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COMMITMENT & INTEGRITY DRIVE RESULTS

HULL WATER POLLUTION CONTROL FACILITY

September

2019

MONTHLY OPERATING REPORT



NPDES NO. MA0101231

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<u>Cover pictures:</u> [top] Fall Sunrise by the Weir River.

[bottom] Ryan H sandbag filling/preparation

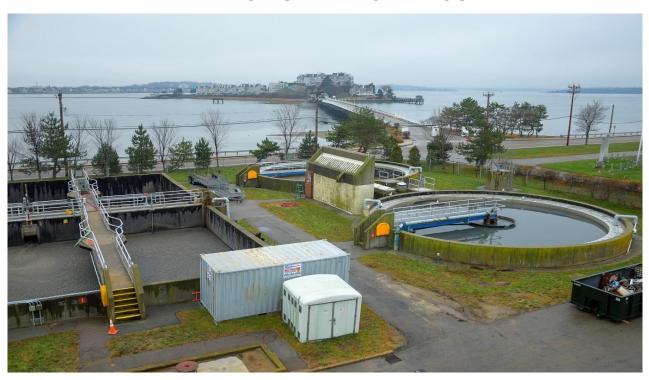
1 EXECUTIVE SUMMARY

This Monthly Operating Report provides a summary of the pertinent information and activities that occurred at Hull WPCF during the month of September 2019.

- No lost-time incidents for the month of September.
- There were 136 effluent samples taken in the month of September. Please see page (8) for details.
- There were no effluent permit violations.
- Plant average flows were lower in September in comparison to August. Overall rainfall was less.
 The average daily flow for the month was 1.32MGD. A total of 1.13 inches of rainfall was recorded for the month.
- The plant and collection system odors were low. The Bioxide system was in service for the entire
 month, and adequate dosing of Bioxide was achieved, with good results. No dose changes were
 made.
- Asset Management Accounts checkbook for 05M is attached, and the updated planned expenses sheets also attached. A review of the account status between W&C and Hull Sewer Dept. is an on-going process.
- There were 4 grinder pump call outs during the month of September that the staff responded to and corrected with (3) pumps having to be replaced.
- W&C O&M staff continued to assist HSD where requested for selection of some of the equipment
 off the original "Critical Equipment List" so that the HSD could purchase directly. Amwell gear boxes,
 effluent pump, portable emergency generator.
- W&C O&M working with Engineering on multiple projects including Facility Planning [tour given on 9/4/19], Pump Station, Conditions Assessments, Gunrock Ave PCO related to FM break and Headworks / structural coordination.
- Planning meetings held with HSD to discuss capital projects and spending plan

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2 FLOWS AND LOADINGS



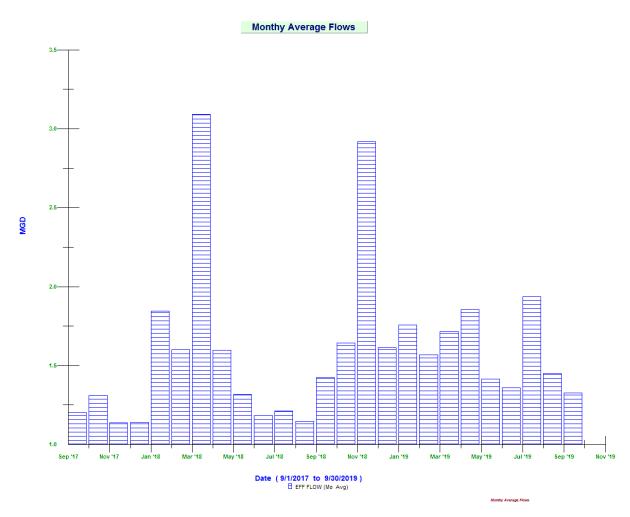
Average Daily Flows and Loadings for the Month:

	Eff Flow MGD	Inf Flow MGD	Inf BOD LBS	Inf TSS LBS	Eff BOD LBS	EFF TSS LBS
Sep 2017	1.201	1.308*	1569	4598	89	217
Sep 2018	1.423	1.735 *	1317	2325	101	238
Sep 2019	1.327	1.517*	2020**	5900**	37	160

^{*} Meter drift – influent flow meters are strap on doppler flow meters, and the internal pipe condition prevents getting a strong signal. The staff adjusts accordingly and utilizes the area velocity meter in the aeration tank inlet channel as needed. All loadings are based on the effluent flow meter.

