

**Blue Box Recycling Program
Generic Indexed
Best Practice Assessment Reports**

**Prepared by: The Emerald Group
On behalf of Continuous Improvement Fund
Project No. 158**

Background

Preamble

The CIF wishes to develop recycling program assessments for participating volunteer municipal programs. The assessments are designed to meet the needs of the participating municipalities by providing them an objective and thorough assessment of their blue box program. This project will identify opportunities to enhance selected programs and will be carried out at no cost to the participating municipalities. Findings from the program assessments will be made public in order to benefit all similar programs in Ontario, however, individual municipal identifiers will be removed from the public findings.

The approach is based on the site visit and assessment process utilized as part of the Blue Box Program Enhancement and Best Practices Assessment Project (Best Practices Project). A number of program assessments (called “blueprints” at the time of the Best Practices Project) can be viewed on the Recycling Knowledge Network.

Additional information about the Best Practices Project can be found at

http://www.stewardshipontario.ca/bluebox/eefund/bp_bluebox1.html.

This report will primarily focus on Blue Box Recycling Program issues within 3 municipalities. Other waste issues are beyond the scope of the services provided by the Continuous Improvement Fund. There are a number of goals and objectives associated with the project, including:

- Recommending, for implementation, recycling program effectiveness and efficiency improvements through examination of program components by an experienced technical team.
- Providing municipal recycling programs with timely and objective input to aid decision making about program improvements, upgrades, contracts, tenders and any other program development issues.
- Sharing the assessment report information with a broader municipal audience for educational purposes.

To assist the reader in making comparisons with their own municipality, the following table identifies several recycling program operating parameters. Click on any cell in the row that most closely matches your local operating conditions to jump to the associated assessment report:

Population Served	Tonnes/yr. Collected	Collection Type	Mrf Owned	Payment Method	Location
<u>18,000</u>	<u>1,000</u>	<u>alternate week (modified)</u>	<u>no</u>	<u>flat rate</u>	<u>Southern</u>
<u>15,000</u>	<u>1,100</u>	<u>alternate week (2 stream)</u>	<u>no</u>	<u>per tonne</u>	<u>Southern</u>
<u>14,000</u>	<u>1,700</u>	<u>Single Stream (No Glass)</u>	<u>no</u>	<u>municipal staff</u>	<u>Northern</u>

Contacts

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Continuous Improvement Fund

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Barrie, Ontario L4N 0Z7
<http://www.wdo.ca/cif/contact.html>

Waste Diversion Ontario

45 Sheppard Avenue East, Suite 920,
North York, Ontario, M2N 5W9
Telephone: (416) 226-5113
E-mail: nicolelewis@wdo.ca

StewardEdge

attn: John Dixie
26 Wellington Street E, Suite 601
Toronto, ON M5E 1S2
(647) 777-3367
E-mail: Jdixie@stewardedge.ca
Customer Service- 1-888-288-3360

Association of Municipalities of Ontario (AMO)

<http://www.amo.on.ca>
393 University Ave., Suite 1701
Toronto, Ontario M5G 1E6
Telephone direct : (416) 971-9856
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Municipal Waste Association (MWA)

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Blue Box Recycling Program Assessment Reports

Municipality 1

Background

In the spring of 2009 CIF staff issued a Request For Expressions of Interest to determine which municipalities were interested in obtaining a professional recycling program assessment. The key considerations were the willingness of host municipalities to incorporate the advisement and the timeliness of the input. The municipality 1 expressed interest in the project and was selected to receive an assessment.

The Municipality was contacted on July 27, 2009. A site visit was arranged for August 7, 2009. The recycling program was discussed in general and in detail with waste management staff.

Staff provided considerable background and written materials, describing the current blue box program, for review.

Municipality 1 has a total population of about 18,000 residents with about 9,800 single family households, 75 multi-residential households and 4 multi-residential buildings. Seasonal residents increase the summer population to about 30,000 residents.

About 7,500 single family households are served by the curbside recycling program and about 2,500 households are served by a depot program.

Approximately 1,000 tonnes of recyclable material are diverted annually for a diversion rate of about 20% at a net cost of \$328.25 per tonne.

After amalgamation of 4 separate local collection districts in 1998, the municipality is trying to move forward in harmonizing consistent services over the entire service area. There are a significant number of private lanes and seasonal residents which makes collection routing and equipment utilization challenging.

The municipality has an incentive to examine best practices to most effectively offer standardized services to residents. This is also a rural municipality that doesn't have the economies of scale of an urban centre and therefore needs to find efficiencies in other areas.

Based on the information provided and the project interviews, the assessment team was able to make recommendations in a number of areas. Some may be immediately adopted or considered while others, with additional research, consulting and technical support, may be implemented at a later date.

