

CIF Project #108 – QinetiQ Automated Waste Reclamation System Review

Background

In early 2008 the CIF was examining various technologies with the potential to improve sortation of recyclables and gain operating efficiencies in MRFs. Two key drivers at the time included the potential for major funding investments in local MRFs and the recognition that the increasing complexity and light weighting of packaging would make manual sortation obsolete.

Project #108 involved reviewing a new sortation system with technology from QinetiQ in the UK in support of MRF design work underway in London and Bluewater.

Summary of Results

The project report is confidential due to the commercially sensitive nature of the financial analysis undertaken as part of the technology review.

The technology proposed included a traditional sortation line processing a mix of materials similar in composition to typical blue box mixes found in Ontario. Key components of the design include high speed wide belt separation, optical sortation, colour recognition systems and traditional metal sortation systems.

The system achieved purity levels in excess of 90% on clean, label free resins as one would expect from these sorts of technologies, but had not been field trialed with curbside materials at that time.

Financials

The CIF approved funding of \$5,000 plus disbursements and taxes and the total cost was \$5,484.

Learnings

This review highlighted the importance of undertaking regular scans of the market for new and developing technologies that might present an opportunity for municipalities to improve their processing efficiencies and testing their functionality under real world conditions.