



**REPORT TO CORE AREA LIQUID WASTE MANAGEMENT COMMITTEE  
MEETING OF WEDNESDAY, JULY 28, 2021**

---

**SUBJECT**     **Residuals Treatment Facility – Bylaw No. 4414 – Other Municipal Solids Tipping Fees and Charges Bylaw No. 1, 2021**

**ISSUE SUMMARY**

Approval of the tipping fees bylaw for processing of regional wastewater residuals at the Residuals Treatment Facility (RTF) that are generated outside of the core area service.

**BACKGROUND**

The Core Area Wastewater Treatment Project included the construction of the RTF, located adjacent to the Hartland Landfill. The RTF was built to produce Class A biosolids from wastewater residuals generated at the new McLoughlin Point Wastewater Treatment Plant. The RTF also has the capacity to accept wastewater residuals from other facilities within the capital region but located outside of the core area through the Other Municipal Residual Solids (OMS) receiving station. Staff estimate that OMS could represent approximately 10% of the total solids processed through the RTF.

The OMS station is designed to receive residuals from transfer trucks and incorporate them into the larger RTF process stream, as follows:

- Dewatered Residuals: high solids content (greater than or equal to 10%) residuals are loaded into the OMS reception hopper and then directed into the main sludge pump reception hopper.
- Pumpable Residuals: low solids content (less than 10%) residuals are pumped to either the residual storage tank or directly into the digester.

Annual revenue generated from the OMS is an economic opportunity for the core area to offset a portion of the fixed annual capital and operational costs for the RTF. Based on the five-year budget for 2021, projected fees could recover about 10% of the total annual operating and capital cost of the RTF.

CRD Bylaw No. 4414 (Appendix A) provides the administrative mechanism to receive these other municipal solids at the RTF.

**ALTERNATIVES**

The Core Area Liquid Waste Management Committee recommends to the Capital Regional District Board:

*Alternative 1*

1. That CRD Bylaw No. 4414, “Other Municipal Solids Tipping Fees and Charges Bylaw No. 1, 2021”, be introduced and read a first, second, and third time; and
2. That CRD Bylaw No. 4414 be adopted.

*Alternative 2*

That CRD Bylaw No. 4414 be referred back to staff for additional information.

**IMPLICATIONS**

*Financial Implications*

Selection of appropriate and competitive fees is an important consideration in maximizing the use of the RTF for other municipal solids. Fees are structured on a cost recovery basis while reflecting the region's need to meet regulatory requirements for wastewater management. In addition, the tipping fees incorporate an understanding of the cost (per tonne) to produce and beneficially reuse biosolids generated at the RTF. With no operational data available, there is a level of uncertainty around the Capital Regional District's (CRD) current estimated costs. Primary sources of uncertainty include estimates for anaerobic digester solids reduction volumes, dried biosolids beneficial reuse costs and timing of a future plant expansion. Given these uncertainties, staff are recommending tipping fees be designated for a three-year performance period of 2021-2024. After this performance period, appropriate OMS fees can be established based on collected RTF operational data and generated OMS revenue. Once the evaluation is complete, if required, an amendment to Bylaw No. 4414 will be put forward for consideration.

Provided below are the recommended fees developed to recover costs for disposal of OMS dewatered and pumpable residuals for the period of 2021-2024:

- Dewatered Residuals - \$225 per wet tonne: This fee accounts for RTF costs to process dewatered residuals into a dried Class A biosolid and beneficial use under the CRD's biosolids beneficial use strategy. The rate is set to be equivalent to the estimated per tonne cost for the RTF to produce and beneficially reuse biosolids from core area wastewater residuals.
- Pumpable Residuals - \$45 per wet tonne: This fee was selected to be competitive with the current market place costs for liquid waste processing, and hence provides an economically viable alternative at the OMS station. The rate considers costs to process residuals into a dried Class A biosolid, use of the centrate return line for excess liquids and beneficial reuse of biosolids.

The proposed fee structure represents an estimated annual revenue stream of approximately \$1.1-\$1.3 million, if all potential municipal or sub-regional facilities use the OMS station. This projected revenue represents roughly 10% of the budgeted annual operational and capital costs of the RTF facility and represents a full recovery of the estimated 10% capacity usage. OMS disposal and beneficial use is subject to changes in processing costs, transportation costs and capital outlay, which may be reflected in future rate adjustments.

*Environmental & Climate Implications*

Beneficial use of residuals at the RTF has many positive climate implications (e.g., displacing coal as fuel in cement kilns, promoting plant growth for carbon sequestration and methane capture of landfill gas). Directing residuals within the capital region to the RTF also ensures their beneficial reuse conforms to all provincial and regional regulatory requirements.

Since 2011, a temporary allowance has been provided to facilities within the capital region to deposit wastewater residual solids at the Hartland Landfill. This allowance runs counter to the Ministry of Environment & Climate Change Strategy requirement for beneficial reuse of wastewater residuals, and consumes valuable airspace in the landfill. The OMS receiving station represents an available beneficial reuse option in the region. Furthermore, staff anticipate that the landfill allowance for other facilities will be rescinded upon stable operation of the RTF.

### **CONCLUSION**

Through the Other Municipal Residual Solids (OMS) receiving station, the Residuals Treatment Facility has capacity to accept wastewater residuals from municipal and sub-regional facilities located outside of the core area. Annual revenue generated from the OMS station is an economic opportunity for the Core Area Wastewater Service to offset a portion of the fixed annual capital and operating costs for the Residuals Treatment Facility. Selection of appropriate and competitive OMS fees is an important consideration in maximizing the use of this option. Bylaw No. 4414 outlines recommended tipping fees of \$225 per wet tonne for dewatered residuals and \$45 per wet tonne for pumpable residuals. Given uncertainties in operational and financial data, the developed tipping fees in Bylaw No. 4414 are designated for a three-year performance period to be revisited in 2024.

### **RECOMMENDATION**

The Core Area Liquid Waste Management Committee recommends to the Capital Regional District Board:

1. That CRD Bylaw No. 4414, “Other Municipal Solids Tipping Fees and Charges Bylaw No. 1, 2021”, be introduced and read a first, second, and third time; and
2. That CRD Bylaw No. 4414 be adopted.

Submitted by:	Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection
Concurrence:	Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services
Concurrence:	Ted Robbins, B.Sc., C.Tech., General Manager, Integrated Water Services
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Robert Lapham, MCIP, RPP, Chief Administrative Officer

### **ATTACHMENT**

Appendix A: CRD Bylaw No. 4414, “Other Municipal Solids Tipping Fees and Charges Bylaw No. 1, 2021”