The following assessment report is similar to the format of the Waste Diversion Ontario (WDO) annual datacall best practices section;

Development and implementation of an up-to-date plan for recycling, as part of an integrated waste management system

“A recycling program plan that results from a thorough planning process is a strategic and practical guide for the design, management, operation, and optimization of a community’s Blue Box program. To be effective, it should reflect careful examination of all program components, and direct goal setting, action steps, and resource allocation to achieve meaningful results over time. Implementation of a well-conceived plan is facilitated by an overarching vision, purpose, and direction, allowing synergies to be realized across operational, geographical, and political boundaries. The recycling plan may be a stand alone document or may be incorporated into a larger integrated waste management plan.” Pg. 28, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Current Plan and Diversion Targets

A Waste Management Plan Study has been received by Council Dec 16, 2008. This plan sets a target for the municipality to endeavour to divert 50% of its waste stream from landfilling. No timeline has been set to achieve this target diversion rate.

The Provincial target diversion rate is 60% and some municipalities have set target diversion rates exceeding 65%.

Review Process

An official waste management master plan has not been adopted. When this has been accomplished, it is expected that a review process and timeline will be included. A plan for recycling and diversion should also be a part of any waste management master plan.

Multi-municipal planning approach to collection and processing

“A widely-recognized principle of business is that significant efficiencies and economies can be obtained from larger scale activities. Many communities have found it advantageous to work co-operatively in providing solid waste management services.

Working jointly, municipalities can increase bargaining power with private service providers for collection and processing of recyclables. Pooling resources can result in increasing equipment, labour, and/or facility utilization, thereby realizing financial and operational efficiencies.

Co-operative planning can lead to improved performance across virtually all recycling program components, enhancing effectiveness and efficiency.” *Pg. 33, Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Current Level

The Municipality currently processes recyclables at the neighbouring municipality “A” MRF. Collection is done through several local contractors.

Opportunities

An opportunity exists to take advantage of economies of scale through co-operation with neighbouring municipalities in the following areas:

Collection:

Municipality “A” is the largest neighbouring municipality and opportunities should be explored to obtain pricing for recyclable collection using their collection contractor. Other nearby municipalities should also be approached to determine if their collection can be combined with municipality “1” to achieve greater economies of scale.

Processing:

Municipality “A” is the largest neighbouring municipality and is currently processing local material. Opportunities should be explored with other municipalities to determine if processing at municipality “A” is still the most cost-effective option. This may be accomplished by obtaining market pricing through the next RFP.

P&E:

Municipality “A” is the largest neighbouring municipality and opportunities should be explored to co-ordinate P&E with their program. An increased level of co-operation with municipality “A” would result in greater effectiveness for the current P&E program due to economies of scale and consistent content. Some modification to the collection system may be required to align the P&E message with the existing municipality “A” collection/processing program and P&E message. This may require the adoption of a more typical alternate week collection system if processing is done at municipality “A” long term.

Containers:

Municipality “A” is the largest neighbouring municipality and opportunities should be explored to co-ordinate volume purchases of recycling containers through their annual purchase. The municipality may be able to obtain volume discount pricing if they add annual container purchases to the municipality “A” order.

Establishing defined performance measures

“Proper management of a recycling program includes the monitoring and measurement of the program goals through the establishment of diversion targets and performance objectives. Targets and objectives must be realistic, measurable and relevant. Furthermore, targets and objectives are needed for the individual program components to be evaluated (e.g., curbside collection, depots, processing, promotion and education, etc.) Evaluation facilitates continuous improvement within the recycling program.” Pg. 38, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Types of data collected

The municipality does not perform waste audits to better understand the effectiveness of the recycling program and base rate diversion.

The municipality does obtain processing data monthly from the MRF. A lack of weight based collection data makes effective monitoring and measurement challenging.

One possibility to address this issue is to require collection contractors to weigh loads at local gravel or farm suppliers or other private scales. This option may be priced out in the next collection RFP.

Data Requirements

In defining data requirements, the following questions should be answered as the Municipality continually improves their performance measures:

Will the measure track program outcomes as opposed to just outputs and inputs?

Is the measure for absolute impacts or relative impacts?

Can information pertaining to the measure be gathered systematically, consistently, and objectively?

Is there sufficient time and resources to gather, organize and interpret that information in order to tell a meaningful story to the evaluation audience?

Will the intended audiences perceive the measure as credible?

Will the knowledge gained through use of the measure be useful
(e.g., for program improvement, adjustment in funding)?

Optimization of operations in collection and processing

“Optimization of operations is a process of critically assessing collection and processing functions and making changes that have a net positive effect on recovery rates and/or cost. A combination of data-driven, expertise-driven, and heuristic approaches can be used to optimize operations. Where collection and/or processing are outsourced, close collaboration with the contractor, sufficient flexibility in the use of contractor labour and assets, and thorough understanding of cost drivers contribute to optimization of the system.” Pg. 42, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Processing

Processing Facility

The municipality does not own or operate a processing facility and currently subcontracts processing to the municipality “A” MRF. The municipality does receive a share of marketed materials revenue to offset some of the processing costs.

