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MONTHLY REPORT OF THE OPERATIONS & MAINTENANCE ACTIVITIES (FEBRUARY 2022)

CLAREMONT POLYCHEMICAL OPERABLE UNIT 5 GROUND WATER TREATMENT SYSTEM, OLD BETHPAGE, NY

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MONTHLY REPORT OF THE OPERATIONS & MAINTENANCE ACTIVITIES (FEBRUARY 2022) CLAREMONT POLYCHEMICAL OPERABLE UNIT 5 GROUND WATER TREATMENT SYSTEM, OLD BETHPAGE, NY

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LIST OF ACRONYMS AND ABBRIEVIATIONS

AS	Air Stripper
A/V	Air and Vacuum
ASF	Air Stripper feed
BNA	Base Neutral & Acid Extractables
CPC	Claremont Polychemical
CSE	Confined Space Entry
DOSR	Daily Operations Summary Report
EE	Electrical Engineer
GPM	Gallons Per Minute
GWTS	Groundwater extraction, treatment, and reinjection system
HDR	Henningson, Durham & Richardson Architecture and Engineering, P.C.
HMI	Human Machine Interface
HVAC	Heating, Ventilation, and Air Conditioning
MTBA	Tert-Butyl-Methyl ether
MW	Monitoring Well
NYSDEC	New York State Department of Environmental Conservation
O&M	Operation and Maintenance
OU4	Operable Unit 4
OU5	Operable Unit 5
PD	Plant Discharge
PDB	Passive Diffusion Bag
PID	Photoionization Detector
PFF	Pressure Filter Feed
PLC	Programmable Logic Controller
ppm	parts per million
PW	Process Water
Ramboll	Ramboll Americas Engineering Solutions, Inc.
RW	Recovery Well, Process Well
SPEDES	State Pollutant Discharge Elimination System
SSHP	Site Safety and Health Plan
SU	Standard pH Units
SVOCs	Semi-Volatile Organic Compounds
TBA	Tert-butyl alcohol
TDS	Total Dissolved Solids
TKN	Total Kjeldahl Nitrogen
TOC	Total Organic Carbon
TSS	Total Suspended Solids
US Water	US Water Services Corporation
VOCs	Volatile Organic Compounds

1. OPERATION AND MAINTENANCE ACTIVITIES

Henningson, Durham & Richardson Architecture and Engineering, P.C. (HDR) continued the daily operation and maintenance (O&M) of the Claremont Polychemical (CPC) Superfund Site Groundwater Treatment System (GWTS) Operable Unit 5 (OU5) during the month of February 2022. This report covers the O&M activities for the system during the period defined as beginning at approximately 0830 hours, February 1, 2022, through approximately 0830 hours, March 1, 2022. O&M conducted during this reporting period was guided by the site O&M Manual. Within this stated timeframe, the transition of O&M activities from HDR to Ramboll Americas Engineering Solutions, Inc. (Ramboll) occurred. Future O&M activities will be conducted by Ramboll subcontractor, US Water Services Corporation (US Water).

The GWTS – treatment plant, grounds, and well systems - were maintained for the 28 days in this reporting period during which the treatment system experienced 51 minutes of total downtime due to maintenance issues.

Readings of the key plant process parameters are normally recorded each workday. These readings and the Human Machine Interface (HMI) flow trend lines are used to monitor the system's performance and condition. Selected readings are recorded in the daily database which is an electronic file maintained in the monthly operating documents folder. If the plant is not occupied,the system is monitored remotely.

The treatment process control and alarm systems are functional. The recovery well pumps, process pumps, and air stripper blower are operated in the automatic mode and are remotely controlled and monitored.

1.1 Daily Operations Summary Reports

The GWTS's daily operations and maintenance activities, project tasks, and observations during this period are briefly described in the Daily Operations Summary Report (DOSR). The DOSR is based in part on the treatment system's daily operating worksheets and logs which include:

- Daily Operating Log – flow readings and calculations (Form-01)
- Daily Site and Safety Inspection – plant condition checklist (Form-02)
- Daily Plant Activity Notes – plant manager's daily summary (Form-03)
- HDR Sign-In Sheet – HDR employee on-site hours (Form-15)
- Daily Process Data Sheet – point process readings (Form-30)
- Logbook CPC 5-8– plant operator's daily logbook
- Daily Database – daily process readings (February 22 Database.xlsx)
- New York State Department of Environmental Conservation (NYSDEC) Log-in Sheet – Entry/Exit Log with COVID-19 Acknowledgement

1.2 Summary of Maintenance Activities

The operation and maintenance of the treatment system, facility, and associated equipment is performed in accordance with the site O&M Manual. These tasks and inspections incorporate the equipment manufacturers' recommendations, operations experience, and good engineering and

maintenance practices. A detailed accounting of the February 2022 activities is further provided in the plantoperator's daily logbook.

