

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC INVESTIGATION INTO)	
EXCESSIVE WATER LOSS BY KENTUCKY'S)	CASE NO.
JURISDICTIONAL WATER UTILITIES)	2019-00041

**RESPONSE OF NORTH MANCHESTER WATER ASSOCIATION (NMWA) TO
APPENDIX C – APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2019-00041 DATED MARCH 12, 2019**

Comes NMWA, by and through its legal counsel, and for its responses states:

1. Provide the utility's monthly unaccounted for loss water loss percentage report with associated underlying data from January 1, 2018, to the date of the issuance of this Order.

Answer: The Annual Water Loss Report is attached hereto as **Exhibit A**.

2. Describe in detail the procedure utilized in preparing monthly water use and loss reports, including, but not limited to, the following:

a. How the utility calculates water loss, water treatment plant usage, system flushing, and disinfection byproduct flushing.

Answer: NMWA reads its master meters every day to get the total amount purchased for the month. The readings are stored on a Microsoft Excel spreadsheet and also on a daily reading sheet. We also read customer meters monthly beginning on the 10th of each month. We then take a customer billing report, master readings for the month, flushing reports, fire department usage and enter them into a PSC monthly water loss report.

b. Identify by name and job title employees who prepare or assist in the preparation of the reports.

Answer: Jerry Rice, Distribution Manager.

- c. What is included in the water loss category? Specifically, state whether the utility includes water loss from known leaks and breaks in the water loss category.

Answer: Tank overflows, line breaks, line leaks, other.

3. State whether the water utility has completed a water loss detection plan.

Answer: Yes.

- a. If the answer is yes, provide a copy of the last completed water loss detection plan.

Answer: A copy of the last completed water loss detection plan is attached hereto as **Exhibit B**.

- b. If the answer is no, explain why a water loss detection plan has not been completed.

4. State whether the water utility has completed a comprehensive unaccounted-for water loss reduction plan.

Answer: NMWA has identified certain areas of the distribution system that need upgraded to help reduce water loss.

- a. If the answer is yes, provide a copy of the last completed comprehensive unaccounted-for water loss reduction plan.

- b. If the answer is no, explain why a comprehensive unaccounted-for water loss reduction plan has not been completed.

5. Describe and provide the results of all water loss reduction projects that the water utility has initiated from January 1, 2015, to the date of the issuance of this Order.

Answer: NMWA does not have any information or records of any such projects, however, valves have been installed in strategic areas to help with leak protection. Also, certain elements are being added to future projects to help with water loss control.

6. Provide a copy of the utility's most recent and updated annual and long-range Capital Improvement Plans.

Answer: A copy of the utility's most recent and updated annual and long-range Capital Improvement Plan is attached hereto as **Exhibit C**.

7. Provide the names of the persons or entities responsible for assisting the utility with capital improvement planning, grant application assistance, engineering design, and construction services.

Answer: Sisler-Maggard Engineering, PLLC; Jerry Rice, Distribution Manager; and Steve Davis, President.

8. Provide a copy of the utility's preventative maintenance program for the plant, pump, and storage facilities.

Answer: NMWA does not have a written plan in place, but do regular monthly inspections of its facilities.

9. State whether the water utility has assigned specific personnel the responsibility to detect and fix of water line leaks, and if so, state the names and job titles of such personnel and describe the functions and duties of each.

Answer: It is the responsibility of everyone in the distribution system to repair leaks and to locate them.

10. State whether leak detection is conducted on a daily basis, and if not, state the reasons why not.

Answer: NMWA monitors its SCADA system daily, record master meter readings daily to Excel spreadsheet to monitor daily usage. Listening devices are utilized regularly.

11. Provide the number of completed water line leak repairs by category, i.e., mains, service lines, etc. that were completed from September 1, 2018, to the date of the issuance of this Order.

Answer: 2017 and 2019 Water Line Breaks reports are attached hereto as **Exhibit D**.

12. Provide copies of each work order generated to investigate leaks reported by customers of the utility from September 1, 2018, to the date of issuance of this Order.

Answer: Copies of each work order generated to investigate leaks reported by customers of the utility from September 1, 2018, to the date of issuance of this Order are attached as **Exhibit E**.

13. Does the utility have a policy or operating procedure in place that addresses the process and the length of time it should take for the utility to fix a known or reported leaking water line? If yes, provide a copy of the policy or operating procedure.

Answer: NMWA to my knowledge does not have a written policy for this procedure. However, main breaks will be repaired immediately when found or reported. Service lines are repaired when permitted with the exception of loss of pressure or service in which it will be repaired immediately.

14. Provide a general asset ledger listing identifying all new equipment purchased by the utility from January 1, 2018, to the date of the issuance of this Order used in water loss reduction efforts (e.g., listening devices, flow meters, metal detectors, hand tools, etc.).

Answer: No new equipment has been purchased. NMWA currently has 2 DLD listening devices and 1 metal detector.

15. Provide the type of training and the total amount of time the utility's personnel have received for leak detection and repairs since January 1, 2015, to the date of the issuance of this Order. List the personnel and dates of training.

Answer: Employees have no specific training for leak detection to my knowledge other than working with KRWA circuit riders, and what is provided by NMWA staff.

16. Does the utility have a policy to identify errors that result in missed customer billings or under billings of customer accounts? If so, provide a copy of the policy.

Answer: NMWA does not have a written policy but when errors are found they are corrected as soon as possible. Work orders are made up to investigate or recheck customer readings and if a mistake has occurred it is adjusted accordingly.

17. If the utility produces and treats water for its distribution system, provide the date that the utility's water treatment plant meter was last tested and state how frequently the utility's water treatment plant meter is tested. Provide a copy of the most recent meter test results.

Answer: Not applicable.

18. Provide the dates on which the utility's master meters were last tested and the results of the tests.

Answer: November, 2018, results are attached hereto as **Exhibit F**.

19. Provide the utility's procedure and schedule for testing its master meters and customer meters.

Answer: NMWA master meters are certified annually. All PSC guidelines are followed for customer meter testing.

20. State the number of meters that have been replaced by the utility from January 1, 2018, to the date of the issuance of this Order.

Answer: 2018 – 330 meters; 2019 – 90 meters. NMWA has budgeted \$2,000 a month for new meters.

21. Provide the type of metering equipment, including brands and model numbers, the utility uses.

Answer: Badger, Sensus, Elster, Amco, Kent, Hersey, Rockwell.

22. State whether the utility utilizes supervisory control and data acquisition (SCADA) technology within its system.

Answer: Yes. Micro-Comm.

23. State whether the utility utilizes telemetry within its system.

Answer: Yes.

24. State whether all meters within the utility's distribution area are read monthly. If all meters are not read monthly state the reasons why not.

Answer: Yes.

25. What training is provided to the utility's meter readers?

Answer: Employees receive basic training in-house training for meter reading.

26. Does the utility utilize master meter zones in leak detection? If yes, for each of the utility's master meter zones, provide a monthly comparison of the master meter readings to the total customer meter readings for that zone for December 2018 and January 2019.

Answer: NMWA currently does not have any meter zones. This will be added into future projects to address water loss issues.

27. State whether the utility uses a system-wide hydraulic model to evaluate the pressure zones and flow in the utility's distribution system.

Answer: No, but NMWA would like to explore this option in the future.

28. Does the utility manager regularly report the water loss reduction efforts to the water utility's board of commissioners? Provide copies of any written reports, memorandums, letters, emails, or minutes from January 1, 2018, to the date of the issuance of this Order that details the efforts of the utility manager in reducing water loss as reported to the water utility's board of commissioners.

