



## **CIF Project #1096: City of Cornwall MRF Assessment and Material Cost Study (Material Specific Cost Analysis)**

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### **Background**

In 2019, the CIF continued working with the Corporation of the City of Cornwall to obtain a better understanding of the costs to manage specific recyclable materials. This served as a follow-up to Project 1075, which assisted in the development of a new recycling collection and processing RFP in preparation of IPR transition. Cornwall is an eastern Ontario municipality, that processes approximately 4,500 tonnes of single-stream recyclables per year. Following a year of operations under a new MRF contract and to prepare for transition to individual producer responsibility, the municipality was looking to:

- Confirm MRF operational efficiency and capture rates;
- Identify promotion and educational requirements to address resident set-out issues;
- Pinpoint contamination reduction opportunities both from residents and during processing;
- Determine the cost to expand or remove certain materials from their program;
- Develop an approach to increase revenue from marketable materials;
- Prioritize and budget for capital projects; and
- Assist municipal negotiations for compensation based on common based of goods collected.

In 2020, ReMM Group and Cambium Inc. were hired to complete a scope of work to:

1. Coordinate and implement data collection to assess the cost to manage recyclable materials at the MRF, and to measure equipment efficiencies (i.e. extent to which MRF equipment manufacturer's operating specifications were met).
2. Provide inbound composition analysis and calculate costs associated with residue.
3. Provide all collected data (spreadsheets) and a final report on key findings, observations, recommendations, and likely outcomes to improvements in MRF operations.

To complete the work consultants proposed to perform a mass balance audit, an inbound material audit, and a time and motion assessment at the MRF. Consultants also requested to thoroughly review contracts, financials, MRF equipment specifications, and the waste management master plan.

## Summary of Results

Over the two-year project period since the project's launch, the MRF experienced challenges including a delayed implementation of contractor-owned dual stream processing systems, multiple shutdowns for operational and equipment adjustments, and onsite material stockpiling leading to transferring materials to an outside facility.

Stable MRF operations were required to identify efficiencies and material costs. Additionally contract performance clauses (borne out of CIF project #1075) required materials to be processed within the Cornwall MRF except otherwise permitted and in accordance with market specifications to maximize revenue. As a result of ongoing and unresolved MRF operational concerns, the City requested to terminate Project #1096 in February 2021 as the ongoing delays meant that project was unlikely to be completed within required timeline.

## Financials

The total estimated costs, including contingency, to complete the work was \$25,000. CIF granted Cornwall up to \$15,538 which represented approximately 55% of the project value. The actual project cost as of February 2021 was \$11,015 as much of the preparatory work was completed before the project was terminated.

## Learnings

Clear contract clauses save money. In their new contract, developed through CIF project 1075, the City of Cornwall was no longer responsible for the financial burden of MRF processing issues (e.g. equipment adjustments, downtime due to operational issues, transport of backlogged materials to an alternate facility for processing). Given the challenges faced by the new operator in managing the existing inbound materials, these new contract clauses have helped the City avoid significant costs.

CIF Project 1096 highlights the challenges smaller municipalities face in trying to develop and maintain modern, efficient infrastructure. It also highlights the additional challenge of limited private sector competition. Once MRF operations have been resolved, Cornwall recognizes the importance of understanding material value and MRF operating costs as they prepare to transition to full producer responsibility starting in 2025.