Maintenance and project activities undertaken during the February period included:

- Routine and general maintenance tasks were conducted at the plant, on the grounds,and in the well fields.
- Single Air Stripper Feed (ASF) pumps were placed into Hand mode and frequently switched to cycle their activity.
- The plant truck was inspected.
- The monthly process equipment tests were conducted.
- The Operable Unit 4 (OU4) comprehensive inspections were completed.
- The monthly Process/Recover Well (RW) system inspection was completed, and the incoming voltage levelswere recorded.
- Basin 33 was inspected.
- The ASF pumps were lubricated, and the seals tightened.
- The OU5 comprehensive inspections were completed.
- The Pressure Filter Feed (PFF) pumps were lubricated, and the seals tightened.
- The fire alarm system components were inspected.
- The monthly electrical device survey was completed.
- The SUNY wellfield was inspected.

1.3 Maintenance Logs

The following operating logbooks are currently in use and maintained at OU5:

- CL-18 OU-4 Log (at OU4)
- CL-43 General Field Support Log (truck)
- CL-47 Misc. Projects Field Notebook (Peter Takach)
- CPC 5-4 Project Support Logbook (site)
- CPC 5-8 Site Supervisor's Daily Logbook (Peter Takach).

Except for log CPC 5-7, the completed logbooks associated with the project have been scanned, all are in storage at OU5, and are available for review.

2. TECHNICAL SUPPORT ACTIVITIES

2.1 HDR Water Personnel

- February 1, 2022, Jennifer Rhee in for Ramboll meeting and returned February 16, 24, and 28
- February 16, 2022, Ian Denholm in for Ramboll meeting
- February 16, 2022, Tom Fogarty in for Ramboll meeting
- February 24, 2022, Brian Montroy in for close out documents

2.2 NYSDEC Personnel, Sub - contractors, and Other Visitors

- February 1, 2022, Chris Martin (US Water) in for meeting and returned February 16, 17, and 28.
- February 1, 2022, Kevin Schen (US Water) in for meeting and returned February 24 with new plant truck.
- February 1, 2022, Ian Hnizdo in for interview and returned on February 16 to start training.

- February 16, 2022, Kirk Takemori (US Water) in for site visit
- February 24, 2022, Jason Pilato (US Water) delivered new truck.

2.3 Deliveries

- February 9, 2022, Pace Laboratories delivered bottle order.
- February 15, 2022, UPS dropped off McMaster catalogue.

3. HEALTH AND SAFETY

Work at the Claremont GWTS OU5 was conducted in accordance with the approved Site Safety and Health Plan (SSHP). Safety related activities during this period included:

- The water remained off at OU4. Both potable and non-potable lines were drained. (No sanitary water).
- Daily site safety inspections were completed as part of the routine O&M activities.

4. PLANNED ACTIVITIES AND SCHEDULES

The evaluation of the plant operating system and equipment was completed by HDR. A list in the form of corrective actions or maintenance tasks has been generated as is a monthly system status report. These reports are updated as needed and reviewed at least monthly Both are electronically filed. The corrective action list is included at the end of this report as **Table 1** – Claremont Corrective Action Summary.

Upcoming tasks include:

- OU4 remains without water to the fire sprinkler system due to no heat in the building.
- OU4 potable water line was shut off due to pipe ruptures from frozen pipes.
- RW5 remains out of service due to well pump motor failure (single phased).
- The gas service to OU4 needs to be re-established as the supply to the HVAC was not flowing.

5. MONITORING WELL WATER ELEVATIONS

The monitoring well system's groundwater elevation data table was updated after the December 2021 quarterly GW elevation recording task. This database is available for review. The next set of synoptic water level measurements will be scheduled for March 2022 and will be conducted by Ramboll.

6. TREATMENT SYSTEM FLOWS

During the February period, the plant continued to operate in the auto control mode although at times, an ASF pump was run in the Hand mode. The volume of treated water discharged by the treatment system to the selected recharge basin was calculated from the plant influent and effluent flow meter readings. These readings are taken at the HMI and recorded in the daily database. The system was down for 51 minutes in February.

During February 2022, the plant discharge was solely directed to Recharge Basin 1.

The total volume of treated water discharged from ~0830 hours February 1, 2022 to ~0830 hours March 1, 2022 was approximately 22,332,637 gallons. The data in **Table 2** is a summary of plant discharge flows.

A graphic representation of the system's daily plant discharge output is provided in **Figure 1** and the daily plant totalizer readings for February are provided in **Table 3**, both following the text of this report.

Under current conditions, the Programmable Logic Controller (PLC) and the control system are functioning as designed. Flows from the individual recovery wells are remotely read, transmitted, and totalized.

The flow summary for the individual components of the system can be found in **Table 4** at the end of this report.

7. CHEMICAL CONSUMPTION

The hydrochloric acid feed system is currently off-line, and the system is void of acid. There are four drums of virgin acid on site. No acid was consumed in February 2022.

