

East Lyme Water Department

Large Meter Ownership & Calibration Policy

For Meters over 1-inch in diameter



Revised Through
January 1, 2023

The East Lyme Water Department Large Meter Ownership and Calibration Policy outlines the ownership and responsibilities of all meters over 1-inch.

Overview

1. Per East Lyme Water Department, Rules and Regulations Section 6, Meters and Meter Communication Equipment:
 - a. All meters up to and including 1-inch will be owned, installed, tested and maintained by the Water Department to the specifications of the Department.
 - b. Should a property owner choose to downsize his/her meter that is currently larger than 1-inch to 1-inch or less, the Water Department will take ownership and responsibility of the meter and communication equipment (i.e. radio/MXU) if all necessary equipment is purchased and installed by the property owner. The Water Department shall not be responsible for any adverse change in pressure or flowrate. A meter maintenance fee will apply to all meters owned and maintained by the Department.
2. All meters over 1-inch and its associated communication equipment (i.e. radio/MXU) and associated wiring are owned by the property owner. The purchase, installation, maintenance, calibration and replacement is the sole responsibility of the property owner.
3. All meters over 1-inch shall be calibrated at least once every two years.
 - a. A meter calibration report in conformance with AWWA M6 must be provided to the East Lyme Water Department by July 1st, 2023 and every two years thereafter.
 - i. Calibration reports shall be sent to **watersewer@eltownhall.com** or mailed to **PO Box 519 Niantic, CT 06357**, attention Utility Engineer.
 - b. A twenty five percent (25%) usage surcharge over the registered usage **per** billing cycle will be charged if meter calibration or replacement is not performed within six months after the July 1st deadline. Water and/or sewer usage shall be calculated be based on the Connecticut Department of Health Code, *On-site Sewage Disposal Regulations and Technical Standards for Subsurface Sewage Disposal Systems rev. 1/2018* using the capacity criteria therein in the event that the meter has failed completely, cannot be read, or its readings are substantially lower than historical average usage.
 - i. “Per billing cycle” means that an additional 25% surcharge will be billed for each additional billing period that calibration or replacement is not performed. (1 billing period late = 25%, 2 billing periods late = 50%...)
 - c. Additionally, should a property owner not comply with the meter calibration program or any of its requirements stated herein, the Water Department reserves the right to terminate water service or to test, replace, repair, or maintain the meter, using either Department personnel or others to perform the work, and shall invoice the property owner the cost of the work performed plus a twenty five percent 25% markup for such service and materials. Payment for the work performed will be due in full upon completion.

Meter Calibration and Replacement

1. Meters that cannot be calibrated to within 2% accuracy shall be replaced immediately. The replacement meter and meter communication equipment (i.e. radio/MXU) must be approved by the Water Department and can be purchased through the Department for an added surcharge via the sale of stocked materials, revised from time to time.
 - a. Per AWWA M6: **Accuracy** denotes the comparison between a meter's indicated quantity of water passing through it as compared to the actual quantity of water passing through it as determined by the test system, or proving system. In the water industry, the meter's accuracy is most commonly called the percent registration (% registration). A water meter that has 101% accuracy, or a percent registration of 101%, at a given flow rate indicates that 1% more water is registered on the meter than is actually delivered (this error is called 1% fast); in this case, the meter over-registers by 1%. Conversely, a meter that has 99% accuracy indicates that 1% less water is registered on the meter than is actually delivered (i.e., 1% slow); the meter under-registers by 1%.
 - b. Per AWWA M6: **Test Rates** - The three rates of flow necessary to properly test displacement, compound, propeller, and other types of water meters are maximum, intermediate, and minimum.
2. The Water Department reserves the right to estimate a property owner's bill in the instance of a failed calibration based on criteria outline in *Overview Section 3b* and to take actions outlined in *Overview Section 3c* of this document as it deems necessary to promote accuracy whenever possible.
3. All meters 20 years or older on July 1, 2023 shall be replaced with a new meter and meter communication equipment approved by the Water Department. Subsequent meters that meet the calibration and communication requirements of this policy can be retained beyond 20 years. If a meter is over 20 years old on July 1, 2023, the property owner shall have one year to replace the meter until the property owner shall be assessed a twenty five percent (25%) usage surcharge until the meter has been replaced and any necessary communication equipment installed to the satisfaction of the Department.

Large Meter Specifications

1. Replacement meters shall conform to the Water Department's large meter specifications and shall be wired to a communication system (i.e. radio/MXU) in a location specified by the Department to ensure remote recording capability of metered usage. The cost to install and maintain the wired connection and communication system is the responsible of the property owner.
2. Testing/Repair Company Qualifications – It is required that at least one of the employees performing the field testing and repair services has attended a Large Meter Training

program within the last five years. Testing and repairs shall be conducted in accordance with AWWA standards as described herein.

3. Equipment Calibration - Test equipment must be calibrated annually, and the meter tester must submit copy of current calibration report along with the meter testing report to the East Lyme Water Department.
4. Disinfection - If meter repairs are conducted then precaution must be taken to prevent foreign materials from entering the water system and internal surfaces of new components must be disinfected in accordance with AWWA standard C651-99 and CT Department of Health regulations.