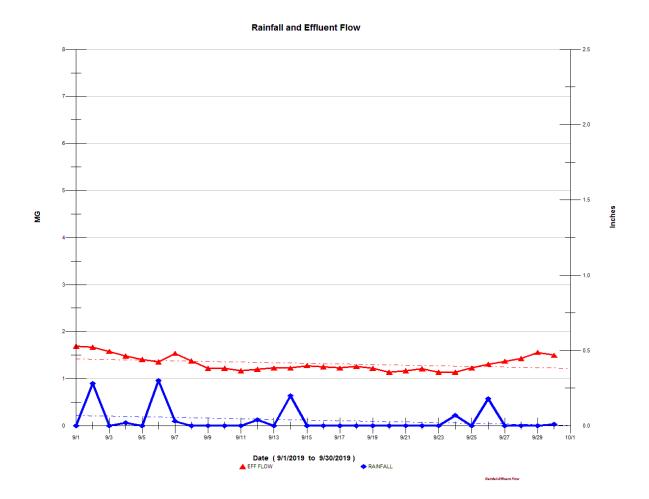
^{**} Influent sewage very dirty on sample days, yielding higher loading, due to interceptor cleaning project.

2.1 AVERAGE EFFLUENT MONTHLY FLOWS – <u>TWO</u> YEAR COMPARISON



Monthly average flow for September was 1.32 MGD, slightly lower than August, and similar to May and June. There were no significant rain events in September. The total precipitation for the month was 1.13 inches. The graph shows a 2-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 plant flows were higher due to some rainfall [Blue Peaks]. This graph provides a good indication of the influence that the heavier rainfall periods had on the effluent flows. There were no events that significantly affected plant flows. Inflow and Infiltration out in the collection system has been noted in the past with the increased effluent flow values when it rains.

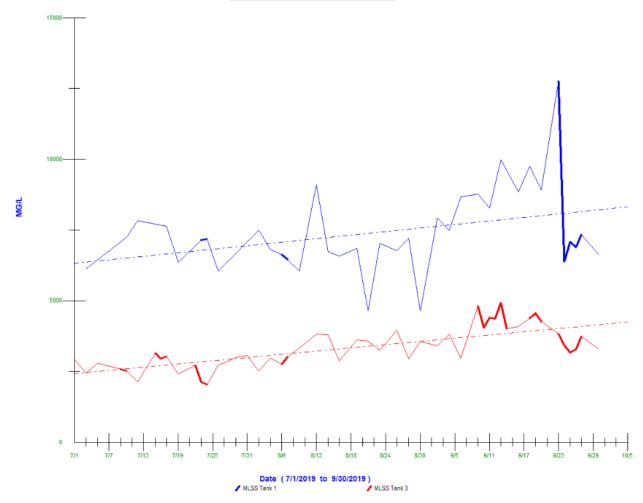
3 COMPLIANCE



> Plant Effluent

There were no permit exceedances for the month of September.

Plant process conditions continued to be maintaining very well, but aeration solids inventory has been up and down and increased significantly, due to the Nantasket Ave interceptor cleaning. There continued to be increased wasting of sludge and RST operation in September by approximately 40-50%. The clarifier surface was good during the month and effluent clarity is also good. We continued to have only one secondary clarifier was online. Sludge settleability remained good and very rapid. No chlorination of the RAS was needed. The aeration process mode remained in contact stabilization mode, and all sewage bypassing the primary clarifiers, with varying amounts of limited flow into aeration tank #1, depending on system inventory and the influent plant flows. The current split is approximately 10-15% to aeration tank #1, with all RAS flow going to aeration tank #1, and approximately 85-90% of flow going into aeration tank #3. This process mode allows for lower solids loading to the secondary clarifiers, minimizes filamentous bacteria formation, and nitrifying bacteria predominance, while maintaining a higher system solids inventory and good sludge settling characteristics. As noted above, the system solids have increased more due to the interceptor cleaning and this may lead to the primary clarifier and gravity thickener being put back online in September.



Trend showing MLSS levels in the aeration tanks over the past three months, since the interceptor cleaning began. The trend shows a rise in concentration and there was a corresponding increase in the wasted sludge gallons.

