The City of Durant encourages participation from all its citizens. If participation at any public meeting is not possible due to a disability, notification to the City Clerk at least 48 hours prior to the scheduled meeting is encouraged in order to make the necessary accommodations. The City of Durant may waive the 48-hour rule if interpreters for the deaf (signing) or translation services for limited English proficient (LEP) individuals are not the necessary accommodation.

THE DURANT CITY UTILITIES AUTHORITY / DCUA

6:00 PM **Roscoe J. Hatfield Council Chambers, 300 West Evergreen, Durant, Oklahoma** **November 13, 2018**

AGENDA

DURANT CITY HALL
300 W. EVERGREEN, DURANT, OK
ROSCOE J. HATFIELD COUNCIL CHAMBERS

CALL TO ORDER

ROLL CALL

ORDER OF BUSINESS

1. Consent Items

To help streamline meetings and allow the focus to be on other items requiring strategic thought, the "Consent Items" portion of the agenda groups the routine, procedural, and self-explanatory non-controversial items together. These items are voted on in a single motion (one vote). However, any Council member requesting further information on a specific item thus removes it from the "Consent Items" section for individual attention and separate vote.

a. Consider Approval of Regular Meeting Minutes of October 9, 2018

b. Consider Acknowledging Receipt of Permit for Fluoride Treatment System Upgrade from Oklahoma Department of Environmental Quality (ODEQ) to be Installed at our Water Treatment Plant

2. Consider Items Removed from Consent

3. Information Items

a. Landfill Information & Reports - October 2018

b. Solid Waste Department Collection Monthly Report - October 2018

c. Utilities Department Monthly Report - October 2018

d. Utility Line Maintenance Report- October 2018

e. Waste Water Treatment Plant and Lab Monthly Report - October 2018

f. Water Treatment Plant Monthly Report - October 2018

4. Administration

a. Consider Approval of Utility Project Agreement with Ameresco for Oversight, Coordination, and Management of Automated Meter Reading System Project, or take any other appropriate action

b. Consider Authorizing Staff to Move Forward with an Automated Meter Reading to Include the Necessary Infrastructure, Bidding for Contractors, Financing Options, and Recognize the Neptune Mach 10 as the Selected Meter, or Take Any Other Appropriate Action

ADJOURNMENT

CERTIFICATE

This is to certify that in conformity with the Oklahoma Open Meeting Act, public notice of the date, time and place of this meeting was filed with the City Clerk of Durant on the 14th day of November, 2017 and that an agenda of said meeting was posted at the place of such meeting at 4:55 p.m. on the 9th day of November, 2018.

_____

Cynthia J. Price, City of Durant

Agenda Item: 1.a.

The City of Durant

Office of City Clerk

Memorandum

Date: 10/26/2018
To: Utilities Authority
From: Cynthia J. Price, City Clerk
Re: Consider Approval of Regular Meeting Minutes of October 9, 2018

Council Information / Action Requested

Approval of Regular Meeting Minutes of October 9, 2018

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
Regular Meeting Minutes of October 9, 2018	Exhibit	10/26/2018

This is to certify that in conformity with the Oklahoma Open Meeting Act, public notice of the date, time and place of this meeting was filed with the City Clerk of Durant on the 14th day of November, 2017 and that an agenda of said meeting was posted at the place of such meeting at 4:52 p.m. on the 5th day of October, 2018.

MINUTES OF THE REGULAR SCHEDULED MEETING OF THE DURANT CITY UTILITIES AUTHORITY OF October 9, 2018 AT 6:00 PM, Roscoe J. Hatfield Council Chambers, 300 West Evergreen, Durant, Oklahoma

CALL TO ORDER

Chairman Tomlinson called the meeting to order at 7:42 p.m.

ROLL CALL

Present: Trustee Oden Grube
Trustee Mike Dills
Trustee Destry Hawthorne
Vice Chairman Chad Hitchcock
Chairman Jerry Tomlinson

City Attorney Tom Marcum
City Manager Tim Rundel
City Clerk Cynthia J. Price

Absent: None

(*denotes partial attendance)

Chairman Tomlinson declared a quorum.

1. Consent Items

To help streamline meetings and allow the focus to be on other items requiring strategic thought, the "Consent Items" portion of the agenda groups the routine, procedural, and self-explanatory non-controversial items together. These items are voted on in a single motion (one vote). However, any Council member requesting further information on a specific item thus removes it from the "Consent Items" section for individual attention and separate vote.

a. Consider Approval of Regular Meeting Minutes of September 11, 2018

Approved

Motion was made by Chad Hitchcock and seconded by Destry Hawthorne to approve consent item as presented.

Motion Passed with the following vote:

Ayes: Dills, Grube, Hawthorne, Hitchcock, Tomlinson

2. Consideration Items Removed from Consent

3. Administration

4. Information Items

a. Landfill Information & Reports - September 2018

b. Solid Waste Collection Monthly Report - September 2018

c. Utility Department Monthly Report - September 2018

d. Utility Line Maintenance Report- September 2018

e. Waste Water Treatment Plant and Lab Monthly Report - September 2018

f. Water Treatment Plant Monthly Operation Reports - September 2018

Adjournment

Motion was made by Chad Hitchcock and seconded by Destry Hawthorne to adjourn meeting.

Motion Passed with the following vote:

Ayes: Dills, Grube, Hawthorne, Hitchcock, Tomlinson

Agenda Item: 1.b.

The City of Durant

Office of the Water Treatment Plant

Memorandum

Date:	11/1/2018
To:	Utilities Authority
From:	Phillip Hightower
Re:	Consider Acknowledging Receipt of Permit for Fluoride Treatment System Upgrade from Oklahoma Department of Environmental Quality (ODEQ) to be Installed at our Water Treatment Plant

ODEQ now requires that the Utility Authority make a public acknowledgment of the receipt of all permits granted to the City for Infrastructure installation or upgrade. The Permit #WT000007180561 from ODEQ is to consrtuct our new facility for our Fluoride Treatment System at the Water Treatment Plant. It is a new requirement that permit's must be approved by the Authority and entered in the agenda minutes for public record.

Council Information / Action Requested

Acknowledge receipt of the permit.

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
ODEQ Permit	Cover Memo	11/1/2018

SCOTT A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

MARY FALLIN
Governor

August 22, 2018

Mr. Jerry L. Tomlinson, Mayor
City of Durant
P. O. Box 578
Durant, Oklahoma 74702-0578

Re: Permit No. WT000007180561
Water Treatment Plant Fluoride System Improvements
PWSID No. 1010601

Dear Mr. Tomlinson:

Enclosed is Permit No. WT000007180561 for the construction of chemical building and fluoride system and all appurtenances to serve the City of Durant, Bryan County, Oklahoma.

The project authorized by this permit should be constructed in accordance with the plans approved by this Department on August 22, 2018. Any deviations from the approved plans and specifications affecting capacity, flow or operation of units must be approved, in writing, by the Department before changes are made.

Receipt of this permit should be noted in the minutes of the next regular meeting of the City of Durant, after which it should be made a matter of permanent record.

We are returning one (1) set of the approved plans to you, one set (1) to your engineer and retaining one (1) set for our files.

Respectfully,

Wendy S. Sheets

Wendy S. Sheets, E.I.
Construction Permit Section
Water Quality Division

WSS/RC/ag

Enclosure

c: Jeff Brents, Regional Manager, DEQ
DURANT DEQ OFFICE
Brandon Wall PE, Wall Engineering, LLC

SCOTT A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

MARY FALLIN
Governor

PERMIT No. WT000007180561

WATER TREATMENT

PWSID No. 1010601

PERMIT TO CONSTRUCT

August 22, 2018

Pursuant to O.S. 27A 2-6-304, the City of Durant is hereby granted this Tier I Permit to construct chemical building and fluoride system and all appurtenances to serve the Water Treatment Plant, located in Section 10, T-6-S, R-9-E, Bryan County, Oklahoma, in accordance with the plans approved on August 22, 2018.

Sludge will be disposed of in accordance with applicable rules and regulations regarding the disposal of waste sludges.

By acceptance of this permit, the permittee agrees to operate and maintain the facility in accordance with the Public Water Supply Operation rules (OAC 252:631), and to comply with the State Certification laws, Title 59, Section 1101-1116 O.S. and the rules and regulations adopted thereunder regarding the requirement for certified operators.

This permit is issued subject to the following provisions and conditions.

1) That the recipient of the permit is responsible that the project receive supervision and inspection by competent and qualified personnel.

2) That construction of all phases of the project will be started within one year of the date of approval or the phases not under construction will be resubmitted for approval as a new project.

3) That no significant information necessary for a proper evaluation of the project has been omitted or no invalid information has been presented in applying for the permit.

4) That the Oklahoma Department of Environmental Quality shall be kept informed on occurrences which may affect the eventual performance of the works or that will unduly delay the progress of the project.

