

Glen Geurts

From: David Casper <DCasper@Badgerlabs.com>
Sent: Tuesday, March 01, 2016 10:34 AM
To: glen.geurts@hvmsd.org
Cc: John Johnson
Subject: Billing language
Attachments: ARTICLE VI.docx

Hi Guys:

Here is a shot at some language for our discussion on the billing issue. It is at the end of the copy and paste from our SUO

Feel free to comment etc.

David J. Casper

ARTICLE VI - SEWER SERVICE CHARGES AND FEES

SEC. 6.01 DISTRICT SERVICE CHARGES. Sewer service charges to each District customer shall be based on wastewater parameters established from time to time by the Commission. The sewer service charge rates shall consist of the sum of the District's user charge rates and the District's debt service rates.

SEC. 6.02 USER CHARGE RATES. The District shall determine, from time to time, user charge rates based on the District's annual operations and maintenance expense (including replacement costs), the annual administrative budget, the quantity and quality of wastewater received at the District's wastewater treatment plant, and such additional rate parameters as the Commission may from time to time determine. Such rates shall reflect the unit costs for administration and for transporting and treating the quantity and quality of wastewater discharged to the District's wastewater facilities.

SEC. 6.03 DEBT SERVICE RATES. The District shall determine debt service rates based on the District's annual debt service, and/or capital improvement budget, the quantity of wastewater received at the District's wastewater treatment plant, and such additional rate parameters the Commission may from time to time determine. Such rates shall reflect the unit costs for construction of facilities funded with the indebtedness being retired, and for capital improvement projects funded directly from revenues raised by the District from other sources.

SEC. 6.04 MEASUREMENT. The unit of volume measurement for wastewater discharged into the District's wastewater collection and treatment facilities shall be gallons, United States Liquid Measure. The unit for assessing costs with respect to strength wastewater parameter shall be pounds.

SEC. 6.05 ANNUAL REVIEW. The District's sewer service charge shall be reviewed at least annually by the Commission for purposes of establishing appropriate rates so as to generate sufficient revenues to pay for the debt service, administrative, and the operation and maintenance expenses (including replacement costs) of the District's wastewater facilities.

SEC. 6.06 AMOUNT OF SERVICE CHARGE. Service Charges for each of the HOVMSD's Customers shall be determined pursuant to the formula presented below:

$$SC = (V1 \times Cv) + 8.34 \times V2 [(B \times Cb) + (S \times Cs) + (P \times Cp) + (A \times Ca)] + X$$

Where:

SC = Service Charge to Municipalities.

V1 = Wastewater volume in thousand gallons, for the billing period.

Cv = Cost/volume (Cost is expensed as \$ per 1000 gallons)

V2 = Wastewater volume in million gallons, for the billing period.

B = Concentration of Biochemical Oxygen Demand (BOD) in milligrams per liter (mg/l) in the Wastewater.

Cb = Cost per pound of BOD.

S = Concentration of Suspended Solids in milligrams per liter (mg/l) in the Wastewater.

Cs = Cost per pound of Suspended Solids. (ss)

P = Concentration of phosphorus in milligrams per liter (mg/l) in the Wastewater.

Cp = Cost per pound of phosphorus. (p)

A = Concentration of Ammonia Nitrogen in Milligrams per Liter (mg/l) in the Wastewater.

Ca = Cost per pound of Ammonia Nitrogen.

X = Certain fixed operating costs and expenses, as allocated by the Commission, to such rate parameters as the Commission may from time to time establish.

The Unit cost for each rate parameter shall be calculated from information generated by the individual Municipalities and the District and shall be reviewed routinely and approved by the Commission.

The User Charge volume rate ("Cv") shall be determined by dividing the sum of the cost components allocated to volume proposed in the upcoming year's budget by the collective average total of the preceding year's or years' contributions of Wastewater received as an estimate of the succeeding year of Wastewater anticipated to be contributed, to wit:

{Cv=Cost Allocated to Volume From Budget Hearing ÷ Estimated succeeding year's Wastewater volume in 1000 gallons.}

The User charge BOD rate ("Cb") shall be determined by dividing the sum of cost components allocated to BOD proposed in the upcoming year's budget by the collective average total of the preceding year's or years' contributions of BOD loadings received as an estimate of the succeeding year's BOD loadings anticipated to be contributed.

{Cb=Cost Allocated to BOD From Budget Hearing ÷ Estimated succeeding year's BOD contributions in pounds.}

The User Charge Suspended Solids rate ("Cs") shall be determined by dividing the sum of the cost components allocated to Suspended Solids proposed in the upcoming year's budget by the collective average total of the preceding year's or years' contributions of Suspended Solids loadings received as an estimate of the succeeding year's Suspended Solids loadings anticipated to be contributed.

{Cs=Cost Allocated to Suspended Solids From Budget Hearing ÷ Estimating succeeding year's Suspended Solids contributions in pounds.}

The User Charge phosphorus rate ("Cp") shall be determined by dividing the sum of the cost components allocated to phosphorus proposed in the upcoming year's budget by the collective average

total of the preceding year's or years' contributions of phosphorus loadings received as an estimate of the succeeding year's phosphorus loadings anticipated to be contributed.

{Cp=Cost Allocated to Phosphorus From Budget Hearing ÷ Estimated succeeding year's phosphorus contributions in pounds.}

The User Charge Ammonia Nitrogen Rate (Ca) shall be determined by dividing the sum of the cost components allocated to ammonia nitrogen in the upcoming year's budget by the collective average total of the preceding year's or years' contributions of ammonia nitrogen loadings received as an estimate of the succeeding year's ammonia nitrogen loadings anticipated to be contributed.

{Ca=Cost Allocated to Ammonia Nitrogen From Budget Hearing ÷ Estimate Succeeding Year's Ammonia Nitrogen Contributions.}

Proposed Language for Methodology for Service Charge Calculation

SEC. 6.06.1 Calculation of Service Charge

The HOVMSD owns and maintains metering stations that receive flow from each of the individual Municipalities. The metering stations are provided with flow metering and wastewater sampling equipment that is owned, maintained and calibrated by HOVMSD. The flow metering equipment provides the volume measurement component (in gallons) to be used in the calculation of the Service Charge. The wastewater sampling equipment collects and composites flow proportional samples of the wastewater at each metering location. The composite wastewater samples are collected periodically and analyzed by HOVMSD using standard and accepted analysis methods to determine the strength of the wastewater in pounds from each metering station.

The flow volumes and strengths represented by each composite sampling event shall be used to calculate the amount of the Service Charge billed to each individual Municipality, using the formula given in Section 6.06.

The results of the calculation of Service Charges from each individual Composite Sampling event during a monthly billing cycle shall be summed on a monthly basis to determine the total Service Charges from each metering station for that billing cycle.