- A Copy of the NPDES report for September 2019 was submitted to the DEP and then forwarded to the Hull Sewer Dept.
- Corporate team [Frank C & Alan F] continued work with the Scada to Hach Wims data management computer data export and transitioning data sharing between SCADA, HACH, and Power BI for analysis.
- The Use of Drylet continued, and the additive has contributed to improved secondary effluent quality and bacterial augmentation of the process. This observation was seen especially during the heavier loaded days and during higher flow periods. The costs for use of the Drylet product is being paid for by W&C. The goal to be achieved is that the product costs will be offset by the lower sludge generation and lower sludge disposal costs. The daily dose of Drylet product continues at the original "2 scoops" dosed (2 pounds).

Photos below show the typical September conditions [9/14] with the plant in contact stabilization mode process flow mode, with some feed to aeration tank #1 also. Higher solids level in system, causing for higher amounts of dark foam in aeration tank #1. Continued good settling characteristics in the secondary sludge and low [slightly higher] turbidity in clarified effluent. Moderate brown system color in aeration tank #3, and no odors. As the month progressed the aeration color has gotten darker.



Aeration tank #1 [dark foam - high solids]



Sec clarifier #1 [slightly cloudy]



Aeration tank #3 [moderate dark brown color]

- There were no SSO reports submitted in September.
- SPCC: Regular inspections of the new AST and fuel day tank, as well at container storage of waste oil. Updated file. Review plan for Godwin pump secondary containment, and proposal to install liner under the unit. Also, confirm that future 8-inch Premier portable trash pump [new unit already has secondary spill tray as part of trailer.
- Completed work on standard operating procedure for the AST fuel storage tank and systems [by Mike Anderson and reviewed by Bill and Frank]

As noted last month, continued to collect some additional samples of influent sewage on days of
the interceptor cleaning. Comparison samples of the influent sewage to the facility that is reaching
the aeration tanks as a result of the interceptor cleaning. The cleaning phase that started in late
July continued in August and September. The cleaning of the sewer line typically ran for 3-4 days
per week for a duration of 9-10 hours per day.



Typical influent Sewage sample prior to cleaning



Influent Sample during cleaning period

4 KEY PERFORMANCE INDICATORS



4.1 WATER QUALITY - SEPTEMBER 2019

Parameter Info			Permit Requirements				Results				
Parameter	Units	Daily Max	Daily Min	Weekly Avg. Max	Monthly Avg. Max	Freq	Period Avg.	Period Min	Period Max	# of Sample s	# of Violations
Eff TSS	MG/L	50		45	30	1 X Week	15.3	10.0	18.0	4	0
Eff TSS	LBS			1152	768	1 X Week	160.0	131.8	183.1		0
% TSS Rem	%		85			1 X Month	97.3				0
Eff BOD	MG/L	50		45	30	1 X Week	3.5	3.0	4.2	4	0
Eff BOD	LBS			1152	768	1 X Week	36.7	30.5	39.9		0
% BOD Rem	%		85			1 X Month	98.2				0
Eff Chlorine	MG/L	1.0			0.7	3 X Day	0.25	0.02	0.58	90	0
Eff Fecal	#/100 ML	260			88	1 X Week	10	10	10	4	0
Eff pH	SU	8.5	6.5			1X Daily	7.1	6.9	7.3	30	0
Enterococci	#/100 ML	276			35	1 X Week	17	80	80	4	0

There were 136 effluent samples taken in the month of September with zero [0] NPDES Permit
exceedances.

Gallons Treated vs Sludge Disposed

Month	Effluent Treated, MG	Sludge Disposed, Gals		
September 2017	36.03	54,000		
September 2018	42.70	54,000		
September 2019	39.82	72,000 *		

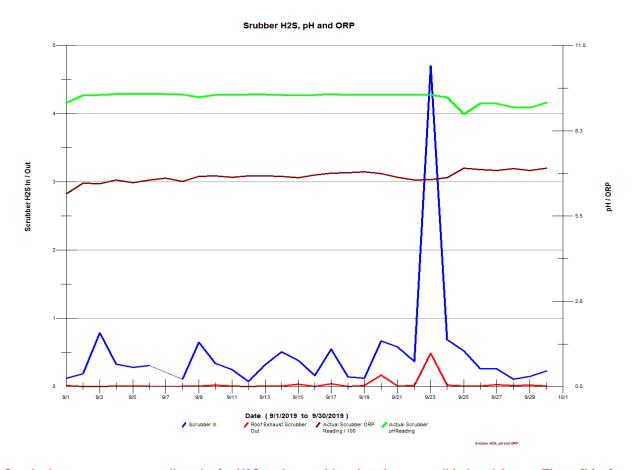
^{*} Some impact from interceptor cleaning, with increased solids processed/disposal quantity