SCOTT A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

MARY FALLIN
Governor

PERMIT No. WT000007180561

WATER TREATMENT

PWSID No. 1010601

PERMIT TO CONSTRUCT

5) That the issuing of this permit does not relieve the responsible parties from any damage which may accrue as the result of the location and operation of the plant in this area.

6) That before placing this facility into service, at least two samples of the water, taken on different days, shall be tested for bacteria to show that it is safe for drinking purposes.

7) That any deviations from approved plans or specifications affecting capacity, flow or operation of units must be approved by the Department before any such deviations are made in the construction of this project.

8) That the water leaving the plant will be non-corrosive as determined by a calcium carbonate saturation index (langelier index), and the water shall contain at least 1.0 mg/l free chlorine or 2.0 mg/l of combined chlorine.

9) The issuance of this permit does not relieve the responsible parties of any obligations or liabilities which the permittee may be under pursuant to prior enforcement action taken by the Department.

10) That the permittee is required to inform the developer/builder that a DEQ Storm Water Construction Permit is required for a construction site that will disturb one (1) acre or more in accordance with OPDES, 27A O.S. 2-6-201 et seq. For information or a copy of the GENERAL PERMIT (OKR10) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES, Notice of Intent (NOI) form, Notice of Termination (NOT) form, or guidance on preparation of a Pollution Prevention Plan, contact the Storm Water Unit of the Water Quality Division at P.O. Box 1677, Oklahoma City, OK 73101-1677 or by phone at (405) 702-8100.

Failure to appeal the conditions of this permit in writing within 30 days from the date of issue will constitute acceptance of the permit and all conditions or provisions.

Rocky Chen, P.E., Engineering Manager, Construction Permit Section
Water Quality Division WQS

Agenda Item: 3.a.

The City of Durant

Solid Waste Landfill

Memorandum

Date: 11/1/2018
To: Utilities Authority
From: Kenny Cooper, Supervisor, Solid Waste Landfill
Re: Landfill Information & Reports - October 2018

Council Information / Action Requested

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
October 2018 Project Report	Cover Memo	11/1/2018
October 2018 DEQ Report	Cover Memo	11/1/2018

THE CITY OF DURANT
Office of the Solid Waste Superintendent

DURANT
· OKLAHOMA ·

SOLID WASTE DISPOSAL PROJECTS SCHEDULE
October 2018

A. **Work Completed for October:**

1. Covered C & D Site
2. Hauled MSW To SORD
3. picked up 304 rolloff's & 6 delivered

B. **Work Planned For OCTOBER:**

1. Continue Covering C&D site
2. Have new C&D cell 10C inspected and approved
3. Haul MSW To SORD
4. Continue Picking up, Delivering

C. **Work Planned For Jan. '18 – Dec. '18:** **Approx. Start – Finish Date:**

1. Haul trash to Ardmore 1-2018 thru 12-2018

D. **Projects Planned And Requested For Authorization:**

1. None.

1620 Blanchard Rd. • Durant, Oklahoma 74701 • (580) 920-2579 • Fax (580) 924-8344
www.durant.org

OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY

MONTHLY REPORT FOR SOLID WASTE DISPOSAL FACILITIES

(Please see instructions prior to completing this form)
Due by the 10th of the month following the reporting month

Administrative Services
Accounts Receivable
P. O. Box 2036
Oklahoma City, OK 73101-2036

Report month/year: Oct.18

Facility Name: CITY OF DURANT C/D LANDFILL
Mailing Address: PO BOX 578
DURANT, OK 74702-0578

Permit Number: 3507001

Phone Number: 580-931-6606

Total # of Days open: 27

COMPLETE SECTIONS 5-10 ONLY IF SCALES GO DOWN

DAY	(1) Total weight accepted (tons)	(2) Weight which is reused or recycled in accordance with facility permit (tons)	(3) Weight accepted from a DEQ approved emergency or special event (tons)	(4) Weight accepted from large industrial waste generators with DEQ exemption certificate (tons)	(5) Time scales placed out of service	(6) Time scales placed into service	(7) Total volume accepted (yd3)	(8) Volume which is reused or recycled in accordance with facility permit (yd3)	(9) Volume accepted from a DEQ approved emergency or special event (yd3)	(10) Volume accepted from large industrial waste generators with DEQ exemption certificate (yd3)
1	267.47									
2	163.83									
3	165.45									
4	222.38									
5	180.51									
6	27.13									
7										
8	120.86									
9	105.4									
10	97.1									
11	90.82									
12	113.03									
13	21.42									
14										
15	132.28									
16	108.19									
17	140.9									
18	99.83									
19	143.72									
20	10.76									
21										
22	185.64									
23	259.86									
24	174.97									
25	114.61									
26	181.96									
27	19.74									
28										
29	200.55									
30	198.79									
31	106.35									
Total	3653.55	0	0	0	0	0	0	0	0	0

I hereby certify that the information reported above is accurate and correct to the best of my knowledge and includes all solid waste received at this facility.

Signature of authorized agent: Kenneth Cooper Phone #: 580-924-8358 Date: 11-1-18

Agenda Item: 3.b.

The City of Durant

Office of the Solid Waste Department

Memorandum

Date: 10/31/2018
To: Utilities Authority
From: Albert Pierce, Superintendent, Solid Waste Department
Re: Solid Waste Department Collection Monthly Report - October 2018

Council Information / Action Requested

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
Solid Waste Department Collection Monthly Report - October 2018	Exhibit	10/31/2018

THE CITY OF DURANT
Office of the Solid Waste Superintendent

SOLID WASTE PROJECTS SCHEDULE
October 2018

A. Work Completed:

1. Hauled 63.47 tons of extra hauling
2. Hauled 53 loads of extra hauling
3. Picked up and delivered 13 sharps
4. No abatement this month
5. Cleaned Sunny Side rd. 1 time
6. Refurbished 6 dumpsters
7. Replaced 3 dumpsters with new
8. Cleaned dead ends of Cemetery rd. 1 time

B. Work Planned For November

1. Refurbish. dumpsters
2.

C. Work Planned For Jan. '1-18 – Dec. 31-18

1. Pick up trash

D. Projects Planned And Requested For Authorization:

1. None.

1202 1/2 N.E. 2nd • Durant, Oklahoma 74701 • (580) 924-2707 • Fax (580) 924-8344
www.durant.org

Agenda Item: 3.c.

The City of Durant

Office of City Clerk

Memorandum

Date: 11/5/2018
To: Utilities Authority
From: Stephanie Barfield, Utility Billing Supervisor
Re: Utilities Department Monthly Report - October 2018

Council Information / Action Requested

Information only.

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
Utilities Department Monthly Report - October 2018	Exhibit	11/6/2018

Monthly Utility Billing,
Cash Collection,
And Consumption Summary

OCT 2018

	WATER		SANITARY SEWER		SANITATION	
	Month	YTD	Month	YTD	Month	YTD
Number of Bills - Active Accounts	6860		5960		6806	
Total Revenue Billed	$301,592.52	$1,578,423.92	$232,737.17	$1,015,952.88	$376,106.36	$1,468,364.88
Adjustments in Dollar	($6,148.55)	($22,765.55)	($26,357.57)	($88,048.23)	($4,548.03)	($27,576.05)
TOTAL CASH RECEIPTS	$197,323.02	$1,032,581.19	$142,392.37	$675,119.51	$231,835.55	$969,237.68

CONSUMPTION IN GALLONS	80,644,100

NEW SERVICE APPLICATIONS	88
NUMBER OF WALK IN/PHONE PAYMENTS	2,461
MAIL PAYMENTS	1,454
CREDIT CARD PAYMENTS	716
WEB PAYMENTS	973
DROP BOX PAYMENTS	577
BANK DRAFT PAYMENTS	766
CREDIT CARD DRAFT PAYMENTS	195
KIOSK	614
OTHERS	

Agenda Item: 3.d.

The City of Durant

Office of the Water and Sewer Maintenance Department

Memorandum

Date: 11/8/2018
To: Utilities Authority
From: Jay Neal- Utility Line Maintenance Supervisor
Re: Utility Line Maintenance Report- October 2018

---

1. Completing water/wastewater needs for runway extension at Airport prior to Thanksgiving holiday.
2. We will begin leak detection project next week with the goal of preparing a minimum of 2 deployments.
3. Will be providing 2 personnel for assistance with meter reading for approximately 8 business days.
4. Full October departmental report is attached.

Council Information / Action Requested

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
City Council Attachment	Cover Memo	11/8/2018

October 2018

Water Leaks:	49
Water Taps:	4
Sewer Leaks:	1
Sewer Taps:	2
Other Completed Jobs:	**162**
Carryover Balance to Next Month	**10**

Jobs/Day	**5.45**
Jobs/Week	**21.8**
Jobs/Month	**218**

Added Leaks	**46**
Paid Taps	**6**

Agenda Item: 3.e.

