## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:		
ELECTRONIC INVESTIGATGION INTO	)	
EXCESSIVE WATER LOSS BY KENTUCKY'S	)	CASE NO
JURISDICTIONAL WATER UTILITIES	)	2019-41

RESPONSE OF SOUTHERN WATER & SEWER DISCTRICT TO APPENDIX C

FILED: May 2, 2019

#### Southern Water and Sewer District

Response to Ky. PSC (Kentucky Public Service Commission) for case # 2019-00041

- 1. See attached spreadsheets
- 2. SWSD utilizes the water loss form created by the Ky. PSC
- A. Utilizing the PSC form, WTP (Water treatment Plant) usage is a guess/estimate in reality at this time but the staff has attempted to calculate daily usage by timing usage, using drawdown information, using pump information, etc. It will continue this way until we (UMG) can install a new plan and the necessary equipment to better record / monitor the numbers.
- B. Donald R. Compton UMG Special Projects Manager
   Chris Francis SWSD WTP Supervisor
   Reece Salyer SWSD Dist. Supervisor
   SWSD Office staff (meter reports, billing info, usage, etc.)
- C. \*\*See attached sheet
- 3. Since UMG has taken over the management of SWSD there has not been a water loss detection plan located so UMG will create one and put in action as quick as possible.
- 4. Same as # 3
- UMG was not present in 2015 and to our knowledge the only water loss reduction project was associated with KRWA (Ky Rural Water Assoc.) and their staff. It will be a priority going forward for UMG to reduce water loss
- UMG is not aware that a plan is on file but UMG is already started compiling the info to create a long range C.I.P.
- 7. Those are TBD by UMG
- 8. UMG has not located a written maintenance program, the maintenance has been performed on an "as needed basis".
- Duane Hamilton & Grondall Potter of UMG are assisting the SWSD crews to help detect leaks.
   Duane Hamilton UMG, Grondall Potter UMG, Logan Crowder SWSD, Reese Salyer SWSD
- 10. Daily leak detection is not performed at this time but all SWSD staff always look / observe / report / repair any suspicious looking water issues. There is not enough personnel staffed at present time to have a dedicated leak detection crew.
- 11. The work order flow is at this time not being utilized properly and UMG is now training the staff on how work orders should be handled and flow through the system to have better reports generated, UMG cannot provide these reports at this time. \*\*See attached reports
- 12. See # 11
- 13. No, each leak is different so trying to determine a set time would not be practical in the opinion of UMG.

- CPA can answer but to the knowledge of UMG no materials were purchased during the requested time period.
- 15. UMG was not present in 2015 so knowledge of training is not known.
- 16. Don't think there is a written policy but based on short time UMG has been managing any irregular meter issues have been addressed.
- 17. To the knowledge of UMG the meter is 2 3 yrs old and has not been tested since installation. UMG has already attempted to calibrate this meter but was unsuccessful. UMG will plan accordingly and have testing performed.
- 18. \*\*See attached reports
- 19. To the knowledge of UMG there is not one in place but UMG will have a testing plan in place as quickly as possible.
- 20. To the knowledge of UMG that number would be zero (0).
- 21. It appears that SWSD has mostly Sensus meters, some SRII's, some Badger meters and mostly Sensus on larger meters.
- 22. Yes
- 23. Yes
- 24. To UMG knowledge yes, as of March 25th 2019, they had better be read !!!
- 25. None that UMG is aware of.
- 26. No, this is not a doable task at this time but it will be on the UMG list of items "to do".
- 27. UMG has searched but not located one.
- 28. UMG has only calculated 2 months of WLR's (Water Loss Reports) for SWSD. UMG provides this monthly report to the board along with a production report / leak report. \*\*See attached reports.
- 29. UMG was not present in 2015 and the board has changed multiple times since requested date. Water loss is and will be a priority for UMG while managing SWSD.
- 30. 1. Water meter replacement / testing
  - 2. Water loss reduction
  - 3. Master meter replacement / testing
  - 4. Mink Br. Tank replacement
  - 5. WTP improvements Turb's, pipe gallery work, Grit King resolved, etc.
- 31. CPA will have to provide.
- 32. N/A
- 33. Old to Older to Oldest !! UMG has not acquired this info as of yet.
- 34. Same as # 33
- 35. No mapping that includes service connections, SWSD does have repair supplies.
- 36. UMG cannot locate any said policy.
- 37. UMG does know of a few cases but no prosecution that is known.
  - A. See #37
  - B. See #37