5 ODOR CONTROL

There were no odor complaint calls during the month of September. The gravity thickener and primary clarifier remained off-line in September as these tanks have historically been the source of a lot of the odors within the facility, if in service during the warmer weather months. With the recent sewer interceptor project work, the #2 PC was readied for potential service, due to the high solids loading to the plant. However, due to the sensitivity to odors in the immediate area, we held off putting the tank into service, as the gravity thickener would also have been needed.

The above ground sludge storage tank was in service to receive thickened sludge from the RST thickening process, and this tank is typically emptied typically during the weekday Monday through Friday period, lessening the chance for odors during the filling of the truck. This avoids any potential odors over the weekend period. The secondary scum well is also pumped out during the week, to avoid odors on the weekend. There is continued flushing of the aeration tank troughs to minimize build-up of solids that can cause odors. The off-line aeration tanks and clarifiers kept empty to prevent odors.

The odor scrubber system was on-line for entire the month. The scrubber fan speed remains at the mid-range due to moderate levels of hydrogen sulfide production. With the continued addition of Bioxide at PS 3, the H2S levels have been stable. The facility realizes electrical savings, when the fan operates at a lower speed.



Graph shows some very small peaks for H2S to the scrubber, but these are all below 1.0 ppm. These [blue] peaks are primarily due to the H2S peaks, at the time of the Jerome meter sampling, which is a grab [one-time] sample. The time of day when the grab sample was collected can affect the H2S reading observed. The portable H2S meter was functional during the month. The one spike came on 9/23 during the drain back of the sludge truck filling line to the headworks, after that procedure was completed.

- The odalog and in-pipe units in the manhole at Water Street and Nantasket were removed for several days, while GMPS continued with their work in that area.
- "In-Pipe" bacteria addition continued with all 24 dosing stations operational. No additional actions taken for headworks sulfide reduction plan proposed by "In-Pipe. The inspection/replacement with full bottles took place on 9/11/19. Additional kick-start vegetable protein and bacteria was added in September. The kick-start program will continue to follow this plan following the summer months, and we will evaluate the overall effectiveness and odor reduction. All work being tracked on the Utility Cloud [UC].
- Continued the bi-weekly change outs of the bacteria bottles at three lift stations Microbe Dosing Stations (MDU's) with installation just in front of the three largest pump stations [in the wet wells or manhole just prior to the station. [PS 3, PS 5, PS 9] The re-load plan is delivering an additional 5.4 liters per month in total (1.8 liters x 3 locations). The goal is to see if we get a step change and reduce odors, while at the same time potentially reducing sludge. This change is being monitored closely over the summer months, for pump stations and at the plant.
- On-going frequent pumping out of the secondary scum wells. Tank cleaning performed quickly and as needed. For the warmer weather months, this activity is scheduled during the week, to avoid unforeseen odor issues on the weekends.
- Mixing systems/aerators all functional at the pump stations, except for pump station #3. New Medora Gridbee mixing system for PS 3 not installed yet. Mixer/Aerators at PS 1, PS4. PS6 & PS 9 are on timed control through SCADA.

The Bioxide system continued to operate at a feed rate at 137 gpd. The August data from the odor data loggers was downloaded from 4 manhole locations on 9/10/19. Overall, everything continues to look very good in the main interceptor system and at the plant. The Nitrate residual is carrying all the way down the Hull interceptor sewer line, indicating effective treatment the H2S.

The latest odalog data collected by Evoqua for the most recent operating period was not available, and will be included in the October MOR.

6 MAINTENANCE SUMMARY

6.1 TASKS COMPLETED THIS MONTH

The SEMS monthly work order summary for September is compiled and attached as a pdf file for review.

Key items of note are listed below.

