

Evaporative Cooling Tower Overview



Current Billing Method

- We currently have 14 standard and 62 nonstandard evaporative cooling tower meters.
- We bill each cooling tower meter a maximum of 12,000 gallons of sewer per month.
- Our average cooling tower consumption ranges from hundreds of thousands to millions of gallons of water each month.
- The current rate of sewer being charged does not fully cover the cost of the large amounts of water currently being discharged into the sewer system.



Proposed Billing Method

- We are proposing that each customer install a blowdown meter on their cooling tower to capture the actual amount of water being returned to the sewer system. Sewer will be charged based on these meter readings.
- It is the assumption that all water not being discharged into the sewer system is evaporating which is not always the case. Our goal is to identify these issues and notify the customer so they can be corrected.
- Known industry standards indicate that a cooling tower operating at optimum level will return between 20-25% of water to the sewer system.



Water Engineering Technologies, Inc.

- We will be utilizing software from Water Engineering Technologies, Inc. that will allow us to enter the customer's readings and consumption into a database and analyze their usage.
- It will enable us to recognize if a tower is not functioning properly and identify possible leaks in their system based on cycles of concentration that are set by known industry standards.
- If we find their tower is not within range compliance, we will notify the customer to correct the problem and they will be charged 100% sewer on their water usage while the tower is out of compliance.



Area City Comparison

The following cities offer a deduct method for cooling tower users that require a makeup meter and blowdown meter be installed and bill sewer based on the usage of the blowdown meter:

- City of Dallas
- City of Fort Worth
- City of Garland
- City of Richardson

The City of Frisco charges sewer on 100% of water usage on the customer's cooling tower.

The City of McKinney uses a unique formula to calculate sewer on their cooling towers.



Goals

- Establish a method of billing for evaporative cooling towers that is fair and equitable to both the customer and the city.
- Identify possible issues in the operation of the cooling towers that will enable customers to reduce unnecessary water usage.
- Continue to support the city's current water conservation efforts.

