

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

**ELECTRONIC INVESTIGATION )  
INTO THE MEASURING, )  
RECORDING, AND REPORTING OF ) CASE NO. 2018-00394  
WATER LOSS BY KENTUCKY'S )  
JURISDICTIONAL WATER )  
UTILITIES )**

**RESPONSE OF  
CUMBERLAND COUNTY WATER DISTRICT  
TO  
COMMISSION'S REQUEST FOR INFORMATION  
DATED DECEMBER 18, 2018**

**FILED JANUARY 14, 2019**

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**CERTIFICATION OF RESPONSE OF  
CUMBERLAND COUNTY WATER DISTRICT TO  
COMMISSION'S REQUEST FOR INFORMATION**

**This is to certify that I have supervised the preparation of Cumberland County Water District's Response to the Commission's Request for Information. The response submitted on behalf of Cumberland County Water District is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.**

**DATE: 1/14/2019**

  
**Matthew Dyer, General Manager  
Cumberland County Water District**

**Cumberland County Water District**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 1**

**Responding Witness: Matthew Dyer**

**Question 1. Explain in detail the manner in which you measure, calculate, and track water loss, and:**

- a. Identify whether you use any manual form (including Excel spreadsheet) or electronic or mechanized system to calculate and track water loss.**
- b. Provide a copy of any form used (including Excel spreadsheet).**
- c. Identify the source of any form or system used.**

**Response 1. Cumberland County Water District (CCWD), reads master meters daily and customer meters monthly. The master meters readings are reconciled to the wholesale providers monthly bills. Master meter readings provide the total amount of water in gallons purchased from all suppliers. Water loss is calculated monthly by using the Code Summary Report generated by the CCWD billing system of total gallons sold to all customers. The difference between water sold and water purchased after adjusting for flushing, fire department usage, line break loss and other usages as identified on Reporting Form is water loss.**

- a. Cumberland County Water District uses the Monthly (Annual) Water Loss Report (Excel Workbook).**
- b. See sample Monthly Water Loss Report (Workbook sheet) labeled as Exhibit 1.  
See sample Code Summary Report as Exhibit 2.  
See sample Flushing record as Exhibit 3.  
See sample Monthly Fire Dept Usage Report as Exhibit 4.  
See sample Daily Master Meter Reading sheet as Exhibit 5  
See sample Leak Log as Exhibit 6.**

**c. Monthly Water Loss Report (Workbook sheet) source is Kentucky Rural Water Association.**

**Code Summary Report is generated United Systems billing software.**

**And all other forms are generated in-house by CCWD staff.**

**Cumberland County Water District**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 2**

**Responding Witness: Matthew Dyer**

**Question 2. Explain in detail your understanding of the information to be provided in each of the categories on the Water Statistics page (reference page 30) of the Annual Report required of jurisdictional water utilities, accessed through the Commission's website.**

**Response 2. Cumberland County Water District (CCWD) purchases and produces all of the water it sells. CCWD understands the Water Statistics (Ref Page: 30) of the Annual Report.**

- 1. This is a section heading, "Water Produced, Purchased and Distributed"**
- 2. CCWD does not produce water therefore leaves blank.**
- 3. CCWD enters total gallons of water purchased omitting 000's**
- 4. This number is the total gallons of water the utility produced and purchased**
- 5. There is not a Number 5 (skipped number) on Water Statistics (Ref Pg 30) print copy**
- 6. This is a section heading, "Water Sales: "**
- 7. Using reports generated by billing system, CCWD enters Residential total usage in gallons**
- 8. Using reports generated by billing system, CCWD enters Commercial total usage in gallons**
- 9. Using reports generated by billing system, CCWD enters Industrial total usage in gallons**
- 10. CCWD does not have any Bulk Loading Stations.**
- 11. CCWD does not resale water to any wholesale customers**
- 12. Any water sold that cannot be categorized within Nos. 7 – 11, total gallons input here**
- 13. Total of all Water Sales (in gallons) calculated from all categories (Nos. 7-12)**
- 14. There is not a Number 14 (skipped number) on Water Statistics (Ref Pg 30) print copy**
- 15. This is a section heading, "Other Water Used"**
- 16. CCWD does not have a Water Treatment Plant therefore this is left blank**

