

## 2019 Wastewater Overstrength Surcharges Information Sheet

EPCOR Drainage Services

This program is designed to recover the cost of treatment and applies to a customer who releases higher strength wastewater to the sewer system that contains one or more constituents that exceed the concentration indicated in this information sheet. More information for this program can be found in the EPCOR Water Services and Wastewater Treatment Bylaw 17698, Schedule 1, Part IV and Schedule 3, Appendix 1.3.

### Constituents

BOD - BIOCHEMICAL OXYGEN DEMAND  
 COD - CHEMICAL OXYGEN DEMAND  
 TKN - TOTAL KJELDAHL NITROGEN  
 O/G - OIL AND GREASE  
 TP - TOTAL PHOSPHORUS  
 TSS - TOTAL SUSPENDED SOLIDS

### Allowable Limits

CONSTITUENT	BOD mg/L	COD mg/L	N - TKN mg/L	O/G mg/L	TP mg/L	TSS mg/L
SURCHARGEABLE	>300	>600*	>50	>100	>10	>300
ADDITIONAL SURCHARGE	>3,000	>6,000*	>200	>400	>75	>3,000
MAXIMUM ALLOWABLE	10,000	20,000	500	500	200	5,000

\* - or twice the BOD concentration in the wastewater, whichever is greater.

**Exceeding any limit stated in the maximum allowable row is a violation of the EPCOR Drainage Bylaw 18100, Schedule 2, Appendix B.**

### Determination of Wastewater Overstrength Surcharges

EWSI or its agent:

- will collect a composite sample of the wastewater being released over any 24 hour period or part thereof;
- will determine the concentration of the surchargeable constituents in the sample, using a standard procedure;
- will calculate the average concentration of each constituent from a minimum of four (4) composite samples taken over a period of more than seven (7) days, and not longer than a 12 month period;

- may, where the concentration(s) of the overstrength constituent(s) are in the same range as those used to establish the existing overstrength surcharge, use the existing mean concentrations to set the overstrength surchargeable rate until such time as the concentrations fall outside the existing range;
- will calculate the average number of kilograms of each surchargeable constituent per cubic metre of wastewater, that exceeds the concentration indicated in Part IV “Wastewater Overstrength Surcharge” and “Wastewater Additional Overstrength Surcharge” of this Schedule; and
- will calculate the wastewater overstrength surcharges which will appear on the customer’s utility bill using the following formula:

Overstrength Surcharge ( \$ ) =

$$\frac{m3 [ Ob (Cxb - 300) + Oc (Cxc - Cac) + Oo (Cxo - 100) + Op (Cxp - 10) + Os (Cxs - 300) + On (Cxn - 50) ]}{100,000}$$

Where: m3 is the total water consumption in cubic meters (or, if approved, sewer metering);

- Ob, Oc, Oo, Op, Os and On are the overstrength surcharge set out in Schedule 1, Part IV of the EPCOR Water Services and Wastewater Treatment Bylaw 17698 for each kilogram of BOD, COD, O/G, TP, TSS and N-TKN, respectively.
- Cxb, Cxc, Cxo, Cxp, Cxs, Cxn are the average concentrations in milligrams per litre (mg/L) of BOD, COD, O/G, TP, TSS and N-TKN, respectively, in the sampled wastewater.
- Cac is 600 or double the average BOD concentration in mg/L whichever is greater.
- the additional surcharge is calculated using the above formula but substituting 3000, 400, 75, 3000, and 200 for 300, 100, 10, 300 and 50, respectively, and Cac is 6000 or double the average BOD concentration in mg/L, whichever is greater.
- where the remainder of a subtraction is a negative number, that component of the formula becomes equal to zero.

### **Application of Wastewater Overstrength Surcharges**

#### **a) Single Business, Multiple Sewers:**

Where the wastewater from premises is released through two or more building sewers and where there is no accurate measurement of the individual flows being released, the release that would produce the highest surcharge will be used to determine the overstrength surcharge on all releases.

#### **b) Multiple Businesses, Single Water & Sewer Service:**

Wastewater released through a single sewer service from a premises with two or more separate businesses serviced by a single water service will be considered as being released by the person responsible for the payment of the utility bill for that water meter.

#### **c) Multiple Businesses, Multiple Water Services & Single Sewer Service**

Wastewater released through a single sewer service from a premises with two or more separate businesses, each serviced by separately metered water services, will be considered as being released from each of the separate businesses, in proportion to the separate business’ water consumption, unless it is shown to the satisfaction of EWSI or its agent, by the owner of the premises, that:

- i. the portion of the wastewater that is overstrength is being released from only one of the businesses serviced by a separate metered waterservice on the premises; and,
- ii. the release from that business can be monitored separately from the other businesses.