

To:

Honorable Mayor and City Councilors

From:

Michael Spurgeon, City Manager

Date:

June 30, 2017

Re:

Notes to Council

# 1. STAFF REPORTS / ITEMS REQUIRING IMMEDIATE ATTENTION

Utilities Department Monthly Report – May 2017

### 2. GENERAL CORRESPONDENCE / NOTIFICATION

• Streets and Stormwater – Projects Report

### 3. SPECIAL EVENTS / ACTIVITIES

N/A

Respectfully submitted,

Michael L. Spurgeon

gak

Attachments

1. STAFF R	EPORTS / ITEM	S REQUIRIN	G IMMEDIATE	ATTENTION
			BROKEN A Where opportun	



### INTEROFFICE MEMO

To:

Michael Spurgeon, City Manager

From:

Anthony Daniel, Utilities Director

Date:

June 30, 2017

Re:

Utilities Department Monthly Report - May 2017

Water Treated, Purchased and Distributed	May 2017	May 2016
Water Purchased from Tulsa	0.7 MG	0.0 MG
Water – Produced at Verdigris WTP	340.0 MG	335.9 MG
Total	340.7 MG	335.9 MG
Wastewater Treated Lynn Lane Plant	153.0 MG	140.2 MG
Haikey Creek Plant flow from BA	185.6 MG	152.2 MG
Haikey Creek Plant flow from Tulsa	228.0 MG	217.9 MG

# LLWWTP Maintenance Summary-

# **David Handy**

- 1. New radio installed in RAS Building as part of the plant SCADA.
- 2. New chlorine analyzer pump installed with pressure gauge, started new Chlorine Analyzer (CL17).
- 3. Motor starter replaced and new vacuum pump installed/wired at Southpark Lift Station.
- 4. Alarm light repaired at Indian Springs Lift Station (Golf Course).
- 5. New outdoor light fixture installed at Adams Creek NW Lift Station.
- 6. New keypads and LCD screens installed on standby Generators at LLWWTP.
- 7. North Belt Press Feed pump rebuilt and back online.
- 8. Repaired Chlorine Regulator #1 and back online.
- 9. Installed new blower in Grit Building.
- 10. Grit Classifier repaired and back online with East Grit Pump.
- 11. Conveyor motors greased and oil added to Conveyor #3 gearbox in Sludge Transport Building.
- 12. Seamed tear on top belt on West Beltpress.
- 13. Repaired water leak in Sodium Bisulfite Room.
- 14. Replaced grease pump on #3 Screw pump at Headworks.
- 15. Replaced seal on #2 Screw pump Grease Pump.
- 16. Repaired pressure switch on South Beltpress Feed Pump.
- 17. Changed hydraulic oil on West Beltpress.
- 18. Received new pickup Unit #1763 to replace Unit #0352.
- 19. Received new tractor Unit #1745.
- 20. Ongoing Plant grounds maintenance.
- 21. Implemented new QA/QC program with assistance from Accurate Labs/Stillwater, OK.

- 22. Attended Pre-Bid meeting for Digester Rehabilitation Project for LLWWTP.
- 23. Attended OSHA 30 training in Tulsa.

# Lynn Lane and Haikey Creek WWTP Industrial Pretreatment Program Summary-Lauren Wilson

### Fats, Oil & Grease (FOG) Program Activities

### 1. Food Handling Establishment Inspections:

City pretreatment staff performed 101 food handling establishment inspections/rechecks in the month of May. Staff inspected manifests for grease interceptor maintenance, inspected the interceptors, and discussed best management practices with management. Establishments with improperly maintained interceptors with excessive grease accumulation were asked to have it pumped immediately. Re-checks were done for non-compliance issues. There are 273 grease interceptors in use in Broken Arrow, 8 were given notices of non-compliance this month.

# 2. FOG Program Administration & Sanitary Sewer Overflows (SSO) Response:

- Pretreatment staff have been going door to door in neighborhoods that have greaserelated sanitary sewer overflows to hand out cooking oil recycle bottles, recycling instructions, and FOG pollution prevention brochures. We visited 240 homes this month.
- Broken Arrow pretreatment staff was asked to participate in a series of FOG seminars hosted by DEQ. The seminars are meant to assist smaller communities in developing procedures to control FOG discharges in their collection system. The 2<sup>nd</sup> seminar was on May 25<sup>th</sup> at the Heart of Oklahoma Convention Center in Shawnee. Broken Arrow staff presented the steps that went into starting Broken Arrow's program such as; an initial survey, database development, paper file system, grease interceptor maintenance inspection form, best management practice development and SSO tracking procedures.

