



OPERATIONS SERVICES

March 7, 2023

To All Wastewater Haulers:

Subject: Stony Plain and Villeneuve Wastewater Transfer Stations

Over the last several years, the Alberta Capital Region Wastewater Commission (ACRWC) has implemented source control for managing the wastewater quality received at their sewage treatment plant. As a result of this process, ACRWC has been increasing their charges to the County for overstrength wastewater received from the County's wastewater transfer stations to help pay for their additional treatment costs. Currently the County is paying in excess of \$400,000 annually for these overstrength charges in addition to ACRWC's basic sewage charges.

The County has recently been testing individual haulers and although there are varying degrees of overstrength exceedances between haulers, it appears that all haulers are disposing of overstrength wastewater to some degree. Therefore, the County will be increasing rates to ultimately recover these extra charges from ACRWC to the County.

To allow haulers to give advance warning to customers, the County will be raising disposal fees to \$10/m³ effective May 1, 2023 for all haulers. In addition, an increase to \$11.50/m³ will be effective on January 1, 2024. With these increases, the County expects to cover these additional operating costs being assessed by the ACRWC.

If the quality of wastewater disposal improves such that the overstrength charges from ACRWC drop, then the County will consider reducing these fees. If Haulers use these stations for sanitary sewage only, rather than illegally using them to discharge commercial sumps or other waste, then the overstrength charges may be reduced for all haulers. The reduction of suspended solids including sand and gravel, in addition to oil, grease and other chemicals is required to help reduce these extra charges.

The County will continue to monitor haulers' wastewater quality and if testing shows the quality significantly exceeds the overstrength limits, or includes banned waste, the County will be enforcing the Bylaw which may include additional overstrength charges, fines, and possible removal of access, either temporarily or permanently.

Thank you for your co-operation in maintaining this necessary public service.

Regards,

Neil Jamieson, P.Eng
Director, Public Works
Parkland County

Cc: Robert McGowan, General Manager, Operations Services
Jaitik Berawala, Manager, Water, Wastewater and Solid Waste

Attachment – Overstrength Surcharge Information Sheet

INFORMATION SHEET

Wastewater Overstrength Surcharges

Applies to Industrial, Commercial, and Institutional customers who release wastewater to the sewer system that contains one or more constituents that exceed the concentration indicated in this information sheet. The overstrength charges are billed through your municipality and are adjusted every six months.

Constituents

BOD- Biochemical Oxygen Demand
COD- Chemical Oxygen Demand
TKN- Total Kjeldahl Nitrogen
O/G- Oil and Grease, Total
TP- Total Phosphorus
TSS- Total Suspended Solids

Example Surchargeable and Additional Surcharge Rates

(Actual rates will be found within member municipalities bylaws)

BOD	COD	O&G	TP	TSS	TKN
\$0.3134/kg	\$0.3134/kg	\$0.2796/kg	\$12.8519/kg	\$0.2745/kg	\$1.9778/kg

Allowable Limits

(From the Alberta Capital Region Wastewater Commission Bylaw 8 Schedule B and C)

Constituent	BOD mg/L	COD mg/L	O/G mg/L	TP mg/L	TSS mg/L	TKN mg/L
Surchargeable	>300	>600*	>100	>10	>300	>50
Additional Surcharge	>3,000	>6,000*	>400	>75	>3,000	>200
Maximum Limit	10,000	20,000	500	200	5,000	500

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

Exceeding any maximum limit is a violation of the Alberta Capital Region Wastewater Bylaw 8

Members:

Beaumont
Bon Accord
Gibbons
Fort Saskatchewan
Leduc
Leduc County
Morinville
Parkland
St. Albert
Spruce Grove
Stony Plain
Strathcona County
Sturgeon County

Calculating Wastewater Overstrength Surcharges

The overstrength surcharge and additional overstrength surcharge is calculated using the same formula. To calculate the total cost the formula must be used on the constituents that are above each limit:

$$\frac{(\text{Annual Water Consumption}) \times (\text{Constituent Concentration} - \text{Constituent Limit})}{1000} \times \text{Constituent Surcharge Rate}$$

Sample Calculation

Industry ABC- Water consumption and Constituent Concentrations

Annual Water Consumption (m3)	BOD	COD*	O&G	TP	TSS	TKN	Total
10,000	500mg/L	2000mg/L	40mg/L	8mg/L	25mg/L	400mg/L	
Surcharge	\$626.80	\$3,134.00	No charge	No charge	No charge	\$6,922.30	\$10,683.10
Additional Surcharge	No charge	No charge	No charge	No charge	No charge	\$3,955.60	\$3,955.60
Total Annual Overstrength Surcharge							\$14,638.70

$$\text{BOD} = (10,000 \times (500 - 300)) / 1000 \times 0.3134 = \$626.80$$

$$\text{COD} = (10,000 \times (2000 - 1000)) / 1000 \times 0.3134 = \$3,134.00$$

$$\text{TKN Surcharge} = (10,000 \times (400 - 50)) / 1000 \times 1.9778 = \$6,922.30$$

$$\text{TKN Additional Surcharge} = (10,000 \times (400 - 200)) / 1000 \times 1.9778 = \$3,955.60$$

$$\text{Total Annual Overstrength Surcharge} = 626.80 + 3,134.00 + 6,922.30 + 3,955.60 = \$14,638.70$$