

sample of the Potential BOD/TSS charge. This charge applies only to 'Permitted' industrial customers, as their discharges are significantly higher than other customers. In addition, 'Permitted' industrial customers typically have a scale of operation that makes it possible to pre-treat sewage at source. This charge is passed along to the user in all other municipalities in the GVRD. Other major cities in Canada have implemented a similar BOD/TSS pricing strategy. Also, high levels of BOD in the sewer system increase odour and corrosion in sewer systems from the generation of hydrogen sulphide. Certain types of TSS can cause build-up in the pipes, resulting in increased maintenance and potential basement flooding from sewer blockages.

Managing BOD/TSS at source maximizes the use of existing treatment facilities and helps in deferring the expansion of plants, which is extremely costly. By sending the right price signal to industries that produce this type of sewage, they are encouraged to implement cost-effective, on-site treatment. The BOD/TSS charges, as recommended in this report, are based on a "user pay" approach and are intended to encourage a more equitable system of cost recovery.

DISCUSSION

GVS&DD introduced the BOD/TSS industrial charges through a phased-in, 4-year period from 1998 to 2001 to all municipalities. This period was aimed at allowing the industries additional time to make the necessary process changes required to reduce their BOD/TSS discharge and thereby to avoid the extra charges.

However, Surrey, in 2000, decided to defer the charging for BOD/TSS directly to the 'Permitted' users because of concerns on the industries' competitiveness and Surrey's attractiveness to industries. The BOD/TSS surcharge is currently being absorbed by the City's utility.

Staff have reviewed the matter and have concluded that the "Permitted" users should be charged the BOD/TSS surcharge for the following reasons:

1. All members of Metro Vancouver, except Surrey, have implemented the direct BOD/TSS charges to their 'Permitted' users;
2. Surrey sewer customers have already been subsidized the 28 industries with almost \$4 million on these BOD/TSS charges from Sewer Utilities since 2000;
3. The BOD/TSS charges levied by Metro Vancouver on Surrey for 2007 is \$596,270 with an estimate of \$607,000 for 2008;
4. Direct BOD/TSS charges are a more equitable system, as it will lower the demand for rate increases for residential owners; and
5. The subsidy acts to discourage industries from implementing cost-effective, on-site changes to their processes to reduce BOD/TSS demand.

To allow opportunities for the ‘Permitted’ industries with significant charges to minimize their BOD/TSS charges through retrofitting on-site pre-treatment, it is proposed that the charges be phased in over a 3 year period as shown in Table 1 below:

Table 1 – Incremental BOD/TSS Charges Schedules

Annual BOD/TSS Charges	Applicable Fixed Charges or Percentage of BOD/TSS Charges		
	2008	2009	2010
\$5,000 and less	100%	100%	100%
More than \$5,000	\$5,000	\$5,000 + 50% of remaining charge	100%

City staff will invite representatives of all the “Permitted” industries whose annual BOD/TSS charge increases exceed \$1,000 to a meeting to explain the impact of the recommended course of action on their sewer charges, explore steps they can take to minimize the financial impact, and collect feedback. A further report will be provided to Council after this meeting.

CONCLUSION

It is recommended billing the BOD/TSS charges directly to the “Permitted” industries because it is a fairer billing system and an effective way of delaying the expansion of treatment facilities. In addition, this gives economic incentives to the permitted industries to invest into cost effective upgrades that will reduce the Regional treatment demand of their sewage. Reducing BOD/TSS at source also helps to mitigate odour and corrosion in our sewerage system.

Paul Ham, P.Eng.
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Appendix I – GVRD BOD/TSS Industrial Charges for Surrey in 2007

c.c. - General Manager, Finance & Technology

GVRD BOD/TSS Industrial Charges for Surrey in 2007

Company Name	BOD/TSS Charges	Current Charges	Percentage Difference
A.G.M. Beef Farm Ltd.	\$789	\$680	116%
Action Plating Inc.	540	3,080	18%
Canadian National Railway Company	1,093	2,393	46%
Coast Mountain Bus Company Ltd.	471	1,262	37%
City of Surrey	7,875	NA	NA
Cott Corporation	2,679	8,942	30%
Ewos Canada Ltd.	24,370	22,765	107%
Excell Railing Systems Ltd.	695	3,762	18%
Finning International Inc. (FI Profolio Inc)	2,096	4,005	52%
J & L Beef Ltd.	611	35,055	2%
Maple Leaf Consumer Foods Inc.	94,363	59,518	159%
Newalta Corporation	1,569	2,083	75%
Orca Specialty Foods Ltd.	35,476	23,726	150%
Pacific Press Ltd.	920	2,213	42%
PolyBottle Group Ltd. (Beedie 132 St Surrey Ltd.)	1,011	590	171%
Punjab Milk Foods Inc.	4,918	NA	NA
Sandel Foods Inc.	135,161	23,723	570%
Scanner Enterprises (1982) Inc.	40,405	37,645	107%
Spectral Finishing Inc.	1,237	9,869	13%
Sunrise Poultry Processors Ltd. (High Noon Investment Corp.)	147,745	17,171	860%
Superior Electro Plating (1980) Ltd.	1,008	388	260%
Titan Steel and Wire Co. Ltd.	12,914	43,335	30%
Tri-Arrow Industrial Recovery Inc.	437	517	85%
Valley Rite-Mix Ltd.	272	3,956	7%
Vitality Manufacturing Canada Co.	50,430	7,871	641%
Western Cleanwood Preservers Ltd.	10,352	NA	NA
Wing Tat Game Bird Packers Inc.	1,596	28,830	6%
Zinnetti Food Products Ltd.	15,236	17,642	86%
Total	\$596,269		

N/A Not applicable, or under review