- 38. A policy has been found and leak adjustments have been performed based on history of account and circumstances surrounding the reason for needed adjustment. \*\*See Attached report
- 39. To UMG's knowledge SWSD can adjust late charges but is searching for that tariff to verify.
- 40. UMG believes there is a tariff that provides a worksheet but cannot locate it at this time.
- 41. To UMG knowledge a "comprehensive" audit has not been performed.
- 42. \*\*See Attached reports
- 43. Rural Water / AWWA spreadsheet to the knowledge of UMG.
- 44. Hydrants, dead end blow offs, flush valves, hydrant meter when possible, diffusers when needed, etc.
- 45. UMG was not present in 2018, cannot locate any reports. SWSD will have a policy created by UMG as soon as possible.

If you have any questions or concerns regarding this response please contact me at the information listed below.

Sincerely

Donald R. Compton

**UMG Special Projects Manager** 

Donall n Compto

Question #1

## **PUBLIC SERVICE COMMISSION**

## **Annual Water Loss Summary**

Water Utility:

SOUTHERN WATER AND SEWER DISTRICT

For the Year:

2012

MONTH	WATER LOSS %
JANUARY	66.3
FEBRUARY	52.0
MARCH	65.6
APRIL	63.1
MAY	63.7
JUNE	51.8
JULY	68.3
AUGUST	63.0
SEPTEMBER	55.9
OCTOBER	69.5
NOVEMBER	67.0
DECEMBER	68.9
TOTAL ANNUAL WATER LOSS %	63.2

The highest water loss was	69.5	and occurred in the month of	DECEMBER
The lowest water loss was	51.8	and occurred in the month of	JUNE

#### **LEGEND**

Water Loss is less that 15%
Water Loss is between 15% - 30%
Water Loss is greater than 30%

Water	Utility:	Southern Water & Sewer District			
For th	e Month of:	February	Year:	2019	
LINE #		ITEM		GALLONS (Omit 000's)	
1	WATER PRODUC	ED, PURCHASED & DISTRIBUTED			
2	Water Produced			42,740,000	
3	Water Purchased			11,006,300	
4		TOTAL PRODUCED AND PURC	CHASED	53,746,300	
5					
6	WATER SALES				
7	Residential			17,494,000	
8	Commercial				
9	Industrial				
10	Bulk Loading Station	ons			
11	Wholesale			1,476,000	
12	Other Sales		8		
13		TOTAL WATER	RSALES	18,970,000	35.3%
14					
15	OTHER WATER U	ISED			
16	Utility and/or Wate	r Treatment Plant		1,330,000	
17	Wastewater Plant				
18	System Flushing			1,600,000	
19	Fire Department			75,000	
20	Other	state hwy dept		2,000	
21		TOTAL OTHER WATE	R USED	3,007,000	5.6%
22				4	
23	WATER LOSS				
24	Tank Overflows			145,000	
25	Line Breaks			2,750,000	
26	Line Leaks			28,874,300	
27	Other				
28		TOTAL LIN	E LOSS	31,769,300	59.1%
29					
30	Note: Line 13 + Lir	ne 21 + Line 28 Must Equal Line 4			
31					
32	WATER LOSS PE	AND THE STATE OF T			
33	Unaccounted-For \	Vater (Line 28 divided by Line 4)		59.1%	