### **Industrial Pretreatment Activities:**

### 1. Industrial Pretreatment Program Administration:

• A file review of Significant Industrial Users (SIU) in the Haikey Creek Wastewater Treatment Basin was performed as a part of the Oklahoma Pollutant Discharge Elimination System Permit application process. Three years of laboratory analysis/flow data was compiled to get an average flow and maximum pollutant concentration for each SIU. The data was submitted to City of Tulsa along with a three-year comparison of the Haikey Creek Wastewater Treatment Plant influent and effluent priority pollutant analytical and the Oklahoma Water Quality Limits for the Middle Arkansas River receiving stream.

### 2. Compliance monitoring reports and laboratory analysis:

- Unifirst compliance monitoring report and laboratory analysis was received and reviewed. No deficiencies were noted. Surcharges were calculated in the amount of \$4,464.47 and sent to finance for billing.
- Haikey Creek Wastewater Treatment Plant influent and effluent priority pollutant scan laboratory analytical results were received and reviewed. No deficiencies were noted.
- Blue Bell compliance monitoring report and laboratory analysis were received and reviewed. There were two daily bio-chemical oxygen demand (BOD) violations, a

- monthly average BOD violation, a daily total suspended solids (TSS) violation, and a reported spill of 1200 gallons of ice cream mix on 5/29/17.
- Broken Arrow Powder Coating compliance monitoring report and laboratory analysis were received and reviewed. The report showed a zinc result of 5.73 mg/L, which is 1.19 times over the daily limit of 2.61 mg/L. The City of Broken Arrow enforcement response plan calls for a notice of violation, which was issued on May 22<sup>nd</sup>. Broken Arrow Powder Coating was asked to analyze the process waste stream for zinc for three additional days in May. There was no monthly average violation and Broken Arrow Powder Coating has been asked to resume their normal sampling schedule.

### 3. Industrial User Survey Inspections:

City pretreatment staff inspected 14 industrial sewer users in the month of May as a part of the 5-year, comprehensive survey that is required by DEQ. The purpose of the survey is to determine compliance with the sewer use/pretreatment requirements that are outlined in Chapter 24, Article V of the Broken Arrow Municipal Code. Staff is looking at industrial processes that have waste streams to determine if a permit is necessary and are focusing on chemical storage as well and hazardous/waste disposal manifests. The information gathered will be entered into the industrial user database.

# UTILITIES DISTRIBUTION/COLLECTIONS MAINTENANCE SUMMARY WATER DISTRIBUTION – Jerry Hanewinkel

- 1. New Taps and Meters set-43
- 2. Responded to 558 Call Okie Line Locates
- 3. Replaced 86 meters
- 4. Repaired or Replaced 30 meter boxes and valve boxes
- 5. Meter leak repairs done-8
- 6. Responded to 37 water leak calls
- 7. Distribution Main Leaks repaired-16
- 8. Replaced 16 Curb Stops
- 9. Valve truck crew exercised 73 valves for the month, bringing the total to 442 for 2017
- 10. Installed 1 service crossings
- 11. Responded to 39 water system service requests
- 12. Fire Hydrants Repaired-39
- 13. Fire Hydrants Replaced-2
- 14. Cleaned and restored 62 yards after water line repairs were done
- 15. Flushed 46 main lines for water quality issues
- 16. Repaired 2 isolation valve
- 17. Checked 20 auto flushers
- 18. Auto Flushers Reprogrammed-3

### **SEWER COLLECTION- David Marlow**

- 1. Service requests calls-72
- 2. Sewer line locates done-119
- 3. Sewer line blockages-25
- 4. Stand-by and night crew responded to 25 sewer calls
- 5. Manholes cleaned /raised/repaired-6
- 6. Sewer line cleaned-2,200 ft.
- 7. CCTV 240 ft. to locate problems/defects in the sewer line as a follow up to the SSO
- 8. Sewer lines root cut-400 ft.

- 9. Sinkholes inspected/repaired-1
- 10. Clean ups done at 19 locations after repairs to sewer lines were done
- 11. Sanitary Sewer Overflows (SSO's) reported to ODEQ for the month of May-16

### BOOSTER AND LIFT STATIONS

- 1. Routine station visits (31 lift stations and 4 booster stations)-467
- 2. Check valves/pumps cleaned-10
- 3. Wet wells cleaned-2
- 4. Grounds keeping (cut grass/trim trees/weed & pest control)-11
- 5. Booster station emergency calls-1
- 6. Lift station repairs done-13
  - Greens-replaced light bulbs
  - 209<sup>th</sup>-pulled bypass hose, cleaned and re-primed #2 pump
  - Greens-replaced belt on vent fan
  - Greens-flap was stuck, pulled back plate from #3 pump
  - Windsor-replaced filter on 2 pumps
  - Adams Creek NW-repaired road to station
  - Homeland-replaced vac bowl ball and cleaned 3 way valve
  - ISSC-changed flapper valve on #1 pump
  - Battle Creek-AEI worked on VFD and transducer
  - ISSC-changed bypass line on #2 pump
  - Old Adams Creek-installed seals on one pump
  - South Park South-pulled #2 pump, trash, and alarm light not working. Light was repaired.