17. CCWD does not have a Wastewater treatment plant
18. CCWD routinely flushes to maintain safe drinking water standards. Flushing calculations and records are maintained. Total gallons used for flushing entered.
19. CCWD enters Fire Department usage from Monthly Fire Dept. Usage Reports
20. Other Water Usage, if not categorized above, is recorded and entered here on this line.
21. Total of Other Water Used (in gallons) calculated from all categories (Nos. 16-20)
22. There is not a Number 22 (skipped number) on Water Statistics (Ref Pg 30) print copy
23. This is a section heading, "Water Loss: "
24. Gallons of water loss due to an annual total of any Tank Overflow entered (records are maintained, if applicable)
25. CCWD does not use this line.
26. Gallons of water loss due to Known Line Leaks that have been located/repaired. A Leak Log is maintained.
27. CCWD enters other leakage here.
28. Total Line Loss (water in gallons) calculated from all categories (Nos. 24-27) and entered
29. There is not a Number 29 (skipped number) on Water Statistics (Ref Pg 30) print copy
30. There is not a Number 30 (skipped number) on Water Statistics (Ref Pg 30) print copy
31. There is not a Number 31 (skipped number) on Water Statistics (Ref Pg 30) print copy
32. This is a section heading, "Water Loss Percentage"
33. The Water Loss Percentage is calculated based upon data entry of Line 28, "Total Line Loss" divided by Line 4, "Total Produced and Purchased"

**Cumberland County Water District**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 3**

**Responding Witness: Matthew Dyer**

**Question 3. State any questions you have regarding how to use the updated Commission Form described and attached as Appendix A to this Order.**

**Response 3. Cumberland County Water District (CCWD) has no questions regarding the use of the updated Commission Form attached as Appendix A to the Order.**

**Cumberland County Water District**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 4**

**Responding Witness: Matthew Dyer**

**Question 4. State any suggestions or improvements you have for the updated Commission Form described and attached as Appendix A to this Order.**

**Response 4. Cumberland County Water District (CCWD) has no suggestions or improvements to offer for the updated Commission Form described and attached as Appendix A to the Order.**



**Cumberland County Water District**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 5**

**Responding Witness: Matthew Dyer**

**Question 5. State any questions you have regarding how the information in the updated Commission Form described and attached as Appendix A to this Order is to be incorporated into annual reports.**

**Response 5. Cumberland County Water District (CCWD) has no questions regarding how the information in the updated Commission Form described and attached as Appendix A to the Order is to be incorporated into annual reports.**

**Cumberland County Water District**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 6**

**Responding Witness: Matthew Dyer**

**Question 6. State any concerns you have regarding the use of the updated Commission Form described and attached as Appendix A to this Order.**

**Response 6. Cumberland County Water District (CCWD) has no concerns regarding the use of the updated Commission Form described and attached as Appendix A to the Order.**

**Cumberland County Water District**

**CASE NO. 2018-00394**

**Response to Commission's Request for Information**

**Question No. 7**

**Responding Witness: Matthew Dyer**

**Question 7. State whether you believe it is reasonable, proper, and appropriate for the Commission to require jurisdictional water utilities to maintain and use the updated Commission Form described and attached as Appendix A to this Order. Fully explain your answer.**

**Response 7. Cumberland County Water District (CCWD) believes it is reasonable, proper, and appropriate for the Commission to require jurisdictional water utilities to maintain and use the updated Commission Form described and attached as Appendix A to the Order. CCWD believes it is a good business practice for all water utilities to track all sources of non-revenue water.**

**Cumberland County Water District****CASE NO. 2018-00394****Response to Commission's Request for Information****CERTIFICATE OF SERVICE**

**In accordance with 807 KAR 5:001, Section 8, I certify that Cumberland County Water District's electronic filing of this Response is a true and accurate copy of the same document being filed in paper medium; that the electronic filing was transmitted to the Public Service Commission on January 14, 2019; that there are currently no parties that the Public Service Commission has excused from participation by electronic means in this proceeding; and that an original paper medium of this Response will be delivered to the Public Service Commission within two business days.**

  
**Matthew Dyer, General Manager  
Cumberland County Water District**

### Exhibit 1

#### Water Use Report

Water Utility: Cumberland County Water District PWSID: KY0290271

For the Month of:  Year:

1	PURCHASE/ALBANY COST PER THOUSAND	\$2.10
2	PURCHASE/BURKESVILLE COST PER THOUSAND	\$2.15

GALLONS

<b>WATER PRODUCED or PURCHASED</b>		
3	Albany purchased water	\$0.00
4	Burkesville purchased water	\$0.00
5	<b>TOTAL PRODUCED AND PURCHASED</b>	0
6	<b>TOTAL COST</b>	

<b>WATER SOLD</b>		
7	Residential	
8	Commercial	
9	Industrial	
10	Bulk Loading Stations	
11	Wholesale	
12	Other Sales (explain) <u>DHSRP</u>	
13	<b>TOTAL WATER SOLD</b>	0
14	<b>TOTAL WATER NOT SOLD</b>	0

<b>BREAKDOWN OF WATER USAGE</b>		
15	Water Treatment Plant	
16	Wastewater Treatment Plant	
17	System Flushing	
18	Fire Department Usage	
19	Other Usage (explain)	
20	<b>TOTAL USAGE</b>	0
21	<b>WATER LOSS PERCENTAGE FOR RATE PURPOSES</b>	