Water	Vater Utility: Southern Water & Sewer District								
For th	or the Month of: January Year: 2019								
LINE #		ITEM		GALLONS (Omit 000's)					
1	WATER PRODUC	ED, PURCHASED & DISTRIBUTED							
2	Water Produced			51,150,000					
3	Water Purchased			13,510,000					
4		TOTAL PRODUCED AND PUR	CHASED	64,660,000					
5									
6	WATER SALES								
7	Residential			19,355,000					
8	Commercial								
9	Industrial								
10	Bulk Loading Statio	ns							
11	Wholesale			1,377,000					
12	Other Sales		-						
13		TOTAL WATER	R SALES	20,732,000	32.1%				
14									
15	OTHER WATER U								
16	Utility and/or Water	Treatment Plant		975,000	]				
17	Wastewater Plant								
18	System Flushing			1,000,000					
19	Fire Department			62,196					
20	Other								
21		TOTAL OTHER WATE	RUSED	2,037,196	2 20/				
22		TO THE OTHER WATE	IN OOLD	2,037,190	3.2%				
23	WATER LOSS								
24	Tank Overflows			30,000					
25	Line Breaks			4,200,000					
26	Line Leaks			37,660,804					
27	Other								
28		TOTAL LIN	IF LOSS	41,890,804	64.8%				
29		TOTAL LIN	- L000	41,090,804	04.0%				
30	Note: Line 13 + Lin	e 21 + Line 28 Must Equal Line 4							
31		**							
32	WATER LOSS PER	CENTAGE							
33	Unaccounted-For M	later (Line 28 divided by Line 4)		64 99/					

Water	Utility:				
For the	e Month of:	March	Year:	2019	
LINE #		ITEM	GAL	LONS (Omit 000's)	
1		ED, PURCHASED & DISTRIBUTED		45 004 000	1
2	Water Produced			45,204,000	
3	Water Purchased	TOTAL PROPULED AND DURC	HACED	12,716,000 57,920,000	
4		TOTAL PRODUCED AND PURC	HASED	57,920,000	
5					
6	WATER SALES			04 004 040	1
7	Residential			21,924,910	
8	Commercial				
9	Industrial				
10	Bulk Loading Stati	ons		4 470 000	
11	Wholesale			1,476,000	
12	Other Sales				1
13		TOTAL WATER	SALES	23,400,910	40.4%
14					
15	OTHER WATER I				
16	Utility and/or Water	er Treatment Plant		1,190,000	
17	Wastewater Plant				
18	System Flushing			1,200,000	
19	Fire Department			87,500	
20	Other	state hwy dept.		3,500	
21		TOTAL OTHER WATER	RUSED	2,481,000	4.3%
22					
23	WATER LOSS				
24	Tank Overflows		30.586.000	658,000	1
25	Line Breaks			2,200,000	
26	Line Leaks			29,180,090	
27	Other				
28		TOTAL LINI	E LOSS	32,038,090	55.3%
29					
30	Note: Line 13 + Li	ine 21 + Line 28 Must Equal Line 4			
31	WATER LOSS DE	PCENTACE			
32	WATER LOSS PE			CE 20/	
33	Unaccounted-For	Water (Line 28 divided by Line 4)		55.3%	

Question # Z item C

## **PUBLIC SERVICE COMMISSION**

Wate	r Utility:		0
For th	e Month of:	April Ye	ar: 2019
LINE		ITEM	GALLONS (Omit 000's)
1		ED, PURCHASED & DISTRIBUTED	
2	Water Produced		
3	Water Purchased		
4		TOTAL PRODUCED AND PURCHASI	ED -
5			
6	WATER SALES		
7	Residential		
8	Commercial		
9	Industrial		
10 11	Bulk Loading Station Wholesale	ns	
12	Other Sales		
12	Other Sales	Y	
13		TOTAL MATER CALL	
14		TOTAL WATER SALE	ES - #DIV/0!
15	OTHER WATER U	SED	
16	Utility and/or Water		
17	Wastewater Plant	Treatment Fiant	
18	System Flushing		
19	Fire Department		
20	Other		
21		TOTAL OTHER WATER USE	<b>ED</b> - #DIV/0!
22			#510/0!
23	WATER LOSS		
24	Tank Overflows		
25	Line Breaks		
26	Line Leaks		
27	Other		
28		TOTAL LINE LOS	#DIV/0!
29	AND THE PARTY NAMED AND THE		
30	Note: Line 13 + Line	e 21 + Line 28 Must Equal Line 4	
31 32	WATER LOSS DED	CENTAGE	
33	WATER LOSS PER		
33	Unaccounted-For W	ater (Line 28 divided by Line 4)	#DIV/0!

