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PUBLIC SERVICE
COMMISSION

GRAVES COUNTY WATER DISTRICT

December 19, 2019

Kentucky Public Service Commission
Attn: Mary Purvis
211 Sower Boulevard
Frankfort, KY 40602-0615

Case Number: 2019-00347

Ms. Purvis,

Attached you will find documentation that needs to be added to our current case file. If you have any questions please give us a call.

Sincerely,

Kevin Leonard
Water and Wastewater Manager

301 East Broadway
Mayfield, KY 42066
Phone: 270-247-4661 Fax: 270-247-0550

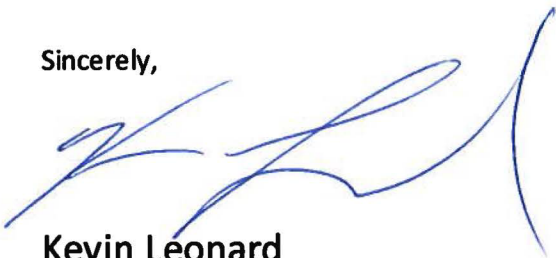
Graves County Water District

On behalf of the Graves County Water District these are the steps of implementation for the Water Loss Control Program:

1. Bid/purchase of hydro-excavator 12/1/19-12/1/20
2. Hire full-time position for leak specialist. 12/1/19
 - a. Move leak loggers daily and utilize listening equipment
3. Establish type of meters to utilize for DMA. 2/1/20
 - a. We currently have two active test sites.
4. DMA sites established. 1/1/20 - 1/1/22
5. Installation of DMA meters. 1/1/20 - 1/1/22
6. Installation of Pressure sensors and PRV monitors. 2/2/23
7. Set up IOT for interface with AMI meters, DMA's, SCADA tank data, 1/1/21
8. Continue to establish workflow for DMA information to field crews. 1/1/21
9. Complete build out of infrastructure for long-term leak predictive analysis and response. 1/1/20-1/1/23
10. Leaks in check and system wide monitoring built on the established infrastructure. 12/1/26

This project is the first in Kentucky that I am aware of. A vast amount of research and training continues to make the items mentioned above dynamic in nature. The predictive analysis software that will incorporate all other platforms (AMI, SCADA, DMA sites, Pressure, GIS, Work order system, etc.) is a vital part of capturing and monitoring all the water loss in the systems for long-term success. I hope that the Commission will take this under consideration when evaluating our progress.

Sincerely,



Kevin Leonard

Water and Wastewater Manager

Mayfield Electric & Water Systems

301 East Broadway

Mayfield, KY 42066

PUBLIC SERVICE COMMISSION

Monthly Water Loss Report

Water Utility:

For the Month of: Year:

LINE #	ITEM	GALLONS (Omit 000's)	
1	WATER PRODUCED, PURCHASED & DISTRIBUTED		
2	Water Produced		
3	Water Purchased	8,594,000	
4	TOTAL PRODUCED AND PURCHASED	8,594,000	
5			
6	WATER SALES		
7	Residential	6,187,200	
8	Commercial	260,700	
9	Industrial		
10	Bulk Loading Stations		
11	Wholesale		
12	Other Sales		
13	TOTAL WATER SALES	6,447,900	75.0%
14			
15	OTHER WATER USED		
16	Utility and/or Water Treatment Plant		
17	Wastewater Plant		
18	System Flushing		
19	Fire Department		
20	Other		
21	TOTAL OTHER WATER USED	-	0.0%
22			
23	WATER LOSS		
24	Tank Overflows		
25	Line Breaks		
26	Line Leaks	2,146,100	
27	Other		
28	TOTAL LINE LOSS	2,146,100	25.0%
29			
30	Note: Line 13 + Line 21 + Line 28 Must Equal Line 4		
31			
32	WATER LOSS PERCENTAGE		
33	Unaccounted-For Water (Line 28 divided by Line 4)		25.0%

PUBLIC SERVICE COMMISSION

Monthly Water Loss Report

Water Utility:

For the Month of: Year:

LINE #	ITEM	GALLONS (Omit 000's)	
1	WATER PRODUCED, PURCHASED & DISTRIBUTED		
2	Water Produced		
3	Water Purchased	2,816,000	
4	TOTAL PRODUCED AND PURCHASED	2,816,000	
5			
6	WATER SALES		
7	Residential	1,356,000	
8	Commercial	152,600	
9	Industrial		
10	Bulk Loading Stations		
11	Wholesale	782,900	
12	Other Sales		
13	TOTAL WATER SALES	2,291,500	81.4%
14			
15	OTHER WATER USED		
16	Utility and/or Water Treatment Plant		
17	Wastewater Plant		
18	System Flushing		
19	Fire Department		
20	Other		
21	TOTAL OTHER WATER USED	-	0.0%
22			
23	WATER LOSS		
24	Tank Overflows		
25	Line Breaks		
26	Line Leaks	524,500	
27	Other		
28	TOTAL LINE LOSS	524,500	18.6%
29			
30	Note: Line 13 + Line 21 + Line 28 Must Equal Line 4		
31			
32	WATER LOSS PERCENTAGE		
33	Unaccounted-For Water (Line 28 divided by Line 4)	18.6%	