# **METER READING - Derriel Bynum**

- 1. Replaced Meters-87
- 2. Placed Door Hangers for bad checks-70
- 3. Turn Ons for nonpayment-253
- 4. Turn Offs for nonpayment-287
- 5. New Accounts-519
- 6. Finals-537
- 7. Read 37,715 Meters for the month of May 2017
- 8. Construction Meters Set-6
- 9. UME Chambers replaced on large meters-55
- 10. Rereads/Leak Tests-182
- 11. Meter boxes replaced-13
- 12. Misreads-62 verified
- 13. Met with residents to discuss their high bill/water usage concerns-6
- 14. Meters pulled-2
- 15. Meter resetter installed-12

### AMR PROJECT-

- •Retrieved water use history from 2 AMR radio devices and provided the 90 day graphs to the customers.
- Total number of AMR meters installed to date-9,510
- AMR register only installed-242
- AMR register with meter installed-112

# **UTILITIES CONSTRUCTION – Tommy Kimbrough**

1. Water Line Project (WL1701)-installed 25' of C-900 water pipe

- -transferred 11 service crossings and 6 main line services to new main
- -connected inline/branch valve boxes
- -installed 16 taps & meter boxes
- -installed 100' of 18" dual wall pipe
- -installed 11 1/2 pallets of sod
- 2. Water Line Project (WL1606)-installed 1/2 pallet of sod
- 3. 1501 N Elm Pl-repaired manhole that contractor damaged during grading work
- 4. Elm & Knoxville-welded manhole lid to ring
- 5. 10232 S Lynn Lane Rd-repaired damaged sprinkler line from the installation of the Kirk water line project

### **WATER QUALITY- Diana Flora**

- 1. Flushed dead end water lines at 39 locations.
- 2. Tested chlorine levels near auto flushers to verify all are working, 18 total.
- 3. 13 dirty water calls, 180,015 gallons of water flushed to improve water quality.
- 4. Collected 100 Bac-T samples and 2 chlorine (am/pm) daily for the month.
- 5. Distribution system-11 parameter testing at 13 locations every two weeks.
- 6. Total gallons flushed to improve water quality in May; 4,255,740 gallons.

## **VERDIGRIS WTP – Jimmy Helms**

- 1. Replaced hose and feed line on algaecide pump
- 2. Replaced hose on sodium permanganate pump
- 3. Installed new brine pump in generator room
- 4. Installed new brine flow meter in generator room
- 5. Installed new lights in CIP room
- 6. Installed new transducer on 71st St. tower
- 7. Changed oil on high service pumps
- 8. Changed oil on raw water pumps
- 9. Installed new HMI screen in the Pall SCADA cabinet
- 10. Installed new display puck on the sludge flow meter
- 11. Installed new nova 200 cell for the chlorine generator slave #2
- 12. Reconfigured the brine speed setting on slave #2
- 13. Re calibrated the EQ basin level indicator
- 14. Cleaned the filtrate water, laser turbidimeter
- 15. Replaced sump pump in chlorine containment area
- 16. Replaced 2" in. bypass valve and O-rings on chlorine generator slave #2
- 17. Installed a separate RMI/RFI filter (filter transient voltage) to pre-treatment train #1 PLC
- 18. Replaced two 1" in. valves on sodium hydroxide feed panel
- 19. Lubed and tightened up the chain on the front gate
- 20. Greased Flocculators on train #4
- 21. Changed the oil and air filters on the air compressors in high service pump building
- 22. Repaired 2 leaks on sodium hydroxide transfer pump pressure gauge fittings
- 23. Repaired Sodium Hydroxide Y-strainer leak on feed panel
- 24. Replaced fiberglass flange and recoated deteriorated fiberglass inside east sodium hypochlorite bulk tank
- 25. Conducted tour of water plant for councilor Debra Wimpee

- 26. Conducted safety meeting "Safe Chemical Unloading"
- 27. Attended pre-construction meeting for water plant residuals disposal
- 28. Attended kick-off meeting for water plant algaecide improvements/electrical repairs