restor "11

# SOUTHERN WATER AND SEWER MONTHLY FILED CONSTRUCTION LOG

3/25/19 10 4/25/19

NUMBER OF LEAKS 316 NUMBER OF TAPS 4	**		
NUMBER OF DIG OUTS			
ESTIMATED WATER LOSS	ga	ıl	
LINE SIZES ¾ 16 1inch 3	2inch	3inch	4inch2
6inch 8inch :	10inch	12inch _	
PARST USED: ¾ couplings 32  3 inch hymax's _2  8 inch hymax's _2  SR-II meter bottoms _	_ 4 inch hym 10 inch hym	nax's <u>4</u> ax,s	6 inch hymax's 12inch hymaxs
Right Beaver <u>//</u> Left Beave	r <u>14</u> Big N	/lud <u>5</u>	Little Mud
Scherualues = 4 - 2 meterbexe Vinch Value = 1 2 inch Setter	Replaced.		
FILED SUPERVISOR Steen Sol	2	DATE	
GENERAL MANAGER	1	_DATE	

#### SOUTHERN WATER & SEWER DISTRICT

#### MONTHLY LEAK LOGG

#### 1/29/2019 TO 2/25/2019

TO	$\Gamma \Lambda \Gamma$	1 6	AKS	17
10	IAL	LE	ANG	42

ESTIMATED WATER LOSS 4,200,000 gal.

**NEW TAPS 1** 

DIG-OUTS 0

3/4 18

1" INCH 8

6" INCH 1

2" INCH 2

8" INCH 1

3" INCH 2

10" INCH

4" INCH 7

12" INCH 1

RIGHT BEAVER 18

LEFT BEAVER 17

BIG MUD 5

LITTLE MUD 2

**PARTS USED** 

40-3/4 CUPLINGS

18-1" CUPLINGS

2-6" HYMAX'S

4-2" HYMAX'S

2-8" HYMAX'S

4-3" HYMAX'S

0-10" HYMAX'S

14-4" HYMAX'S

2-12" HYMAX'S

FIELD SUPERVISOR Chilaban

DATE 2/25/19

MANGER

DATE

# SOUTHERN WATER AND SEWER MONTHLY FILED CONSTRUCTION LOG 1/10/2018 TO 1/28/2019

NUMBER OF LEAKS _50 NUMBER OF TAPS4
NUMBER OF DIG OUTS1
ESTIMATED WATER LOSS 8,200,000 gal
LINE SIZES ¾29 1inch3 2inch2 3inch3 4inch5
6inch2 8inch2_ 10inch1 12inch
PARST USED: ¾ couplings100 1 inch couplings6 2 inch hymax,s4 3 inch hymax's6 4 inch hymax's10 6 inch hymax's4 10 inch hymax,s2_ 12inch hymaxs SR-II meter bottoms3 ¾ regulators
Right Beaver30 Left Beaver _13 Big Mud3 Little Mud4
FILED SUPERVISOR There Sole DATE 1-28-2019
GENERAL MANAGER DATE

QUESTION # 18



Branch Office 740 Enterprise Drive Lexington, KY 40510 Phone: (859)255-0852

Fax: (859)259-1171

## **CITCO Large Meter Test Record**

**Customer Name: Southern Water** 

Date: 4-26-19

Make: Sensus Compound

Serial #: 69278421

Size: 4"

Location: Garret

**Meter Tester Information:** 

Make: Sensus

Type: V2

Serial #: Tester3

Size: 3"

Last Tested: 07-19-2018

**Test As Found** 

		Residual			Result	Curve	Meter
	Flow Rate	Pressure	Meter	Prover	%=(A/B)x100		Accuracy
HIGH	200/500	60	505	510	99.02%	100.50%	99.51%
MED	25/100	80	102	105	97.14%	100.80%	97.92%
LOW	.75/10	95	10	10.1	99.01%	99.50%	98.51%
	Average of Tests As	Found:					98.65