- 1) In-Pipe units battery change out, dosing unit cleaning and inspection and circuit board troubleshooting and replacement as needed.
- 2) On-going E-1 Repairs at FRMahony. Replaced 4 grinder pumps: 1 Worrick Rd., 3 Dellawanda Rd., 1 Dighton St., and 101 Rockaway Ave.
- 3) On-going issue continuing to add oil to sec clarifier gear boxes, since only one S.C. is online. All the existing Amwell units have leaks [lower gear box seals are no good]. The only exception is primary clarifier #2, where the unit is ok. We are using a flowable grease product that of heavier consistency to lessen the amount of leakage. The estimated use of product with just SC1 online is about 0.5 gallons per week. The other 2 units [SC #2 and GT #1] will need to be filled up before use.
- 4) Weekly exercise without loads and Monthly load tests completed on all generators including the portable generator and pump stations.
- 5) On-going repairs to the Rotary sludge thickening [RST] unit drum wheel replacement on-going as needed. Failed drum wheel picture noted below.



- 6) Scrubber fan unit maintenance monthly maintenance performed belts and motor are good.
- 7) Scrubber pH and ORP probes cleaning and calibration. New probes needed and were ordered, since calibration was not effective.
- 8) Duct work in basement HVAC room collapsed due to old & corroded support straps. Make up temporary wooden bracing to support.





Failed HVAC ductwork in basement

Temporary support bracing

9) PS1 – drain piping off bypass line – install new piping. Also install new dehumidifier in pump room.





10) Various electrical conduit support hangers that are anchored and run along on clarifier catwalks – replaced where needed with new stainless-steel hardware. Original hangers were not stainless steel and are corroding away.



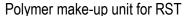


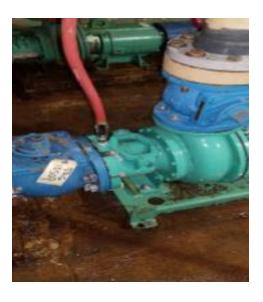
- 11) Replace peristaltic tubing in caustic pump for scrubber.
- 12) RAS pumps on-going rag/debris removal. Cleaning pumps every few days
- 13) The area velocity meter was checked out in late September and found to be operating ok. The issue with the inaccurate readings was due to sludge accumulation in the aeration tank channel. Plant flow was stopped while the channel was cleaned, and the meter performance was verified to be good.

Hull Water Pollution Control Facility

14) RST polymer make-up system – required a shutdown and internal cleaning due to polymer fouling







Polymer injection point into sludge feed line

15) Influent pump #1 – repair cleanout cover [rotted]



Cleanout cover – repaired with ceramic coating

16) Found leak in damper/expansion tank for secondary scum pump [Penn Valley Pump]. The hole was due to corrosion. Parts ordered. System locked out at MCC. Hydraulically and electrically isolated locally. Replaced air damper. Installed new drain valve for maintenance. Disassembled, cleaned and rebuilt pressure switch assembly. New pipe nipples, reducer fittings, and valve installed. Bled air from pressure switch. Repaired conduit connections and tested & returned pump to service. See below.





17) PS9 – install new ductwork for ventilation [was missing]. Two elbows to offset ducting and the down pipe connecting to the lower level. See below.





- 18) Pnumercator oil tank level monitoring system stopped working in September. The factory was contacted after the service call by Comm Tank. The panel was removed and sent in for evaluation. The repairs were covered under warrantee. We are waiting for Comm Tank to re-install the panel. In the interim, the staff is using the manual sight gauge to accurately see the oil level in the tank.
- 19) The WPCF operated under emergency power for 2 to 3 hours on 9/25, to allow for the Hull light to install new stainless-steel straps that secure the new transformers to the base mounts.

20) Primary Clarifier #2 – several the plow blades have rotted and there is little steel left to keep attached to the rake. Three of the failed blades were removed and 2 new spare replacements were installed. Materials were ordered to fabricate 8 additional plow blades.







Please see the attached summary of the Asset Management accounts for contract year (5).

Updates & notes made to the planned expenditures list.

While the projected costs and actual costs combined total exceeds the 05M planned budget, adjustments and decisions are being made on a regular basis based upon priorities and unforeseen costs. The planned list was initially set up to layout a planned budget for the contract year.

