste Oil Storage	Waste Oil Area Inspection	Inspected	Aram Varjarbedian	6/8/21	Completed
7/18/21	13621	Universal waste area	Universal Waste Storage Area Inspection	Close out	Aram Varjarbedian	5/11/21	Completed
7/18/21	13620	Waste Oil Storage	Waste Oil Area Inspection	Closeout	Aram Varjarbedian	5/11/21	Completed
7/18/21	13835	Eyewash Stations	WWTF Eyewash Inspection - Weekly	All done while on N rounds	Ryan Holman	7/11/21	Completed
7/21/21	13970	Blower Room Exhaust Fan 1	Monthly operational inspection		David Wilson	7/1/21	Completed
7/21/21	13972	Blower Room Exhaust Fan 2	Monthly operational inspection		David Wilson	7/1/21	Completed
7/22/21	13836	Eyewash Stations	WWTF Eyewash Inspection - Weekly		David Wilson	7/18/21	Completed

## Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
7/1/21	13732	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		David Wilson	6/30/21	Completed
7/1/21	13737	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		David Wilson	6/30/21	Completed
7/1/21	13744	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		David Wilson	6/30/21	Completed
7/1/21	13749	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		David Wilson	6/30/21	Completed
7/1/21	13756	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		David Wilson	6/30/21	Completed
7/1/21	13761	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		David Wilson	6/30/21	Completed
7/2/21	13772	PS Kholer Trailer Mounted Generator	Generator Weekly - Test Run no load		David Wilson	6/28/21	Completed
7/7/21	13843	Generator #1- Emergency Kohler 750	Generator - Monthly Load Test		Outside Contractor	7/4/21	Completed
7/7/21	13951	Generators "All Pump Station"	Generator - Monthly Load Test		Outside Contractor	7/4/21	Completed
7/7/21	13839	Generator #2 - Backup Detroit 500	Generator - Monthly Load Test		Outside Contractor	7/4/21	Completed

## Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
7/7/21	13885	PS 1 Generator	PS #1 Generator Inspection and Load Test - Monthly		David Wilson	7/7/21	Completed
7/7/21	13886	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		David Wilson	7/7/21	Completed
7/7/21	13894	PS 3 Generator	PS #3 Generator Inspection and Load Test - Monthly		David Wilson	7/7/21	Completed
7/7/21	13890	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		David Wilson	7/7/21	Completed
7/7/21	13895	PS 4 Generator	PS #4 Generator Inspection and Load Test - Monthly		David Wilson	7/7/21	Completed
7/7/21	13896	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		David Wilson	7/7/21	Completed
7/7/21	13900	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		David Wilson	7/7/21	Completed
7/7/21	13904	PS 5 Generator	PS #5 Generator Inspection and Load Test - Monthly		David Wilson	7/7/21	Completed
7/7/21	13910	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		David Wilson	7/7/21	Completed
7/7/21	13914	PS 6 Generator	PS #5 Generator Inspection and Load Test - Monthly		David Wilson	7/7/21	Completed
7/7/21	13905	PS 9 Generator	PS #9 Generator Inspection and Load Test - Monthly		David Wilson	7/7/21	Completed
7/7/21	13906	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		David Wilson	7/7/21	Completed
7/7/21	13876	Sludge Transfer Pump 1	Monthly Check Pump Couplings	LOTO of equipment. Inspected hubs and coupling.	David Wilson	7/7/21	Completed
7/7/21	13874	Primary Sludge Pump 1	Monthly Check Pump Couplings		David Wilson	7/7/21	Completed
7/7/21	13877	Sludge Transfer Pump 2	Monthly Check Pump Couplings	Out of service	David Wilson	7/7/21	Completed
7/7/21	13869	RAS Pump 1	Monthly Check Pump Couplings	LOTO of equipment. Inspected hubs and coupling.	David Wilson	7/7/21	Completed
7/7/21	13875	Primary Sludge Pump 2	Monthly Check Pump Couplings		David Wilson	7/7/21	Completed
7/7/21	13870	RAS Pump 2	Monthly Check Pump Couplings	LOTO of equipment. Inspected hubs and coupling.	David Wilson	7/7/21	Completed
7/7/21	13871	RAS Pump 3	Monthly Check Pump Couplings		David Wilson	7/7/21	Completed
7/8/21	13921	PS Kholer Trailer Mounted Generator	Generator - Monthly Load Test		David Wilson	7/4/21	Completed
7/8/21	13833	Portable Generator - Honda	Portable Generator Inspection - Monthly		David Wilson	7/7/21	Completed
7/9/21	13803	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		David Wilson	6/27/21	Completed
7/9/21	13791	High level floats	Weekly High Float Alarm test		David Wilson	6/27/21	Completed
7/9/21	13952	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		David Wilson	7/4/21	Completed
7/9/21	13939	High level floats	Weekly High Float Alarm test		David Wilson	7/4/21	Completed
7/12/21	13922	PS Kholer Trailer Mounted Generator	Generator Weekly - Test Run no load	No load	Eric Sutton	7/12/21	Completed
7/12/21	13948	Generators "All Pump Station"	Generator Weekly - Test Run no load	No load weekly	Eric Sutton	7/12/21	Completed

## Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
7/13/21	13844	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load	Weekly exerc	Aram Varjarbedian	7/12/21	Completed
7/15/21	13854	Influent Pump 2	Semi Annual - ARI air release valve insp and cleaning	Completed as requested	Paul Horigan	7/7/21	Completed
7/15/21	13857	Influent Pump 3	Semi Annual - ARI air release valve insp and cleaning	Completed as requested	Paul Horigan	7/7/21	Completed
7/15/21	13873	RST Feed Pump 2	Monthly Check Pump Couplings		Paul Horigan	7/15/21	Completed
7/15/21	13860	Influent Pump 5	Monthly Check Pump Couplings	Completed as requested	Paul Horigan	7/7/21	Completed
7/15/21	13859	Influent Pump 4	Monthly Check Pump Couplings	Completed as requested	Paul Horigan	7/7/21	Completed
7/15/21	13856	Influent Pump 3	Monthly Check Pump Couplings	Completed as requested	Paul Horigan	7/7/21	Completed
7/15/21	13855	Influent Pump 2	Monthly Check Pump Couplings	Completed as requested	Paul Horigan	7/7/21	Completed
7/15/21	13852	Influent Pump 1	Monthly Check Pump Couplings	Completed as requested	Paul Horigan	7/7/21	Completed
7/15/21	13853	Influent Pump 1	Semi Annual - ARI air release valve insp and cleaning	Completed as requested	Paul Horigan	7/7/21	Completed
7/15/21	13858	Influent Pump 4	Semi Annual - ARI air release valve insp and cleaning	Completed as requested	Paul Horigan	7/7/21	Completed
7/15/21	13861	Influent Pump 5	Semi Annual - ARI air release valve insp and cleaning		Paul Horigan	7/7/21	Completed
7/18/21	13847	Influent Sluice Isolation Gate	Weekly operate through full range	Exercised storm prep	David Wilson	7/7/21	Completed
7/18/21	13706	Effluent Pumps	Effluent Pump - Monthly	Runpumps,recenthighflows	Aram Varjarbedian	6/15/21	Completed
7/18/21	13936	Chlorine probe AT1	Change electrolyte	Chg solution	Aram Varjarbedian	7/1/21	Completed
7/18/21	13934	Chlorine probe AT1	Weekly calibration	Calibrsted	Aram Varjarbedian	7/5/21	Completed
7/18/21	13940	High level floats	Weekly High Float Alarm test		Aram Varjarbedian	7/11/21	Completed
7/19/21	13864	Aeration Tank 1 Oxygen Probe	AT #1 DO Probe Clean and Calibrate - Monthly	Cleaned and inspected LDO probe. Tested calibration. Offset by .1mg/l	David Wilson	7/6/21	Completed
7/19/21	13865	Aeration Tank 3 Oxygen Probe	AT #3 DO Probe Clean and Calibrate - Monthly	Cleaned and inspected LDO probe. Tested calibration offset .4mg/l	David Wilson	7/6/21	Completed
7/20/21	13840	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load		David Wilson	7/12/21	Completed
7/20/21	13887	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		David Wilson	7/14/21	Completed
7/20/21	13891	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		David Wilson	7/14/21	Completed
7/20/21	13897	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		David Wilson	7/14/21	Completed
7/20/21	13901	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		David Wilson	7/14/21	Completed
7/20/21	13907	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		David Wilson	7/14/21	Completed
7/20/21	13911	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		David Wilson	7/14/21	Completed
7/20/21	13845	Generator #1- Emergency Kohler 750	Generator Weekly - Test Run no load		David Wilson	7/19/21	Completed