Result: PASSED

Oxygen: 20.8

#### Michael Shipley (Card# W1370)

Size	High Flow	AWWA Standard	Mid Flow	AWWA Standard	Minimum Flow	AWWA Standard	TURBINE
1.5"	90 gpm for 300 gal	98.5% - 101.5%	10 gpm for 100 gal	98.5% - 101.5%	4 gpm for 100 gal	98.5% - 101.5%	TURBINE
2"	120 gpm for 300 gal	98.5% - 101.5%	10 gpm for 100 gal	98.5% - 101.5%	4 gpm for 100 gal	98.5% - 101.5%	TURBINE
3"	275 gpm for 600 gal	98.5% - 101.5%	20 gpm for 100 gal	98.5% - 101.5%	8 gpm for 100 gal	98.5% - 101.5%	TURBINE
4"	500 gpm for 1000 gal	98.5% - 101.5%	20 gpm for 1000 gal	98.5% - 101.5%	15 gpm for 100 gal	98.5% - 101.5%	TURBINE
6"	1100 gpm for 2500 gal	98.5% - 101.5%	40 gpm for 1000 gal	98.5% - 101.5%	30 gpm for 1000 gal	98.5% - 101.5%	TURBINE
8"	1500 gpm for 4000 gal	98.5% - 101.5%	50 gpm for 1000 gal	98.5% - 101.5%	50 gpm for 1000 gal	98.5% - 101.5%	TURBINE
2"	100 gpm for 100 gal	97% - 103%	15 gpm for 100 gal	90% - 103%	.25 gpm for 10 gal	95% - 101%	COMPOUND
3"	150 gpm for 500 gal	97% - 103%	15 gpm for 100 gal	90% - 103%	.50 gpm for 10 gal	95% - 101%	COMPOUND
4"	200 gpm for 500 gal	97% - 103%	25 gpm for 100 gal	90% - 103%	.75 gpm for 10 gal	95% - 101%	COMPOUND
6"	500 gpm for 1000 gal	97% - 103%	35 gpm for 100 gal	90% - 103%	1.5 gpm for 100 gal	95% - 101%	COMPOUND
8"	600 gpm for 2000 gal	97% - 103%	45 gpm for 100 gal	90% - 103%	2 gpm for 100 gal	95% - 101%	COMPOUND



Branch Office 740 Enterprise Drive Lexington, KY 40510 Phone: (859)255-0852

Fax: (859)259-1171

### **CITCO Large Meter Test Record**

**Customer Name: Southern Water** 

Date: 4-26-19

Make: Sensus T2 Omni

Serial #: 70575243

Size: 6"

**Location: Potter** 

**Meter Tester Information:** 

Make: Sensus

Type: V2

Serial #: Tester3

Size: 3"

Last Tested: 07-19-2018

**Test As Found** 

	Residual			Result	Curve	Meter	
	Flow Rate	Flow Rate Pressure	Meter	Prover	%=(A/B)x100		Accuracy
HIGH	510/2500	55	2749	2505	109.74%	100.50%	110.29%
MED						200.0070	
LOW	30/1000	85	1109	1035	107.15%	100.80%	108.01%
	Average of Tests As Found:						109.15

**Result: FAILED** 

Oxygen: 20.8

#### Michael Shipley (Card# W1370)

<u>Size</u>	<b>High Flow</b>	<b>AWWA Standard</b>	Mid Flow	<b>AWWA Standard</b>	<b>Minimum Flow</b>	AWWA Standard	TURBINE
1.5"	90 gpm for 300 gal	98.5% - 101.5%	10 gpm for 100 gal	98.5% - 101.5%	4 gpm for 100 gal	98.5% - 101.5%	TURBINE
2"	120 gpm for 300 gal	98.5% - 101.5%	10 gpm for 100 gal	98.5% - 101.5%	4 gpm for 100 gal	98.5% - 101.5%	TURBINE
3"	275 gpm for 600 gal	98.5% - 101.5%	20 gpm for 100 gal	98.5% - 101.5%	8 gpm for 100 gal	98.5% - 101.5%	TURBINE
4"	500 gpm for 1000 gal	98.5% - 101.5%	20 gpm for 1000 gal	98.5% - 101.5%	15 gpm for 100 gal	98.5% - 101.5%	TURBINE
6"	1100 gpm for 2500 gal	98.5% - 101.5%	40 gpm for 1000 gal	98.5% - 101.5%	30 gpm for 1000 gal	98.5% - 101.5%	TURBINE
8"	1500 gpm for 4000 gal	98.5% - 101.5%	50 gpm for 1000 gal	98.5% - 101.5%	50 gpm for 1000 gal	98.5% - 101.5%	TURBINE
2"	100 gpm for 100 gal	97% - 103%	15 gpm for 100 gal	90% - 103%	.25 gpm for 10 gal	95% - 101%	COMPOUND
3"	150 gpm for 500 gal	97% - 103%	15 gpm for 100 gal	90% - 103%	.50 gpm for 10 gal	95% - 101%	COMPOUND
4"	200 gpm for 500 gal	97% - 103%	25 gpm for 100 gal	90% - 103%	.75 gpm for 10 gal	95% - 101%	COMPOUND
6"	500 gpm for 1000 gal	97% - 103%	35 gpm for 100 gal	90% - 103%	1.5 gpm for 100 gal	95% - 101%	COMPOUND
8"	600 gpm for 2000 gal	97% - 103%	45 gpm for 100 gal	90% - 103%	2 gpm for 100 gal	95% - 101%	COMPOUND