Answer: No, but discussions with the President of the Association have taken place regarding water loss and measures that need to be taken to address these issues.

29. For the period from January 1, 2015, to the date of the issuance of this Order, discuss whether the water utility's board of commissioners has placed any deadlines or target dates on the utility for achieving a reduction in the amount of water loss.

Answer: No, there have been no specific dates set for water loss reduction, however, NMWA is working diligently to reduce water loss.

30. Provide a list of the utility management's five most critical projects, listed in order of priority, notwithstanding the opinions of the county judge/executive nor the opinions of the water district board of commissioners.

Answer: (1) Solenoid control valves to isolate tanks; (2) replace all AC and galvanized lines; (3) AMR system for reading meters; (4) billing system upgrade; and (5) install 2" leak detect meters throughout the system.

31. Provide the total salary of the general manager/superintendent of the water utility for calendar years 2017 and 2018.

Answer: A copy of the Employee Detail provided by Teddy Woods, CPA, for calendar years 2017 and 2018 is attached hereto as **Exhibit G**. These employees are no longer employed by NMWA.

32. Provide a copy of the most recent signed employment contract between the general manager/superintendent and the utility.

Answer: No employment contracts.

33. State the average age, with the high and low ages, of the utility's distribution mains.

Answer: 90% of the distribution system is 25 years or older; 10% is 10 years or newer.

34. "Service connection," as defined by 807 KAR 5:066(6), means the line from the main to the customer's point of service, and shall include the pipefittings and valves necessary to make the connection. State the average age of the utility's service connections.

Answer: 90% of the distribution system is 25 years or older; 10% is 10 years or newer.

35. Has the utility mapped the entire distribution area for service connections to include mapping of its system, and identifying parts of its system with repeated breaks?

Answer: No, we currently do not have a map of service connections but do recognize hot spots in the system and are checked regularly.

36. Provide a copy of the utility's policy for dealing with apparent theft of water.

Answer: A copy of the utility's policy for dealing with theft of water is attached as **Exhibit H**.

37. Provide documentation of any request by the utility from January 1, 2017, to the date of the issuance of this Order to the county attorney or commonwealth attorney's office for the prosecution of any person for the theft of water.

Answer: There is no record of any documents of theft during this time period.

a. State whether the utility provided information related to the request for prosecution to the county attorney or commonwealth attorney's office for this time frame.

b. If the response to Item 37a. above is confirmed, state to which office the utility provided the information, whether any action was taken on behalf of the utility to prosecute any person for theft of water, and provide copies of the documentation and correspondence related to the prosecution.

38. Provide the utility's policy for determining whether a leak adjustment to a customer's account is warranted and identify the person(s) that approve leak adjustments.

Answer: A copy of the utility's policy for Leak Adjustments to customer accounts is attached hereto as **Exhibit I**.

39. State whether the utility's tariff permits the utility to adjust late charges when making a leak adjustment.

Answer: NMWA tariff states that a leak adjustment is based off of average use, does not specify late charges.

40. Provide a copy of the utility's most recent Leak Adjustment Worksheet that was used by the utility and explain what software is being used by the utility to generate the Leak Adjustment Worksheet. If the utility is using Microsoft Excel to generate the Leak Adjustment Worksheet, then provide a copy of the most recent Leak Adjustment Worksheet used by the utility in electronic format with all rows unprotected and all formulas intact.

Answer: A copy of the utility's most recent Leak Adjustment Worksheet that was used by the utility is attached hereto as **Exhibit J**.

41. State whether the utility has conducted a comprehensive water audit, and if so, provide a copy of the most recent water audit.

Answer: No, the utility has not conducted a comprehensive water audit.

42. Provide a copy of the utility's procedure for monitoring and documenting withdrawals from the utility's distribution system by fire departments. If no document exists, explain the process in detail.

Answer: Past management practice was that the fire department would call the utility with an estimate of its withdrawals.

(a) For each fire department that made a withdrawal from the utility's system from January 1, 2018, through the date of the issuance of this Order, provide a copy of the fire department's estimate of its withdrawal.

Answer: A copy of the Fire Department-Water Usage Report Forms are attached as **Exhibit K**.

(b) For any instance in which a fire department failed to provide an estimate of withdrawal from January 1, 2018, to the date of the issuance of this Order, state the actions

the utility implemented to correct the failure.

Answer: None.

(c) Provide the date on which the utility last imposed a penalty on a fire department for the fire department's failure to submit a quarterly report on its water usage.

Answer: There are no records of any penalties.

(d) Provide a sample copy of each type of report form that the utility provides to fire departments.

Answer: A sample copy of the report form provided to fire departments is attached hereto as **Exhibit L**.

(e) Provide the fourth quarter of the 2018 fire protection water usage, by month, and describe the formula relied upon, identifying all variables, and all assumptions and workpapers utilized to produce this information.

Answer: Not applicable.

43. Explain how the utility accounts for flushing when determining water loss for its system.

Answer: A flushing log is provided to fill out monthly, the person flushing estimates the amount of water flushed. A badger flow meter is used for flushing from hydrants.

44. Provide the type of flushing equipment that the utility uses.

Answer: Hydrant wrenches to operate hydrant. Flow meter to measure the amount of water being flushed (hydrant only).

45. Provide the utility's system flushing records, by month, from January 1, 2018, to the date of the issuance of this Order, and describe the formula relied upon, identifying all variables, and all assumptions and workpapers utilized to produce this information.

Answer: The person flushing calculates flushed water by estimating flow, then multiplying it by the amount of time flushed. It is then recorded onto a flushing log. Flow meter used when flushing hydrants. (a) See flushing records attached hereto as **Exhibit M**.

ALL on this 12th day of April, 2019.

Respectfully Submitted,

/s/ Raleigh P. Shepherd

RALEIGH P. SHEPHERD

ATTORNEY AT LAW

305 MAIN STREET

MANCHESTER, KENTUCKY 40962

TELEPHONE: (606) 599-0311

FACSIMILE: (606) 599-0344

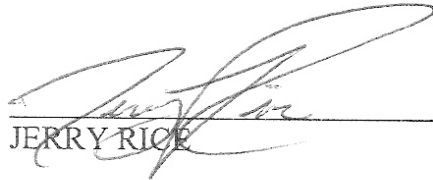
E-MAIL: shepherdlawoffice@icloud.com

ATTORNEY FOR NMTA

VERIFICATION

Jerry Rice, being duly sworn upon his oath deposes and states:

I am the Distribution Manager of NMWA and have read the interrogatories and requests for production of documents served upon NMWA by the Public Service Commission; and the foregoing answers and responses to same are true and accurate according to the best of my knowledge, information and belief.




JERRY RICE

COMMONWEALTH OF KENTUCKY,

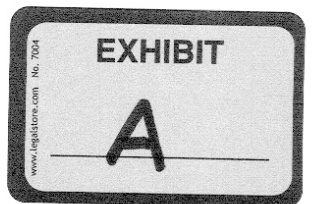
COUNTY OF CLAY,

SUBSCRIBED, sworn to and acknowledged before me by JERRY RICE on this 12th day of April, 2019.



NOTARY PUBLIC, STATE AT LARGE
ID#584571

My Commission Expires: 09/13/2017.



