

## **CIF Project # 671.10 – MRF Preventative Maintenance Audit**

### **Background**

Bob Marshall of HMI Business Management was hired to design and supply a preventative maintenance program (PMP) for the Region of Waterloo's recycling facility located at 925 Erb Street West, Waterloo. This program was customized to the specific process equipment within the facility. The program was Excel-based and included a detailed inspection and housekeeping form for all sorting equipment which would allow the maintenance technician to evaluate each point of inspection on three levels and add comments. A log sheet was also included for all inspection forms issued to maintain control and repair work orders for required follow-up work. The repair work orders also had a log for control and cost tracking.

This comprehensive preventative maintenance program would assure that the equipment was consistently inspected and maintained. The system was designed to simplify the inspection process while assuring that all points of inspection were covered. The logs and sign-off sheets provided a means of accurate tracking of the outstanding work and accountability. The equipment covered within the package included: the baler, all conveyors, plastic perforator, ferrous separator, optical separator and the eddy current separator. It did not include rolling stock such as lift trucks, loaders, other vehicles or the building systems.

### **Summary of Results**

A comprehensive preventative maintenance plan was successfully developed for the Region of Waterloo which incorporated the existing O&M schedules and records. It was noted that while good training was initially provided by Machinex for the equipment they installed, additional and ongoing training was recommended for the contractor's sorting and maintenance staff to address staff turnover.

### **Financials**

CIF supported \$2,544 to complete this project.

### **Lessons**

The municipal and private sector recycling facilities have evolved into multi-million dollar capital assets as consumer packaging continues to change and caring for these assets requires a much greater degree of sophistication than what was required at the outset of the Blue Box program in Ontario. Development and use of an effective PMP is critical to maintaining existing equipment, preventing premature failure and unscheduled down time and for forecasting future investments and replacements.