

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

Linda Beecham,	)	
	)	
Complainant,	)	
	)	
v.	)	<b><u>File No. WC-2020-0181</u></b>
	)	
Missouri-American Water Company,	)	
	)	
Respondent.	)	

**AFFIDAVIT OF TRACIE FIGUEROA**

STATE OF MISSOURI	)	
	)	ss
COUNTY OF ST. LOUIS	)	

**COMES NOW TRACIE FIGUEROA**, and on her oath declares as follows:

1. My name is Tracie Figueroa. I am of lawful age and sound mind, capable of making this affidavit, and personally acquainted with the facts herein stated and would testify to them as true at any hearing regarding the attached records.

2. I am employed by Missouri American Water Company as the Business Service Specialist—Customer Experience. I am familiar with the records of Missouri American Water Company and the system under which they are made.

3. Attached hereto are 328 pages (.pdf) and two (2) Excel Workbooks of records kept by Missouri American Water Company regarding water meter testing and the Complainant’s water meter.

4. The attached records are kept by Missouri American Water Company in the regular course of business; and it was the regular course of business of Missouri American Water Company for an employee or representative of the Company with knowledge of the act, event, condition, opinion, or diagnosis recorded to make the record or to transmit the information thereof to be included in such record; and the record was made at or near the time of the act, event, condition, opinion, or diagnosis; and the records attached hereto are the original, exact duplicates of the original, or accurate reproductions of the original records.

5. The Neptune 5/8-inch water meter, Serial No. 84255800, installed at Complainant's service address in 2007, was removed by Missouri American Water Company personnel on September 21, 2020, for meter testing.

6. On September 23, 2020, Complainant's water meter, Serial No. 84255800, was bench tested for accuracy by Missouri American Water Company personnel in accordance with the industry standard water meter practice and at rates of flow over the meter's range of minimum to maximum flow.

7. At high flow of 10 gallons per minute, Complainant's water meter, Serial No. 84255800, tested 100.4 percent accurate.

8. At minimum flow of two (2) gallons per minute, Complainant's water meter, Serial No. 84255800, tested 101.0 percent accurate.

9. At low flow of 1/8 gallon per minute, Complainant's water meter, Serial No. 84255800, tested 100.0 percent accurate.

10. Commission Rule 20 CSR 4240-10.030(37) provides that a water service meter shall not have an error in measurement in excess of five (5) percent when registering water at

stream flow equivalent to approximately one tenth (1/10) and full normal rating under the average service pressure.

11. Complainant's water meter, Serial No. 84255800, tested within the permitted accuracy ranges at high, minimum and low test flows.

12. Missouri American Water Company's 15-year meter change program for 5/8-inch meters is warranted as the results of meter studies conducted in 1960, 1968, 1972, 1990, 1995 and 2012 show that time period to be sufficient to ensure compliance with Rule 20 CSR 4240-10.030(37).

13. The 1968 study showed that meter performance at 1/8 gallon per minute improved with increasing service age from 10 through 17 years, and average meter performance at two (2) gallons per minute is acceptable through the service ages of 10 through 17 years.

14. The 1972 study tested an increased number of 5/8-inch meters in the higher years' service period, testing meters having service periods between 15 and 23 years. The 1972 study concluded that the service period of meters may be extended from 10 years to 15 years with no significant loss of meter accuracy, and on average retain acceptable accuracy through the 20<sup>th</sup> year of service life.

15. A meter study was conducted in 1990 to determine if the 15-year meter change program for 5/8-inch meters was still appropriate. This study, like those in 1968 and 1972, included meters having service periods from 15 through 20 years. The 1990 study concluded that the service period of 15 years should continue to be used for 5/8-inch meters.

16. Missouri American Water Company conducted a meter study in 1995 and tested twice as many meters as that tested in the 1990 study. From the data it was concluded that the service period of 15 years should continue to be used for 5/8-inch meters.

17. Missouri American Water Company conducted a meter study in 2012, testing 558 meters having 15 year service periods. The 15 year service period meters averaged 98.9 percent accuracy at minimum flow of two (2) gallons per minute. The acceptable test range is 98.5 percent to 102 percent accuracy at two (2) gallons per minute. The 15 year service period meters averaged 80.5 percent accuracy at low flow of 1/8 gallon per minute. The acceptable test range is above 65 percent at low flow of 1/8 gallon per minute. From the data it was concluded that the service period of 15 years should continue to be used for 5/8-inch meters.

18. Neptune meters are warranted to meet or exceed meter accuracy standards for at least 15 years.

Under penalty of perjury, I declare that the foregoing is true and correct to the best of my knowledge and belief.

Further Affiant sayeth not.

/s/ Tracie Figueroa  
Signature of Declarant      September 25, 2020