The sodium hydroxide storage system is currently not in use and the system is empty of caustic. There is no bulk sodium hydroxide on site and no caustic was consumed in February 2022.

The sodium hypochlorite storage system is currently not in use and the system is empty of bleach. No bulk sodium hypochlorite is stored on site. No sodium hypochlorite was consumed in February 2022.

8. WASTE DISPOSALS

Routine collection of waste materials continued. National Waste emptied the dumpster. No other waste was disposed of in February 2022.

9. MONTHLY DISCHARGE MONITORING REPORT

The GWTS is operated under an equivalency permit from the NYSDEC. **Table 5** presents the Claremont OU5 O&M Sampling and Measurement requirements and their frequency. The analytical results for the February 2022 plant discharge samples indicate that the analyzed parameters were compliant with permit limits (**Table 6**).

10. PENDING ISSUES AND CONSIDERATIONS

Mechanical repairs have been made to the plant HVAC system at OU4. Upon testing, the gas supply appeared to be shut off. National Grid will be contacted to check the meter and delivery system.

The sprinkler system at OU4 remains drained of water. The potable and non-potable water lines at OU4 have been drained.

The discrepancies/inaccuracies in the plant flow meter at OU5 readings may be due to the inappropriate configuration of the local piping. Future calibration or adjustment of pulse reading may be required.

A damaged tree adjacent to the path to the Monitoring Well (MW)-6 well cluster continues to obstruct the path. The situation will continue to be monitored.

The well path to the BP-3 cluster following rain events still poses issues for vehicle transport. Work and upkeep will continue as necessary along the path.

The OU4 plant is offline and its disposition including that of the injection well system, and vapor carbon beds is pending.

The status of key aspects of OU4 are as follows:

- The plant heat is currently off, and the system is out of service.
- The fire alarm panels are off-line.
- The fire sprinkler system is currently off-line. The water has been drained fromthe system. An alarm system for the sprinkler has been installed with central monitoring.
- The facility is secure, and its physical monitoring continues.
- The facility and grounds are not maintained except for the facility entrance and plant egress points.

11. PLANT DOCUMENTS

Procedures and standard forms are written, reviewed, and revised as needed. As-built drawings are generated and updated as necessary.

12. MONITORING RESULTS

The CPC GWTS at OU5 is monitored through the analysis of off-site laboratory analytical data and on-site field data.

12.1 Off-site Analytical Data Results

Monthly Plant Discharge (PD) samples are taken for organic analysis in compliance with the NYSDEC discharge permit. Quarterly groundwater samples are taken for organic analysis, and

quarterly process water (PW) samples are taken for organic, inorganic, and generic analysis. The February sampling activities included:

- The February PD data was processed and submitted.

12.2 Field Data

12.2.1 Plant Discharge pH and Temperature

The treatment plant effluent is monitored for pH and temperature on a weekly basis to obtain a monthly average in compliance with the NYSDEC discharge permit requirements. These measurements are taken from the plant effluent at a controlled point with a calibrated portable meter. The plant discharge readings are typically found in **Table 7** following the text of this report. However, February 2022 results were unable to be located by Ramboll staff and, thus, determined to have been lost during the transfer of O&M from HDR.

The February 2022 average pH measurement was 6.78 standard units (su). The NYSDEC discharge permit requires the plant discharge to have an average monthly pH between 6.5 and 8.5 su. The results for this month meet this requirement. Data showing the plant discharge's monthly average pH trend over several months is provided in **Table 8** following the text of this report.

12.2.2 Air Stripper (AS) Tower Air Monitoring

Using a calibrated photoionization detector (PID), the vapor discharge from the air stripper tower was monitored weekly for volatile organic compounds (VOCs). The measurements were taken from the tower's effluent air stream through Port B when the treatment system is online. The readings from the AS tower are typically provided in **Table 9**. However, as mentioned in **Section 12.2.1**, February 2022 results were unable to be located by Ramboll staff and, thus, determined to have been lost during the transfer of O&M from HDR.

There was one measurement from the Air Stripping System of 0.1 parts per million (ppm) for VOCs observed this month.

Other routine data collected in February included:

- The electric and water meter readings at OU5 were recorded weekly.
- The plant vaults and selected areas were monitored for VOCs weekly.
- The plant sound levels were recorded bi-weekly.
- The electric and gas meter readings for OU4 were recorded monthly.
- The recharge basins were inspected, and the water levels noted every week.
- The differential pressure readings across the AS Tower were recorded bi-weekly.
- The power supply voltage to the recovery wells was recorded monthly.

13. PROCESS ANALYSIS AND SYSTEM STATUS

The treatment system is currently operated 24/7 in the automatic mode. It is remotely monitored as necessary.

