

To: Honorable Mayor and City Councilors
From: Michael Spurgeon, City Manager
Date: May 28, 2021
Re: Notes to Council

1. STAFF REPORTS / ITEMS REQUIRING IMMEDIATE ATTENTION

- Utilities Department Monthly Report- April 2021

2. GENERAL CORRESPONDENCE / NOTIFICATION

- Recent Media Coverage

3. SPECIAL EVENTS / ACTIVITIES

Respectfully submitted

Michael Spurgeon

mb

Attachments



BROKEN ARROW

Where opportunity lives

SECTION 1 - STAFF REPORTS

To: Michael Spurgeon, City Manager
From: Charles Vokes, Utilities Director
Date: May 25, 2021
Re: Utilities Department Monthly Report – April 2021

	April 2021	April 2020
Water Treated, Purchased and Distributed		
Water Purchased from Tulsa	0.2 MG	0.7 MG
Water Produced at Verdigris WTP	<u>297.2 MG</u>	<u>272.5 MG</u>
Total	297.4 MG	273.2 MG
Wastewater Treated		
Lynn Lane Plant	177.5 MG	192.1 MG
Haikey Creek Plant flow from BA	<u>140.3 MG</u>	<u>150.6 MG</u>
Total	317.8 MG	342.7 MG
Haikey Creek Plant flow from Tulsa	202.8 MG	206.6 MG

LLWWTF Summary

David Handy, Plant Manager

Preventive Maintenance (18.0 person-hrs total)

1. Changed out filters on air make up unit at headworks (0.5 hour)
2. Tested chlorine leak detection sensors (0.5 hour)
3. Checked effluent flowmeter calibration (0.5 hour)
4. Weekly lubrication for influent channel screen (1 hour)
5. Cleared compactors of built up rags (1 hour)
6. Cleaned strainer on headworks non pot and repaired (0.5 hour)
7. Washed and dried three bio filters for head works (1 hour)
8. Performed quarterly lubrication of equipment and motors (4 hours)
9. Checked pumps in non-potable building (0.5 hour)
10. Repaired beam partition in chlorine room (1 hour)
11. Cleared rags off probes in oxidation ditches (1 hour)
12. Lubricated overhead door on belt press building (0.5 hour)
13. Cleaned strainers in bisulfite room (0.5 hour)
14. Cleaned east and west scum pits (1 hour)
15. Organized and sorted parts in maintenance shop (4 hours)
16. Installed four drain plugs in basement of headworks (0.5 hour)

Corrective Maintenance

1. Replaced motor on #1 grit pump

Other Maintenance

1. Changed out roll off dumpster in head works

Utilities Distribution/Collections Maintenance Summary
Water Distribution-Travis Schemonia, Water Supervisor
Preventive Maintenance

1. Line locates-2105
2. Valve truck crew exercised 195 valves for the month, bringing the total to 576 for 2021
3. Fire hydrants inspected-139, bringing the total to 485 for 2021
4. Fire hydrants painted-0
5. Fire hydrants greased/oiled-139

Corrective Maintenance

1. Meter leak repairs-2
2. Distribution main leak repaired-15
3. Curb stops replaced-13
4. Defective meters replaced-0
5. Water system service requests-57
6. Broken meter/valve boxes replaced-11
7. Cleaned and restored yards after water line repair-39
8. Fire hydrants repaired-0
9. Fire hydrants replaced-0
10. Service line breaks-18
11. After hours sewer calls-1
12. Water valves replaced-2

Other

1. New taps and meters-39
2. Water pressure tests-0
3. Service crossings installed-0
4. Assisted Meter Reading with Turn Ons/Offs-4
5. Water quality concerns-3
6. Moved meter on 111th St for street widening project
7. Lowered water line at Jackson Park for street widening project

Water Quality

Tim Nix-Water Quality Technician

Preventive Maintenance

1. Tested chlorine levels near auto flushers-19
2. Bac-T samples collected-101
3. Collected 2 chlorine samples (am/pm) daily-60 total
4. Distribution system-tests at 12 distribution locations and 5 water tower locations-144
5. Checked chlorine levels every Friday at 5 water towers-25
6. Flushed dead end lines at 25 locations once a month and 10 locations twice a month-136,657 gallons