Month	Masters	Sold	Loss	Percent Lost
JANUARY	18,771,000	8,724,319	8,371,681	44.60%
February	13,117,000	7,880,000	5,124,520	39.10%
March	15,059,200	7,889,000	6,518,420	43.30%
April	14,314,700	7,133,792	6,670,368	47.70%
May	13,977,200	8,618,666	4,934,534	35.50%
June	16,745,800	9,522,026	6,942,304	41.50%
July	15,967,500	8,860,778	6,880,422	43.10%
August	17,458,000	9,256,236	7,926,164	41.50%
Sept.	15,875,800	10,137,819	5,358,231	33.80%
October	14,054,100	10,842,514	2,963,366	21.10%
Nov.	12,940,600	9,716,080		24.30%
Dec.	13,347,000	9,378,025		28.80%
	181,627,900	107,959,255	61,690,010	37.30%

NOTE: Percent Lost reflects system flushing, Fire Dept, and other water

Monthly Water Use Report

Water Utility: **ORTH MANCHESTER WATER ASSOCIATION** PWSID: **KY0260266**
 For the Month of: **February** Year: **2019**

Line #	Item	Gallons	
1	Water Produced, Purchased and Distributed		
2	Water Produced	0	
3	Water Purchased	11,995,500	
4	Water Produced & Purchased	11,995,500	
5			
6	Water Sales		
7	Residential	10,885,898	
8	Commercial	0	
9	Industrial	0	
10	Bulk Loading Stations	0	
11	Wholesale	0	
12	Other Sales (explain) _____ 0	0	
13	Total Water Sales	10,885,898	90.7%
14			
15	Other Water Used		
16	Utility and/or Water Treatment Plant	0	
17	Wastewater Treatment Plant	0	
18	System Flushing	1,500	
19	Fire Department Usage	0	
20	Other Usage (explain) _____ DBP Maintenance	26,050	
21	Total Other Water Used	27,550	0.2%
22			
23	Water Loss		
24	Tank Overflows	0	
25	Line Breaks	183,336	
26	Line Leaks	898,716	
27	Other _____		
28	Total Line Loss	1,082,052	9.0%
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)		9.0%

PUBLIC SERVICE COMMISSION

Monthly Water Loss Report

Water Utility: NORTH MANCHESTER WATER ASSOCIATION

For the Month of: March Year: 2019

LINE #	ITEM	GALLONS (0mil,000's)
1	WATER PRODUCED, PURCHASED & DISTRIBUTED	
2	Water Produced	
3	Water Purchased	13,057,900
4	TOTAL PRODUCED AND PURCHASED	
5		
6	WATER SALES	
7	Residential	6,101,003
8	Commercial	677,081
9	Industrial	272,980
10	Bulk Loading Stations	
11	Wholesale	
12	Other Sales 25550	25,550
13	TOTAL WATER SALES	54.2%
14		
15	OTHER WATER USED	
16	Utility and/or Water Treatment Plant	
17	Wastewater Plant	
18	System Flushing	21,500
19	Fire Department	-
20	Other DBP maintenace	38,450
21	TOTAL OTHER WATER USED	0.5%
22		
23	WATER LOSS	
24	Tank Overflows	
25	Line Breaks	1,831,680
26	Line Leaks	4,089,656
27	Other	
28	TOTAL LINE LOSS	45.3%
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)	

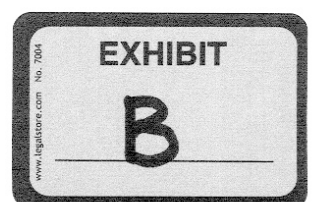
Monthly Water Use Report

Water Utility: **ORTH MANCHESTER WATER ASSOCIATION** PWSID: **KY0260266**

For the Month of: **January** Year: **2019**

Line #	Item	Gallons	
1	Water Produced, Purchased and Distributed		
2	Water Produced	0	
3	Water Purchased	14,000,200	
4	Water Produced & Purchased	14,000,200	
5			
6	Water Sales		
7	Residential	7,002,366	
8	Commercial	0	
9	Industrial	0	
10	Bulk Loading Stations	0	
11	Wholesale	0	
12	Other Sales (explain) _____ 0	0	
13	Total Water Sales	7,002,366	50.0%
14			
15	Other Water Used		
16	Utility and/or Water Treatment Plant	0	
17	Wastewater Treatment Plant	0	
18	System Flushing	0	
19	Fire Department Usage	43,200	
20	Other Usage (explain) _____ DBP Maintenance	52,550	
21	Total Other Water Used	95,750	0.7%
22			
23	Water Loss		
24	Tank Overflows	0	
25	Line Breaks	1,831,084	
26	Line Leaks	5,071,000	
27	Other _____		
28	Total Line Loss	6,902,084	49.3%
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)	49.3%	





WATER LOSS PREVENTION AND LEAK DETECTION

The goal of the water loss program is to reduce “unaccounted-for water” to zero. In doing so, real and apparent losses must be addressed. Real loss consists of physical water losses from leaks, line breaks, tank overflows, etc. and places a financial and operational burden on the utility. Apparent loss consists of unauthorized consumption, customer metering inaccuracies, and errors in the meter reading and billing processes. This can result in overtime and wasted hours testing for leaks that are not real.

Water Accountability

Water Purchased – Water Sold = Non-Revenued Water

Non-Revenued Water – Water Used (i.e. flushing, breaks, etc.) = Accounted-for Water

Non-Revenued Water - Accounted-For Water = Unaccounted-For Water

Proper distribution management is the key to reducing water loss. Standard methods such as creating hydraulically isolated zones, accurate metering, pressure monitoring, tank performance, demand factoring and preventative maintenance are needed to identify real water loss.

The following plan outlines processes and procedures that NMWA will conduct on a routine basis to identify and repair water line leaks, monitor water usage, eliminate tank overflows, to reduce its overall water loss.

1. Records

A. Infrastructure: Knowledge of water system components and how they function under normal operating conditions is crucial to identifying where water loss occurs. Infrastructure inventory, maintenance and operational performance records are maintained where applicable.

- Water meters
- Water mains
- Service lines
- Valves
- Hydrants
- Storage tank

B. Customer: Billing and water usage data needs to be maintained as a historic record so that apparent losses can be identified.

- Meter readings
- Billing adjustments
- Count of active/in-active meters
- Total water usage by zone

2. Routine Procedures:

A. Daily

- Read Master Meter;
- Record readings in field log and spreadsheet;
- All distribution personnel (meter readers, maintenance, etc.), shall immediately report any identified water leaks, tank overflows, or other concerns that are presently or could result in water leaks or loss.
- Water leaks, given the urgency of the problem reported are repaired immediately or at the earliest possible time;
- All office personnel shall immediately report any customer reported leaks, tank overflows, pressure problems, or other issues (whether during regular operational hours or after hours) to the Operator.

B. Monthly

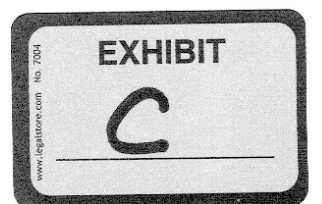
- Read customer meters approximately the same time;
- Record fire department usage
- Compile estimated loss from flushing, line brakes, overflows, etc.;
- Compile customer usage by hydraulic zone; and
- Analyze data with water audit and demand factor spreadsheets (see Appendix D).

C. Annually

- Customer meters will be tested every ten years to ensure that they are registering water accurately;
- All meters will be replaced, as warranted.

3. Leak Detection Procedures

- A. On a routine basis, as system operations permit, the Manager will assemble a leak detection team to check zones during a time when customer usage is minimal. This allows field personnel to go valve to valve (and often meter to meter) with listening devices and detect abnormal flows without affecting customer service. Personnel will perform leak detection in those areas with the highest known water loss, based on routine data collection and analysis.
- B. Outside consultants such as Kentucky Rural Water, contract engineer or industry specialists are utilized as circumstances dictate.



