# CITY OF VANCOUVER

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## POLICY REPORT PHYSICAL SERVICES

Report Date: June 10, 2008 Author: Steve McTaggart Phone No.: 604.873.7356

RTS No.: 4050

VanRIMS No.: 08-2000-30 Meeting Date: June 26, 2008

TO: Standing Committee on City Services and Budgets

FROM: General Manager of Engineering Services

SUBJECT: BOD/TSS/Flow Charges to Permitted Industries

#### RECOMMENDATION

THAT Council approve in principle the revised rate structure outlined in this report for BOD/TSS/Flow fees charged to Permitted Industries with implementation effective January 1<sup>st</sup>, 2009, and subject to consultation with the Permitted Industries.

#### **CITY MANAGER'S COMMENTS**

The City Manager RECOMMENDS approval of the foregoing.

#### **COUNCIL POLICY**

On March 9, 2000, Council approved implementation of Biochemical Oxygen Demand/Total Suspended Solids/Flow (BOD/TSS/Flow) charges for permitted industrial sewer users based on a rate structure formulated to pay for their portion of the costs to treat their liquid wastes discharged to the sewer system. These fees are reviewed each year by Council to establish new rates for the following twelve month period.

#### **PURPOSE**

The purpose of this report is to recommend a revision to the rate structure for BOD/TSS/Flow charges to permitted industries to better reflect actual costs to treat the liquid wastes discharged from these industries.

#### **BACKGROUND**

Over the past decade, Metro Vancouver has implemented user pay fees for "permitted" industries. There are currently 51 permitted industries in Vancouver that pay these user fees. An industry becomes permitted when it discharges more than 300 cubic metres of wastewater over a 30 day period. These fees are based on the amount of biochemical oxygen demand (BOD), total suspended solids (TSS) and flow discharged to the sewer system and the cost to treat that wastewater at the regional sewage treatment plants (STPs).

The major cost drivers to build and operate sewage treatment plants are BOD, TSS and flow entering the plants. By passing on the true costs to treat industrial effluent, industries pay their fair share of the treatment costs. They also have an incentive to improve their own processes and implement technologies to minimize waste discharges. In addition, this reduces the amount of contaminants going to the treatment plant and receiving waters, and helps the plant maintain its operating efficiency to meet the requirements of the Provincial discharge permit.

When Metro Vancouver implemented these fees, they agreed to let individual municipalities develop their own method to pass these costs on. Most municipalities charge the regional user fees directly to their permitted industries, however, some choose other methods. In Vancouver's case, the Metro Vancouver fees did not accurately pass on the treatment costs to our industries. This is because the lona sewage treatment plant treats both sanitary sewage and stormwater from Vancouver, and the Metro Vancouver rate structure only dealt with the sanitary component. Applying Metro's rates would have resulted in some double billing to our industries. As a result, Vancouver staff developed a modified rate structure to more accurately charge industries for their share of the actual treatment costs, which was approved by Council on March 9, 2000.

#### DISCUSSION

Over the past few years, City and Metro Vancouver staff have been working together to review and update the BOD/TSS/Flow rate structure taking into account Vancouver's combined sewer system. Based on this work, we have mutually developed and agree upon a revised rate structure which more accurately distributes the sanitary sewer costs to our permitted industries. The proposed changes to the rate structure are shown in Appendix A.

The impact of this rate structure change on industries is shown in Appendix B. The illustrated changes to their fees are based on 2008 data and vary significantly between the permittees. Some industries will experience increases in their permit fees while others will experience decreases. This new fee structure will effectively charge our industry the same net costs as other industries are charged throughout Metro Vancouver.

City staff have notified the industries that there will be a rate change and have held an initial information meeting on June 9, 2008. Staff answered general questions and have met with some permittees on an individual basis. We will also be undertaking formal consultation with them in the Fall. Staff will be reporting back, as part of the annual rate setting report, on the results of this consultation process and will likely recommend that the new rates be implemented effective January 1, 2009.