7 SAFETY





Temporary supports for HVAC ductwork to correct an unsafe condition

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 September.
- Ongoing Daily safety briefing meetings, review site safety policies with sub-contractors, safety tailgate topics. Pure Safety topic—September "Fire extinguisher" safety.
- Monthly staff safety meeting conducted on 9/26/19; BB and RH presented.
 - Reminders for daily safety briefing topics and discussion points & documentation. Review
 "Lessons Learned" from August 2019 Near misses and incidents from other company projects.
 - Pure Safety reminder "Fire Extinguisher Safety"
 - Toolbox topics Blood-borne pathogens [BBB] and Pandemic Flu
 - Review of site-specific policies on BBB and pandemic Flu. [required annual task]
 - Arc Flash Sticker replacements and updates
 - Reminder that certain areas in Massachusetts still at "critical levels" for EEE and West Nile virus
 take precautions

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:

- Ryan Holman completed confined space training by W&C. [now able to perform & assist with confined space entry [CSE] projects.
- Monthly staff Safety training completed Pure Safety and monthly safety meeting. W&C "near-miss" incidents at all projects for August discussed.
- Operational updates and process control discussions, especially with recent electrical issues and plant shutdowns, pump station operations, odor issues, dig-safes, etc.
- Jim G continues to work with staff on various SEMS updates work order management & scheduling, gas meters – PM and CM, and calibration.
- RCM Reliability Centered Maintenance workshops on-going held at the facility several days in September

Staffing related items:

- Mike Anderson [former intern] and currently working for W&C part-time worked on special projects AST S.O.P., and equipment inventory updates. He we continue to provide part-time assistance as needed in Hull.
- Continued involvement with Mass Maritime [MM] internship program/career fair for future interns. Corporate human resources department leading the effort for future intern for next year's winter and summer months.
- Sunday rotation schedule in place with Jim Gagliard working every other Sunday, and remaining weekends being filled by Roger B., Aram V., and Bill B. When Bill is not scheduled for a Sunday, he will be on a Monday-Friday schedule.
- Supplementing staff needs with O&M tech support where needed. Jody S providing coverage when staff
 levels are lower due to sickness, vacation, or training. Continuing to transition in Richard [Dick] Gould from
 the Linden Ponds project for various fill-in coverage as needed. Mostly with daily pump station
 rounds/inspections, weekend lab tasks, and if additional staffing needed for special projects.

9 COLLECTION SYSTEM

9.1 WET WELL CLEANING

The actual schedule for wet well cleaning: May 2019 to April 2020:

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

Frequency of	Pump Station								
cleaning	Α	1	3	4	5	6	9	D	
May, 2019				Х	Х				
June, 2019									
July, 2019									
Aug., 2019	Χ			X	X		Χ		
Sept. 2019									
Oct.,2019									
Nov, 2019									
Dec., 2019									
Jan., 2020									
Feb., 2020									
March 2020									
April 2020									

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 September.

- 27 Western Ave
- Spring Street & Nantasket Ave
- Berkley Rd
- Pump & Haul PS1 & A
- 779 Nantasket Ave

Manholes:

 Staff continues to respond to rattling manhole covers, broken manhole covers/rims and sunken manholes covers/rims.

Dig Safe mark outs:

 Dig-Safe mark outs were completed throughout the Town of Hull in order to assist/facilitate the Town's paving projects and the emergency repairs of the broken water lines, broken sewer laterals due to gas main work.