North Manchester Water Association - WX21051202
North Manchester Water Association Line Extension and Line Upgrade
SME # 16015
8/9/2016 revised 12/13/16 revised 12/12/18

Opinion of Probable Construction Cost

Description	Qty	Unit Cost	Total Est. Cost
Robinson Creek Road (KY 3475)	1	\$0	\$0
Elbert Reid Road	1	\$0	\$0
Holland Branch Road	1	\$0	\$0
East Rawlings Road with booster pump station	1	\$0	\$0
Charlie Rawlings Lane	1	\$0	\$0
Island Creek AC line replacement	1	\$0	\$0
Blackie Branch Road off SR 472 w/booster			\$100,000
Total Construction			\$525,000
Main Pump Station Generator	1	\$30,000	\$30,000
Jacks Branch Telemetry Generator	1	\$5,000	\$5,000
Office Generator	1	\$20,000	\$20,000
New Water Meters	1	\$70,000	\$70,000

Total Construction Estimate **\$650,000**

Other Probable Costs

Administration	\$20,000
Legal	\$9,500
Land, Appraisals, Easements	\$7,600
Interest During Construction	\$10,000
Preliminary Engineering Report	\$2,500
Engineering Fee Design@9.90% RD Fee Scale	\$46,875
Engineering Fees - Construction	\$15,625
Engineering Inspection @7.78%	\$42,900
Additional Engineering	\$20,000
Contingency	\$65,000

Total Other **\$240,000**

TOTAL PROJECT COST **\$890,000**

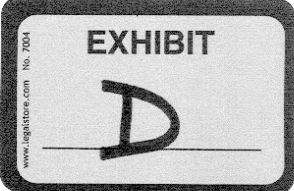
Proposed Project Funding

ARC Grant	\$ 175,000	Annual Debt Service	\$11,691
RD Grant	\$ 341,500	Debt Reserve @10%	\$1,169
RD Loan	\$ 373,500	Total Debt Service/year	\$12,860
		Total Debt Service/month	\$1,072
Total Funding	\$ 890,000	Total Number of Customers	1,933
		Rate increase/mo/customer	\$0.55

**North Manchester Water Association -
SHORT TERM CAPITAL IMPROVEMENTS
SME # 16015
4/10/2019**

Opinion of Probable Construction Cost

Description	Qty	Unit Cost	Total Est. Cost
System Leak Detection meters	6	\$2,500	\$15,000
Solenoid Control Valves with telemetry	3	\$5,500	\$16,500
Install Gate valves	12	\$1,000	\$12,000
Install Blow offs	5	\$800	\$4,000
change out water meters	50	\$125	\$6,250
Total Construction Estimate			\$53,750



North Manchester Water Association
2017 Water Line Breaks

Date	Name	Location of Break	Time of Break	Time Repaired	Gallons	Line Size
8/14/18	Leaty	Morgan Branch	?	1:30	2200	1 Galvanized
8/15/18	6045 Briar House Duro Long	Reed Branch / Royce	?	1:00	604, 800	3/4 CTS
8/15/18	ARND Long	Reed Branch / Royce	?	1:15	604, 800	3/4 CTS
8/16/18	MARSHALL Cole	Sacks Branch	?	1:00	816, 400	3/4 CTS
8/16/18	2" Blow OFF	Bell's Creek	1:30	3:00	18000	3 TRUCK SIZE
8/17/18	Arnold Mackin #2	Sacks Branch	?	2:00 P.M.	816, 400	3/4 CTS
8/20/18	Elynn Johnson	Sacks Branch	?	12:00 P.M.	30, 240	3/4 CTS
8/22/18	Line before Len Hughes	Greenbriar	?	2:00 P.M.	816, 400	3/4 CTS
8/23/18	Sgt. J. Haskins Pavon Swamp	Island Creek	?	11:30 P.M.	816, 400	3/4 CTS
8/24/18	Leaty	Morgan Branch	?	11:30 A.M.	2000	1 Galvanized
8/24/18	Sunny Ruth Egan thuse	Island Creek	?	8:00 P.M.	2200	3/4 CTS
8/28/18	Lodge on Hill / House on Hill	Island Creek	?	11:30 A.M.	28, 800	3/4 Plumbers
8/28/18	Penions Furniture Store	0 Hwy 421	?	11:00 A.M.	302, 400	3/4 CTS
8/28/18	Ritchie Farmers	Bell's Creek	?	5:00 P.M.	302, 400	3/4 CTS
8/29/18	Dennis Seater's Mailbox	Seater Hollow	?	12:00 P.M.	7200	1 Plumbers
9/20/18	Danny Reid Holman	Bell's Creek	?	9:45 P.M.	14, 400	3/4 CTS
10/5/18	Doug Adams	Lavel Creek	3:00	5:15 P.M.	8000	6' main

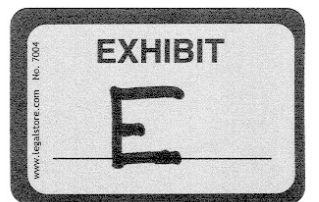
17

North Manchester Water Association

--- 2019 --- Water Line Breaks

Date	Name	Location of Break	Time of Break	Time Repaired	Gallons	Line Size
1-3-19	William Hur Hudson	Genealogy meter behind Bobby's Tree	?	9:45	40,300	3/4 cts
1-3-19	Pauline Baker	Island creek before solar hollow	?	11:30	43,000	3/4 cts
1-10-19	Fedrick Apartments	Charlie Sizemore Road	?	5:30 PM	469353	tee 1 1/2 3/4
1-11-19	DIO FAITHFUL	Morgan Branch	?	12:00 AM	10986	3/4 Plummers
1-14-19	Frank Paulson	Charlie Sizemore Road	?	10:00 AM	158,800	3/4 cts
1-15-19	Devey Jaci Jacobs	Jacks Branch	?	10:00 AM	38,753	3/4 cts
1-14-19	Georshy Diner	N. Hwy 421	?	1:00 PM	671,224	3/4 cts
1-10-19	Beth Plewens	Island creek	?	12:00 PM	671,220	3/4 Galvanized
1-17-19	Johnny Johnson	N. Hwy 421	?	8:00 AM	164,273	3/4 cts
1-21-19	Chris Dunson	N. Hwy 11	?	12:41 PM	23408	3/4 Plummers
1-23-19	Jennings Johnson	472	?	2:00 PM	131419	1 cts
1-24-19	Ben Cole	Jacks Branch	?	2:00 PM	22750	3/4 Plummers
1-25-19	APRY Sizemore	MT Crest	?	1:00 PM	105604	3/4 cts
1-28-19	Dillard Winger/Miric R. Bottom	M:Ze Branch	?	3:00 PM	13212	meter Bottom
1-28-19	Jennings Jurek/Huy 11	Jacks Branch	?	10:06 AM	4694	3/4 Plummers
1-31-19	Dellbert Smith Port Taylor	ISLAND CREEK / 421	?	2:00 PM	2397	meter Bottom
1-28-19	Ray Finley / South 421	ISLAND CREEK / 421	?	11:30 AM	288	3/4 cts
1-30-19	Jacks Branch Tour Line	JACKS BRANCH 41/11	2:45	8:30 PM	71917	8" Main
2-4-19	Betty Owens	Island creek / 421	1:15 PM	8:30 PM	33887	8" Main
2-4-19	WALKER Collins APT ROAD	Island creek / 421	?	8:30 AM	95,889	3/4 Galvanized
2-4-19	Michael Paul Collins Mts Bottom	Island creek / 421	?	?	?	meter Bottom
2-22-19	Cool Springs R.O.	Cool Springs Road	12:00	5:30 PM	2010	meter Bottom
2-14-19	Brown R. Bottom	Hwy 421 / Mts Bottom	N/A	12:15 AM	21,300	meter Bottom