## Preventative Maintenance

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
7/20/21	13841	Generator #2 - Backup Detroit 500	Generator Weekly - Test Run no load		David Wilson	7/19/21	Completed
7/20/21	13923	PS Kholer Trailer Mounted Generator	Generator Weekly - Test Run no load		David Wilson	7/19/21	Completed
7/20/21	13848	Influent Sluice Isolation Gate	Weekly operate through full range		David Wilson	7/14/21	Completed
7/21/21	13888	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		David Wilson	7/21/21	Completed
7/21/21	13892	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		David Wilson	7/21/21	Completed
7/21/21	13898	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		David Wilson	7/21/21	Completed
7/21/21	13902	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		David Wilson	7/21/21	Completed
7/21/21	13912	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		David Wilson	7/21/21	Completed
7/21/21	13849	Influent Sluice Isolation Gate	Weekly operate through full range		David Wilson	7/21/21	Completed
7/21/21	13908	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		David Wilson	7/21/21	Completed
7/21/21	13868	Wet Scrubber Fan	Scrubber Exhaust Fan PM - Monthly		David Wilson	7/14/21	Completed
7/22/21	13851	Mechanical Screen & Washpress System	Monthly Maintenance	Cleaned and inspected flexrake and wash press assembly. No issues found. Lubed all bearings.	David Wilson	7/5/21	Completed
7/22/21	13689	Fixed Gas Monitoring System	Quarterly Calibration Headworks room gas meters	Inspected and calibrated fixed gas monitoring system. No issues found.	David Wilson	6/2/21	Completed
7/22/21	13968	pH meter	Clean and Calibrate	Cleaned and calibrated pH meter. 1.02 offset	David Wilson	7/1/21	Completed
7/22/21	13978	ORP meter	Clean and Calibrate	Cleaned and calibrated ORP meter.	David Wilson	7/10/21	Completed
7/22/21	13953	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		David Wilson	7/11/21	Completed
7/22/21	13954	All Plant Gear box reducers	GEAR BOX MAINT - WEEKLY		David Wilson	7/18/21	Completed
7/22/21	13941	High level floats	Weekly High Float Alarm test		David Wilson	7/18/21	Completed
7/29/21	13909	PS 9 Generator	PS #9 Generator Inspection and Test - Weekly		Paul Horigan	7/28/21	Completed
7/29/21	13913	PS 6 Generator	PS #6 Generator Inspection and Test - Weekly		Paul Horigan	7/28/21	Completed
7/29/21	13903	PS 5 Generator	PS #5 Generator Inspection and Test - Weekly		Paul Horigan	7/28/21	Completed
7/29/21	13899	PS 4 Generator	PS #4 Generator Inspection and Test - Weekly		Paul Horigan	7/28/21	Completed
7/29/21	13893	PS 3 Generator	PS #3 Generator Inspection and Test - Weekly		Paul Horigan	7/28/21	Completed
7/29/21	13889	PS 1 Generator	PS #1 Generator Inspection and Test - Weekly		Paul Horigan	7/28/21	Completed
7/29/21	13924	PS Kholer Trailer Mounted Generator	Generator Weekly - Test Run no load		Paul Horigan	7/26/21	Completed

## Administrative

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

Administrative

Status Date	WO #	Asset Name	Work Description	Work History Note	Employee	Schedule Date	Status
7/14/21	14312	30 - WW Treatment Plant - General	install new AED in lobby	Installed as requested	Paul Horigan	7/14/21	Completed

Date	Asset ID	Asset Description	Asset Class	Name	Workflow Class	View
7/2/2021 13:35	01-016	0 HELEN STREET	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/30/2021 12:11	03-101	36 LAFAYETTE RD	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/22/2021 8:20	1 Dighton St	1 Dighton St Grinder Pump	Hull Grinder Pumps	Sutton, Eric	Hull - Grinder Pump Maintenance	<a href="#">View</a>
7/26/2021 7:05	13 Eastman Rd	13 Eastman Rd Grinder Pump	Hull Grinder Pumps	Sutton, Eric	Hull - Grinder Pump Maintenance	<a href="#">View</a>
7/21/2021 8:41	13-015	27 T STREET	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/14/2021 14:12	14-030	37 H STREET	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/12/2021 14:40	14-121	118 CADISH AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/12/2021 14:38	15-132	57 M STREET	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/17/2021 14:44	16 Dellawanda Rd	16 Dellawanda Rd Grinder Pump	Hull Grinder Pumps	Sutton, Eric	Hull - Grinder Pump Maintenance	<a href="#">View</a>
7/30/2021 12:28	17-072	71 C STREET	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/15/2021 13:30	22-068	21 LYNN AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/27/2021 8:17	23-148	101 BEACH AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 11:58	25-031	65 MANOMET AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/14/2021 10:09	25-075	51 MASSASOIT AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/26/2021 7:27	28 Barnstable St	28 Barnstable St Grinder Pump	Hull Grinder Pumps	Sutton, Eric	Hull - Grinder Pump Maintenance	<a href="#">View</a>
7/8/2021 13:08	32-034	243 NANTASKET RD	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/16/2021 13:11	33-128	39 MERRILL RD	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/22/2021 12:05	33-128	39 MERRILL RD	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/6/2021 12:25	34-081	8 PORRAZZO RD	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:18	34-081	8 PORRAZZO RD	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/26/2021 7:34	34-081	8 PORRAZZO RD	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 11:10	36-095	6 LINCOLN AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/30/2021 13:30	44-045	175 GEO WASH BLVD	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/2/2021 14:06	48-002	288 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/15/2021 11:52	48-011	19 STATE PARK RD	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/2/2021 14:03	48-015	42 STATE PARK RD	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/15/2021 11:50	49-083	28 B SCHOOL ST	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:21	52-018	158 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:20	52-021	150 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/2/2021 14:56	52-057	140 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:23	52-058	0 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:24	53-024	136 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/2/2021 14:56	53-026	134 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:26	53-026	134 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>