The City of Durant

Office of the Wastewater Treatment Plant

Memorandum

Date: 11/5/2018
To: Utilities Authority
From: Terry Condor, Superintendent, Waste Water Treatment Plant
Re: Waste Water Treatment Plant and Lab Monthly Report - October 2018

Council Information / Action Requested

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
Waste Water Treatment Plant and Lab Monthly Report - October 2018	Exhibit	11/5/2018

The City of Durant

Office of the Wastewater Treatment Plant

DURANT
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PROJECTS SCHEDULE

A: WORK COMPLETED IN OCTOBER 2018

1: MONITORING OF SBR SE VALVES TO DETERMINE FURTHER FAILURES (on going)
2: CLEAN CLARIFIER WEIRS 10-18-18
3: CLEAN BLEND TANK MIXER
4: CLEAN EFFLUENT PUMP STATION -----
5: CLEAN RAW WATER PUMP STATION 10-25-18
6: CLEAN SCUM PUMP STATION 10-25-18
7: CLEAN DRAIN LIFT STATION
8: CK TORQUE & OVERLOAD & GREASE CHAIN ON CLARIFIER 10-11-18
9: CALIBRATE DISCHARGE DO & PH METER 10-18-18
10: CHECK CALIBRATION OF DISCHARGE FLOW METER 10-17-18
11: RESET SBR PLC
12: WASH DOWN STEP SCREEN 10-8-18
13: CLEAN UV TROUGHS AND FLUME 10-4-18
14: CHECK ELECTRIC MANHOLES 10-15-18
15: CLEAN OUT BUILDINGS 10-17-18
16: MANUALLY CHECK U.V. BULBS 10-23-18
17: WASH DOWN CASINO STEPSCREEN 10-10-18
18: CHECK ALL AUTOMATIC VALVES -done
19: VEHICLE INSPECTION 10-19-18
20: WALK-THRU INSPECTION 10-3-18
21: CLEAN ALL PLC's 10-11-18
22: CLEAN D.O. METERS not needed
23: CHECK CLARIFIER OIL WEEKLY 10-1-18, 10-11-18, 10-22-18

TREATED 90.392 MG OF WASTEWATER
PROCESSED 0.941190 MG OF TREATED SLUDGE

B: WORK PLANNED FOR NOVEMBER 2018

1: MONITORING OF SBR SE VALVES TO DETERMINE FURTHER FAILURES (on going)
2: CLEAN CLARIFIER WEIRS
3: CLEAN BLEND TANK MIXER
4: CLEAN EFFLUENT PUMP STATION -----
5: CLEAN RAW WATER PUMP STATION -----
6: CLEAN SCUM PUMP STATION
7: CLEAN DRAIN LIFT STATION
8: CK TORQUE & OVERLOAD & GREASE CHAIN ON CLARIFIER
9: CALIBRATE DISCHARGE DO & PH METER
10: CHECK CALIBRATION OF DISCHARGE FLOW METER
11: RESET SBR PLC
12: WASH DOWN STEP SCREEN
13: CLEAN UV TROUGHS AND FLUME
14: CHECK ELECTRIC MANHOLES
15: CLEAN OUT BUILDINGS
16: MANUALLY CHECK U.V. BULBS
17: WASH DOWN CASINO STEPSCREEN
18: CHECK ALL AUTOMATIC VALVES
19: VEHICLE INSPECTION
20: WALK-THRU INSPECTION
21: CLEAN ALL PLC's
22: CLEAN D.O. METERS
23: CHECK CLARIFIER OIL WEEKLY

THE CITY OF DURANT
Office of the Wastewater Treatment Plant
Lab Report

10/1/18 to 10/31/18

Tests Processed

77 Bac-t's
105 BOD's
25 TSS's
25 NH3's
4 DO's
36 Ph's
0 Fecal Coliforms (May 1st – Sept. 30th) * 6 per set
0 FOG's

Work Projects

- Data entry
- Reports (water test results), Make copies and envelope
- Purchase Orders, copy, file
- Equipment calibrations and maintenance
- Sampling and process readings
- Quality Assurance, Quality Control tests
- Laboratory Testing
- Filing
- Daily/Weekly laboratory and WWTP building cleaning
- Monthly, Quarterly, Bi-annual, Yearly reports
- Ordering Lab chemicals and supplies
- Water Billing
- Storm water monitoring
- Storm water Report
- Pre-Treatment Inspections

Process Water and Sludge Flow Report

October 2018

Date	*Influent Flow (MG)*	*Drain Lift Station Flow (MG)*	*Casino Lift Station Flow (MG)*	*Combined Infl (MG)*	*Effluent Flow (MG)*	*GBT #1 Flow (KG)*	*GBT #2 Flow (KG)*	*Sludge Flow Digester #1 (KG)*	*Sludge Flow Digester #2 (KG)*
10/1/2018	2.281	0.069	0.245	2.595	1.414	47.457	0.000	0.000	25.269
10/2/2018	2.163	0.062	0.223	2.448	1.356	43.296	0.000	0.000	25.567
10/3/2018	2.281	0.065	0.250	0.000	1.378	45.459	0.000	0.000	25.795
10/4/2018	2.256	0.065	0.259	0.000	1.378	45.459	0.000	0.000	25.795
10/5/2018	1.959	0.063	0.277	2.299	1.226	42.007	0.000	0.000	25.768
10/6/2018	1.964	0.034	0.383	2.380	1.264	0.033	0.000	0.000	25.799
10/7/2018	1.964	0.034	0.383	2.380	1.264	0.033	0.000	0.000	25.799
10/8/2018	2.821	0.077	0.346	3.243	1.682	42.576	0.000	0.000	26.230
10/9/2018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10/10/2018	2.628	0.033	0.289	2.950	1.579	0.004	0.000	0.000	24.611
10/11/2018	2.789	0.081	0.289	3.158	1.667	53.375	0.000	0.000	24.469
10/12/2018	2.587	0.085	0.379	3.052	1.735	49.032	0.000	0.000	25.291
10/13/2018	3.208	0.046	0.440	3.694	2.171	0.013	0.000	0.000	26.613
10/14/2018	2.452	0.039	0.332	2.823	1.508	0.045	0.000	0.000	25.334
10/15/2018	3.285	0.073	0.343	3.701	2.155	45.828	0.000	0.000	24.265
10/16/2018	2.663	0.074	0.246	2.983	1.555	46.787	0.000	0.000	23.585
10/17/2018	3.032	0.074	0.238	3.343	1.832	42.750	0.000	0.000	24.144
10/18/2018	3.324	0.063	0.258	3.645	2.030	42.831	0.000	0.000	23.973
10/19/2018	3.329	0.077	0.379	3.785	2.906	42.977	0.000	0.000	25.196
10/20/2018	3.007	0.033	0.370	3.410	2.461	0.002	0.000	0.000	24.479
10/21/2018	3.007	0.033	0.370	3.410	2.461	0.002	0.000	0.000	24.479
10/22/2018	3.496	0.077	0.255	3.828	3.141	49.917	0.000	0.000	24.114
10/23/2018	3.234	0.052	0.236	3.521	2.942	49.853	0.000	0.000	1.124
10/24/2018	3.239	0.091	0.254	3.584	3.063	44.693	0.000	0.000	0.024
10/25/2018	3.377	0.066	0.262	3.705	3.196	39.732	0.000	0.000	0.025
10/26/2018	3.270	0.064	0.300	3.634	3.052	40.373	0.000	0.000	0.028
10/27/2018	3.022	0.024	0.321	3.367	2.863	0.022	0.000	0.000	0.019
10/28/2018	3.013	0.028	0.279	3.320	2.810	0.011	0.000	0.000	0.017
10/29/2018	2.933	0.066	0.236	3.236	2.839	44.021	0.000	0.000	0.012
10/30/2018	3.129	0.063	0.232	3.425	2.980	41.292	0.000	0.000	0.017

10/31/2018	3.073	0.071	0.325	3.469	3.101	41.311	0.000	0.000	0.018
Sum	*84.787*	*1.783*	*8.998*	*90.392*	*65.011*	*941.190*	*0.000*	*0.000*	*527.860*
Avg	*2.735*	*0.058*	*0.290*	*2.916*	*2.097*	*30.361*	*0.000*	*0.000*	*17.028*
Min	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*	*0.000*
Max	*3.496*	*0.091*	*0.440*	*3.828*	*3.196*	*53.375*	*0.000*	*0.000*	*26.613*

