

## 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:** Quinte Waste Solutions Depot Review / PN45/  
Benchmarking & Waste Audits

**Lead Sponsor/completed by/date:** QWS/Rick Clow/June 2008

**Project Duration:** 2005-2008

**Total project value:** \$43,300

**E&E funding amount:** \$31,650

### **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)?**

*Phase 1:* Province-wide research on best practices at rural depot (collection systems, recovery etc.)

*Phase 2:*

- Assess Quinte's existing rural depot system to determine if best practices are being applied and to suggest improvements.
- Pilot test the best practices, monitor impacts

*Phase 3:* Summarize findings and share

**2) Were the goals and objectives met? (and if not why not?)**

Yes

**3) Summary of Project Accomplishments (i.e. what did the project do/achieve?):**

*Phase I:*

- Identified the top nine performing depot programs in the province and identified factors contributing to their good performance (i.e. best practices).

*Phase II:*

- Assessed Quinte's rural depot system by visiting and observing activities at 16 of the rural depots, and conducting in-depth interviews with 19 depot attendants (including management level staff).
- Determined if the best practices identified in Phase 1 were being applied to QWS's rural depots
- Developed other recommendations based on the data collected.
- Pilot tested 4 recommendations. All pilot tests had positive outcomes, except for the Poster Pilot Test.
- A training manual was created based on the feedback from depot attendants. It was distributed to 24 depot attendants who reviewed it. It proved to be an effective education tool for the vast majority of depot attendants.

**4) Summary of Project Limitations** (e.g. is there anything that should have been done differently?)

The pilot tests occurred in the winter. This is not the best time to conduct pilot tests because the weather conditions may deter people from attending the depot. As a result, we did not have a typical population sample throughout the entire data collection period. Also, we discovered that the project required more resources than anticipated. Phase 2 could have been divided into 2 separate projects (assessment of QWS depots and pilot testing).

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

*Cost Related Issues*

- Municipalities that rely on the same contractor to provide collection and processing services should require costs to be itemized according to lift fees, hauling fees, and processing fees. This enables municipalities to review associated program costs and consider changes to improve efficiency.
- Co-mingling material reduces the frequency of collection from the depot site.
- On site-compaction is not the solution to the lack of space for storing recyclables at depots in the Quinte area.

*Importance of the Depot Attendant’s Role and User Friendliness of Site*

- Depot attendants need more training and support, as they play an important role in encouraging public participation.
- A responsible depot attendant is the best defense against contamination of recycling.
- Depot attendants should be provided with sufficient resources to keep the depot well maintained to reduce contamination and increase public participation.
- Depot attendants could make the site more ‘user friendly’ if given the resources.
- Efforts should be made to reduce the presence of wasps at the depot, as they may deter people from participating.
- The concept of reuse should be promoted and reuse centres should be set up at depots if possible. This initiative will attract people to the depot.

*Diversion Policies/By-laws*

- The attendant’s monitoring efforts should be supported by a mandatory recycling by-law.

*Promotion and Education*

- Avoid a piecemeal approach to promotion and education. An employee should be assigned responsibility of overseeing the depot’s P&E.
- When testing different recycling instructions at the depot, the layout with the graphic/text signs resulted in the lowest recycling contamination rate, compared to the layout with text-only signs and the layout with text-only labels.
- The main customer education needs were identified, including how and why it is important to properly separate recyclables, and the importance of rinsing containers.

- The depot attendant education manual proved to be an effective education tool. 71% of the attendants surveyed deemed the manual to be 'useful' or 'very useful'. 21% of attendants found it 'somewhat useful' and 8% referred to it as 'not useful'.

#### *Safe and Healthy Environment*

- A non-smoking policy should be enforced at the depots (for safety and public health).
- An anti-idling policy should be created and enforced at the depots.