7/2/2021 14:57	53-028-A	128 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:27	53-028-A	128 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:28	53-030	128 A ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/2/2021 14:58	53-032	0 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/2/2021 14:59	53-033	124 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:30	53-033	124 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:32	53-035	122 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:32	53-036	120 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/2/2021 15:01	53-037	118 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:36	53-037	118 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/2/2021 15:03	53-038	116 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:46	53-038	116 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/2/2021 15:04	53-039	116 A ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:44	53-039	116 A ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/2/2021 15:02	53-040	114 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:48	53-040	114 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/2/2021 15:04	53-042	112 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:49	53-042	112 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:51	53-043	110 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:52	53-044	108 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:53	53-045	106 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:53	53-046	104 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:55	53-047	100 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:56	53-048	98 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:58	53-049	96 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:57	53-050	96 A ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:59	53-051	94 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 14:01	53-052	92 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 14:02	53-053	90 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 14:04	53-054	88 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 14:20	54-001	40 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 14:23	54-009-A	38 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 14:19	54-024	50 SUMMIT AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 14:17	54-025	48 SUMMIT AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 14:13	54-035	76 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>

7/8/2021 14:12	54-035-A	78 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 14:05	54-041	86 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 14:07	54-042	84 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 14:07	54-043	82 A ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 14:10	54-044	82 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 14:12	54-045	80 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/9/2021 10:44	55-007	4 ATLANTIC AVE	Hull Parcels	Sutton, Eric	Hull - Markout	<a href="#">View</a>
7/8/2021 13:13	Bacteria UNIT #21	UNIT #21	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:15	Bacteria UNIT #21	UNIT #21	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:19	Bacteria UNIT #22	UNIT #22	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:07	Bateria UNIT # 8	UNIT # 8	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:00	Bateria UNIT #1	UNIT #1	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:08	Bateria UNIT #10	UNIT #10	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:11	Bateria UNIT #11	UNIT #11	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:17	Bateria UNIT #12	UNIT #12	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:17	Bateria UNIT #13	UNIT #13	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:16	Bateria UNIT #14	UNIT #14	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:15	Bateria UNIT #15	UNIT #15	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:14	Bateria UNIT #16	UNIT #16	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:08	Bateria UNIT #17	UNIT #17	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:09	Bateria UNIT #18	UNIT #18	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:10	Bateria UNIT #19	UNIT #19	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:02	Bateria UNIT #2	UNIT #2	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:13	Bateria UNIT #20	UNIT #20	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:17	Bateria UNIT #23	UNIT #23	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:04	Bateria UNIT #24	UNIT #24	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/8/2021 13:12	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:10	Bateria UNIT #3	UNIT #3	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/8/2021 13:10	Bateria UNIT #4	UNIT #4	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:01	Bateria UNIT #4	UNIT #4	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:05	Bateria UNIT #5	UNIT #5	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:06	Bateria UNIT #5	UNIT #5	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:05	Bateria UNIT #6	UNIT #6	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:06	Bateria UNIT #7	UNIT #7	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>
7/28/2021 15:20	Bateria UNIT #9	UNIT #9	Hull In Pipe Bacteria Unit	Sutton, Eric	Hull - In Pipe Bacteria Units	<a href="#">View</a>

7/27/2021 9:07	MH-20441	SEMS_Asset	Sanitary Manhole	Sutton, Eric	MH Frame & Cover Inspection	<a href="#">View</a>
7/8/2021 14:32	MH-20877	SEMS_Asset	Sanitary Manhole	Sutton, Eric	MH Frame & Cover Inspection	<a href="#">View</a>
7/4/2021 8:20	MH-20944	SEMS_Asset	Sanitary Manhole	Sutton, Eric	Generic WO	<a href="#">View</a>