CITY OF DURANT WASTEWATER TREATMENT PLANT MONTHLY OPERATION REPORT

MONTH OF **October 2018**

		WEATHER		FLOW		PUMPS		INFLUENT DATA					SLUDGE		SBR DATA				DMR							Effluent	
DAY	DATE	RAINFALL (in.)	LG AIR TEMP	INFLUENT (MGD)	EFFLUENT (MGD)	KKW PUMP ONLINE	EFFLUENT PUMP ONLINE	pH	SETTLEABLE SOLIDS ml / L	Head works BOD_5	Over the Weirs BOD_5	TSS	FEED SLUDGE (GPD)	GBT ONLINE	REACTOR #1 SETTLEABILITY	REACTOR #2 SETTLEABILITY	REACTOR #3 SETTLEABILITY	REACTOR #4 SETTLEABILITY	D.O. mg/L	pH	TSS mg/L	AMMONIA mg/L	$CBOD_5$	FECAL COLIFORM #cfu/100ml	Bis(2-Ethylhexyl)phthalate UG/L	Visible Foam or Floating Solids in Discharge/ Comments:
M	10/1/18		73	2.6	2.6		4	7.2	8				25269	47457	800	700	800	750	7.3	7.7						
T	10/2/18		72	2.4	2.4		4	7.4	5				25567	43296	700	725	725	775	7.4	7.6						ND
W	10/3/18		74	2.6	2.4		4	7.3	8	546	95	48	25795	45459	800	700	650	750	7.4	7.7	2.5	0.2	2.0			ND
T	10/4/18		73	2.3	2.3		4	7.3	8				25705	47521					7.6	7.8					∅	ND
F	10/5/18		72	2.4	2.2		4	7.3	5				25808	42007					7.5	7.8						ND
S	10/6/18			2.3	2.1		4						25799						7.1	7.7						
S	10/7/18	1.5		2.5	2.5		4						26360						7.0	7.7						
M	10/8/18		73	3.2	3.1		4	7.3	4				26230	42576	750	850	600	750	7.0	7.8						
T	10/9/18	2.5	69	3.7	3.6		4	7.3	7				26827	40900	750	600	700	700	7.1	8.0						ND
W	10/10/18		59	3.0	2.9		4	7.4	20	68	55	24	24611	0	750	700	700	750	7.2	7.9	2.5	0.2	2.0			ND
T	10/11/18		50	3.2	3.0		4	7.4	5				24469	53375					7.2	7.8						ND
F	10/12/18		55	3.1	3.0		4	7.4	5				25291	49018					7.1	7.8						ND
S	10/13/18			3.7	3.6		4						26613						7.2	7.8						
S	10/14/18	3.5		2.9	2.8		4						25334						7.2	7.7						
M	10/15/18		40	3.7	3.5		4	7.2	3				24265	45828	600	750	650	600	7.0	7.7						
T	10/16/18		46	3.0	3.0		4	7.2	5				23585	46786	800	800	750	700	7.1	7.8						ND
W	10/17/18		51	3.3	3.2		4	7.4	4	49	166	48	24144	42750	850	800	800	700	7.0	7.7	2.5	0.2	2.0		∅	ND
T	10/18/18		56	3.6	3.5		4	7.3	5				23973	42831					7.2	7.8						ND
F	10/19/18		55	3.8	3.6		4	7.2	4				25196	42977					7.5	7.5						ND
S	10/20/18			3.4	3.4		4						24479						7.5	7.6						
S	10/21/18			3.6	3.5		4						24064						8.0	7.4						
M	10/22/18		43	3.8	3.7		4	7.2	6				24114	49917	750	800	800	650	7.6	7.4						
T	10/23/18		54	3.5	3.3		4	7.2	7				25230	49853	700	800	700	650	7.4	7.7						ND
W	10/24/18		53	3.6	3.5		4	7.2	10	57	104	64	24605	44693	750	850	800	700	7.1	7.6	2.5	0.2	2.0			ND
T	10/25/18		55	3.7	3.5		4	7.2	6				24649	39732					7.3	7.6						ND
F	10/26/18		49	3.6	3.4		4	7.2	10				25370	40373					7.8	7.7						ND
S	10/27/18			3.4	3.3		4						24480						7.1	7.6						
S	10/28/18			3.3	3.2		4						24300						7.3	7.7						
M	10/29/18		56	3.2	3.0		4	7.4	20				23558	44019	750	800	800	700	7.4	7.6						
T	10/30/18		64	3.4	3.2		4	7.4	3				24811	41292	650	750	800	700	8.0	7.7						ND
W	10/31/18		61	3.5	3.1		4	7.4	6						700	800	800	750	7.3	7.6						ND

m

Agenda Item: 3.f.

The City of Durant

Office of the Water Treatment Plant

Memorandum

Date: 11/1/2018
To: Utilities Authority
From: Phillip Hightower, Water Treatment Plant
Re: Water Treatment Plant Monthly Report - October 2018

Council Information / Action Requested

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
October MOR #1	Cover Memo	11/1/2018
October MOR #2	Cover Memo	11/1/2018
October CLO2 and Chlorite MOR	Cover Memo	11/1/2018
October Maintenance Report	Cover Memo	11/1/2018

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY OPERATIONAL REPORT
WATER TREATMENT PLANTS

Mail original before the 10th of the following month
to the Department of Environmental Quality, Water Quality Division
P. O. Box 1677, Oklahoma City, OK 73101-1677

Plant: Durant Water Treatement F
PWSID: 1010601
Month: October 2018
Population: 19,491

Durant City Utilities Authority (*System*) | PO Box 578 (*Address*) | Durant OK (*City*) | 74702 (*ZIP*)

DAY	WATER TREATED	FILTER OPERATION: FILTERS USED-HOURS 1	2	3	4	5	6	7	8	WASH WATER IN 1000 GALS.	CHEMICALS USED-LBS.: ALUM	LIME	POLYMER Name:	NAOH	CARBON	OTHER Name: NH2SIF6	OTHER Name: copper sulf	CHLORINE PRE	CHLORINE POST	ALKALINITY: "P" RAW	"P" FILT	TOTAL AM RAW	TOTAL AM FILT	CLO2 Residual RAW	CLO2 Residual FILT	TOTAL PM RAW	TOTAL PM FILT	pH AM	pH FILT	pH PM	CaCO3 STABILITY Method:	HARDNESS (ppm) AM RAW	HARDNESS (ppm) AM FILT	Chlorite residual	Chlorite lbs/day	REMARKS
1	4,335	24	0	24	24	24	24	24	24		2300	0	0	1100	0	0	0	240	90			98	84		0.14	100	84	7.2	7.3	7.5		92	100	102	0.61	300	
2	4,153	24	0	24	24	23	23	24	24	75	2400	0	0	1100	0	0	0	260	100			108	94		0.12	106	94	7.3	7.5	7.5		106	108	110	0.61	300	
3	4,126	24	0	24	24	24	24	23	23	75	2100	0	0	1100	0	0	0	210	90			106	96		0.09	112	94	7.4	7.6	7.7		90	110	108	0.76	300	
4	4,401	23	0	23	23	24	24	24	24	110	2500	0	0	1100	0	0	0	200	60			102	86		0.12	270	82	7.2	7.9	7.9		98	120	116	0.042	300	
5	4,533	24	0	24	24	24	24	24	24		2500	0	0	1100	0	0	0	130	90			274	170		0.14	274	196	7.9	7.9	7.6		92	262	178	0.57	300	
6	4,440	24	0	24	24	23	23	24	24	77	2300	0	0	688	0	0	0	150	90			284	252		0.13	274	244	8	7.6	7.7		160	234	272	0.57	320	
7	4,033	24	0	24	24	24	24	23	23	65	4000	0	0	550	0	0	0	140	80			268	250		0.11	150	246	7.9	7.8	7.8		230	254	262	0.38	320	
8	4,097	23	0	23	23	24	24	24	24	100	3400	0	40	825	0	0	0	240	80			96	198		0.15	82	140	7.3	7.6	7.3		240	120	240	0.42	300	
9	4,023	24	0	24	24	23	23	24	24	70	2600	0	40	1100	0	0	0	240	80			100	96		0.08	106	86	7.4	6.9	7.4		200	130	160	0.47	280	
10	4,200	24	0	24	24	24	24	23	23	60	2400	0	40	1238	0	0	0	240	80			100	90		0.13	110	88	7.2	7.3	7.5		120	122	122	0.51	280	
11	4,070	24	0	24	24	24	24	24	24		2400	0	40	1238	0	0	0	200	60			100	82		0.07	90	80	7.2	7.4	7.7		100	118	128	0.47	280	
12	4,125	23	0	23	23	24	24	24	24	105	2300	0	40	1238	0	0	0	240	60			90	90		0.06	96	80	7.3	7.5	7.7		100	150	122	0.47	280	
13	3,865	24	0	24	24	23	23	24	24	71	2300	0	40	963	0	0	0	200	80			92	82		0.11	90	80	7.2	7.6	7.7		90	108	108	0.42	260	
14	3,739	24	0	24	24	24	24	23	23	70	2500	0	40	1375	0	0	0	260	100			100	86		0.13	100	78	7.1	7.5	7.8		80	100	86	0.66	260	
15	3,962	23	0	23	23	24	24	24	24	120	2400	0	40	1100	0	0	0	260	100			90	76		0.13	92	78	7.2	7.3	7.7		84	96	92	0.76	260	
16	3,958	24	0	24	24	23	23	24	24	80	2500	0	40	1238	0	0	0	260	100			88	80		0.11	94	78	7.1	7.3	7.3		92	118	110	0.47	260	
17	3,931	24	0	24	24	24	24	24	24		2400	0	40	1100	0	0	0	260	100			86	72		0.13	94	78	7.1	7.2	7.2		84	100	88	0.57	260	
18	3,929	24	0	24	24	24	24	23	23	75	2400	0	40	1100	0	0	0	260	100			80	72		0.2	100	92	7.2	7.3	7.3		86	92	89	0.47	260	
19	3,883	23	0	23	23	24	24	24	24	90	2400	0	40	1238	0	0	0	260	100			90	72		0.1	86	96	7.1	7.1	7.1		84	100	92	0.42	260	
20	3,375	24	0	24	24	23	23	24	24	74	2300	0	40	1100	0	0	0	200	60			78	78		0.09	100	92	6.9	7	7.2		82	94	90	0.57	240	
21	3,521	24	0	24	24	24	24	24	24		2000	0	40	1100	0	0	0	200	60			90	70		0.14	92	64	7.2	7.3	7.1		86	102	90	0.33	240	
22	3,832	24	0	24	24	24	24	23	23	70	2500	0	40	1100	0	0	0	120	80			84	66		0.14	228	82	7.1	7.3	7.5		78	90	82	0.38	260	
23	3,903	23	0	23	23	24	24	24	24	105	2500	0	40	1100	0	0	0	0	100			250	116		0.12	268	174	7.6	7.2	7.5		80	256	136	0.57	260	
24	4,117	24	0	24	24	23	23	24	24	70	2000	0	40	275	0	0	0	0	100			278	204		0.12	288	224	7.8	7.5	7.2		130	260	242	0.66	280	
25	4,152	24	0	24	24	24	24	24	24		2500	0	40	550	0	0	0	0	120			262	230		0.15	266	242	7.9	7.5	7.5		210	270	272	0.9	260	
26	4,147	24	0	24	24	24	24	23	23	70	2100	0	40	275	0	0	0	0	100			262	256		0.08	270	264	8	7.5	7.4		250	252	290	0.85	260	
27	4,155	23	0	23	23	24	24	24	24	110	2100	0	40	413	0	0	0	0	100			272	256		0.08	276	266	7.9	7.4	7.5		250	294	294	0.8	260	
28	4,093	24	0	24	24	23	23	24	24	75	2000	0	40	550	0	0	0	0	120			270	252		0.1	272	234	7.8	7.4	7.6		260	314	316	0.85	260	
29	4,059	23	0	24	24	24	24	24	24	30	2000	0	40	413	0	0	0	0	100			300	268		0.08	288	250	7.9	7.4	7.6		260	300	296	0.9	260	
30	4,096	24	0	24	24	24	24	23	23	75	1900	0	40	275	0	0	0	0	100			296	272		0.12	296	274	7.9	7.4	7.5		262	302	300	0.9	260	
31	4,023	23	0	23	23	24	24	24	24	100	3300	0	40	550	0	0	0	140	100			282	270		0.18	300	276	7.8	7.4	7.4		282	298	310	0.9	260	
TOT	125276	736	736	736	736	736	736	736	736	2022	75300		960	28192				4910	2780			5076	4466		3.65	5370	4536	231	230	232		4458	5374	5303	18.26	8480	
Avg	4041	24	24	24	24	24	24	24	24	65	2429		30.97	909				158	90			164	144		0	173	146	7.5	7.4	7.5		143.8	173	171	0.589	######	