Corrective Maintenance

1. Water quality concern calls at 12 locations-170,946 gallons flushed

Other

1. Total gallons flushed to improve water quality-estimated 4,597,728 gallons

Water Reclamation-David Marlow, Wastewater Collection Supervisor

Preventive Maintenance

1. CCTV inspections done-0
2. Routine station visits (29 lift stations and 4 booster stations)-364
3. Check valves/pumps cleaned at stations-13
4. Sewer line root cut-0

5. Sewer line locates-77
6. Sewer line cleaning-5,315 ft.
7. Lines smoked-0
8. Clean fog rods at lift stations-13
9. Clean wet wells-4

Corrective Maintenance

1. Service request calls-44
2. Sewer line blockages relieved-17
3. After hour calls-20
4. Manholes repaired-13
5. Sewer lines repaired/replaced/installed-93'
6. Sewer taps-5
7. Clean and restored yards after sewer line repairs-3
8. Sanitary Sewer Overflows (SSOs) reported to ODEQ-3
9. Sinkholes-2
10. Lift station repairs-
 - Shadow Trails-cleaned out clogged pump
 - South Park-high alarm; cleaned impellar and wet well, cleaned out clogged pump, replaced bypass pump
 - Stone Horse-cleaned vacuum breaker
 - Greens-replaced ARV hose, installed 2 VFD fans, adjusted wear plate #1
 - Berwick-cleaned impeller #3, installed new pressure gauge
 - Animal Shelter-installed 3" pump
 - Turnberry-force main was clogged, cleaned all check valves
 - Villas on the Greens-replaced breaker

Other

1. Assisted WWTP vacuuming out clarifier
2. Assisted Meter Reading vacuuming out a meter vault

Meter Reading-Derriell Bynum, Meter Reading Supervisor

Preventive Maintenance

1. Replace meters-12
2. Install Mach 10 meters-0
3. Replace meter lids-0

Corrective Maintenance

1. Replace defective AMR registers-14
2. Meter boxes replace-13
3. Replace AMR antenna-12
4. Construction meters rebuilt-0
5. Replace riser-0
6. Replace defective meter base-10
7. Replace stop-0

Other Maintenance

1. Meters read-39,885
2. Rereads/Leak Tests-80
3. Turn Ons for nonpayment-165
4. Turn Offs for nonpayment-167
5. New accounts-549
6. Finals-501
7. Pulled meters-0

8. Retrieve water use history from AMR and provide 90-day graph to customer-18 for a total of 84 for 2021
9. Place door hangers for bad checks-0
10. Misreads-9 for a total of 68 for 2021
11. Customer concerns-0
12. AMR Project-
 - Registers-441
 - Body-171
 - Replace meter box-4
 - AMR antenna-12

Utilities Construction-Tommy Kimbrough, Construction Supervisor

Preventive Maintenance

1. Garnett water line-installed 1580' of 8" C-900 water pipe, 80' of 12" casing, 3 fire hydrants and 3 taps
2. Ft. Worth water line-installed 505' of 6" C-900 water pipe and 3 taps
3. Urbana water line-installed 765' of 6" C-900 water pipe, 2 fire hydrants and 12 taps

Corrective Maintenance

1. None for this month

Other

1. None for this month

Verdigris WTP-Lou Fisher, Plant Manager

Preventive Maintenance (64.5 person-hrs total)

1. Tested eye wash / shower stations (5 hours)
2. Flushed hydrochloric and SBS water traps (2 hours)
3. Flushed permanganate, hydrochloric, SBS and brine containment areas (10 hours)
4. Installed markers around valves and mowing obstructions around plant property and painted bright orange (2 hours)
5. Cleaned out brine containment area and sump area (6 hours)
6. Flushed ACH pump 4 feed line to rapid mixer (1 hour)
7. Plumbed in new drain valve on SBS tank water trap (1 hour)
8. Bump tested and calibrated Ventis MX4 air monitors (1 hour)
9. Uploaded PSI programs to hypochlorite generator memory modules (2 hours)
10. Tested portable Honda generator (0.5 hours)
11. Cleaned and organized tools (12 hours)
12. Inspected hypochlorite generators, tested hydrogen sensors (10 hours)
13. Installed 2 refurbished cells on generator 3 (6 hours)
14. Inspected back flow preventers and rebuilt hypochlorite generator room back flow preventer (contractor, 6 hours)