PUBLIC SERVICE COMMISSION

Monthly Water Loss Report

Water Utility:

For the Month of: Year:

LINE #	ITEM	GALLONS (Omit 000's)
1	WATER PRODUCED, PURCHASED & DISTRIBUTED	
2	Water Produced	
3	Water Purchased	2,147,000
4	TOTAL PRODUCED AND PURCHASED	2,147,000
5		
6	WATER SALES	
7	Residential	1,181,100
8	Commercial	277,300
9	Industrial	
10	Bulk Loading Stations	
11	Wholesale	
12	Other Sales	
13	TOTAL WATER SALES	1,458,400 67.9%
14		
15	OTHER WATER USED	
16	Utility and/or Water Treatment Plant	
17	Wastewater Plant	
18	System Flushing	
19	Fire Department	
20	Other	
21	TOTAL OTHER WATER USED	- 0.0%
22		
23	WATER LOSS	
24	Tank Overflows	
25	Line Breaks	
26	Line Leaks	688,600
27	Other	
28	TOTAL LINE LOSS	688,600 32.1%
29		
30	Note: Line 13 + Line 21 + Line 28 Must Equal Line 4	
31		
32	WATER LOSS PERCENTAGE	
33	Unaccounted-For Water (Line 28 divided by Line 4)	32.1%

PUBLIC SERVICE COMMISSION

Monthly Water Loss Report

Water Utility:

For the Month of: Year:

LINE #	ITEM	GALLONS (Omit 000's)	
1	WATER PRODUCED, PURCHASED & DISTRIBUTED		
2	Water Produced	8,144,000	
3	Water Purchased		
4	TOTAL PRODUCED AND PURCHASED	8,144,000	
5			
6	WATER SALES		
7	Residential	4,165,000	
8	Commercial	2,501,600	
9	Industrial		
10	Bulk Loading Stations		
11	Wholesale		
12	Other Sales		
13	TOTAL WATER SALES	6,666,600	81.9%
14			
15	OTHER WATER USED		
16	Utility and/or Water Treatment Plant		
17	Wastewater Plant		
18	System Flushing		
19	Fire Department		
20	Other		
21	TOTAL OTHER WATER USED	-	0.0%
22			
23	WATER LOSS		
24	Tank Overflows		
25	Line Breaks	80,000	
26	Line Leaks	1,397,400	
27	Other		
28	TOTAL LINE LOSS	1,477,400	18.1%
29			
30	Note: Line 13 + Line 21 + Line 28 Must Equal Line 4		
31			
32	WATER LOSS PERCENTAGE		
33	Unaccounted-For Water (Line 28 divided by Line 4)		18.1%

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Monthly Water Loss Report

Water Utility: Sedalia Water District

For the Month of: November Year: 2019

LINE #	ITEM	GALLONS (Omit 000's)
1	WATER PRODUCED, PURCHASED & DISTRIBUTED	
2	Water Produced	480,700
3	Water Purchased	
4	TOTAL PRODUCED AND PURCHASED	480,700
5		
6	WATER SALES	
7	Residential	360,000
8	Commercial	82,900
9	Industrial	
10	Bulk Loading Stations	
11	Wholesale	
12	Other Sales	
13	TOTAL WATER SALES	442,900 92.1%
14		
15	OTHER WATER USED	
16	Utility and/or Water Treatment Plant	
17	Wastewater Plant	
18	System Flushing	
19	Fire Department	
20	Other	
21	TOTAL OTHER WATER USED	- 0.0%
22		
23	WATER LOSS	
24	Tank Overflows	
25	Line Breaks	
26	Line Leaks	37,800
27	Other	
28	TOTAL LINE LOSS	37,800 7.9%
29		
30	Note: Line 13 + Line 21 + Line 28 Must Equal Line 4	
31		
32	WATER LOSS PERCENTAGE	
33	Unaccounted-For Water (Line 28 divided by Line 4)	7.9%

PUBLIC SERVICE COMMISSION

Monthly Water Loss Report

Water Utility:

For the Month of: Year:

LINE #	ITEM	GALLONS (Omit 000's)	
1	WATER PRODUCED, PURCHASED & DISTRIBUTED		
2	Water Produced	5,067,000	
3	Water Purchased		
4	TOTAL PRODUCED AND PURCHASED	5,067,000	
5			
6	WATER SALES		
7	Residential	2,071,100	
8	Commercial	263,300	
9	Industrial		
10	Bulk Loading Stations		
11	Wholesale		
12	Other Sales		
13	TOTAL WATER SALES	2,334,400	46.1%
14			
15	OTHER WATER USED		
16	Utility and/or Water Treatment Plant		
17	Wastewater Plant		
18	System Flushing		
19	Fire Department		
20	Other		
21	TOTAL OTHER WATER USED	-	0.0%
22			
23	WATER LOSS		
24	Tank Overflows		
25	Line Breaks		
26	Line Leaks	2,732,600	
27	Other		
28	TOTAL LINE LOSS	2,732,600	53.9%
29			
30	Note: Line 13 + Line 21 + Line 28 Must Equal Line 4		
31			
32	WATER LOSS PERCENTAGE		
33	Unaccounted-For Water (Line 28 divided by Line 4)		53.9%