Power Costs	**$16,723.76**
Labor Costs	**$49,250.80**
Chemicals	**$23,432.88**
Supplies	**$284.31**
Repairs	**$329.30**
TOTAL	**$90,021.05**

Cost per thousand Gallons $ 0.71

Ave. Rate of Wash (Vert. in/min.)

Ave Wash Period (Minutes)

% Wash Water Used **1.61%**

Ave. Head Loss for Washing

I hereby certify the above to be correct to the best of my knowledge.

Signed PhillipHightower

Title Water Treatment Plant Supervisor

DEQ Form # 630-577A
Revised 9/1/2000

Oper. Cert. No. B 90404

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY OPERATIONAL REPORT
WATER TREATMENT PLANTS

Mail original before the 10th of the following month
to the Department of Environmental Quality, Water Quality Division
P. O. Box 1677, Oklahoma City, OK 73101-1677

Plant: Durant Water Treatement F
PWSID: 1010601
Month: October 2018
Population: 19,491

Durant City Utilities Authority (*System*) | PO Box 578 (*Address*) | Durant OK (*City*) | 74702 (*ZIP*)

DAY	WATER TREATED	FILTER OPERATION: FILTERS USED-HOURS 1	2	3	4	5	6	7	8	WASH WATER IN 1000 GALS.	CHEMICALS USED-LBS.: ALUM	LIME	POLYMER Name:	NAOH	CARBON	OTHER Name:	OTHER Name:	CHLORINE PRE	POST	ALKALINITY: "P" RAW	FILT	TOTAL AM RAW	FILT	CLO2 Residual RAW	FILT	TOTAL PM RAW	FILT	pH: AM RAW	FILT	PM FILT	CaCO3 STABILITY Method:	HARDNESS (ppm): AM RAW	FILT	Chlorite residual	Chlorite lbs/day	REMARKS
											NaOH					NH2SIF6	copper sulf					AM				PM												
1	4,335	24	0	24	24	24	24	24	24		2300	0	0	1100	0	0	0	240	90			98	84		0.14	100	84	7.2	7.3	7.5	92	100	102	0.61	300	
2	4,153	24	0	24	24	23	23	24	24	75	2400	0	0	1100	0	0	0	260	100			108	94		0.12	106	94	7.3	7.5	7.5	106	108	110	0.61	300	
3	4,126	24	0	24	24	24	24	23	23	75	2100	0	0	1100	0	0	0	210	90			106	96		0.09	112	94	7.4	7.6	7.7	90	110	108	0.76	300	
4	4,401	23	0	23	23	24	24	24	24	110	2500	0	0	1100	0	0	0	200	60			102	86		0.12	270	82	7.2	7.9	7.9	98	120	116	0.042	300	
5	4,533	24	0	24	24	24	24	24	24		2500	0	0	1100	0	0	0	130	90			274	170		0.14	274	196	7.9	7.9	7.6	92	262	178	0.57	300	
6	4,440	24	0	24	24	23	23	24	24	77	2300	0	0	688	0	0	0	150	90			284	252		0.13	274	244	8	7.6	7.7	160	234	272	0.57	320	
7	4,033	24	0	24	24	24	24	23	23	65	4000	0	0	550	0	0	0	140	80			268	250		0.11	150	246	7.9	7.8	7.8	230	254	262	0.38	320	
8	4,097	23	0	23	23	24	24	24	24	100	3400	0	40	825	0	0	0	240	80			96	198		0.15	82	140	7.3	7.6	7.3	240	120	240	0.42	300	
9	4,023	24	0	24	24	23	23	24	24	70	2600	0	40	1100	0	0	0	240	80			100	96		0.08	106	86	7.4	6.9	7.4	200	130	160	0.47	280	
10	4,200	24	0	24	24	24	24	23	23	60	2400	0	40	1238	0	0	0	240	80			100	90		0.13	110	88	7.2	7.3	7.5	120	122	122	0.51	280	
11	4,070	24	0	24	24	24	24	24	24		2400	0	40	1238	0	0	0	200	60			100	82		0.07	90	80	7.2	7.4	7.7	100	118	128	0.47	280	
12	4,125	23	0	23	23	24	24	24	24	105	2300	0	40	1238	0	0	0	240	60			90	90		0.06	96	80	7.3	7.5	7.7	100	150	122	0.47	280	
13	3,865	24	0	24	24	23	23	24	24	71	2300	0	40	963	0	0	0	200	80			92	82		0.11	90	80	7.2	7.6	7.7	90	108	108	0.42	260	
14	3,739	24	0	24	24	24	24	23	23	70	2500	0	40	1375	0	0	0	260	100			100	86		0.13	100	78	7.1	7.5	7.8	80	100	86	0.66	260	
15	3,962	23	0	23	23	24	24	24	24	120	2400	0	40	1100	0	0	0	260	100			90	76		0.13	92	78	7.2	7.3	7.7	84	96	92	0.76	260	
16	3,958	24	0	24	24	23	23	24	24	80	2500	0	40	1238	0	0	0	260	100			88	80		0.11	94	78	7.1	7.3	7.3	92	118	110	0.47	260	
17	3,931	24	0	24	24	24	24	24	24		2400	0	40	1100	0	0	0	260	100			86	72		0.13	94	78	7.1	7.2	7.2	84	100	88	0.57	260	
18	3,929	24	0	24	24	24	24	23	23	75	2400	0	40	1100	0	0	0	260	100			80	72		0.2	100	92	7.2	7.3	7.3	86	92	89	0.47	260	
19	3,883	23	0	23	23	24	24	24	24	90	2400	0	40	1238	0	0	0	260	100			90	72		0.1	86	96	7.1	7.1	7.1	84	100	92	0.42	260	
20	3,375	24	0	24	24	23	23	24	24	74	2300	0	40	1100	0	0	0	200	60			78	78		0.09	100	92	6.9	7	7.2	82	94	90	0.57	240	
21	3,521	24	0	24	24	24	24	24	24		2000	0	40	1100	0	0	0	200	60			90	70		0.14	92	64	7.2	7.3	7.1	86	102	90	0.33	240	
22	3,832	24	0	24	24	24	24	23	23	70	2500	0	40	1100	0	0	0	120	80			84	66		0.14	228	82	7.1	7.3	7.5	78	90	82	0.38	260	
23	3,903	23	0	23	23	24	24	24	24	105	2500	0	40	1100	0	0	0	0	100			250	116		0.12	268	174	7.6	7.2	7.5	80	256	136	0.57	260	
24	4,117	24	0	24	24	23	23	24	24	70	2000	0	40	275	0	0	0	0	100			278	204		0.12	288	224	7.8	7.5	7.2	130	260	242	0.66	280	
25	4,152	24	0	24	24	24	24	24	24		2500	0	40	550	0	0	0	0	120			262	230		0.15	266	242	7.9	7.5	7.5	210	270	272	0.9	260	
26	4,147	24	0	24	24	24	24	23	23	70	2100	0	40	275	0	0	0	0	100			262	256		0.08	270	264	8	7.5	7.4	250	252	290	0.85	260	
27	4,155	23	0	23	23	24	24	24	24	110	2100	0	40	413	0	0	0	0	100			272	256		0.08	276	266	7.9	7.4	7.5	250	294	294	0.8	260	
28	4,093	24	0	24	24	23	23	24	24	75	2000	0	40	550	0	0	0	0	120			270	252		0.1	272	234	7.8	7.4	7.6	260	314	316	0.85	260	
29	4,059	23	0	24	24	24	24	24	24	30	2000	0	40	413	0	0	0	0	100			300	268		0.08	288	250	7.9	7.4	7.6	260	300	296	0.9	260	
30	4,096	24	0	24	24	24	24	23	23	75	1900	0	40	275	0	0	0	0	100			296	272		0.12	296	274	7.9	7.4	7.5	262	302	300	0.9	260	
31	4,023	23	0	23	23	24	24	24	24	100	3300	0	40	550	0	0	0	140	100			282	270		0.18	300	276	7.8	7.4	7.4	282	298	310	0.9	260	
TOT	125276	736	736	736	736	736	736	736	736	2022	75300		960	28192				4910	2780			5076	4466		3.65	5370	4536	231	230	232	4458	5374	5303	18.26	8480	
Avg	4041	24	24	24	24	24	24	24	24	65	2429		30.97	909				158	90			164	144		0	173	146	7.5	7.4	7.5	143.8	173	171	0.589	######	

