



CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Date: November 25, 2005
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Meeting Date: December 15, 2005

TO: Standing Committee on City Services and Budgets

FROM: General Manager of Engineering Services

SUBJECT: Annual Review of Sewer Rates for 2006 under the Sewer and Watercourse By-law

RECOMMENDATION

- A. *THAT the 2006 sanitary sewer user rates be set as per Appendix A (Schedule A).*
- B. *THAT the 2006 public sewer connection fees be set as per Appendix A (Schedule A).*
- C. *THAT 2006 Biochemical Oxygen Demand/Total Suspended Solids / Flow (BOD/TSS/Flow) rates payable by waste discharge permit users ("permitted industrial users") be set as per Appendix A (Schedule B).*
- D. *THAT the Director of Legal Services be instructed to bring forward for enactment amendments to the Sewer and Watercourse By-law, substantially as set out in Appendix A, to give effect to the recommendations A, B and C of this Report.*

GENERAL MANAGER'S COMMENTS

The General Manager of Engineering Services RECOMMENDS approval of A through D.

COUNCIL POLICY

Sanitary sewer user fees, Sewer BOD/TSS/Flow rates for Permitted Industries and public sewer connection fees are reviewed annually by Council to establish the following year's rates.

Council policy is that fees for services are to be set at cost recovery level or at market level in circumstances where City Services compete with the private sector.

PURPOSE

The purpose of this report is to recommend revised sanitary sewer user fees, Sewer BOD/TSS/Flow rates and public sewer connection fees for 2006.

BACKGROUND

The sewer system of the City of Vancouver operates as a Utility. The sewer system has two main components: the sanitary system collects wastewater from homes and business, while the storm system handles surface run off from properties and streets in the City. The system delivers sanitary wastewater to the treatment facilities operated by the Greater Vancouver Sewerage and Drainage District (GVS&DD).

The Utility recovers the costs of sewer system services, including regional treatment costs, through two vehicles. Costs of the sanitary sewer system are recovered through Sewer user fees using water consumption as the proxy for consumption. Currently, about 48% of sewer system costs are recovered on this basis, either in the form of flat fees (residential properties) or metered fees (properties with water meters). The remainder of the system costs, comprising infrastructure costs of sanitary sewer system and the entire storm sewer component are more closely related to lot size and system maintenance rather than consumption. This portion of the system costs, which is about 52%, is recovered through a transfer of funds from the City General Revenues Fund to the Sewer Utility.

DISCUSSION

1. 2005 Sewer Utility Status

On the expenditure side, staff expect an under-expenditure of \$242,000 (0.3% of the total sewer costs) mainly due to the need to postpone some maintenance work from 2005 to the beginning of 2006. 52% (\$127,000) and 48% (\$116,000) of this unspent budget will be distributed to the General Revenues accounts and the Sewer Utility accounts respectively at year-end. On the revenue side, it is anticipated revenues will be over budget by approximately \$934,000 or 2.9% of total sewer revenues. This is primarily attributed to higher metered revenues due to higher than expected water usage. Overall, the 2005 actual financial results of the Sewer Utility will show a net positive variance of approximately \$1.05 million.

The actual transfer to the Sewer Stabilization Reserve should be approximately \$1.1 million, compared to the \$51,000 originally budgeted. The Sewer Stabilization Reserve currently has a balance of \$4.6 million before the 2005 year-end transfer.

2. 2006 Sewer Budget and Rates

Table 1 summarizes the 2005 Sewer Operating Budget and the proposed budget for 2006.

Table 1
2005 and 2006 Sewer Budget

Description	2005 Budget	2006 Proposed Budget	Increase (decrease)	% Change
(A) COSTS				
(I) GVS&DD Levies	\$36,460,000	\$36,903,500	\$443,500	1.2%
<i>City Debt Servicing Costs</i>	<i>\$21,367,600</i>	<i>\$24,297,900</i>	<i>\$2,930,300</i>	<i>13.7%</i>
<i>City Operating costs</i>	<i>\$6,504,300</i>	<i>\$6,610,600</i>	<i>\$106,300</i>	<i>1.6%</i>
(II) Total City Costs	\$27,871,900	\$30,908,500	\$3,036,600	10.9%
Total Sewer Costs (I) + (II)	\$64,331,900	\$67,812,000	\$3,480,100	5.4%
(B) REVENUES				
<u>Sewer Costs recovered from:</u>				
(a) BOD/TSS/Flow Charge	\$1,270,000	\$1,170,000	(\$100,000)	(7.9%)
(b) Billable Sewer Fees	\$30,658,700	\$32,345,100	\$1,686,500	5.5%
(c) Transfer from/(to) Sewer Reserve	(\$51,000)	(\$7,000)	\$44,000	Note 1
(d) Transfer from General Revenues	\$32,454,200	\$34,303,900	\$1,849,700	5.7%
Total Cost Recovery	\$64,331,900	\$67,812,000	\$3,480,100	5.4%

Note 1: Transfer excess sewer fees due to rounding of flat rates up to the nearest dollar to Sewer Reserve

(A) COSTS

The Sewer Utility costs consist of two major cost components: GVS&DD levies and City costs. The preliminary bill from the GVS&DD indicates that the levies for Vancouver will increase by 1.2% in 2006. The proposed City costs budget includes a 1.6% increase in operating costs from the 2005 budget level as a result of inflationary increases in employment and other costs, and a 13.7% increase in debt charges related to the capital construction program. The increase in

debt charges is due to principal and interest payments arising from the 2005 debenture issue. Overall the City sewer costs are anticipated to increase by 10.9%.

The combined GVS&DD levy and City sewer cost increases result in a projected 5.4% increase over 2005 budget levels.

