

## E&E Project Evaluation Form

\*\*\*\*Please be advised that completed evaluations are made available publicly and are posted on Stewardship Ontario's E&E Fund web site\*\*\*\*

**Project Name/Number/Priority area:** MRF Optimization & Opportunities Study/ #198 and #198B/ MRF Rationalization

**Lead Sponsor/competed by/date:** City of Peterborough/ City of Peterborough, MacViro Consultants, and Genivar Ontario Inc./ November 29, 2007

**Project Duration:** May 1, 2006 – April 27, 2007

**Total project value:** \$55,900.00

**E&E funding amount:** \$27,950.00

### **Section 1 –To be completed by Project Applicant**

- 1) **What were the Project Goals and Objectives** (as per the E&E Application and/or Contract)? To evaluate the life remaining in the City's MRF and secure short and long-term MRF capacity for the processing of both the City and the County of Peterborough's recyclables materials. Midway through the process, we also saw the need to consider a regional approach for recycling processing services, and so invited four municipalities from the surrounding area to join in the assessment.
- 2) **Were the goals and objectives met?** (and if not why not?)  
Yes, I would say they were met. For part A, the project helped to provide a foundation upon which we could build an RFP for processing capacity over the next 7 years. It was determined that the current MRF had at best two years of life remaining status quo, and that alternate arrangements would need to be in place within that time-frame. It also was very valuable in identifying and ranking the most efficient system of collections, taking all material streams into account. Part B of the project was successful in getting all the appropriate parties together and talking about the possibilities of regionalization at some point in the future. Although it appears premature to look at regionalization immediately, all parties will probably be in a position to do some serious planning towards this end within the next 3-4 years. This was a good first step in highlighting potential benefits and opportunities.
- 3) **Summary of Project Accomplishments** (i.e. what did the project do/achieve?):
  - A) Many collection scenarios were identified and ranked in terms of the number of vehicles required. This helped in identifying the most efficient collection systems for the various waste streams (ie. weekly vs. bi-weekly garbage; single vs 2-stream recycling; co-collection, etc).
  - B) Determined that the existing MRF shell could be retrofitted into a transfer station, if necessary, and provided an estimate of the costs to do so.
  - C) Provided a good overview of the regional situation in terms of other nearby MRF's, their capacity, their sorting systems, programs, limitations, etc.

**4) What do you consider to have been the key “lessons learned” from this project? Does your project/activity represent a “best practice”?**

Moving from a 5-stream collection/processing system to a 2-stream system represents a “best practice”, and the project helped lead us to the decision to make this change.

**5) What specifically are municipal staff doing with the experiences and data from this project? Do you have plans to apply these lessons in your program? Please explain how.**

Using the information gathered through this project, we have developed and issued an RFP for Processing Capacity for the City and County of Peterborough. Several of the report’s findings also helped us in the evaluation of the proposals. Although there were not many specific recommendations, the report helped to focus our attention and energies to the most effective and efficient types of collection and processing systems we should be considering.

**6) Has your municipal council been informed about the project and its results?**

Yes. See attached report.

**7) Do you think there are opportunities to share/replicate the successful elements of this project with other Ontario programs? If yes, how and where?**

For those municipalities that have a similar situation in terms of size and age of their MRF, yes. Quinte, for instance, would probably find some of the findings and recommendations helpful.

**8) Did this project result in either reduced costs per tonne of Blue Box waste recycled and/or increased Blue Box tonnes diverted? (Please explain)**

It is difficult to say whether our new processing contract, written with the help of this project, will result in reduced costs per tonne from our current arrangement. We have opted for a two-stream system, and coming from a five-stream system, this generally means somewhat higher processing costs. However, we are confident that the two-stream system will result in higher diversion due to better convenience and fewer limitations for the public. Savings will most definitely be realized on the collection side of this new system.

## **Section 2 –To be completed by Stewardship Ontario (and reviewed by applicant)**

### **9) Did this project do what it set out to do? If not, what were the reasons/ barriers?**

As per the original contract agreement, the tasks for this project were set out and met as follows:

- Evaluation of the current system established a benchmark to which all further options will be compared.
- Research identified key considerations and scope for project options, including: market area boundaries; existing merchant capacities; opportunities for partnership with other municipalities; confirmation of proposed 2-stream collection program; infrastructure needs for every scenario; and economics associated with technologies for all options.
- Compilation and analysis of all research findings.
- Documentation of preferred options and recommendations.
- Preparation and presentation of final report.

### **10) What are the key learnings from this project? Are there any next steps? What is being done to share the results?**

This project highlights the preferred program options determined by the proponents on the basis of feasibility, existing and required infrastructure, and the economics required for each option. The components of this analysis included the facility, the collection programs, and the potential regionalization.

#### Facility

The condition of the existing MRF requires that even the 'status quo' option will result in necessary expenditure to upgrade the facility to maintain service for another two years.

The option to build a new transfer station and ship materials to other municipalities presented a range of substantial costs for both City and County. In addition, these options presented some barriers and limitations regarding capacity and negotiations required in order to work with other municipalities.

The final option to build a new MRF facility for the City and County of Peterborough proved to be less costly than shipping to other municipalities.

#### Collection Programs

Collection program scenarios for County collection revealed the benefits of a two-stream program versus a single-stream program.

Collection program scenarios for City collection revealed that ideal collection programs will involve: 1) Bi-weekly garbage collection; 2) Weekly single-stream or two-stream recycling collection; and 3) Weekly Source-Separated Organics collection.

#### Regionalization

There are currently only minimal opportunities for regionalization of material processing due to existing contractual obligations, a variety of different collection and processing programs, and capacity issues.

The most likely opportunity, regionalizing Peterborough, Kawartha Lakes, and Durham Region, is restricted by an expected capacity restriction in approximately 5 years at which time another option would have to be investigated.

The results of the study indicate that while regionalization is not an effective or efficient option at present, it may be ideal within the next 5 to 7 years when some current restrictions, such as contracts, are lifted.

Next steps for this project will involve a debriefing regarding the regional aspect and future prospects for regionalization with the City of Peterborough. Stewardship Ontario is still in communication with the City of Peterborough regarding the results and future actions of this project.

**11) Was the project good value for the money** (*e.g. were there measureable program or system cost reduction benefits, cost effective tonnage increases, etc?*)

Completing this project enabled the proponent to establish benchmark information, and to analyze various options for optimizing the efficiency of the current MRF, and collection programs. The preferences identified by the project analysis will assist the City of Peterborough to determine the best course of action with regard to improving the efficiency and effectiveness of the current MRF, and collection programs.

**12) Does this project represent “best practices”?** If yes, explain.

While not a direct response to Best Practices, this project represents several components and considerations identified as Best Practices.

Options for regionalization were reviewed and analyzed for potential. While the report revealed that there are minimal opportunities to regionalize operations at this time, regionalization should be included as a consideration in future analyses.

This project also incorporated the initial steps towards development of an integrated waste management plan, establishing the current operations and costs, as well as potential options for future management of recycling materials.

The analysis of options for collection system identified four recommended options for collection schedules, and minimization of collection costs, by minimizing the number of trucks required. In accordance with Best Practices recommendations, these four options include weekly collection of recyclables and co-collection of recyclables with other waste in order to optimize the tonnage collected both in the City and County.