13.1 Extraction (RW) Processes

- The monthly system inspection was completed.
- The incoming voltage to the well controls was measured.
- The vault space heating units are active.
- The recovery well pump system is remotely controlled and monitored, it operates in the Auto mode. The pumps at RW3, RW4, and RW5 are online and fully functional.
- Pump flow readouts are transmitted to the plant and the totalizers for pumps RW3, and RW4 are fully functional. The flow meter for RW5 occasionally stopstransmitting.
- The Air/Vacuum (A/V) valve at station 16+57 remains isolated from the transmission line.
- The A/V valve at station 17+10 remains isolated from the transmission line.
- RW1 and RW2 are offline and periodically run for preventative maintenance purposes. Their flow meters are not transmitting through the PLC. When repairs were made at RW1 in November 2021, stones were removed from the flow meterhousing. There was a thick coating of iron salt deposits on the housing and impeller.

13.2 AS Process

- The three ASF pumps in the AS Process are fully functional.
- Motors and seals were lubricated as necessary. Seals were tightened and the drains were cleared.
- The AS tower main drain valve's manual actuator is not functional (fail open).
- The tower media appears clean as the pressure differential between the top and bottom ports remains relatively constant. The lower section of media has been visually inspected.
- The discharge valves for ASF P1 and P2 appear to be frozen in the open position.

13.3 PD Process

- The plant discharge flow was directed to Recharge Basin 1 during February 2022
- The valve influent to Recharge Basin 33 remains closed.
- Pump 1 has been taken out of service due to excessive noise and vibration. A full evaluation is required. Pumps 2 and 3 are fully functional.
- The motors and seals were lubricated as necessary.
- The discharge valve for PFF P3 has failed open.

13.4 Other

- The plant's first bank of lights is wired to the emergency-light recharging system. The circuit is kept on 24/7. The lamps appear burnt out. The second bank of lights provides sufficient lighting for general tasks.
- The potential for leaks in the water supply line running through the plant will continue to be monitored.
- The fire alarm and central monitoring systems are fully functional.

14. GROUNDS

14.1 Plant Perimeter

- General outdoor clean-up tasks are on-going.
- The fencing is clear and secure.

14.2 Well Field

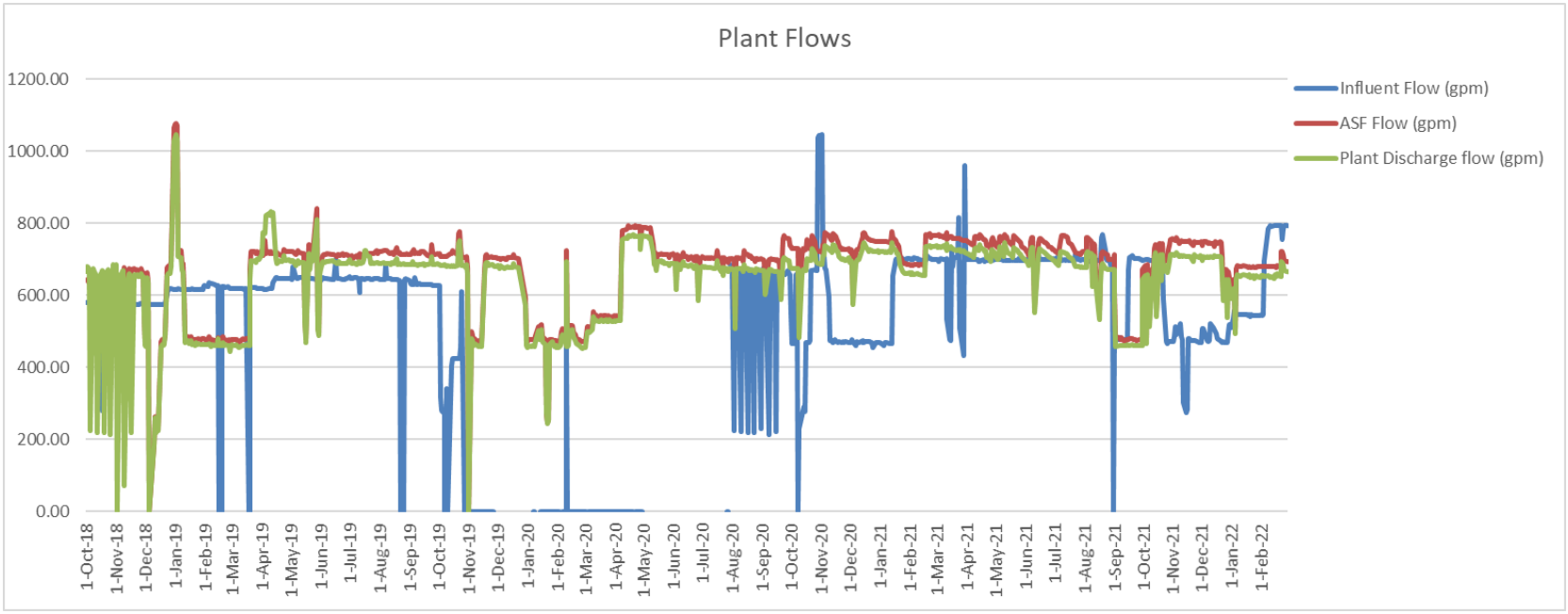
- Well, well field, and recharge basin inspections continue.