OLLESTION #28

## **PUBLIC SERVICE COMMISSION**

ater	r Utility:	Southern Water & Sewer District		
For the Month of:		February	Year:	2019
NE#	<b>#</b>	ITEM	GALL	ONS (Omit 000's)
1	WATER PRODU	ICED, PURCHASED & DISTRIBUTED		
2	Water Produced			42,740,000
3	Water Purchase	d		11,006,300
4		TOTAL PRODUCED AND PUR	CHASED	53,746,300
5				
6	<b>WATER SALES</b>			
7	Residential			17,494,000
8	Commercial			
9	Industrial			
10	Bulk Loading Sta	ations		
11	Wholesale			1,476,000
12	Other Sales			
13		TOTAL WATER	R SALES	18,970,000 35.
14				
15	OTHER WATER	USED		(4)
16	Utility and/or Wa	ter Treatment Plant		1,330,000
17	Wastewater Plan	nt		
18	System Flushing			1,600,000
19	Fire Department			75,000
20	Other	state hwy dept		2,000
21		TOTAL OTHER WATE	R USED	3,007,000 5.6
22				
23	WATER LOSS			
24	Tank Overflows		Salt from the	145,000
25	Line Breaks			2,750,000
26	Line Leaks			28,874,300
27	Other			
28		TOTAL LIN	IE LOSS	31,769,300 59.
29 30	Note: Line 13 ±	Line 21 + Line 28 Must Equal Line 4		
31				
32	WATER LOSS P			
33	Unaccounted-Fo	r Water (Line 28 divided by Line 4)	MAN PROPERTY.	59.1%

101-4	1.14:11:407	Southern Water & Sewer District		
Water	Othity.	Southern Water & Sewer District	A Commence of the Commence of	
For the	e Month of:	March Year:	2019	
LINE#		ITEM	GALLONS (Omit 000's)	
1	WATER PRODUC	ED, PURCHASED & DISTRIBUTED		
2	Water Produced		45,204,000	
3	Water Purchased		12,716,000	
4		TOTAL PRODUCED AND PURCHASED	57,920,000	
5				
6	WATER SALES		04 004 040	ř
7	Residential		21,924,910	
8	Commercial			
9	Industrial			
10	Bulk Loading Stati	ons	1,476,000	
11	Wholesale		1,476,000	
12	Other Sales			
13		TOTAL WATER SALES	23,400,910	40.4%
14				
15	OTHER WATER			i
16	Utility and/or Water	r Treatment Plant	1,190,000	
17	Wastewater Plant			
18	System Flushing		1,200,000	
19	Fire Department		87,500	
20	Other	state hwy dept.	3,500	
21		TOTAL OTHER WATER USE	2,481,000	4.3%
22				
23	WATER LOSS			1
24	Tank Overflows		658,000	
25	Line Breaks		2,200,000	
26	Line Leaks		29,180,090	
27	Other			
28		TOTAL LINE LOS	32,038,090	55.3%
29				
30	Note: Line 13 + L	ine 21 + Line 28 Must Equal Line 4		
31	WATER LOSS P	EDCENTAGE		
32 33	WATER LOSS P	Water (Line 28 divided by Line 4)	55.3%	
33	Unaccounted-For	VValor (Line 20 divided by Line 4)		

Question # 38

	FOR Southern Floyd County, KY Community, Town or City
	P.S.C. KY. NO1
	Original SHEET NO. 35
Southern Water & Sewer District (Name of Utility)	CANCELLING P.S.C. KY. NO
***************************************	SHEET NO
RULI	ES & REGULATIONS

#### AC. Leak Adjustment Policy:

While a utility is not required to have a leak adjustment policy to adjust bills due to a water leak, this utility chooses to offer a leak adjustment under the following conditions:

- 1. The customer must request a leak adjustment in writing to the utility.
- The customer must provide a plumber's statement or other proof showing the leak has been repaired.
- 3. The customer's bill will be based on two components. The first step will be to calculate the customer's average monthly usage over a twelve-month period. The second step will be to deduct the customer's average monthly usage (as calculated above) from the total amount of water that passed through the meter. The usage calculated in step one will be billed at the utility's regular rates, while the remaining usage will be charged at the per thousand gallon leak adjustment rate. All water passing through the meter must be accounted and paid for by the customer. Therefore, the customer will owe the amount of his/her average bill plus the per thousand gallon leak adjustment rate for the remainder of the water that passed through the meter.
- If meter readings are not available for an entire twelve-month period, the average usage of similar customer loads shall be used for comparison purposes for the calculation.
- Only one (1) leak adjustment will be made for a specific service location during any given twelve-month period.
- 6. Wholesale customers are not eligible for this Leak Adjustment Policy.
- 7. The leak adjustment rate shall be: the cost of production per 1,000 gallons.

	KINTUGKY
DATE OF ISSUE April 03, 2014	PUBLIC SERVICE COMMISSION
DATE EFFECTIVE May 03, 2014	JEFF R. DEROUEN EXECUTIVE DIRECTOR
ISSUED BY Janua Month / Date / Year (Signature of Officer)	Beent Kirlley
BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION	EFFECTIVE 5/3/2014 PURSUANT TO 807 KAR 5:011 SECTION 9 (1)
IN CASE NO. n DATED n/a	No. 2. Last Tolomograph in the local control of the last term of the last of the last control of the last

Question # 42

Question-		For:
		PSC KY Number:
		Sheet No
		Cancelling PSC KY Number:
(Name	e of Utility)	Sheet No
Fire Departments.		
("User").may withd at no charge on th training during the	raw water from the utility's water dis se condition that it maintains estimate	protection district, or volunteer fire protection district stribution system for fighting fires or training firefighters tes of the amount of water used for fire protection and nount of this water usage to the utility no later than the
purposes and fails	to submit the required report on wa	iter distribution system for fire protection or training iter usage in a timely manner shall be assessed the cost n if it withdraws no water for fire protection or training
calendar month. A	non-reporting User may present evid	be 0.3 percent of the utility's total water sales for the dence of its actual usage to rebut the presumed usage. he presumed usage amount accordingly.
The non-reporting classification that the	User shall be billed for this usage ane utility charges.	at the lowest usage block rate regardless of customer
A non-reporting Us timely manner.	er shall also be assessed a penalty of	f\$ for each failure to submit a report in a
ATE OF ISSUE	2	
ATE EFFECTIVE	Month / Day / Year	
ATE EFFECTIVE	Month / Day / Year	
SUED BY	(Signature of Officer)	
TLE	(Signature of Officer)	
		TOTAL
N CASE NO.	ER OF THE PUBLIC SERVICE COMMI DATED	SSION
of Child Ito.	DATED	

#### Fire Department - Water Usage Report Form

KRS 278.170(3) 807 KAR 5:095 Section 9 Any city, county, urban-county, charter county, fire protection district, or volunteer fire protection district ("User") may withdraw water from the utility's water distribution system for the purpose of fighting fires or training firefighters at no charge on the condition that it maintains estimates of the amount of water used for fire protection and training during the calendar month and reports the amount of this water usage to the utility no later than the 15th day of the following calendar month. Any city, county, urban-county, charter county, fire protection district, or volunteer fire protection district that withdraws water from the utility's water distribution system for fire protection or training purposes and fails to submit the required report on water usage in a timely manner shall be assessed the cost of this water. A non-reporting user's usage shall be presumed to be 0.3 percent of the utility's total water sales for the calendar month. (name of Fire Department) Month Year (name of Water System) unit conversion factor 29.83 coefficient value 0.95 **Estimated** Nozzle Total Flow if size Reason Minutes Pitot Gallons Pitot not (typically Date Hydrant Location and/or Number Operated Operated 2.5 or 4.5) Pressure **GPM** Flowed used

Signed:	Date:	Total Gallons for Month	0
(fire department representive)	ASum II . I D		