#### FINANCIAL IMPLICATIONS

As noted in Appendix B, it is estimated that approximately \$410,000 of additional fees will be collected from permittees on an annual basis, related to changes in the capacity utilization rates. However, as these fees become part of the calculation to determine the metered and flat rates for other users of the Sewer Utility, there will be no overall increase in revenue to the Sewer Utility or the City. Rather the rates to other users will be adjusted to reflect this additional revenue from the permittees. It should be noted that the overall impact on other users will be negligible given the total number of users and the total costs associated with the Sewer Utility.

#### CONCLUSION

The recommended rate change for permitted industries will better reflect the actual costs to treat BOD/TSS and flow at the Iona STP. Metro Vancouver and City staff are in agreement with the new proposed rates. Industry consultation is underway. Subject to Council's approval, the revised fees will be implemented effective January 1, 2009.

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#### RATE STRUCTURE CHANGES

Comparison of the actual rates for 2008 and the rates that would have been applied if the proposed rate calculations had been applied in 2008.

	Actual Rates 2008	Proposed Rates 2008
GVSⅅ Sewage Facility - Capacity Utilization Rate:		
BOD Load Capacity Utilization Rate (per Average BOD		
Load/Operating Day/ per year)	\$ 3.194	\$ 42.541
TSS Load Capacity Utilization Rate (per Average TSS		
Load/Operating Day/ per year)	\$ 23.179	\$ 46.399
Flow Load Capacity Utilization Rate (per Average		
Flow/Operating Day/ per year)	\$ 29.496	\$ 17.854

Note: This information is presented for comparison purposes only, as there will be no change to the rates for 2008.