14.3 Other

- The CPC GWTF OU4 is secure
- The property at and around the OU4 site continues to be inspected. While the grounds are not maintained, the treatment plant's entrance and egress points are kept clear and functional.

FIGURE

Figure 1
Plant Discharge Daily Flow



TABLES

Table 1
Claremont Corrective Actions Summary

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
The RW Discharge Manifold integrity is suspect	The condition of the various devices on the RW discharge manifold are suspect. The Air Vent valve in the vault on the N-side of the 6th fairway is leaking from the influent nipple. **The shut-off valve was closed and the device isolated.** The air-vent valve in the vault to the east of the 6th green is leaking. **The shut-off valve was closed and the device isolated.** **The manifold employs isolation, venting, and drain valves as well as other devices. Along the path of the manifold are vaults which house some of these devices. These vaults need to be accessed, pumped out, and the devices tested.** **Two isolation valves were closed between RW1 and RW3. These valves seemed to hold.**	Plant staff and outside contractors	Possible shutdown	May require a Confined Space Entry (CSE)
AS Tower main drain valve is not controlled	The valve does not respond to manipulation of its actuator. ***This valve should be replaced*.** ***No further action is planned at this time.***	Operator	Plant will need to be shut down to change out the valve	None

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
OU4 fire alarm system is not functioning Central monitoring of the fire alarm system or fire suppression system does not exist OU4 electrical system has been unstable	The Nassau County Fire Code indicates that the sprinkler system must have central monitoring for flow and valve tampering. The fire alarm system needs to be replaced and centrally monitored. Several contractors have been at the site to propose options for the system. BK Fire installed central monitoring on the sprinkler system. Both are offline as the sprinkler system will remain drained until the HVAC system is repaired. Certain OU4 lights currently create a large amount of noise in the fan box within the control room. The southern lights flicker and then die including the emergency system.	Plant operator, Electrical Engineer (EE) and outside vender	None at this time	Fire code violations. High altitude tasks, safety code violations
Several leaks were observed in the plant overhead water supply line	Adjacent to the north door a clam-shell type clamp was applied. The second leak observed above the AS Blower is not readily accessible. It is not problematic. ***Repair work may require evaluation and outside resources. Currently the situation is controlled.***	Outside plumbing contractor	None	Sanitary water may be shut off during repairs

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
The float controls for the PFF pump system have intermittently shorted out causing the system to not properly control the pumping operation	The wiring of the pump control system is connected below grade. The junction box in the wet well is thought to be filled with water creating a problem with the float switches to control relay wiring. The box cannot be opened without damage to it and the conduit. This appears to have been a longstanding problem, as when switches have been replaced in the past, they were spliced outside the box. The float switches have been replaced and spliced above the sump but there remains a problem with the L2 circuit. The output from the W-2 relay was moved to the output for the W-1 relay. This has stopped the short cycling. ***The control wiring should be changed and moved above grade. Currently the second splices to the floats are above ground outside the vault.***	Plant operator and US Water resources	Plant shut down is required	Possible Confined Space Entry work
PFF P1 has failed	The pump when activated immediately makes a lot of noise, and the pump drop pipe shakes. Smoke/ fumes emanated at the Motor-shaft connection. The motor appears to be good. The pump was removed from service, 2/24/20. ***It is recommended that the motor be disconnected, lifted, and the mechanical connection checked.***	Outside contractors	None anticipated	To be determined

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
As the ASF pumps cycle off/on, the check valves have started to slam closed. When reactivating, the motor starter contact is rather violent. Both actions tend to rattle the piping and fixtures	There is no available literature regarding the check valves, so the exact description of their functioning parts is to be determined. A softer start/stop control may fix this issue. ***This will need further investigation. Soft-start equipment and variable frequency controls were discussed.***	Plant operator and EE support	If replacement or repairs are necessary, a plant shutdown will be required as the units can- not be isolated	To be determined
The flowmeters for system flow, ASF flow and plant discharge are out of sync with the flow meters on the recovery wells	While the ASF flow meter is the most out of line, it is plumbed correctly. The influent system flow meter and the plant discharge flow meters are piped incorrectly. The same style of relay is used to count pulses, but the meters have not been calibrated. **The system needs further investigation to determine if any changes are warranted.**	EE support	To be determined	none
EF-4 is not operatable	The fan is controlled through the mezzanine thermostat, but it does not appear to be operating. The fan requires electrical testing. **The system was checked, it appears that the fan is not functioning. The fan should be replaced.**	EE support	Only in an emergency	Only in an emergency
Wiring nests in main control console	**The wiring in the main control console needs to be cleaned up and labeled, to facilitate problem troubleshooting and process improvements.**	EE support	A shut down may be necessary	Electrical work