<b>BREAKDOWN OF WATER LOST</b>		
22	Tank Overflows	
23	Excavation Breaks	
24	Repaired Line Breaks	
25	Unknown Loss	0
26	<b>TOTAL WATER NOT SOLD OR USED</b>	0
27	<b>COST OF WATER NOT SOLD OR USED</b>	

<b>"UNKNOWN LOSS" FLOW RATE AND COST:</b>		
28	"Unknown Loss"	0
29	% "Unknown Loss"	
30	Number of Days in Period	31
31	"Unknown Loss" per Day (Gallons per Day)	0
32	"Unknown Loss" per Minute (GPM)	0.00
33	"Unknown Loss" Cost for Month	

### Exhibit 2

#### Cumberland Co Water District Code Summary

Service Type All Service Types  
 Cycle 1-Cycle1  
 Account Range All Accounts  
 Date Range Current Billing

Break Report Down By Customer Type  
 Breakdown Addons By Service Type   
 Include Inactive Accounts   
 Inactive Accounts To Include Inactive Accounts With Arrears Shown In Billing   
 Use Reading Factor

Print Add On Usage

Service	Rate	Number Active	Number Inactive	Charges	Arrears	Total	Usage	Adjustment Amount	Adjusted Total
***** Customer Type A UNKNOWN *****									
WA Water	01 Residential 5/8" -WA	1	0	\$69.73	\$0.00	\$69.73	7,800		
Local Tax	01 School Tax	1	0	\$2.09	\$0.00	\$2.09			
Net Amount		0	0	\$71.82	\$0.00	\$71.82			
Penalty	01 Penalty	1	0	\$6.97	\$0.00	\$6.97			
Gross Amount		0	0	\$78.79	\$0.00	\$78.79			
Total Amount		0	0	\$78.79	\$0.00	\$78.79	7,800		
***** Customer Type C Commercial *****									
WA Water	01 Residential 5/8" -WA	1	0	\$42.70	\$0.00	\$42.70	3,900		
	02 Commercial 5/8" -WE	18	0	\$902.85	\$0.00	\$902.85	78,700		
	04 Commercial 1" -WD	2	0	\$2,555.29	\$0.00	\$2,555.29	442,400		
	07 5/8x3/4 SCWD - WH	3	0	\$104.37	\$2.82	\$107.19	4,800		
	08 5/8x3/4 Comm - W2	15	3	\$827.39	\$128.49	\$753.88	48,000		
	10 1" Commercial - W4	3	0	\$3,756.89	\$0.00	\$3,756.89	649,900		
	14 2" Commercial - W8	2	0	\$574.39	\$0.00	\$574.39	89,200		
		44	3	\$8,588.48	\$128.31	\$8,694.79	1,313,700		
CS Conv. Svc.	03 LZ	0	1	\$0.00	\$50.00	\$50.00			
SV Service Ch	08 Service Call / Inv.	0	1	\$0.00	\$35.00	\$35.00			
Local Tax	01 School Tax	44	3	\$256.82	\$0.00	\$256.82			
State Tax	01 Sales Tax	39	3	\$137.21	\$0.00	\$137.21			
Net Amount		0	0	\$8,959.51	\$214.31	\$9,173.82			
Penalty	01 Penalty	44	3	\$848.82	\$0.00	\$848.82			
Gross Amount		0	0	\$9,608.13	\$214.31	\$10,022.44			
Overpayment		2	0	\$0.00	(\$146.41)	(\$146.41)			
Total Amount		0	0	\$9,608.13	\$67.90	\$9,876.03	1,313,700		
***** Customer Type I Industrial *****									
WA Water	02 Commercial 5/8" -WE	1	0	\$28.16	\$0.00	\$28.16	0		
	04 Commercial 1" -WD	1	0	\$117.70	\$0.00	\$117.70	15,900		
	08 5/8x3/4 Comm - W2	3	0	\$124.06	\$0.00	\$124.06	7,500		
		5	0	\$269.92	\$0.00	\$269.92	23,400		
Local Tax	01 School Tax	5	0	\$8.08	\$0.00	\$8.08			
State Tax	01 Sales Tax	5	0	\$16.19	\$0.00	\$16.19			
Net Amount		0	0	\$294.19	\$0.00	\$294.19			
Penalty	01 Penalty	5	0	\$27.00	\$0.00	\$27.00			







### Exhibit 5

PLANT MASTER METER - 000	
Today	_____ / _____
Yesterday	_____ / _____
Total	_____ / _____
GPM	_____ / _____

SOUTH 61 PIT - 000	
Today	_____ / _____
Yesterday	_____ / _____
Total	_____ / _____
GPM	_____ / _____

SOUTH 61 PUMP STATION - 00	
Today	_____ / _____
Yesterday	_____ / _____
Total	_____ / _____
GPM	_____ / _____