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

10 PROJECT MANAGEMENT & ADMINISTRATION



10.1 ON-GOING PROJECTS AND SUPPORT ITEMS

- The current summary for the account status for and the year 5 asset management accounts, as of 10/21/19, is included as an attached pdf file with this report. The 05M checkbook spreadsheet with proposed maintenance task plan for the year was set up and presented as an attachment with this report. The plan has been updated to reflect recent changes in the spending plan, with adjustments made as projects were completed. There is still some adjustment need in areas where there is "on going" work. [i.e. sub-contractors, goods and services, etc.]
- Continue to help the sewer department with proposed items for purchase from encumbered funds, primarily from the critical spares list. Currently the Amwell gear boxes, Fyght effluent pump, and the plant water strainer are all in production and W&C is waiting delivery. W&C is also coordinating all work associated with getting the equipment installed and related planning.
- The proposal plan for the D Street stormwater pump station upgrade was approved and new
 equipment purchases are underway. A portable trash pump remains set up at the station with float
 control for remote starting capability. The pump I tested regularly to confirm readiness. The auxiliary
 trash pump was not needed during the month of September
- The existing HVAC ductwork in the basement is in poor condition as noted in the maintenance section. When the duct work partially fell, the room was off limits to the staff until support bracing could be installed. W&C reached out to a contractor for an estimate to remove the affected sections, but nothing has been received back to date. The T&B sampling results for the paint on the ductwork indicated a higher level of PCB's in the coatings, therefore requiring additional precautions be taken when removing the equipment. No asbestos or lead paint issues, however, the paint on the duct was assumed to contain PCBs at concentrations greater than 50 ppm and must be handled and disposed as Assumed PCB Bulk Product Waste. The contractor does not need any specific licenses but should have workers with OSHA 40-hour Hazwoper training and be provided the proper PPE
- The Town was contacted by the USEPA for a plant tour and to discuss hosting a field workshop at the wastewater facility in November. David Turin and Elizabeth Kudarauskas visited and toured the facility with AV and BB on 9/18/19. The field workshop is one that would be held at the plant and would include approximately 20 staff members of the USEPA. The areas of training exercises would include

flow measurement, influent and effluent sampler set up and operation, and process control techniques - microscope and sludge blanket monitoring.

- Back room spare parts storage areas worked on to improve on inventory control and plant orderliness.
 Consolidation and boxing up of old fluorescent bulbs. Also looking into disposal of failed electronic items utilizing a recycling company [for failed UPS units, old computers with hard drives removed, other electronic items that are not functional
- Bill B working with Nick V and Tim H (W&C engineers) for the PS 5 evaluation and new pump and piping recommendation.
- W&C operations team is also assisting with multiple engineering projects that are currently in construction including the two SRF Contracts 1 & 2. As well as aiding planning of the Headworks & Pump Station Structural Rehab project and the Facility Planning project. Multiple meetings and condition assessment staff assistance onsite as well as continued coordination involvement with Bill, Aram and Rob.
- RS continued work on the Annual Operating Report for contract years 3 and 4.
- Drylet bacterial process enhancement continued in September. The process plan is to continue use of the product. The effectiveness and costs will be reviewed annually. [See effluent/compliance section]. The interceptor cleaning project phase has had a significant impact on increasing the solids inventory in the facility, resulting in more days of sludge thickening, and disposal costs.
 - Nothing further done to date, regarding an alternative use for one of the existing primary clarifiers, especially the #1 PC. The drive is not functional. Conversion to a mixed tank and/or floating aerator is being considered and this option would allow for hydraulic flow into the tank, keep it aerated and aerobic [little or no odor] and not restrict flow from the D-box, which is currently a concern. For the past 3 years, the process has benefited, and reduced odors around the plant have been seen with the primary tanks and the gravity thickener tank off-line in the warmer months. Little or no odors seen. This re-purposing of the tank will be reviewed under the facilities plan.
- The Duperon site visit was completed on August 14th as noted in the maintenance section. The site visit reported no deficiencies, other than corrosion of certain components, due to hydrogen sulfide. A recommendation for the cleaning/passivation was discussed, but not something that Duperon performs.
- A local contractor was selected for the operations building stairwell roof repairs. South Shore roofing
 was selected, and they are currently undergoing the "contractor pre-qualification" process.
- Pump Station 9 [PS 9] Currently operational, with one of the pumps [#2] having a leaking mechanical seal. One of the pump assemblies was replaced with a used one for the short-term, while service is being done on the removed pump assembly. The spare pump assembly was been repaired, and to be scheduled for installation. The "special order" check valve was received from the manufacturer in July. The other pump assembly parts have been ordered. This check valve, one isolation valve, and pump assemblies will be replaced hopefully in August. At PS #9, the structural and overall station condition assessment and corrective action is part of the larger structural project being discussed.

- Received the upgraded keypads for the deragger units at PS6 and waiting for S. Rose from the scada group to install them. Hull has received the first of the new units. The units will provide greater monitoring and programming capabilities.
- The new accounts payable program for W&C that was rolled out in August is working well, with the Hull
 facility being one of the first facilities to utilize the process. All invoices are electronically scanned and
 processed using the program "Invoice Capture at Concur Solutions"
- The ladder project has picked back up with a site visit and W&C agreement coordination with Boston Forging and Welding to start fabrication of new ladders for Pump Station #1. Additional Pump stations will be added to the work sequentially following completion of PS#1.