Corrective Maintenance (121 person-hrs total)

1. Repaired 1" pvc on permanganate pump 3 influent line (4 hours)
2. Diagnosed permanganate pump 3 pressure switch gauge isolator (6 hours)
3. Diagnosed blower B cooling fan failure, removed fan (5 hours)
4. Installed new hypochlorite metering pump 3 VFD (3 hours)
5. Installed new pressure switch on permanganate pump 3 (2 hours)
6. Wired, tested and installed slide gate 3002 actuator (7 hours)
7. Changed out high bay light bulbs in high service (3 hours)
8. Plumbed new sump pump setup, installed in brine containment area (5 hours)
9. Diagnosed rack 7 issues, rebuilt rack 7 air pressure regulator (4 hours)

10. Replaced train 2, floc zone 1 sludge valve pins with stainless bolts (4 hours)
11. Replaced train 2, floc zone 2 sludge valve pins with stainless bolts (4 hours)
12. Repaired flow control valve, changed plc analog output card on east pre-treat basin flow control valve (5 hours)
13. Changed analog input card in plant plc cabinet slot 6 (2 hours)
14. Diagnosed train 6 floc VFD issues (4 hours)
15. Replaced Control board on HFS day tank Siemens hydro ranger 200 level transmitter (1 hour)
16. Replaced Control board on EQ basin Siemens hydro ranger 200 level transmitter (1 hour)
17. Replaced Control module on Endress & Hauser west pre-treatment flow meter (1 hour)
18. Replaced Allen Bradley 1756-IF16 analog input card in plant PLC cabinet (1 hour)
19. Diagnosed flocculator FLC-3016, FLC- 3017 and FLC-3018 auto/remote control issues (3 hours)
20. Diagnosed lightning storm related control issues (10 hours)
21. Replaced control board on NaOH day tank Siemens hydro ranger 200 level transmitter (1 hour)
22. Diagnosed auto control issue with ACH metering pump number 5 (2 hours)
23. Removed damaged handle and installed a bolt on the latch assembly for pre-treatment flow control valve vault fall protection (1 hour)
24. Worked on Watson Marlow 520u fluoride pump 2 installation and wiring (5 hours)
25. Diagnosed programming issues on ACH pump 5 and 8, corrected SCADA issues (3 hours)
26. Diagnosed west pre-treatment flow meter (2 hours)
27. Diagnosed fluoride pump 2 no run condition (3 hours)
28. Removed damaged Watson Marlow 720d, plumbed and wired in replacement 520du sodium hydroxide pump 2, tested operation (5 hours)
29. Installed photocell for west pre-treatment basin lights (3 hours)
30. Replaced analog output PLC card 1756-OF8 in PLC cabinet 100 (1 hour)
31. Installed 3 new analog cards in VFD FLC-3016, 3017, 3018 (3 hours)
32. Diagnosed high level beacon on decant station (1 hour)
33. Diagnosed Cummins generator 3 breaker (6 hours)
34. Located and labeled pole light breaker at high service (1 hour)
35. Changed out CIP drain pump flow switch (1 hour)
36. Removed hypochlorite generator 3 breaker (2 hours)
37. Installed new #2 sludge pump on west pretreatment sludge removal system (online 4/14, 6 hours)

Operator Preventive Maintenance (62.5 person-hrs total)

1. Scrubbed plates on train 5 and 6 (2 hour)
2. Flushed west pre-treatment permanganate vault (3 hours)
3. Inspected brine tank vent line (2 hours)
4. Cleaned trains 5 and 6 (14 hours)
5. Flushed settled turbidimeter Line (0.5 hours)
6. Inspected fire extinguishers (1 hour)
7. Completed CIPs on rack 1-10 (40 hours)