Condition to be Corrected	Status and Actions	Resources	Plant Ops Impact	Health & Safety Impacts
Pressure Filter Feed pump controls	With P1 out of service, the sequencing of pumps allows for the PFF vault to reach HHL conditions in certain circumstances. **Reprogram the sequencing to eliminate the position of P1.**	EE support	To be determined	To be determined

Other Plant Conditions of Note (no action required at this time)

- The methane detection system is offline. **To function, it will need a technical inspection and maintenance**. However, methane does not currently appear to be a hazard
- It has been determined that intrinsically safe components are no longer required in the plant
- There has been no need for acid washing of the AS Tower media, the hydrochloric acid feed and storage system have not been operated. The tanks have not been filled and the level monitoring system has not been operated.

As previously noted, there are pieces of equipment that are out of service and require repairs. Currently there are no plans for addressing these conditions as the operation of this equipment is not necessary or needed for the operation of the treatment system.

Equipment	Fault	Status
Plant electric heater UH-1	Needs transformer	Heater is not needed
Plant electric heater UH-2	Needs relay timer and wiring repairs	Heater is not needed
Recovery well pump pressure switch assembly	Units are unwieldy and subject to vibration, corrosion, and leaks	Each unit requires assessment and disposition
NaOH sump pump	Pump is not operating	No water or chemicals stored in vault. Portable submersible pump in sump should suffice
Plant lights are wired to the emergency light charging system	Un-segregated light cannot be shut off. Several of the lamps may have burnt out	The bank of lights appear to have failed/burnt out. The second bank of lights are sufficient
Plant exhaust fans are part of methane system	Fans cannot be manually operated	Once the methane monitoring system is online, the fans can be operated
Plant discharge drain	Leak in Victaulic fitting	Drain line on plant discharge intermittently leaks. Parts are in-house. Not pressing
ASF pump isolation valve	Valve P1 has failed open	Not needed at this time

Equipment	Fault	Status
PFF pump isolation valve	Valve P3 has vailed open	Not needed at this time
RW1 flow meter	The meter is not operating	Pump is offline. Rocks were pulled from the housing and iron sediment was encrusting the flow meter impeller and housing
RW2 flow meter	The meter is not transmitting	Pump is offline
Air stripper flow meter	Non-functional and removed	
AH-1 condenser	Air conditioner is non-functional	Two window AC units in place
Plant outdoor lights	9 of 12 lights not functioning	Not a security issue

Table 2
Plant Discharge Average Flow & Volume

Period	Average Flow (gpm)	Average Daily volume (gal)	Total Period Flow (gal)	Min off	Min on
Q4 2016	517	745,000	68,540,000	7,309	125,171
Q1 2017	520	748,244	67,342,000	655	128,945
Q2 2017	576	829,130	76,280,000	6,165	126,315
Q3 2017	634	913,576	84,049,000	1,110	131,370
Q4 2017	256	368,762	33,926,110	69,165	63,315
Q1 2018	53	75,989	6,839,000	118,180	11,420
Q2 2018	179	258,284	23,762,103	102,929	29,551
Q3 2018	504	725,280	66,725,717	57,416	75,064
Q4 2018	726	1,045,065	96,145,984	23,734	108,746
Q1 2019	527	758,467	68,262,000	735	128,865
Q2 2019	662	953,877	87,756,724	405	132,075
Q3 2019	685	985,802	90,693,740	108	132,372
Q4 2019	655	943,871	82,116,780	5,039	129,326
Q1 2020	480	682,527	62,110,000	1,824	129,326
Q2 2020	698	996,998	88,732,846	3,838	127,185
Q3 2020	669	955,928	87,945,333	1,099	131,401
Q4 2020	695	1,001,365	92,125,539	52	132,497
Q1 2021	708	1,019,733	91,776,000	0	129,603
Q2 2021	709	1,021,317	92,939,850	0	131,040
Q3 2021	615	884,934	81,413,897	0	132,475
Q4 2021	677	928,370	85,410,047	6,317	126,185
Jan 2022	643	913,290	28,312,000	619	44,022
Feb 2022	678	976,166	27,332,637	51	40,269