Power Costs	**$16,723.76**
Labor Costs	**$49,250.80**
Chemicals	**$23,432.88**
Supplies	**$284.31**
Repairs	**$329.30**
TOTAL	**$90,021.05**

Cost per thousand Gallons $ 0.71

Ave. Rate of Wash (Vert. in/min.)

Ave Wash Period (Minutes)

% Wash Water Used 1.61%

Ave. Head Loss for Washing

I hereby certify the above to be correct to the best of my knowledge.

Signed PhillipHightower

Title Water Treatment Plant Supervisor

DEQ Form # 630-577A
Revised 9/1/2000

Oper. Cert. No. B 90404

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
MONTHLY OPERATIONAL REPORT
WATER TREATMENT PLANTS

Plant: Durant Water Treatment Plant
PWSID: 1010601
Month: October 2018
Population: 19,491

Durant City Utilities Authority *System* | PO Box 578 *Address* | Durant *City* | 74702 *ZIP*

☑ Rapid Rate Filter
☐ Slow Sand Filter

	No. OF SAMPLES	% OF TOTAL SAMPLES	
TURBIDITY GREATER THAN 0.5 NTU:	0	0%	◄
TURBIDITY GREATER THAN 0.3 NTU:	0	0%	◄
TURBIDITY GREATER THAN 0.1 NTU:	19	10%	

TOTAL NO. OF TURBIDITY ANALYSES:	186

HIGHEST TURBIDITY READING	0.15	◄
NUMBER OF SAMPLES > 1 NTU	0	◄
NUMBER OF SAMPLES > 5 NTU	0	◄
95TH PERCENTILE OF FINISHED WATER TURBIDITY	0.12	◄ NOT REQUIRED
95TH PERCENTILE OF SETTLED WATER TURBIDITY	3.50	◄ NOT REQUIRED
CHLORINE RESIDUAL < 1.0 mg/l LEAVING PLANT *(# Samples)*		

INDIVIDUAL FILTER TURBIDITY CHECKLIST

1. IS TURBIDITY FROM EACH INDIVIDUAL FILTER RECORDED EVERY 15 MINUTES? ☑ Yes ☐ No

2. DID ANY SINGLE FILTER EXCEED 2.0 NTU IN TWO CONSECUTIVE 15 MINUTE PERIODS?
   - ☑ No, Go to Question 3.
   - ☐ Yes, What date was the filter profile completed? ____

   DID THIS SAME FILTER EXCEED 2.0 NTU IN 2 CONSECUTIVE 15-MIN PERIODS DURING THE LAST MONTH?
   - ☐ No, Go to Question 3.
   - ☐ Yes, Schedule Comprehensive Perfomance Evaluation (CPE) with DEQ.

3. DID ANY SINGLE FILTER EXCEED 1.0 NTU IN TWO CONSECUTIVE 15 MINUTE PERIODS?
   - ☑ No, Go to Question 4.
   - ☐ Yes, What date was the filter profile completed? ____

   DID THIS SAME FILTER EXCEED 1.0 NTU IN 2 CONSECUTIVE 15-MIN PERIODS DURING THE LAST 2 MONTHS?
   - ☐ No, Go to Question 4.
   - ☐ Yes, What date was the filter self-assessment completed? ____

4. DID ANY SINGLE FILTER EXCEED 0.5 NTU IN 2 CONSECUTIVE 15-MIN PERIODS AT THE END OF 4 HRS OF OPERATION?
   - ☑ No, You are finished with the checklist.
   - ☐ Yes, What date was the filter profile completed? ____

* IF ANY OF QUESTIONS 2 THROUGH 4 ARE CHECKED "YES", YOU MUST COMPLETE THE TURBIDITY TRIGGER EVALUATION FORM AND ATTACH TO THIS MOR.