JOE SCOTT RIDGE - 000	
Today	_____ / _____
Yesterday	_____ / _____
Total	_____ / _____
GPM	_____ / _____

WHITES BOTTOM / ID# 11934183 - 00	
Today	_____ / _____
Yesterday	_____ / _____
Total	_____ / _____
GPM	_____ / _____

HWY 953 METER / ID# 12957650 - 00	
Today	_____ / _____
Yesterday	_____ / _____
Total	_____ / _____
GPM	_____ / _____

JAMES LONG METER - 00	
Today	_____ / _____
Yesterday	_____ / _____
Total	_____ / _____
GPM	_____ / _____

BILLY COOT METER - 00	
Today	_____ / _____
Yesterday	_____ / _____
Total	_____ / _____
GPM	_____ / _____

CEDAR CREEK METER - 00	
Today	_____ / _____
Yesterday	_____ / _____
Total	_____ / _____
GPM	_____ / _____

ZINC MINE METER - 00	
Today	_____ / _____
Yesterday	_____ / _____
Total	_____ / _____
GPM	_____ / _____

ALBANY MASTER METER - 000	
Today	_____ / _____
Yesterday	_____ / _____
Total	_____ / _____
GPM	_____ / _____

NEW 1880 MASTER METER - 00	
Today	_____ / _____
Yesterday	_____ / _____
Total	_____ / _____
GPM	_____ / _____

NORTH CHLORINE RESIDUAL @ \_\_\_\_\_  
 LOCATION \_\_\_\_\_  
 TOTAL \_\_\_\_\_ / FREE \_\_\_\_\_

SOUTH CHLORINE RESIDUAL @ \_\_\_\_\_  
 LOCATION \_\_\_\_\_  
 TOTAL \_\_\_\_\_ / FREE \_\_\_\_\_

EAST CHLORINE RESIDUAL @ \_\_\_\_\_  
 LOCATION \_\_\_\_\_  
 TOTAL \_\_\_\_\_ / FREE \_\_\_\_\_

WEST CHLORINE RESIDUAL @ \_\_\_\_\_  
 LOCATION \_\_\_\_\_  
 TOTAL \_\_\_\_\_ / FREE \_\_\_\_\_

NOTES \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

HIGHWAY 1206 METER - 0

Today \_\_\_\_\_ / \_\_\_\_\_  
Yesterday \_\_\_\_\_ / \_\_\_\_\_  
Total \_\_\_\_\_ / \_\_\_\_\_  
GPM \_\_\_\_\_ / \_\_\_\_\_

GARRETT CREEK / ID# 12957648- 00

Today \_\_\_\_\_ / \_\_\_\_\_  
Yesterday \_\_\_\_\_ / \_\_\_\_\_  
Total \_\_\_\_\_ / \_\_\_\_\_  
GPM \_\_\_\_\_ / \_\_\_\_\_

WEST 90 METER / ID# 12957649 - 00

Today \_\_\_\_\_ / \_\_\_\_\_  
Yesterday \_\_\_\_\_ / \_\_\_\_\_  
Total \_\_\_\_\_ / \_\_\_\_\_  
GPM \_\_\_\_\_ / \_\_\_\_\_

EAST 90 METER / ID# 12957647 - 00

Today \_\_\_\_\_ / \_\_\_\_\_  
Yesterday \_\_\_\_\_ / \_\_\_\_\_  
Total \_\_\_\_\_ / \_\_\_\_\_  
GPM \_\_\_\_\_ / \_\_\_\_\_

STATE PARK MASTER METER

Today \_\_\_\_\_ / \_\_\_\_\_  
Yesterday \_\_\_\_\_ / \_\_\_\_\_  
Total \_\_\_\_\_ / \_\_\_\_\_  
GPM \_\_\_\_\_ / \_\_\_\_\_

### Exhibit 6

## CUMBERLAND COUNTY WATER DISTRICT

### LEAK REPAIR LOG

Date leak was repaired: \_\_\_\_\_

Location of leak: \_\_\_\_\_

Time leak was discovered: \_\_\_\_\_ How long to repair: \_\_\_\_\_

Size of waterline: \_\_\_\_\_ Number of customers affected: \_\_\_\_\_

Materials used to repair leak: \_\_\_\_\_

Leak repaired by: \_\_\_\_\_

Size of hole: \_\_\_\_\_ Length of crack: \_\_\_\_\_ Width of crack: \_\_\_\_\_

PSI: \_\_\_\_\_ Approximate time leaking: \_\_\_\_\_ Days/Hours/Minutes: \_\_\_\_\_

Flushed by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Flushing location: \_\_\_\_\_

Chlorine Residual: \_\_\_\_\_ Free / \_\_\_\_\_ Total

Samples taken by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_