Operator Corrective Maintenance (2.5 person-hrs total)

1. Diagnosed chemical feed pump issues (2 hours)
2. Replaced ACH pump 4 inner hose (0.5 hours)

Other Maintenance

1. Performed grounds keeping duties
2. Cleaned and disinfected membrane building

Lynn Lane and Haikey Creek WWTP Industrial Pretreatment Program Summary

Lauren Kimbrough, Pretreatment Coordinator

Fats, Rags, Oil & Grease Program (FROG)-

Grease interceptor inspections

- 28 interceptors were inspected in April. Staff inspected manifests for interceptor maintenance, inspected interceptor and discussed best management practices with management.
- Facilities that have interceptors that need immediate maintenance are being asked to have maintenance performed within 15 days.
- 11 facilities were asked to perform maintenance.

Oil/Water Separator/Sand Interceptor inspections

- 11 car wash inspections were performed in April. Staff inspected manifests for oil/water separator maintenance and waste hauling, inspected interceptor, and discussed best management practices with management.
- Facilities that have separators/interceptors that need immediate maintenance are being asked to have maintenance performed within 15 days.
- 2 facilities were asked to perform maintenance.

Industrial Pretreatment:

Self-Monitoring Laboratory reports received and reviewed for compliance

- Blue Bell – No deficiencies were noted. Monthly surcharges for conventional pollutants above residential thresholds were calculated in the amount of \$3,868.22. Surcharges have been submitted to the Finance Department for billing.
- Unifirst –No deficiencies were noted. Monthly surcharges for conventional pollutants above residential thresholds were calculated in the amount of \$1,708.34 and submitted to the Finance Department for billing.
- Comgraphx/Communication Graphics – No deficiencies were noted. Monthly surcharges for conventional pollutants above residential thresholds were calculated in the amount of \$116.91. Surcharges have been submitted to the Finance Department for billing.
- Russelectric – quarterly sampling was not performed for the paint line, location 003. A notice of violation was issued informing Russelectric that they are in “Significant Non-compliance,” and will be published as such in the Tulsa World immediately following the close of this pretreatment year, in October 2021. A report will also be submitted to the Department of Environmental Quality with notification of this status.
- CSI Aerospace-A nickel violation was reported for location 002. A notice of violation was issued, and a retest was required.
- Paccar Winch – No deficiencies were noted.

Inspections

Federal and State Pretreatment regulations require City of Broken Arrow to perform a facility inspection and sample the process waste stream at every permitted facility a minimum of one time per year. The sampling is done in addition to the self-monitoring that is required by wastewater discharge permits. A pre-inspection file review is performed to evaluate previous year inspections, permit renewal status, violations, accidental spill prevention plan details, and site details. Automatic sampling equipment is used to perform 24-hour composite samples per EPA regulation. pH and temperature analyses are performed onsite. Samples are collected by city staff for all other required parameter and are transported to a state certified laboratory for analysis. A bill will be issued to each facility, by the Finance Department, for reimbursement of laboratory charges. The following facilities were inspected and sampled in April:

- Unifirst – no deficiencies were noted.
- Broken Arrow Powder Coating – no deficiencies were noted.
- Solar Turbines – No deficiencies were noted.
- CSI Aerospace – a zinc violation was detected on the sample for location 002.
A retest will be required, and a notice of violation issued.



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SECTION 2 - GENERAL



INTEROFFICE MEMO

To: Honorable Mayor and City Councilors
From: T.J. Gerlach, Communications Coordinator
Date: May 28, 2021
Re: Recent Media Coverage

Below are some links to news coverage in Broken Arrow this week.

<https://www.ktul.com/news/local/ba-city-council-says-the-veterans-center-is-almost-complete>

https://tulsaworld.com/news/local/memorial-day-weekend-broken-arrow-cemetery-event-returns-tulas-memorial-park-waiting-till-next-year/article_d161d6a0-bd73-11eb-8efb-b7684b62be24.html#tracking-source=home-top-story-1

Respectfully submitted,

T.J. Gerlach



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SECTION 3 - SPECIAL EVENTS