	TURBIDITY									RESIDUAL DISINFECTANT							
										ENTRY POINT TO DISTRIBUTION						DISTRIBUTION	
DAY	RAW	SET	SET	2400-0400	0400-0800	0800-1200	1200-1600	1600-2000	2000-2400	12am	4am	8am	12pm	4pm	8pm	SYSTEM		COMMENTS
1	7.62	0.7	1.3	0.07	0.07	0.07	0.06	0.05	0.06	1.93	1.55	1.85	2.29	2.43	2.19	1.78	1.15	
2	5.91	0.7	1.5	0.14	0.13	0.10	0.07	0.06	0.07	2.34	2.49	2.55	2.65	2.31	1.99	1.04	0.99	
3	4.46	0.7	0.8	0.14	0.12	0.10	0.08	0.07	0.08	2.06	2.48	2.55	2.65	2.51	2.02	1.81	0.99	
4	4.30	0.9	1.7	0.09	0.09	0.09	0.08	0.07	0.07	2.18	2.61	2.63	2.73	2.31	2.06	0.97	1.92	
5	16.77	2.8	3.4	0.06	0.05	0.05	0.05	0.04	0.04	2.32	2.68	2.72	2.75	2.41	2.36	1.01	0.97	
6	13.77	1.8	3.2	0.07	0.07	0.04	0.04	0.04	0.04	2.63	2.83	2.93	2.92	2.45	2.38	1.01	1.96	
7	10.78	2.4	3.1	0.04	0.04	0.04	0.04	0.04	0.07	2.65	2.96	2.95	3.04	2.88	2.04	2.34	1.10	
8	190.70	2.1	3.7	0.14	0.15	0.14	0.13	0.14	0.10	2.03	1.80	1.72	1.88	1.83	1.64	1.17	1.24	
9	10.00	1.4	1.2	0.10	0.09	0.07	0.11	0.06	0.05	1.65	2.06	2.22	2.62	2.72	2.80	1.35	1.72	
10	8.31	1	1.1	0.05	0.05	0.04	0.08	0.05	0.05	2.87	3.11	3.15	3.28	2.95	2.51	0.79	0.81	
11	8.34	0.9	1.6	0.05	0.05	0.05	0.05	0.07	0.09	2.60	2.83	2.89	2.90	2.80	2.08	2.38	1.11	
12	10.54	1.4	2.4	0.09	0.09	0.09	0.08	0.08	0.08	2.15	2.32	2.54	2.43	2.42	2.29	1.20	1.23	
13	8.95	1.2	2.6	0.09	0.14	0.14	0.12	0.10	0.09	2.25	2.32	2.56	2.34	2.25	2.20	1.92	1.10	
14	8.42	1.2	1.9	0.08	0.08	0.07	0.12	0.10	0.08	2.20	2.10	2.07	1.88	1.85	1.83	1.02	0.98	
15	12.21	2.6	2	0.07	0.07	0.07	0.11	0.09	0.09	1.88	2.19	2.20	2.47	2.60	2.60	1.43	1.57	
16	15.89	1.5	2.8	0.08	0.07	0.07	0.12	0.06	0.06	2.60	2.76	2.82	2.99	3.11	3.01	0.62	2.25	
17	15.45	1.7	1.9	0.06	0.05	0.05	0.05	0.05	0.05	3.02	3.17	3.21	3.27	3.08	3.02	2.57	1.01	
18	14.06	1.7	1.9	0.12	0.07	0.05	0.04	0.04	0.04	3.07	3.31	3.40	3.37	3.28	2.91	1.17	1.30	
19	15.05	1.6	1.8	0.04	0.04	0.04	0.10	0.05	0.05	2.79	2.90	2.96	3.35	3.35	3.17	1.43	1.66	
20	12.20	1.3	1.7	0.05	0.05	0.05	0.09	0.04	0.04	3.37	3.29	3.27	3.22	3.15	2.28	1.70	1.78	
21	10.77	1.2	1.8	0.04	0.04	0.04	0.04	0.04	0.04	2.23	2.47	2.58	2.81	2.85	2.31	2.56	1.85	
22	10.29	1.3	1.4	0.09	0.06	0.04	0.04	0.04	0.04	2.33	2.89	2.97	3.05	2.85	2.46	1.71	1.66	
23	27.36	1.3	1.6	0.08	0.05	0.05	0.04	0.04	0.04	2.52	2.90	2.86	2.90	2.38	2.28	2.27	1.62	
24	19.90	2.2	3.3	0.09	0.04	0.04	0.04	0.04	0.04	2.23	2.27	2.12	2.35	2.32	2.30	1.51	1.89	
25	16.45	1.9	2.9	0.04	0.04	0.04	0.05	0.04	0.05	2.28	2.29	2.30	2.36	2.35	2.35	1.96	1.20	
26	19.56	2.8	3.7	0.05	0.06	0.05	0.05	0.05	0.05	2.35	2.59	2.54	2.31	2.27	2.34	1.07	1.03	
27	14.83	2.4	3.5	0.06	0.08	0.05	0.05	0.04	0.05	2.23	2.29	2.64	2.34	2.31	2.23	0.98	2.09	
28	12.69	2.3	2.7	0.06	0.05	0.05	0.05	0.05	0.05	2.24	2.49	2.46	2.44	2.43	2.37	2.01	0.99	
29	11.93	2.1	3.8	0.05	0.05	0.06	0.05	0.06	0.07	2.38	2.43	2.45	2.47	2.51	2.45	2.12	0.99	
30	8.17	1.5	2.1	0.07	0.07	0.07	0.12	0.08	0.08	2.51	2.70	2.57	2.64	2.46	2.46	2.21	1.05	
31	**7.80**	1.9	3.2	0.09	0.08	0.05	0.05	0.05	0.10	2.52	2.65	2.42	2.56	2.58	2.88	1.00	1.01	

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
. . . for a clean, attractive, prosperous Oklahoma

CHLORINE DIOXIDE AND CHLORITE MONITORING AND REPORTING FORM

1. Public Water System (PWS) Information:

PWSID: OK 1010601 PWS Name: City of Durant

2. Compliance Information:

Water System Facility ID: 1010601 Plant Name: Durant Water Plant

Month: October Year: 2018

3. Analytical Results & Summary Information:

Entry Point Monitoring		
Day	**ClO_2 (mg/L)**	**Chlorite (mg/L)**
1	0.14	0.61
2	0.12	0.61
3	0.09	0.76
4	0.12	0.42
5	0.14	0.57
6	0.13	0.57
7	0.11	0.38
8	0.15	0.42
9	0.08	0.47
10	0.13	0.51
11	0.07	0.47
12	0.06	0.47
13	0.11	0.42
14	0.13	0.66
15	0.13	0.76
16	0.11	0.47
17	0.13	0.57
18	0.2	0.47
19	0.1	0.42
20	0.09	0.57
21	0.14	0.33
22	0.14	0.38
23	0.12	0.57
24	0.12	0.66
25	0.15	0.9
26	0.08	0.85
27	0.08	0.8
28	0.1	0.85
29	0.08	0.9
30	0.12	0.9
31	0.18	0.9

Chlorine Dioxide Daily Monitoring (Summary Type: CLO2)

Number of Samples Required:		
Number of Samples Collected:		31
Was All Chlorine Dioxide Monitoring & Reporting Completed?	Yes / No	Yes / No
Number of ClO_2 samples exceeded the MRDL of 0.8 mg/L?		0

If a routine sample exceeds the MRDL, the system is required to take (3) three more samples the next day.

Chlorite Daily Monitoring (Summary Type: $CLO2^-$)

Number of Samples Required:		
Number of Samples Collected:		31
Was All Chlorite Monitoring & Reporting Completed?	Yes / No	Yes / No
Number of Chlorite samples exceeded the MCL of 1.0 mg/L?		

If a routine sample exceeds the MCL, the system is required to take (3) three more samples the next day.

*** If you didn't use Chlorine Dioxide for disinfection any day this month, please mark "n/a" in that day's box to prevent a Monitoring violation.**

Routine Chlorite Monthly Monitoring in Distribution System

Sampling Location	Lab Sample ID	Sampling Point ID	Collection Date	Certified Lab ID	Chlorite (mg/L)
Near 1st Customer					
Avg. Residence Time					
Max. Residence Time					

Monitoring Period Average:

Mark (X) if analytical results were reported electronically: _____

- If the arithmetic average of any three sample set exceeds the Chlorite MCL (1.0 mg/L), the system is in violation of the MCL.
- If more than one three-sample set was collected, attach additional copies of this form.

_____ _____

Signature of owner or operator: Date:

_____

Operator License Number

Send all documents to:

Joe Keeble
Disinfection Byproducts Compliance Coordinator
Water Quality Division, DEQ
P.O. Box 1677
Oklahoma City, Oklahoma 73101-1677

THE CITY OF DURANT
Office of the Water Treatment Plant

Water Treatment Plant Projects Schedule
October 2018 Monthly Report

A. Work Completed
1. Calibrate lab instruments daily
2. Maintained Water Plant
3. Cleaned all buildings weekly
4. Backwashed filters as needed
5. Backwashed raw pumps weekly
6. Hooked up chlorine tanks and checked for leaks
7. Unload chemicals as they arrived
8. Pulled sludge as needed
9. Run daily chlorine dioxide samples on raw line
10. Flushed alum pumps
11. Inspected fire extinguishers
12. Pulled required water samples and send to ODEQ
13. Clean turbidity meters as needed
14. Cleaned screens on CLO2 generator as needed
15. Fixed water leak on finished instruments water line
16. Fixed water leak under the sink in the lab
17. Pumped vaults out at Airport tower and Chuckwa Tower
18. Check and maintain fluid levels on trucks and mower
19. Mowed Plant grounds
20. Weed eated Plant grounds
21. Greased pumps at High Service Pump Station and Cardinal Glass Pump Station
22. Fixed broken concrete by hand rail leading into old pump building
23. Cleaned out lawn mower building
24. Cleaned fenceline out and took junk metal to OK Iron and Metal
25. Changed out DP unit in old plant raw vault
26. Started painting strips around electrical boxes
27. Power washing old filter building
28. Did monthly safety inspection
29. Treated 125,276,000 gallons of water

B. Work Planned for January-December	Approx Start/Finish Date
1. Paint buildings	Time permitting
2. Put Gravel at Chuckwa Tower	Time Permitting
3. Put Gravel at Raw Pump Station	Time Permitting
4. Fix #2 filter underdrain	Time permitting

C. Projects Planned and Requested for Authorization
- A. Upgrade raw pump building at the water plant
- B. Upgrade Scada system on Old and New Plant Filters
- C. Install new Fluoride System

844 Caddo Hwy • Caddo, Oklahoma 74729 • (580) 924-1487 • Fax (580) 924-8566
www.durant.org

Agenda Item: 4.a.

The City of Durant

Deputy City Manager of Administration

Memorandum

Date:	11/1/2018
To:	Utilities Authority
From:	Marty Cook, Public Works Director Greg Buckley, Administrative Services Director
Re:	Consider Approval of Utility Project Agreement with Ameresco for Oversight, Coordination, and Management of Automated Meter Reading System Project, or take any other appropriate action

For the past several years the City has been working toward updating the water meters to allow for migration to an Automated Meter Reading system. To date City staff have installed approximately 500 Neptune Mach 10 meters, which have the capability to be read remotely. Those meters are currently being read with a mobile drive-by reading system, which the City purchased several years ago when the process to update started.

Current work activity and staffing levels have limited the ability to timely convert the whole system as an in-house project. To maintain the updating of the water meters as an in-house project is impractical. The water meters in the field are mostly older mechanical meters which have been used beyond their life cycle. Old meters lose their accuracy which in turn means they are not recording all of the water that travels through them.