24,400
Bottom



**NORTH MANCHESTER WATER ASSN.
7361 NORTH HWY 421
MANCHESTER KY 40962**

Order Number
20
Route: 02/00120

Priority:	Service Order	11/15/2018
------------------	----------------------	-------------------

Name: Osborne, Terri Account Number: 16552 Address: 2620 N Hwy 421 Address: Telephone: City/St/Zip: MANCHESTER, KY 40962 Svc. Address: 2620 N Hwy 421	Location: Meter Number: 50092908 MXU/ERT Number: Meter Type: Meter Size/Brand: Install Date: Last Service Date: Last Service Code: Last Reading: 25500 Last Reading Date: 11/07/2018 Average usage 9308 Gallons per Month
--	---

Work:
Check meter for leak

Special Instructions: Check Meter used 10 gallon of water last month. Book 2 120

Serviced By:	Payment Received:	Requested Date: 11/15/2018 Actual Svc Date:	Customer Signature:
Parts Used:		Req. Start Time: 08:00 AM Actual Start:	Stop Time:
		Meter Reading:	Meter Number: MXU/ERT Number:

Service Notes:
 ACROSS From Monument
 Had a new Badger mete reading is 46280
 I.D # 50092908 Had Leak got fixed
 B.P. P.F.

NORTH MANCHESTER WATER ASSN.
 7361 NORTH HWY 421
 MANCHESTER KY 40962

Order Number
 14
 Route: 33/000270

Priority: Service Order 11/15/2018

Name: HIBBARD, WESLEY Account Number: 02982 Address: 97 CRESCENT RD Address: Telephone: City/St/Zip: MANCHESTER KY 40962 Svc. Address: 97 CRESCENT RD	Location: Meter Number: MXU/ERT Number: Meter Type: Meter Size/Brand: Install Date: Last Service Date: Last Service Code: Last Reading: 1071020 Last Reading Date: 11/08/2018 Average usage 5803 Gallons per Month
---	--

Work:
 Meter Bottom

Special Instructions: Meter bottom. Book 1A 490

Served By:	Payment Received:	Requested Date: 11/15/2018 Actual Svc Date:	Customer Signature:
Parts Used:		Req. Start Time: 08:00 AM Actual Start:	Stop Time:
		Meter Reading:	Meter Number: MXU/ERT Number:

Service Notes:

Changed meter

old read = 1073240 now read = 0000000

old bill = 51867141 @ new bill = 50252844

**NORTH MANCHESTER WATER ASSN.
7361 NORTH HWY 421
MANCHESTER KY 40962**

**Order Number
63
Route: 02/000740**

Priority:	Service Order	11/28/2018
------------------	----------------------	-------------------

Name: REED, PAUL Account Number: 00249 Address: 3118 N HWY 421 Address: Telephone: City/St/Zip: MANCHESTER KY 40962 Svc. Address: 3118 N HWY 421	Location: Meter Number: 50097994 MXU/ERT Number: Meter Type: Meter Size/Brand: Install Date: Last Service Date: Last Service Code: Last Reading: 3910 Last Reading Date: 11/08/2018 Average usage 4921 Gallons per Month
---	--

Work:

Special Instructions: Customer called and said they didnt have any water

Serviced By:	Payment Received:	Requested Date: Actual Svc Date:	Customer Signature:
Parts Used:		Req. Start Time: 08:00 AM Actual Start:	Stop Time:
		Meter Reading:	Meter Number: MXU/ERT Number:

Service Notes:
Turn meter off, Customer has leak on there side.

NORTH MANCHESTER WATER ASSN.
7361 NORTH HWY 421
MANCHESTER KY 40962

Order Number
151
Route: 33/001190

Priority:

Service Order

01/14/2019

Name: REYNOLDS, BETTY

Account Number: 03345

Address: 7216 N HWY 421

Address:

Telephone:

City/St/Zip: MANCHESTER KY 40962

Svc. Address: 7216 N HWY 421

Location:

Meter Number:

Meter Type:

Meter Size/Brand:

Install Date:

Last Service Date:

Last Service Code:

Last Reading: 511650

Last Reading Date: 01/09/2019

Average usage 1418 Gallons per Month

MXU/ERT Number:

Work:

Check meter for leak

Special Instructions:

Serviced By:

EA HH

Payment Received:

Requested Date:

Actual Svc Date:

Customer Signature:

Parts Used:

Req. Start Time: 08:00 AM

Actual Start:

Stop Time:

12:30

Meter Reading:

Meter Number:

MXU/ERT Number:

Service Notes:

didn't have a leak

NORTH MANCHESTER WATER ASSN.
7361 NORTH HWY 421
MANCHESTER KY 40962

Order Number
150
Route: 05/002220

Priority:

Service Order

01/11/2019

Name: GALLAHER, EREK

Account Number: 15030

Address: PO BOX 235

Address:

Telephone:

City/St/Zip: MANCHESTER KY 40962

Svc. Address: 0 PO BOX 235

Location:

Meter Number:

Meter Type:

Meter Size/Brand:

Install Date:

Last Service Date:

Last Service Code:

Last Reading: 794180

Last Reading Date: 01/09/2019

Average usage 3298 Gallons per Month

MXU/ERT Number:

Work:

Check meter for leak

Special Instructions:

Serviced By:

Payment Received:

Requested Date:

Actual Svc Date:

Customer Signature:

Parts Used:

Req. Start Time: 08:00 AM

Actual Start:

Stop Time:

Meter Reading:

Meter Number:

MXU/ERT Number:

Service Notes:

METER WAS FROZE UP
GOT BACK OWN,

**NORTH MANCHESTER WATER ASSN.
7361 NORTH HWY 421
MANCHESTER KY 40962**

Order Number
281
Route: 22/000140

Priority:	Service Order	02/25/2019
------------------	----------------------	-------------------

Name: Charles Bray Account Number: 165560 Address: 1585 North Hwy 421 Address: Telephone: City/St/Zip: MANCHESTER, KY 40962 Svc. Address: 158 North Highway 421	Location: Meter Number: MXU/ERT Number: Meter Type: Meter Size/Brand: Install Date: Last Service Date: Last Service Code: Last Reading: 53730 - 53940 Last Reading Date: 02/13/2019 Average usage 10490 Gallons per Month
--	---

Work:
Check meter for leak

53940 - NOT leaking

Special Instructions:

Serviced By:	Payment Received:	Requested Date: Actual Svc Date:	Customer Signature:
Parts Used:		Req. Start Time: 08:00 AM	Stop Time:
		Actual Start:	
		Meter Reading:	Meter Number: MXU/ERT Number:

Service Notes:

NORTH MANCHESTER WATER ASSN.
7361 NORTH HWY 421
MANCHESTER KY 40962

Order Number
197
Route: 11/000240

Priority:

Service Order

01/23/2019

Name: REED, MADISON

Account Number: 00558

Address: 868 HWY 638

Address:

Telephone:

City/St/Zip: MANCHESTER KY 40962

Svc. Address: 868 HWY 638

Location:

Meter Number:

MXU/ERT Number:

Meter Type:

Meter Size/Brand:

Install Date:

Last Service Date:

Last Service Code:

Last Reading: 708590

Last Reading Date: 01/10/2019

Average usage 8364 Gallons per Month

Work:
Check Pressure

Special Instructions:

Serviced By:

Payment Received:

Requested Date:

Actual Svc Date:

Customer Signature:

Parts Used:

Req. Start Time: 08:00 AM

Stop Time:

Actual Start:

Meter Reading:

Meter Number:

MXU/ERT Number:

Service Notes:

~~PLA~~ Turned off
VALVE TO Trailer
Leak

NORTH MANCHESTER WATER ASSN.
 7361 NORTH HWY 421
 MANCHESTER KY 40962

Order Number
 201
 Route: 44/002320

Priority: **Service Order** 01/24/2019

Name: WAGERS, DILLARD	Location:
Account Number: 05006	Meter Number: 48152478 MXU/ERT Number:
Address: 547 MIZE BR RD	Meter Type:
Address:	Meter Size/Brand: 5/8"
Telephone:	Install Date:
City/St/Zip: MANCHESTER KY 40962	Last Service Date:
Svc. Address: 547 MIZE BR RD	Last Service Code:
	Last Reading: 1053810
	Last Reading Date: 01/09/2019
	Average usage 1953 Gallons per Month

Work:
 Check meter for leak

Special Instructions:

Serviced By:	Payment Received:	Requested Date: Actual Svc Date:	Customer Signature:
Parts Used:		Req. Start Time: 08:00 AM Actual Start:	Stop Time:
		Meter Reading:	Meter Number: MXU/ERT Number:

Service Notes:

0000000

Dillard WAGERS P.W. 50335594

Ben Cole J.B. 50335601

NORTH MANCHESTER WATER ASSN.
7361 NORTH HWY 421
MANCHESTER KY 40962

Order Number
281
Route: 22/000160

Priority:

Service Order

02/25/2019

Name: Bray, Charles

Account Number: 165560

Address: 1585 North Hwy 421

Address:

Telephone:

City/St/Zip: MANCHESTER, KY 40962

Svc. Address: 158 North Highway 421

Location:

Meter Number:

Meter Type:

Meter Size/Brand:

Install Date:

Last Service Date:

Last Service Code:

Last Reading: 53730

Last Reading Date: 02/13/2019

Average usage 10490 Gallons per Month

MXU/ERT Number:

Work:

Check meter for leak

No leak

Special Instructions:

Serviced By:

Payment Received:

Requested Date:

Actual Svc Date:

Customer Signature:

Parts Used:

Req. Start Time: 08:00 AM

Actual Start:

Stop Time:

Meter Reading:

Meter Number:

MXU/ERT Number:

Service Notes:

1-606-598-8351

NORTH MANCHESTER WATER ASSN.
 7361 NORTH HWY 421
 MANCHESTER KY 40962

Order Number
 216
 Route: 05/001870

Priority:	Service Order	02/04/2019
-----------	----------------------	------------

Name: HENSLEY, MICHAEL PAUL Account Number: 16221 Address: 13275 N HWY 421 Address: Telephone: City/St/Zip: MANCHESTER KY 40962 Svc. Address: 13275 N HWY 421	Location: Meter Number: MXU/ERT Number: Meter Type: Meter Size/Brand: 5/8" Install Date: Last Service Date: Last Service Code: Last Reading: 1608300 Last Reading Date: 01/09/2019 Average usage 6423 Gallons per Month
--	---

Work: Check meter for leak

Special Instructions: Leave water off.

Serviced By: B.P. M.B. K.L.	Payment Received:	Requested Date: Actual Svc Date:	Customer Signature:
Parts Used:	Req. Start Time: 08:00 AM Actual Start:	Stop Time: 11:30	
	Meter Reading:	Meter Number: MXU/ERT Number:	

Service Notes:

Changed meter & regulator
 old readings = 1617310 old lid = 48152452
 new readings = 000000 New lid = 50335363

NORTH MANCHESTER WATER ASSN.
7361 NORTH HWY 421
MANCHESTER KY 40962

Order Number
220
Route: 01/002090

Priority:

Service Order

02/07/2019

Name: FRANCE, LORETTA
Account Number: 00653
Address: 327 CHARLIE SIZEMORE RD
Address:
Telephone:
City/St/Zip: MANCHESTER KY 40962
Svc. Address: 327 CHARLIE SIZEMORE RD

Location:
Meter Number: MXU/ERT Number:
Meter Type:
Meter Size/Brand:
Install Date:
Last Service Date:
Last Service Code:
Last Reading: 941150
Last Reading Date: 01/10/2019
Average usage 13904 Gallons per Month

Work:
Check meter for leak

Special Instructions:

Changed Regulator Too much pressure

Serviced By:

Payment Received:

Requested Date:

Customer Signature:

Actual Svc Date:

Parts Used:

Req. Start Time: 08:00 AM

Stop Time:

Actual Start:

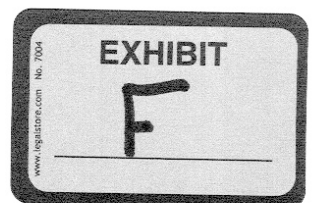
Meter Reading:

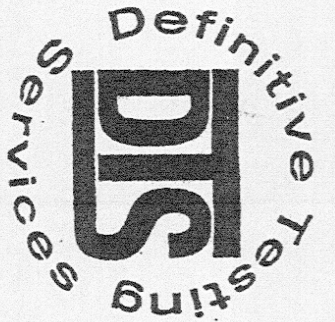
Meter Number:

MXU/ERT Number:

Service Notes:

NOT WAS LEAKING





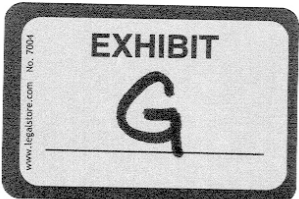
Definitive Testing Services

Lexington, Kentucky

Certified Meter Test Results

Meter Size	Meter MFG	MFG Model	Serial Number	Trans Ponder	BEFORE REPAIR TEST RESULTS				AFTER REPAIR TEST RESULTS				Test/Parts		
					High Flow	Med Flow	Low Flow	Avg Test	High Flow	Med Flow	Low Flow	Avg Test			
1 3/4"	Hyd	255	1550169	Hy	92	92	02	915							
2															
3															
4															
5	Meter Reading Before Test:														
6	Meter Reading After Test:														
7															
8															
9															
10	Comments: 11/18/11 11/11 11/11 11/11 11/11 11/11 11/11 11/11 11/11 11/11 11/11 11/11 11/11 11/11 11/11														
11															
12															
13															
14															
15															

Customer _____ Date Tested _____
 Received By _____ Tested By W0983
 Date _____



04/09/2019

Rpt B,2 Page 1

16:21:54

Report Date: 01/01/2017 Thru: 12/31/2017
 Criteria: ExTags=U

<u>Date</u>	<u>Gross</u>	<u>MCWH</u>	<u>SSWH</u>	<u>FITW</u>	<u>SITW</u>	<u>LITW</u>	<u>Net</u>
BURNS, CHARLES total	19200.00	278.40	1190.40	1128.00	810.96	192.00	15600.24
NEELEY, CARLA total	23040.00	334.08	1428.48	1512.00	1033.68	230.40	18501.36
Total	42240.00	612.48	2618.88	2640.00	1844.64	422.40	34101.60

04/09/2019

Rpt B,2 Page 1

16:50:23

Report Date: 01/01/2018 Thru: 12/31/2018
Criteria: ExTags=U

<u>Date</u>	<u>Gross</u>	<u>MCWH</u>	<u>SSWH</u>	<u>FITW</u>	<u>SITW</u>	<u>LITW</u>	<u>Net</u>
BURNS, CHARLES total	20550.00	297.98	1274.10	1198.00	861.40	205.50	16584.25
NEELEY, CARLA N total	24630.00	357.14	1527.06	1606.00	1098.04	246.30	19795.46
<u>Total</u>	<u>45180.00</u>	<u>655.12</u>	<u>2801.16</u>	<u>2804.00</u>	<u>1959.44</u>	<u>451.80</u>	<u>36379.71</u>

www.eplstore.com No. 7104

EXHIBIT

H

FOR Clay County, Kentucky
Community, Town or City

P.S.C. KY. NO. 4
Original SHEET NO. 21

North Manchester Water Association
(Name of Utility)

CANCELLING P.S.C. KY. NO. 3
SHEET NO. _____

M. Refusal or Termination of Service Without Advance Notice.

The utility may refuse or terminate service to a customer if the following conditions exist without an advance termination notice. Within 24 hours after termination, the utility shall send written notification to the customer stating the reason(s) for termination and providing notice of the customer's right to challenge the termination by filing a complaint with the Public Service Commission. Termination of service is in addition to any legal remedies the utility may pursue, and the utility is not required to restore service until the customer has complied with the utility's tariff and the laws and regulations of the Public Service Commission.