Acronyms: gal - gallons gpm – gallons per minute

Table 3
Plant Daily Totalizer Readings

February 2022 Flows						
	Plant Influent		Plant Discharge		RW Discharge	
Date	Volume	Avg. Flow	Volume	Avg. Flow	Volume	Avg. Flow
1-Feb-22	945,000	656	947,000	658	962,000	668
2-Feb-22	939,000	652	942,000	654	968,000	672
3-Feb-22	946,000	657	949,000	659	971,000	674
4-Feb-22	2,805,000	1,948	2,809,000	1,951	2,880,752	2,001
7-Feb-22	935,000	649	936,000	650	965,000	670
8-Feb-22	936,000	650	945,000	656	969,000	673
9-Feb-22	938,000	651	944,000	656	972,000	675
10-Feb-22	941,000	653	941,000	653	975,000	677
11-Feb-22	2,806,000	1,949	2,818,000	1,957	2,886,330	2,004
14-Feb-22	940,000	653	935,000	649	975,944	678
15-Feb-22	934,000	649	944,000	656	966,711	671
16-Feb-22	955,000	663	961,000	667	994,000	690
17-Feb-22	919,000	638	928,000	644	953,000	662
18-Feb-22	2,796,000	1,942	2,812,000	1,953	2,898,900	2,013
21-Feb-22	929,000	645	934,000	649	967,000	672
22-Feb-22	984,000	683	986,000	685	1,020,000	708
23-Feb-22	990,000	688	989,000	687	1,027,000	713
24-Feb-22	977,000	678	980,000	681	1,012,000	703
25-Feb-22	2,880,000	2,000	2,884,000	2,003	2,981,000	2,070
28-Feb-22	957,000	664	957,000	665	988,000	686
February Total Plant **Influent** (Gal)			26,451,000			
February Total Plant **Effluent** (Gal)			26,541,000			
February Total **RW Discharge** (Gal)			27,332,637			

Table 4
Pump System Flow Readings

February	On-Time Minutes (actual)	Avg. Flow (gpm)	Avg. Flow (gpd)	Total Flow (gal)
RW1	3	216*	NA	648
RW2	3	236*	NA	708
RW3	40,800	212	304,995	8,515,000
RW4	40,800	263	378,487	10,569,000
RW5	16,860	216	310,835	8,248,637
RW Totals	40,800	656	976,165	27,332,637
Plant Influent	40,800	658	947,084	26,451,000
Plant Effluent	40,800	660	950,392	26,541,000

The treatment process was online 28 days in February with 51 minutes of downtime. Flows are taken from the HMI meter readings.

*RW1 and RW2 are offline aside from monthly process equipment test to check their functionality. There are no average gallons per day.

Table 5
Claremont OU5 O&M Sampling/Measurement Program and Frequency

Measurement / Analyte	Sampling Location			
	System Influent	Plant Discharge	Recovery Wells	Monitoring Wells
Flow	Daily	Daily	Daily	NA
pH	Quarterly	Weekly	Quarterly	Quarterly
VOCs (+Tert-Butyl-Methyl ether (MTBA) & Tert-butyl alcohol (TBA))	Quarterly	Monthly	Quarterly	Quarterly
Semi-Volatile Organic Compound (SVOC) Base Neutral & Acid Extractables (BNA)	Quarterly	Monthly	NS	NS
Total Kjeldahl Nitrogen⇥ (TKN)	NS	Quarterly	NS	NS
Total Suspended Solids (TSS)	Quarterly	NS	Quarterly	NS
Total Organic Carbon (TOC)	Quarterly	NS	NS	NS
Total Dissolved Solids (TDS)	NS	Quarterly	NS	NS
Cyanide	NS	Quarterly	NS	NS
Hexavalent Chromium	NS	Quarterly	NS	NS
Mercury	NS	Quarterly	NS	NS
Metals	Quarterly	Quarterly	Quarterly	NS
Anions	NS	Quarterly	NS	NS

Notes: NA – Not applicable; NS – Not sampled.

Table 6
Recent Plant Discharge Analytical Results

Parameters	Discharge Limitations (SPDES)	Units	Results
pH (range)	*6.5 – 8.5*	*su*	6.78
1,1,1-Trichloroethane	5	ug/l	U
1,1-Dichloroethane	5	ug/l	U
1,1-Dichloroethylene	5	ug/l	U
1,2- Dichloroethane	0.6	ug/l	U
Benzene	0.7	ug/l	U
Chlorobenzene	5	ug/l	U
Chloroform	7	ug/l	U
CIS 1,2-Dichloroethylene	5	ug/l	U
Ethylbenzene	5	ug/l	U
Methylene Chloride	5	ug/l	U
Tert-butyl alcohol (TBA)	Not indicated	ug/l	U
Tert-Butyl-Methyl ether (MTBA)	5	ug/l	U
Tetrachloroethylene (PCE)	5	ug/l	U
Toluene	5	ug/l	U
Trans 1,2-Dichloroethylene	5	ug/l	U
Trichloroethylene (TCE)	5	ug/l	U
Bis(2-ethylhexyl) phthalate	5	ug/l	U
Di-n-butyl phthalate	50	ug/l	U
Nitro Benzene	0.4	ug/l	U
Antimony, Total recoverable	3	ug/l	U
Arsenic, Total recoverable	50	ug/l	U
Barium, Total recoverable	2000	ug/l	U
Chromium, Hexavalent	100	ug/l	U
Lead, Total recoverable	50	ug/l	U
Iron, Total recoverable	600	ug/l	U
Manganese, Total recoverable	600	ug/l	138
Mercury	Not indicated	ug/l	U
Zinc	Not indicated	mg/l	NS
Nitrogen, Total (as N)	10	mg/l	6.1
Selenium, Total recoverable	40	ug/l	U
Solids, Total Dissolved	1000	mg/l	272
Chloride Ion	NL	mg/l	148
Cyanide	Not indicated	ug/l	U
Fluoride Ion	NL	mg/l	U
Sulfate Ion	NL	mg/l	18.8
1, 4-Dioxane	NL	ug/l	NS