There are approximately 7,000 meters within the City's water system. Staff is requesting Council authorize staff to bid out the installation of new meters, along with possible fixed base radio towers or other means of reading meters, and financing options. Since the City has already been purchasing Neptune Mach 10 meters as the platform for AMR, sole source the purchase of these meters. By selecting the Mach 10 as a sole source meter we will not lose any of the time and effort since initiating an update to an AMR system.

Staff is estimating the project cost for completion and upgrading to a full ARM system to be around $2.2 to $2.5 Million. This estimate is based on rough estimates of number of meters, meters and installation based on those meter estimates, projected tower costs, and contingency. Once we bid the project we will have a better cost projection, which won't be fully known until project completion.

There are a couple of financing options: open market loan or Oklahoma Water Resources Board. As part of the review process we will evaluate if this project will qualify for tax or tax exempt financing.

Under the proposed Agreement Ameresco will serve as the coordinator and manager of the AMR project. They will assist the City in obtaining bids for installation, contractor oversight, assist and manager the data transfer to our utility system, inspection of work performed and assist in reviewing and obtaining financing options. Basically Ameresco will take on the day to day oversight of the project allowing staff to focus on their normal daily activities and just having to manage Ameresco.

Council Information / Action Requested

Approve Utility Project Agreement with Ameresco for Oversight, Coordination, and Management of Automated Meter Reading System Project.

City Staff Information / Action Follow-up, if Council authorizes this action:

ATTACHMENTS:

Description	Type	Upload Date
Project Development Agreement	Exhibit	11/9/2018

THIS PROJECT DEVELOPMENT AGREEMENT (the "Agreement") is entered into as of the _____ day of _____ (the "Effective Date") by and between the City of Durant, Oklahoma whose principal offices are located at 300 W. Evergreen, Durant, Oklahoma 74701 (the "Owner") and AMERESCO, Inc., with an address of 2375 East Camelback Road, Suite 400, Phoenix, AZ 85016 ("AMERESCO"). AMERESCO and Owner are also referred to individually as "Party" and collectively as the "Parties".

Whereas, the Owner desires that AMERESCO develop a Project (as hereinafter defined) at its facilities listed in Attachment A (the "Premises"); and the scope of services as listed in Attachment B.

Whereas, the Owner has selected Ameresco to provide the scope of services through The Interlocal Purchasing System (TIPS) of which the Owner is a member in good standing.

Whereas, performance of the Project Development Agreement constitutes the first phase ("Phase 1") of a Comprehensive Services project (the "Project");

Whereas, if AMERESCO is directed by the Owner to proceed with the implementation of the recommendations following the Project Development Agreement, the second phase of the Project ("Phase 2") will consist of the design and installation of measures described and recommended in the Project Scope (defined below).

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner and AMERESCO agree as follows.

ARTICLE 1
PHASES OF PROJECT

1.1 Phase I – AMI Project Development.

(a) After execution of this Agreement, AMERESCO will develop a scope of work to implement an Automated Metering Infrastructure (AMI) project at the City for the purpose of remotely reading water meters. This scope of work will include a detailed analysis of implementation costs including first costs and ongoing service fees associated with the scope of work. This detailed analysis shall include:

(i) Turn-key installation pricing for the project scope

(ii) Site survey of all existing meters 3" and larger

(iii) Propagation study to properly price the number of AMI collectors needed in the City

(iv) A presentation of project financing options that may be available to the City for the associated scope of work

(b) As part of this agreement, AMERESCO will not provide a determination of potential increases in water and sewer billings from meter accuracy improvements, and operational saving projects that are recommended to be installed at the Premises, and (ii) will not be testing any existing meters for accuracy. Any project benefits achieved from this project by the City will be the sole responsibility of the City to determine by their own means.

(c) The project implementation price shall be determined based on the quantity and sizes of meters provided by the City. Shall the actual quantity of meters in the field change during Phase II – Project Implementation, it is understood that the corresponding installation price will need to be adjusted accordingly.

Utility Report Price: There is no fee for providing the turn-key installation price for the AMI project

1.2 Phase 2 – Implementation.

(a) If the Owner decides to proceed with the design and implementation of the measures described in the Project Scope or identified as part of a Comprehensive Services Project, the Parties shall execute a mutually-acceptable Comprehensive Services Agreement (CSA).

(c) Owner acknowledges that the price for the Project is based on the market cost as of the date of the Project Scope, for steel, copper and similar raw materials incorporated into equipment and material used for the Project. Price increases for such equipment and materials after the Project Scope has been delivered may either result in a project price increase or a corresponding decrease in the project size. Once the CSA to complete the Project is executed by both parties, the Project price will not be contingent on those fluctuations.

1.3 Other Terms and Conditions.

(a) AMERESCO's receipt of an executed copy of this Project Development Agreement shall serve as notification to AMERESCO to proceed with the Project Development.

(b) AMERESCO does not assume responsibility to Owner for any anticipated revenues, savings or benefits projected in the Project.

1.4 Miscellaneous Terms and Conditions.

(a) This Project Development Agreement is hereby executed as of the Effective Date, written above.

(b) The signatories hereto represent that they have been duly authorized to enter into to this Project Development Agreement on behalf of the Party for whom they sign.

(c) The laws of the State of Oklahoma shall govern the interpretation and enforcement of the terms and conditions stated herein.

(d) This Project Development Agreement may not be amended unless in writing signed by authorized representatives of both Parties.

(e) Neither Party may assign this Project Development Agreement to another party without the prior written consent of the non-assigning Party, which will not be unreasonably withheld, delayed or conditioned. No un-consented-to assignment will be legally binding upon the non-assigning Party.

AMERESCO, INC.

By:_____
Name: Robert Georgeoff
Title: Vice President

City of Durant, Oklahoma

By:_____
Name: Jerry Tomlinson
Title: Mayor

ATTACHMENT A

List of Departments/Facilities

Water Metering Infrastructure - Citywide

ATTACHMENT B

SCOPE OF SERVICES

This table presents an approximation of common engineering, project management, and installation activities that occur during the evaluation of the water metering infrastructure under the Project Development Agreement:

Scope
Database extract from billing system and entry to Ameresco meter evaluation software
Coordinate RFP with meter manufacturer
Coordinate RFP with meter installation subcontractor
Engineer survey via field verification or software analysis of all meters 3” or larger
Develop scope of work for meter changeouts and AMI installation
Coordinate RFPs and finalize pricing with City’s desired meter manufacturer
Billing Software Integration Options
Finalized pricing and scope for Comprehensive Services Contract

Agenda Item: 4.b.

The City of Durant

Deputy City Manager of Administration

Memorandum

Date:	11/5/2018
To:	Utilities Authority
From:	Marty Cook, Public Works Director Greg Buckley, Administrative Services Director
Re:	Consider Authorizing Staff to Move Forward with an Automated Meter Reading to Include the Necessary Infrastructure, Bidding for Contractors, Financing Options, and Recognize the Neptune Mach 10 as the Selected Meter, or Take Any Other Appropriate Action

For the past several years the City has been working toward updating the water meters to allow for migration to an Automated Meter Reading system. To date City staff have installed approximately 500 Neptune Mach 10 meters, which have the capability to be read remotely. Those meters are currently being read with a mobile drive-by reading system, which the City purchased several years ago when the process to update started.

Current work activity and staffing levels have limited the ability to timely convert the whole system as an in-house project. To maintain the updating of the water meters as an in-house project is impractical. The water meters in the field are mostly older mechanical meters which have been used beyond their life cycle. Old meters lose their accuracy which in turn means they are not recording all of the water that travels through them.

There are approximately 7,000 meters with the City's water system. Staff is requesting Council authorize staff to bid out the installation of new meters, along with possible fixed base radio towers or other means of reading meters, and financing options. Since the City has already been purchasing Neptune Mach 10 meters as the platform for AMR, sole source the purchase of these meters. By selecting the Mach 10 as a sole source meter we will not lose any of the time and effort since initiating an update to an AMR system.

Staff is estimating the project cost for completion and upgrading to a full ARM system to be around $2.2 to $2.5 Million. This estimate is based on rough estimates of number of meters, meters and installation based on those meters estimates, projected tower costs, and contingency. Once we bid the project we will have a better cost projection, which won't be fully known until we complete the project.

There are a couple of financing options: open market loan or Oklahoma Water Resources Board. We will evaluate if this project will qualify for tax or tax exempt financing.

Additional benefits to full implementation of an AMR system included better customer service. The system will provide more detail reading information which will assist in customers being able to see when they are using water. One desire is the ability of customers to have a web portal to their account which will show them their water consumption.

Staff recommends Council authorize staff to move forward in obtaining quotes for installation of meters, radio

towers or other reading options and financing for an AMR system.

Council Information / Action Requested

Authorize Staff to move forward with an Automated Meter Reading to include the necessary infrastructure, bidding for contractors, financing options, and recognize the Neptune Mach 10 as the selected meter.

City Staff Information / Action Follow-up, if Council authorizes this action: