

SUBJECT

First Reading of Ordinance No. 093, 2012, Amending Section 26-279 of the City Code to Allow a Reduction for Calculated Evaporative Losses in Determining Wastewater Volume for Existing Large Industrial Processes.

EXECUTIVE SUMMARY

In 2010, Chapter 26 of the City Code was modified to establish an additional method of determining wastewater volume as the basis for Wastewater Service fees. That Code amendment allowed Utilities to recognize specific quantities of water consumed or processed in manufacturing processes for the City's industrial and large commercial wastewater customers. Examples include cooling towers and other equipment or processes where a measurable reduction in wastewater discharge can be determined and metered. The reduction may apply to either a specified portion of the user's facilities or the facility as a whole.

This Ordinance will add an option to Section 26-279 of the City Code to allow for the use of nationally accepted industry standards of calculation to recognize specific quantities of water that are evaporated off as part of an industrial process and as a result are not discharged to the wastewater system. The models would provide a quantifiable amount of water which should not be included in the wastewater discharge volume which serves as the basis for Wastewater Service fees in lieu of metering for existing structures. This adjustment will be allowed only for large industrial customers, and metering will still be required for newly constructed facilities.

BACKGROUND / DISCUSSION

Chapter 26 of the City Code establishes specific rates for all customer classifications, including intermediate non-residential users and users with industrial discharge permits. Rates are based upon water use, measured wastewater flows, or winter quarter use, whichever is applicable. From a technical perspective, measurement of wastewater flow has proved to be difficult due to system design and reliability of wastewater metering.

The 2010 change to Chapter 26 of the City Code established an additional method of determining wastewater volume as the basis for Wastewater Service fees. Because water use is the standard basis for determining the charges, the alternative approach resulted in an adjustment for the difference in water volume received and wastewater volume discharged. This alternative method of determining wastewater discharge applies to commercial customers who have facility or manufacturing processes that result in a significant difference between the volume of water delivered and the volume of wastewater discharged, and excludes water used for landscape irrigation. The 2010 Code change provided general guidelines for this specific type of adjustment.

With the Code amendment now proposed, the Wastewater Utility will be authorized to allow for a calculated determination of evaporative losses for large industrial customers with existing facilities for which installation of additional metering devices is not practical or cost-effective.

The following underlined language is proposed to be added to City Code in 26-279 to describe the manner in which the nationally accepted American Society of Heating, Refrigerating and Air Conditioning Engineer (ASHRAE) standards of calculation could be used as the basis for wastewater charges:

c. for evaporative loss in a specific industrial process that was in operation as of September 1, 2012, and that is served by a water meter four (4) inches in size or greater, a method for calculating the amount of evaporative loss may be used to reduce the customer's wastewater volume from the amount that would otherwise be determined based upon water use, provided that such method must be reasonably satisfactory to the Utilities Executive Director and must be based on generally accepted methods determined to accurately and reliably predict the rate and amount of such evaporative loss; or

A customer requesting an alternative calculation method based on ASHRAE standards and guidelines and approved by the Utilities Executive Director to reflect the difference in water volume received and wastewater volume discharged will be required to meet the following conditions:

- The reduction must be for a specific process for a structure existing prior to the date of this Ordinance being adopted. It is not for the entire facility.
- The reduction must be metered in new construction or where possible in existing buildings.
- Customer must be on a service using a 4-inch meter or larger.
- Customer must be able to verify the accuracy of inputs to calculation model.

FINANCIAL / ECONOMIC IMPACTS

Staff anticipates that this City Code amendment may result in a significant reduction to Wastewater Fund revenue over the next several years. The exact amount of the reduction is not quantifiable at this time; however, it is estimated that it will be in the range of \$500,000 to \$1,500,000. One million dollars represents 5% of the Wastewater Fund's annual operating revenue. Staff has included estimates of the effect of this change in the Budgeting For Outcomes (BFO) process and will make recommendations on any required rate changes as a part of the budget and rate-setting work later this year.

This amendment will provide an additional method for quantifying wastewater discharge in a specific commercial use as the basis for equitably allocating wastewater collection and treatment costs to those commercial customers that meet the requirements of the program. It allows the Utilities to adjust the basis for determining charges by metering or calculating discharge flows rather than determining wastewater charges based on water volume delivered. The result is reduced cost to the commercial customer that more closely matches with the amount of wastewater service delivered. This has an economic benefit to the customer; however, it results in a reduction in revenue to the Wastewater fund. It is anticipated that the change in cost allocation and the need to restore this lost revenue will increase residential rates to some extent as the result of the shift in cost allocation. Since this change is a result of customer feedback on how wastewater service charges are determined, this amendment to City Code may support the ability of customers to influence factors that directly impact their business. It may also support the positive business relationship between these customers, Fort Collins Utilities and City government.