J – Estimated value **U** – Analyzed but not detected **NL** – Monitor only **NS**– Not sampled
SPDES – State Pollutant Discharge Elimination System
Discharge limitations updates as per the water discharge permit.
Note: Parameters shaded in gray are analyzed quarterly with results generally being provided March, June, October, and December.

Table 7
Effluent pH and Temperature Readings

Date	pH (su)	Temp (°F)
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February Average	**--**	**--**

Note: Effluent readings inadvertently misplaced during project transfer to Ramboll.

Table 8
Plant Discharge Monthly Average pH

Month	pH(su)
Aug '19	6.56
Sept '19	7.45
Oct '19	6.86
Nov '19	6.88
Dec '19	6.84
Jan '20	6.63
Feb '20	6.75
Mar'20	6.74
Apr '20	6.65
May '20	6.8
June '20	6.8
July '20	6.9
Aug '20	6.8
Sept. '20	6.8
Oct. '20	6.95
Nov. '20	6.8
Dec '20	6.64
Jan '21	6.8
Feb '21	6.75
Mar '21	6.76
Apr '21	7.28
May '21	7.53
June '21	7.44
July '21	7.41
Aug '21	7.42
Sept '21	7.13
Oct '21	7.10
Nov '21	7.09
Dec'21	7.01
Jan '22	6.90
Feb '22	6.78

Plant Discharge Monthly Average pH Readings

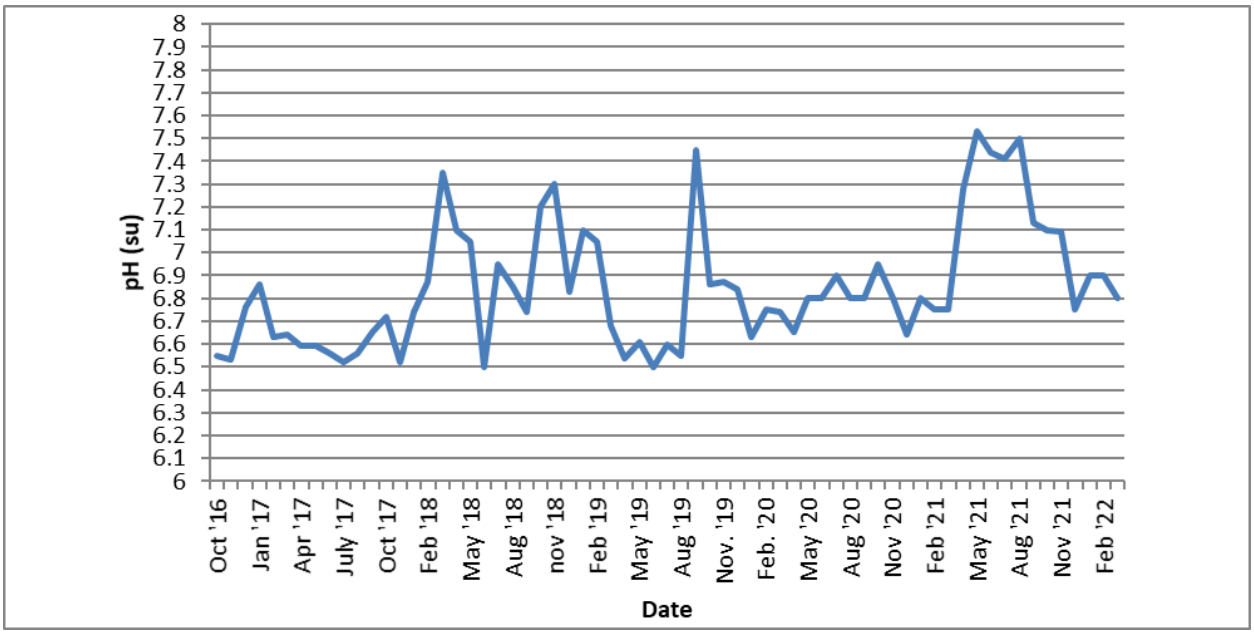

Table 9
AS Tower Air Monitoring Readings

Recorded Date	Port B (ppm)
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Note: Air monitoring readings inadvertently misplaced during project transfer to Ramboll.