# **ASSISTANT DIRECTOR-Barney Campbell**

### **MEETINGS**

- Utilities Staff meetings
- Crossing at Lynn Lane Phase I
- East Haskell Addition Final Review
- Sewer Overflow onsite at BA High School
- QT Easements and Closures (71<sup>st</sup> & 193<sup>rd</sup>)
- 121 W College St sewer line
- QT preliminary plat
- New Council Member onboarding
- Special Council Meeting FY2018 Budget Hearing
- Preconstruction meeting for 37<sup>th</sup> St widening (51<sup>st</sup> to 61<sup>st</sup>)
- Meeting with Legal on fire hydrant leak

### **DEVELOPMENT PLAN REVIEWS**

- Creekside Apartment Homes Phase II
- Dunkin Donuts
- Stone Horse II
- QT Store# 0033
- Kum & Go 1866 Addition (51<sup>st</sup> & 145<sup>th</sup>)

#### IN HOUSE PLAN REVIEW

- Jasper-Olive to Gardenia
- Kenwood Hills high pressure plane

# **DIRECTOR'S REPORT-Anthony Daniel**

- 1. Attended the weekly City Manager's leadership meetings.
- 2. Attended the weekly Asst. City Manager of Operations staff meetings.
- 3. Conducted the weekly Utilities Department staff meetings.
- 4. Attended the scheduled City Council and BAMA meetings.
- 5. Attended the monthly RMUA operations committee meeting with Tulsa staff at HCWWTP to review O & M of the plant.
- 6. Met with Asst. City Manager of Operations and city staff to discuss the water line issue at the Crossings at Lynn Lane (Ninety One) Phase I.
- 7. Participated in the review meeting with E & C project engineer and consultant to review the proposed sewer improvements at East Haskell subdivision.
- 8. Participated in the review meeting with E & C staff to review the proposed water line improvements to replace Kenwood Hills booster station.
- 9. Attended the bimonthly Projects Coordination meeting.
- 10. Met with Asst. City Manager of Operations and Finance to identify funding for FY17 RMUA O & M CIP funding.
- 11. Attended the preconstruction meeting for the WTP lagoon cleaning project.

- 12. Attended the bid opening for the storage tanks mixing project.
- 13. Attended the WL1609 24" water line extension project meeting with E & C staff.
- 14. Participated in a phone hearing with HR and the OK Employment office.
- 15. Met with BAPS construction and maintenance staff on the sewer overflow (SSO) occurrence at the manhole on school property.
- 16. Met with city staff and developer about water and sewer service for a proposed project along W. College St.
- 17. Met with the Director of Emergency Management regarding the Multi Hazard Mitigation Plan.
- 18. Met with WWTP employees as part of a formal investigation.
- 19. Onboarding with new Council Member Debra Wimpee.
- 20. Participated in the six weeks Tuesday evening web based continuing education on "Preventive and Predictive Maintenance" offered by Kansas State University.
- 21. Attended the APWA-OWEA annual conference in OKC.
- 22. Organized a tour of two lift stations with a contractor to estimate costs for repair projects at Adams Creek NW and Indian Springs lift stations.
- 23. Met with HDR Engineers and E & C staff at WTP for the scoping meeting for the Copper Sulfate feed system.

**FUTURE PROJECT TO DO LIST: NONE** 

	. CORRESPONDENCE / N	
• ,		( )             ( ` \





To: Jennifer Hooks

From: Gwen Hicks

CC: Steve Arant, Kenneth Schwab, Krista Flasch, Gail Kirk

Subject: Streets and Stormwater Department

Date: June 30, 2017

Please include this item in your notes to council for the next meeting:

⇒ Street Division has completed the resurfacing of Midway Road (257<sup>th</sup> East Avenue), from Kenosha (71<sup>st</sup>) Street to Houston (81<sup>st</sup>) Street. This work completes the 5<sup>th</sup> mile of the 2014 GO Bond, Resurface 7 miles of 2-lane arterial streets.

The remaining two miles of street resurfacing under this bond project cannot occur until the next bond sale that is scheduled to occur in November 2017. The resurfacing of these two miles, Florence (Aspen to Elm) and Jasper (Elm to Lynn Lane) will be scheduled to be started/completed during April/June 2018 timeframe.

- ⇒ The next major asphalt project to begin work will be the resurfacing of the Aspen Creek Subdivision. This work will start about July 10<sup>th</sup> and be completed in about 3-4 weeks. This project is a part of the 2014 GO Bond program.
- ⇒ Stormwater Division has started the concrete repair work in Central Park Estates/Plaza subdivisions which is a part of the 2014 GO Bond program. At this time a completion date cannot be projected due to other priorities that may influence the completion of this work.
- ⇒ Concrete repair of streets in the 6100 Center is ongoing.
- ⇒ Demolition of house (Hamilton Property) located in the 500 block of New Orleans will occur during the week of July 3, 2017.