1. For dangerous conditions relating to the utility's service.
2. Unauthorized service by illegal use or theft.
3. Extensions or additions to an existing service connection that have not been approved by the utility.
4. Misrepresentation in the application or contract as to the property or fixtures to be supplied or additional use to be made of water.
5. Resale of water except under the terms of a special contract executed by the utility and approved by the PSC.
6. Waste or misuse of water due to improper, imperfect, or deteriorated service pipes.
7. Tampering with the meter, meter seal, valves, or other system facilities or permitting any tampering by others.
8. Connections, cross-connections, or permitting the same, of any separate water supply to premises that receive water from the utility.


DATE OF ISSUE January 2, 2019
Month / Date / Year

DATE EFFECTIVE February 2, 2019
Month / Date / Year

ISSUED BY /s/ Steve Davis
(Signature of Officer)

TITLE President

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATE _____

KENTUCKY PUBLIC SERVICE COMMISSION
Gwen R. Pinson Executive Director 
EFFECTIVE 2/2/2019 PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

North Manchester Water Association

North Highway 421

North Manchester, KY 40962

Phone: (606) 598-5403

Appendix C

Question #40

Leak Adjustment Sheet

JND LEAK ADJUSTMENT FORM

Name:	_____
Account:	_____
Account:	_____
Loans	Checks Cashed
_____	_____

1. Date repairs were made: _____
2. Who made the repairs: _____
3. List of materials used: _____
4. Exact location of the leak: _____
 _____ Feet from the meter box
 _____ Feet from the house.
5. Attach copy of statements or receipts of material used.

I understand that adjustments are figured by the difference between my average water bill and the bill that reflects the leak. The adjustment is then based on what my average water usage would have been and the water metered above that amount that leaked will be charged to me at \$2.90 per thousand which is the lowest rate (which is subject to change) approved by the Public Service Commission for North Manchester Water Association. I further understand that even though an adjustment is to be considered, I am still responsible for the bill and that if I should be disconnected for non-payment, the entire amount plus \$45.00 reconnect fee must be paid before service will be restored and any adjustment made will be credited to my account.

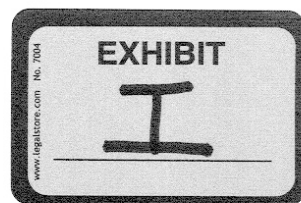
I, also understand that only one leak adjustment will be permitted each 12 (twelve) months. If plastic pipe is used for any repair of underground water service lines, it must be no less than 200 PSI. The use of radiator clamps, king nipples, or the equivalent cannot be accepted. Use only regular plastic pipe clamps and these should be doubled.

I realize that no adjustment will be made until this form (completed in its entirety, signed and dated) and my statements are returned to North Manchester Water Association. The Association reserves the right to inspect your water system for verification.

I hereby verify that I read the information given and that all statements are true and correct, and that the excess usage in by plumbing system has now been corrected.

Signed: _____ Date: _____

North Manchester Water Association _____ Date: _____



FOR Clay County, Kentucky
Community, Town or City

P.S.C. KY. NO. 4
Original SHEET NO. 35

North Manchester Water Association
(Name of Utility)

CANCELLING P.S.C. KY. NO. 3
SHEET NO. _____

AA. Leak Adjustments. Addressing the issue of dealing with the adjustment procedures of a customer's bill when he or she has had a water leak, in their lines or plumbing fixtures. When a customer asks for an adjustment, we first take the customer's average usage of water for the past 12 months of which they are charged at our standard rates for whatever size meter that they have, then the amount of water, then the amount of water above their average due to a leak, we only charge an adjusted rate of \$2.90 per thousand plus utility tax that we are required to charge. Customers are permitted 1 leak adjustment every 12 months.

To justify the adjustment amount (\$2.90 per thousand), we buy water from our supplier at a rate of \$2.00 per thousand plus we must consider our pumping and electrical costs, as well as manpower and paper work required to adjust a customer's bill.

This procedure of bill adjustments of water leaks was approved and adopted by the North Manchester Water Association's Board of Directors on January 10, 1995 at the regular monthly meeting to be included in our Rules and Regulations.

AB. Ownership of Mains, Services and Appurtenances.

1. All mains, valves, crossings, and other appurtenances are and shall remain the property of the utility, whether installed by the utility or the customer.
2. All service lines from main to the meter with appurtenances are and shall remain the property of the utility, whether installed by the utility or by the customer.
3. The Customer shall install, own, and maintain his/her service line from the meter (or point of delivery) to the point of usage.

AC. Notification of System Problems.

The customer shall notify the utility immediately should the service be unsatisfactory for any reason, or should there be any defects, problems, trouble, or accidents affecting the water system.

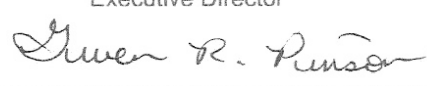
DATE OF ISSUE January 2, 2019
Month / Date / Year

DATE EFFECTIVE February 2, 2019
Month / Date / Year

ISSUED BY /s/ Steve Davis
(Signature of Officer)

TITLE President

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATE

KENTUCKY PUBLIC SERVICE COMMISSION
Gwen R. Pinson Executive Director 
EFFECTIVE 2/2/2019 PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

N
↓



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.

MANCHESTER FIRE DEPARTMENT (name of Fire Department)

Month
Year

NOVEMBER
2018

NORTH MANCHESTER WATER ASSOCIATI (name of Water System)

unit conversion factor
coefficient value

29.83
0.95

Date	Hydrant Location and/or Number	Reason Operated	Total Minutes Operated	Nozzle size (typically 2.5 or 4.5)	Pitot Pressure	GPM	Gallons Flowed	Estimated Flow if Pitot not used
5/18/2018	421 BO							400
5/18/2018	Cbs Hollow							400
5/18/2018	Huckleberry BO							500
5/18/2018	Billy Day BO							400
5/18/2018	Steve Neely BO							2,500
5/18/2018	Ponder br. Top of hill BO							500
5/18/2018	1709 BO							2,500
5/18/2018	Creek Rock Road BO							300
5/18/2018	Roy Wombles BO							500
5/18/2018	Rocky Branch BO							1,800
5/18/2018	Bobby Hizer BO							1,000
5/18/2018	Bob Campbell BO							500
5/18/2018	Orchard Branch BO							800
5/18/2018	1350 BO							600
5/18/2018	577 BO							10,000
5/18/2018	Lower Radar Outlaw BO							7,500
5/19/2018	Lower Radar Outlaw BO							9,000
5/19/2018	577 BO							9,900
5/23/2018	Beige Hensley BO							600
5/23/2018	Lower Radar Outlaw BO							18,000
5/23/2018	421 BO							18,000
5/23/2018	577 BO							8,000
5/23/2018	1350 BO							8,000
5/23/2018	1709 BO							5,000
5/28/2018	Rocky Branch BO							4,000
5/27/2018	Hogskin East BO							100
5/27/2018	Hogskin West BO							200
5/30/2018	421 BO							12,000
5/31/2018	577 BO							12,000
5/31/2018	472 BO							24,000
5/31/2018	1709 BO							6,000
5/31/2018	1350 BO							6,000
5/31/2018	Training							100,000