(B) REVENUES

Based on the 2006 operating budget summarized above and on other factors that affect sewer user fees, including BOD/TSS/Flow treatment costs, overall and metered water consumption, and the projected number of residential dwelling units over which costs are allocated, key 2006 sewer fees are shown in Table 2 below. A full listing of 2006 sewer fees is detailed in Appendix A (Schedule A and B).

Table 2
2006 Sewer Rates

Description	2005 Rates	2006 Rates	Inc (Dec)	% Change
<u>Metered rate per unit:</u>	\$0.963	\$0.990	\$0.027	2.8%
<u>Non metered (flat) fees:</u>				
Single Family Dwelling	\$158	\$162	\$4	2.5%
Extra Unit	\$56	\$57	\$1	1.8%
Duplex (each unit)	\$107	\$110	\$3	2.8%
Vacant Lot	\$90	\$92	\$2	2.2%

3. Sewer BOD/TSS/Flow Rates for 2006

Based on projected treatment costs for BOD/TSS/Flow at the Iona Treatment Plant, GVS&DD staff has calculated Sewer BOD/TSS/Flow unit rates for 2006 as detailed in Appendix A (Schedule B). Staff estimate that based on the proposed unit rates and industrial wastewater discharges and loading levels in 2005, approximately \$1.17 million will be recovered from permitted industrial users in 2006. This represents a 7.8% decrease from 2005 budget. The decrease is mainly attributed to a reduction in the total number of permitted operations from 58 at the beginning of 2005 to 55 at the present time.

4. Public Sewer Connection Rates for 2006

Connections to the City's sewer system (public sewer connections) are provided by the City through a cost-recovery program. Under the City Building By-law, new developments are required to pay for the renewal of the sewer and water connections servicing their property. Fees for this program are adjusted annually to reflect costs required to provide the services. Staff estimate that an increase of 5% will be required in 2006 to cover inflationary increases in wages, construction materials and equipment rental costs.

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Sewers and Watercourse By-Law No. 8093
Schedules of Rates for 2006
(with comparable rates for 2005)

Schedule A

Part I		Sewer Connection Rates	
		Present	Proposed Fee
1.	Public Sewer Connection, for One-Family or Two-Family Dwellings	\$ 5,578	\$ 5,857
2.	Public Sewer Connection, other than One-Family or Two-Family Dwellings		
a)	4 inch/100 mm diameter	\$ 7,287	\$ 7,651
b)	6 inch/150 mm diameter	\$ 8,794	\$ 9,234
c)	8 inch/200 mm diameter	\$ 9,948	\$10,446
d)	10 inch/250 mm diameter	\$11,478	\$12,052
e)	12 inch/300 mm diameter	\$13,041	\$13,694
f)	15 inch/375 mm diameter	\$14,583	\$15,312
g)	Greater than 15 inch/375 mm diameter pursuant to Sentence 2.7 (2) of Sewer and Watercourse By-law	\$14,583	\$15,312
h)	Manhole installation in conjunction with a public sewer connection pursuant to Sentence 2.7 (3) of Sewer and Watercourse By-law	At Cost pursuant to Sentence 2.7 (3)	
3.	Where a public sewer connection will be placed more than 5 feet below the ground elevation, taken to the nearest foot and measured at the centre line of the street or lane as determined by the City Engineer, the fees payable shall be an amount equivalent to an increase of 10%, for each additional foot below 5 feet, of the fee otherwise payable by section 1 or 2 above.		
4.	New fitting on a twin sewer pursuant to Sentence 2.7 (4)	\$ 2,718	\$ 2,854
5.	New fitting on a single sewer pursuant to Sentence 2.7 (4)	\$ 1,198	\$ 1,258
6.	Inspection of a plumbing system, subsoil drainage pipes and a building sewer	\$ 189	\$ 198
Part III		Flat Rates for Unmetered Property	
	Single Family Dwelling	\$ 158	\$ 162
	Single Family Dwelling with Suite	\$ 214	\$ 219
	Strata Duplex (per dwelling unit)	\$ 107	\$ 110
	2 Services, 1 Lot	\$ 316	\$ 324
	3 Services, 1 Lot	\$ 474	\$ 486
	4 Services, 1 Lot	\$ 632	\$ 648
	Parking Lot/Garden	\$ 90	\$ 92

Part IV		Flat Rates for Other Property or Shut Off Water Service	
Other Property		\$ 90	\$ 92
Turned Off, 1 Service		\$ 90	\$ 92
Turned Off, 2 Services		\$ 90	\$ 92
Turned Off, 3 Services		\$ 90	\$ 92
Part V		Unit-Based Rates for Metered Property	
Minimum Charge		\$ 6.55	\$ 6.73
Metered Property Rate		\$ 0.963	\$ 0.990
Waste Discharge Permit User Rate		\$ 0.08657	\$ 0.09163

Schedule B

Part II		BOD/TSS/Flow Rates	
		Present	Proposed
A.	<u>Usage-Based Rate:</u>		
	BOD Load Rate (per kilogram of BOD Load)	\$ 0.032	\$ 0.034
	TSS Load Rate (per kilogram of TSS Load)	\$ 0.316	\$ 0.313
	Flow Rate (per cubic metre of Flow)	\$ 0.037	\$ 0.039
B.	<u>GVS&DD Sewage Facility – Capacity Utilization Rate:</u>		
	BOD Load Capacity Utilization Rate (per Average BOD Load/Operating Day/ per year, as calculated below)	\$ 3.640	\$ 3.405
	TSS Load Capacity Utilization Rate (per Average TSS Load/Operating Day/ per year, as calculated below)	\$ 26.417	\$ 24.712
	Flow Load Capacity Utilization Rate (per Average Flow/Operating Day/ per year, as calculated below)	\$ 31.414	\$ 29.431