### **6) 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.**

- Depot attendants are using the education manual that QWS developed with their input.
- QWS plans to update the education manual on a regular basis, and intends to inform attendants of major updates and provide the manual to new staff.
- The most effective sign design determined from the Pilot 2 test, with the graphic text combination, is now being provided to rural depots upon request (QWS is proactive in providing materials to the municipal offices and municipal councilors – QWS Board members – but it is up to the municipality to ensure its distribution).
- Bee traps are being used at some of the depots (eg. the majority of the depots in Prince Edward County use them).
- QWS has updated its web site to provide relevant recycling depot information.
- QWS has worked with the municipalities to ensure that all sites have additional capacity.
- QWS does not have influence over individual depot layout, however, QWS employees have discussed site reorganization on a depot by depot basis, and some depots have reorganized for better traffic flow.
- QWS has extended the distribution range of its calendar and newsletter. QWS employees have worked with Board members to ensure distribution of recycling literature.

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

Yes, they have been contacted and an email with a link to the report was sent to them.

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

Yes, there are a number of opportunities to share the successful elements of this project:

- The Phase 1 Report outlined best practices for rural recycling depots in Ontario. Based on these findings, a Rural Recycling Depot module was developed for the Recycler's Knowledge Network.
- The Phase 2 Report is available on the Stewardship Ontario and QWS web sites.
- All municipalities in the QWS service area were notified about the report and have access to it.
- A poster presentation was given at the Ontario Recyclers' Workshop in November 2006 and at which some of the project findings were shared. It was supervised by a QWS staff person who answered questions from workshop attendees.

- The education manual was distributed to all depot attendants in the QWS service area. Other municipalities may access it and modify it to suit their needs.
- The most effective sign design from Pilot Test 2, should be shared on the Knowledge Network, if possible.

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

Pilot Test 1 – The addition of an extra staff person resulted in improved monitoring of the recycling depot. There was an 8% increase (4.19 tonnes) in recycling capture compared to the previous year.

Pilot Test 2 – Different layout designs were pilot tested. The layout with an overhead sign that had a combination of text and graphics had significantly less contamination per recycling cart compared to the traditional layout with labels and the layout with an overhead ‘text only’ sign. Less contamination contributes to an increase in the quantity of recycling that can be collected and sold in the market.

Cost analysis of 95 gallon carts vs. sea bins: Although seabins have a high upfront cost, they may be less expensive in the long term depending on the depot’s size. A dedicated section of the project report provides a step by step cost analysis specific to QWS to determine the break even point where sea bins would become the less expensive option. The break-even point is 35 carts per collection period for the QWS service region.

***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?**

According to the original application, this project initially focused on comparing depot service systems (cart vs. bin). As per the approval committee’s request, QWS agreed to broaden the scope of the project to include a Best Practices evaluation of residential depots in Ontario (Phase I), and to test the results or some of the results in Quinte (Phase II). Overall, these objectives were met.

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

The key learnings from this project have been summarized by the proponent in the previous section.

As a next step, Stewardship Ontario will work on integrating the main findings of this report to its existing Rural Depot module on the revamped Knowledge Network.

**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?)

This was primarily a research project and was therefore not expected to generate substantial system improvements.

It is hoped that QWS will carry through on those most promising findings (e.g. addition of recycling capacity at depot, addition of depot attendant, implementation of optimal cart identification, ect) so that tonnage increases are realized.

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

As stated in E&E funded “Blue Box Program Enhancement and Best Practices Assessment Project”, depots are a common tool for rural communities that are large in area but sparsely populated. They offer residents a place to bring recyclables where collection services would be very expensive compared to the amount of materials collected and where potential revenues generated from marketing recycling materials are low. The challenge, of course, is to achieve good capture rates with a system than is not nearly as convenient for the user as a curbside collection system.

The Best Practices project includes a spotlight section on recycling depots, which outlines key attributes of effective and efficient depot systems. In addition to being in line with the findings from the Best Practices Assessment project, the information gathered by QWS contains a much greater level of detail and should be very useful for other municipalities who are hopping to increase the capture rates at their rural depots.

**13) Did this project have a direct impact on Blue Box tonnes recycled ? (Please explain)**

Although this represents a relatively small number of tonnes overall, the implementation of one of the recommendations from Phase 1 – the addition of an additional depot attendant – led to an increase of 8% in recycling tonnes recovered over the previous year.

**14) Did this project have a direct impact on the cost of Blue Box recycling? (Please explain)**

No

**15) Other Comments?**

This project took a substantial amount of time to be completed (3 years from the time the application was submitted). As pointed out by the applicant in question 4, this is likely due to the fact that the project required more resources than anticipated. QWS may want to take this into account when submitting its next project proposal.