Total Gallons for Month **271,000**

www.legislator.com No. 7004

EXHIBIT

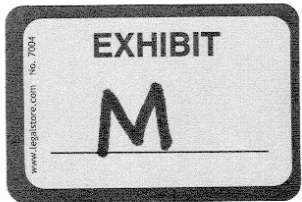
L

North Manchester Water Association

Fire Station Burning Springs Fire Department
Station Location Burning Spring
Month

Date		Estimate Gallons Used	Comments
	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		
	9		
	10		
	11		
	12		
	13		
	14		
	15		
	16		
	17		
	18		
	19		
	20		
	21		
	22		
	23		
	24		
	25		
	26		
	27		
	28		
	29		
	30		

Total Est. Gallons



NORTH MANCHESTER WATER ASSOCIATION

2019

MARCH DBP Maintenance

Date	Location	Reason For Flushing	GPM	Total Usage	Route	BY:
3-28-19	Hobbs Hollow Hydrant Free Before 1.61	Spring flush After 2.20	130	650 gallons		AHNR
3-28-19	Bethany Pentecostal church Free Before 1.99	Spring flush After 1.61	120	600 gallons		AHNR
3-28-19	Hacker farm rd hydrant Free Before 1.55	Spring flush After 1.23	150	750 gallons		AHNR
3-28-19	Robinsons graciosa B.O Free Before 1.54	After 1.62	40	200 gallons		AHEA
3-29-19	577 West B.O Free 1.59	Total 1.82	50	250 gallons		AHEA
3-29-19	Lisa Bays B.O Free 1.55	Total 1.73	20	100 gallon		AHEA
4-1-19	Wavy Dr. Blow off Free 1.45	Spring flush After 1.66	100	800		KL
4-1-19	Baxter Jackson Free .87	Spring flush After 1.84	150	1000		KL
4-1-19	Mumpkin Hollow Free 1.12	Spring flush After 1.84	80	800		MU
4-1-19	Liberty Hill Free 1.02	Spring flush After 2.00	60 100	700 2000		KL
4-1-19	Jarvis Hollow Free .021	Spring flush After 1.64	100	1000		KL
4-1-19	Painters Grack Free 1.48	Spring flush After 2.01	80	1900		KL
4-1-19	Pleasen and estates Free 1.45	Spring flush After 1.66	100	1800		KL
4-1-19	Gibson Rd Free 1.72					

Total 34,150 Gals.

North Manchester Water Association

Valve Records

Date	Location	Work Done	Time Flushed	Gallons	OK BY
1-2-19	Harvey Dean B.O.	Sample / Flush	5	500	C.B.
1-2-19	Wendall Casmaek B.O.	Sample / Flush	5	500	C.B.
1-6-19	1038 B.O.	Sample / Flush	5	500	C.B.
1-8-19	Rocky Borel B.O.	Sample / Flush	10	1500	C.B.
1-8-19	472 B.O.	Sample / Flush	10	4000	C.B.
1-9-19	Bob Bricker B.O.	Sample / Flush	15	3800	C.B.
1-10-19	Todd McDaniel B.O.	Sample / Flush	10	1500	C.B.
1-10-19	Arthur Borge B.O.	Sample / Flush	10	3000	C.B.
1-12-19	Hogskin EAST B.O.	Sample / Flush	10	500	C.B.
1-12-19	Hogskin west B.O.	Sample / Flush	10	750	C.B.
1-14-19	Capier Hollow B.O.	Sample / Flush	10	500	C.B.
1-14-19	Thomas Hollow B.O.	Sample / Flush	10	1000	C.B.
1-16-19	Brushy B.O.	Sample / Flush	10	750	C.B.
1-16-19	Burdy Hollow B.O.	Sample / Flush	10	2000	C.B.
1-18-19	421 H	Flush	10	1000	C.B.
1-18-19	1709 B.O.	Sample / Flush	10	1000	C.B.
1-19-19	STEVE Neeley B.O.	Sample / Flush	10	1000	C.B.
1-21-19	421 B.O.	Sample / Flush	10	2000	C.B.
1-22-19	Collins / Gibson	Sample / Flush	10	1000	C.B.
1-24-19	Bob Combs H B.O.	Sample / Flush	10	500	C.B.
1-24-19	BECKS Creek B.O.	Sample / Flush	10	500	C.B.
1-25-19	Tommy Wolfe H	Flush	10	500	C.B.
1-26-19	Hogskin B.O.	Sample / Flush	10	500	C.B.
1-28-19	Dickie Thompson B.O.	Sample / Flush	10	250	C.B.
1-28-19	Brushy B.O.	Sample / Flush	10	250	C.B.
1-28-19	TODD McDaniel B.O.	Flush	45	2000	C.B.
1-28-19	Dollar Store H	Flush	45	2000	C.B.
1-28-19	Capet Store H	Flush	45	2000	C.B.
1-28-19	Sam Morris B.O.	Flush	90	2000	C.B.
1-29-19	TODD McDaniel B.O.	Flush	20	500	C.B.
1-30-19	Bobby Hizer B.O.	Sample / Flush	10	1000	C.B.
1-30-19	Huckleberry B.O.	Sample / Flush	5	500	C.B.
1-30-19	Hudsons Hydrant	Sample / Flush	5	3000	C.B.
1-30-19	Dixie Mt Hydrant	Sample / Flush	30	18000	C.B.
1-30-19	Mike Combs B.O.	Sample / Flush	10	500	C.B.
1-30-19	KEEDC Hydrant	Sample / Flush	10	1500	C.B.
1-30-19	Whitney Griffin B.O.	Sample / Flush	10	500	C.B.
2-1-19	Thomas Branch B.O.	Sample / Flush	10	500	C.B.
2-3-19	Morgan Branch B.O.	Sample / Flush	10	500	C.B.
2-5-19	577 B.O.	Sample / Flush	10	2500	C.B.
2-5-19	Steve Neeley B.O.	Sample / Flush	10	1500	C.B.
2-9-19	Hogskin B.O. East	Sample / Flush	10	400	C.B.
2-9-19	Hogskin B.O. West	Sample / Flush	10	400	C.B.
2-11-19	Mike Combs B.O.	Sample / Flush	10	500	C.B.
2-11-19	Liberty Mills B.O.	Sample / Flush	10	500	C.B.
2-11-19	William H. Hudson H	Sample / Flush	10	1500	C.B.
2-15-19	MT Crest B.O.	Sample / Flush	10	500	C.B.
2-15-19	472 B.O.	Sample / Flush	10	1500	C.B.
2-17-19	STEVE Neeley B.O.	Sample / Flush	10	1500	C.B.
2-17-19	577 B.O.	Sample / Flush	10	1500	C.B.
2-19-19	Henry Ford B.O.	Sample / Flush	10	500	C.B.
2-19-19	Roxinson B.O.	Sample / Flush	10	1000	C.B.
2-21-19	Bruce Fox Hollow B.O.	Sample / Flush	10	500	C.B.
2-22-19	421 B.O.	Sample / Flush	10	1000	C.B.
2-22-19	Bobby Hizer B.O.	Flush	60	5000	C.B.