### PROPOSED RATE STRUCTURE IMPACT ON PERMITTED INDUSTRIES

Permit	20	008 BOD/TSS/Flow Charges	BOD/TSS/Flow Charges g PROPOSED Rates	Difference		% Change
SC-5000XX-VSA	\$	290,171.00	\$ 434,092.00	\$	143,921.00	49.6%
SC-5000XX-VSA	\$	128,713.00	\$ 219,640.00	\$	90,927.00	70.6%
SC-5000XX-VSA	\$	241,016.00	\$ 299,457.00	\$	58,441.00	24.2%
SC-5000XX-VSA	\$	124,754.00	\$ 154,757.00	\$	30,003.00	24.0%
SC-5000XX-VSA	\$	91,746.00	\$ 118,123.00	\$	26,377.00	28.8%
SC-5000XX-VSA	\$	65,250.00	\$ 84,711.00	\$	19,461.00	29.8%
SC-5000XX-VSA	\$	51,561.00	\$ 67,577.00	\$	16,016.00	31.1%
SC-5000XX-VSA	\$	5,256.00	\$ 15,778.00	\$	10,522.00	200.2%
SC-5000XX-VSA	\$	19,816.00	\$ 25,690.00	\$	5,874.00	29.6%
SC-5000XX-VSA	\$	7,505.00	\$ 12,092.00	\$	4,587.00	61.1%
SC-5000XXVSA	\$	8,115.00	\$ 12,669.00	\$	4,554.00	56.1%
SC-5000XX-VSA	\$	6,977.00	\$ 8,672.00	\$	1,695.00	24.3%
SC-5000XX-VSA	\$	15,073.00	\$ 16,422.00	\$	1,349.00	8.9%
SC-5000XX-VSA	\$	14,182.00	\$ 15,515.00	\$	1,333.00	9.4%
SC-5000XX-VSA	\$	10,828.00	\$ 11,970.00	\$	1,142.00	10.5%
SC-5000XX-VSA	\$	3,867.00	\$ 4,977.00	\$	1,110.00	28.7%
SC-5000XX-VSA	\$	2,432.00	\$ 3,397.00	\$	965.00	39.7%
SC-5000XX-VSA	\$	9,083.00	\$ 9,946.00	\$	863.00	9.5%
SC-5000XX-VSA	\$	2,538.00	\$ 3,305.00	\$	767.00	30.2%
SC-5000XX-VSA	\$	6,959.00	\$ 7,376.00	\$	417.00	6.0%
SC-5000XX-VSA	\$	3,640.00	\$ 4,049.00	\$	409.00	11.2%
SC-5000XX-VSA	\$	1,039.00	\$ 1,365.00	\$	326.00	31.4%
SC-5000XX-VSA	\$	1,183.00	\$ 1,325.00	\$	142.00	12.0%
SC-5000XX-VSA	\$	1,650.00	\$ 1,765.00	\$	115.00	7.0%
SC-5000XX-VSA	\$	1,064.00	\$ 1,039.00	\$	(25.00)	-2.3%
SC-5000XX-VSA	\$	2,181.00	\$ 2,145.00	\$	(36.00)	-1.7%
SC-5000XX-VSA	\$	334.00	\$ 256.00	\$	(78.00)	-23.4%
SC-5000XX-VSA	\$	353.00	\$ 263.00	\$	(90.00)	-25.5%
SC-5000XX-VSA	\$	534.00	\$ 438.00	\$	(96.00)	-18.0%
SC-5000XX-VSA	\$	671.00	\$ 554.00	\$	(117.00)	-17.4%
SC-5000XX-VSA	\$	831.00	\$ 704.00	\$	(127.00)	-15.3%
SC-5000XX-VSA	\$	1,061.00	\$ 909.00	\$	(152.00)	-14.3%
SC-5000XX-VSA	\$	1,032.00	\$ 876.00	\$	(156.00)	-15.1%
SC-5000XX-VSA	\$	627.00	\$ 468.00	\$	(159.00)	-25.4%
SC-5000XX-VSA	\$	3,504.00	\$ 3,310.00	\$	(194.00)	-5.5%
SC-5000XX-VSA	\$	1,585.00	\$ 1,364.00	\$	(221.00)	-13.9%
SC-5000XX-VSA	\$	1,337.00	\$ 1,098.00	\$	(239.00)	-17.9%
SC-5000XX-VSA	\$	1,027.00	\$ 787.00	\$	(240.00)	-23.4%
SC-5000XX-VSA	\$	1,799.00	\$ 1,551.00	\$	(248.00)	-13.8%
SC-5000XX-VSA	\$	2,023.00	\$ 1,675.00	\$	(348.00)	-17.2%

	\$ 1,205,433.00	\$ 1,614,664.00	\$ 409,231.00	33.9%
SC-5000XX-VSA	\$ 14,485.00	\$ 12,893.00	\$ (1,592.00)	-11.0%
SC-5000XX-VSA	\$ 6,648.00	\$ 5,226.00	\$ (1,422.00)	-21.4%
SC-5000XX-VSA	\$ 8,088.00	\$ 6,710.00	\$ (1,378.00)	-17.0%
SC-5000XX-VSA	\$ 5,591.00	\$ 4,307.00	\$ (1,284.00)	-23.0%
SC-5000XX-VSA	\$ 17,519.00	\$ 16,684.00	\$ (835.00)	-4.8%
SC-5000XX-VSA	\$ 2,500.00	\$ 1,879.00	\$ (621.00)	-24.8%
SC-5000XX-VSA	\$ 3,155.00	\$ 2,578.00	\$ (577.00)	-18.3%
SC-5000XX-VSA	\$ 4,677.00	\$ 4,146.00	\$ (531.00)	-11.4%
SC-5000XX-VSA	\$ 3,104.00	\$ 2,590.00	\$ (514.00)	-16.6%
SC-5000XX-VSA	\$ 4,484.00	\$ 4,045.00	\$ (439.00)	-9.8%
SC-5000XX-VSA	\$ 1,865.00	\$ 1,499.00	\$ (366.00)	-19.6%

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