ENVIRONMENTAL IMPACTS

This proposed Code amendment does not create an additional environmental impact in that it does not change the way water resources are used or impact the quality of wastewater discharge.

STAFF RECOMMENDATION

Staff recommends adoption of the Ordinance on First Reading.

BOARD / COMMISSION RECOMMENDATION

The Water Board has not reviewed the change to Section 26-279 proposed in the Ordinance. However, at its May 13, 2010 meeting, the Water Board voted unanimously to recommend Council approve the 2010 Code revision.

ORDINANCE NO. 093, 2012
OF THE COUNCIL OF THE CITY OF FORT COLLINS
AMENDING SECTION 26-279 OF THE CODE OF THE CITY OF FORT COLLINS
TO ALLOW A REDUCTION FOR CALCULATED EVAPORATIVE
LOSSES IN DETERMINING WASTEWATER VOLUME
FOR EXISTING LARGE INDUSTRIAL PROCESSES

WHEREAS, rates, fees and charges for wastewater utility service are determined as set forth in Division 4 of Article IV in Chapter 26 of the City Code; and

WHEREAS, the methods for measuring and determining wastewater volume for the purpose of billing wastewater customers the applicable rates, fees and charges for wastewater service; and

WHEREAS, in some circumstances the volume of wastewater discharged by wastewater customers with complex or unusual processes or plant configurations can be more accurately determined using more refined methods; and

WHEREAS, on June 15, 2010, the Council adopted Ordinance No. 067, 2010, which amended Section 26-279 of the City Code so as to allow Utilities to develop and approve on a case-by-case basis methods for measuring the amount of water consumed or processed by nonresidential wastewater customers, in order to determine more accurately the volume of wastewater discharged by such customers; and

WHEREAS, since the adoption of Ordinance No. 067, 2010, City staff has further evaluated additional circumstances in which large industrial customers may process water in a manner that results in substantial evaporative losses, and which, as a result, significantly reduces the volume of water returned to the City in the form of wastewater; and

WHEREAS, metering such evaporative losses in existing industrial facilities can be difficult and costly except in the case of construction or reconstruction of said facilities; and

WHEREAS, sufficiently reliable engineering analysis and calculations are available that can form the basis for calculating the amount of evaporative loss by which a customer's total wastewater volume should be adjusted; and

WHEREAS, City staff has proposed that Section 26-279 of the City Code be amended so as to allow Utilities to allow large industrial customers experiencing significant evaporative losses in their existing processes to provide data and analysis as the basis for a reduction in wastewater volumes for the purpose of determining Wastewater Utility service fees and charges; and

WHEREAS, the City Council has determined that it is appropriate and desirable for Utilities to have the authority to employ such methods in determining wastewater discharges by large industrial wastewater customers.

NOW THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF FORT COLLINS that Section 26-279(c) of the Code of the City of Fort Collins is hereby amended to read as follows:

(c) The rate determination by category is as follows:

...

(4) In addition to the applicable base charge set forth in § 26-280, users in Categories D, E and F shall be billed upon the basis of metered water consumption except where they can show to the satisfaction of the Utilities Executive Director that not all of the water going through the water meter is returned to the wastewater system but is instead consumed or otherwise diverted. In such cases, and with the approval of the Utilities Executive Director, the wastewater charges may be based upon one (1) of the following methods:

~~(a)~~a. a metering device of a type and installed in a manner approved by the Utilities Executive Director may be used to measure the quantity of wastewater returned to the public sewer, in which event the actual volume of wastewater discharged will be substituted in the formula for billing purposes;

~~(b)~~b. a metering device of a type and installed in a manner approved by the Utilities Executive Director may be used to measure one or more specific quantities of water consumed or processed in all or specified portions of the user's facility if the Utilities Executive Director finds that such measured water quantities form a sufficient and reliable basis for determining the quantity of wastewater returned to the public sewer, in which event the actual volume of wastewater discharged will be substituted in the formula for billing purposes;

c. for evaporative loss in a specific industrial process that was in operation as of September 1, 2012, and that is served by a water meter four (4) inches in size or greater, a method for calculating the amount of evaporative loss may be used to reduce the customer's wastewater volume from the amount that would otherwise be determined based upon water use, provided that such method must be reasonably satisfactory to the Utilities Executive Director and must be based on generally accepted methods determined to accurately and reliably predict the rate and amount of such evaporative loss; or

~~(c)~~d. when the user discharges only wastes reasonably and regularly corresponding to the winter quarter water use, said winter quarter water use may be substituted in the formula for billing purposes. Any metering device used to measure wastewater shall be installed and maintained at the user's expense.

...

Introduced, considered favorably on first reading, and ordered published this 4th day of September, A.D. 2012, and to be presented for final passage on the 18th day of September, A.D. 2012.

Mayor

ATTEST:

City Clerk

Passed and adopted on final reading on the 18th day of September A.D. 2012.

Mayor

ATTEST:

City Clerk