The municipality does not generate large enough recyclable tonnage to consider operating their own facility.

Collection

Materials Collected

The municipality currently collects a standard list of blue box recyclables (including: Newspapers, Magazines, Envelopes, Telephone Books, Paperbacks, Catalogues, Clean Frozen Vegetable Bags, Magazine/Newspaper Sleeves, Grocery Bags, Milk Bags, Bread Bags, Cardboard, Boxboard) plus some additional plastic bags, flower pots, shredded fine paper, books with hard covers removed, Water Softener Bags without handles, Tetra Packs, Drink Trays, Milk/Juice Cartons, Greeting Cards, Egg Cartons, Shoe Boxes, Detergent Boxes.

Collection Process

The municipality operates a modified alternate week collection program designed to compliment the processing operations at municipality “A”. However, the system is not a typical 2 box alternate week program in that cardboard is collected with cans and plastic and glass and plastic bags are collected with paper products.

Collection frequency is weekly in most areas complimented by several depots located at local dumpsites. Contractors operate 3 days per week excluding holidays. Recyclables are collected at

least as frequently as garbage. In one district, depots are used in place of curbside collection.

Collection Equipment

Collection equipment is supplied by subcontractors and varies across the municipality. Non-standard collection equipment may be a contributing factor in seasonal volume challenges and service level differences across the municipality.

Collection Containers

The municipality provides the first recycling container free and charges \$6 for each for additional container.

The Best Practices Assessment Project final report states: “Provision of blue boxes entails the provision to households of free blue boxes in order to ensure ample household recycling capacity. This is usually done when programs are initiated and when materials are added and/or the program is repromoted. Additional blue boxes require an initial capital outlay, however, the added capacity may not only increase capture and potentially lower unit operating costs, but the minimization of home-made curb side containers may yield longer-term ergonomic benefits to collection crews.”

Staff did not report any concerns with lack of container capacity, however, this policy may need to be re-evaluated if the program is modified into a standard alternate week collection system requiring the introduction of a grey box for fibers.

Due to the modified alternate week collection system, the municipality does not require residents to set out recyclables in a dedicated blue or grey box. This modified system may be causing some reduced participation and confusion about the program given the proximity to and overlap of municipality “A” area P&E. The Municipality is also forced to bear additional administrative and P&E costs to continually educate residents about the differences in the local collection system from the municipality “A” system located a few minutes to the south. These issues may be improved during the next tender cycle scheduled for January 2010.

Depots

The municipality provides several depots throughout the service area usually located on existing dumpsites. Some of these unengineered sites may be at risk of premature closure due to increasingly stringent Provincial environmental standards. Accordingly, staff are reviewing the location, number and operating characteristics of these sites.

Additional information about better practices operating depots can be found in the Best Practices Project report located at http://www.stewardshipontario.ca/bluebox/pdf/efund/KPMG_final_report_vol1.pdf at page 107. The municipality is encouraged to review these operating practices for potential improvements to local operating conditions at their depots.

Scales

The municipality does not have municipally owned weigh scales which makes monitoring and measurement of collections difficult and less effective. Municipality “A” provides monthly production reports but without weights on curbside collection, accurate accounting, residue tracking and generation/diversion rates are difficult to calculate accurately.

Training of key program staff in core competencies

“Municipalities need to ensure that management program personnel are adequately trained on position-related competencies and responsibilities. Training provides the skills needed to develop, manage, monitor, document and promote the numerous and complex components of a successful recycling program. Regardless of the size or type of municipal program, training acts as an enabler of performance, facilitating the achievement of objectives in a cost-effective manner.” Pg. 45, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Current Training

Similar to many smaller municipalities, the municipality currently has no dedicated budget or resources to provide ongoing training for recycling staff. The Municipality has an opportunity to improve their performance in this area that is now required to be reported annually under the revised WDO datacall.

Available Training

The municipality is encouraged to contact the Municipal Waste Association, <http://www.municipalwaste.ca/contact.cfm> for information on the Ontario Blue Box Recyclers Training program currently available to municipalities at nominal to no cost. This training was developed and offered through E&E Fund project #341 and was developed with input by municipal recycling experts specifically for Ontario municipal recycling staff.

Training of recycling staff in core competencies is considered a best practice. Further information is available at http://www.stewardshipontario.ca/bluebox/pdf/eefund/KPMG_final_report_vol1.pdf page 44.

Promotion and Education Program

“Planning and implementing targeted P&E programs that support recycling and waste diversion are vital to municipal Blue Box programs. Each community’s ability to design and deploy P&E is affected by community size, geography, resources (financial, skills-based and time) and many other factors.

The Municipality currently produces recycling calendars, compliance notices, public service announcements and recycle it right publications. There is some co-operation with local high schools, community service groups and youth organizations. Some opportunity exists to increase use of these groups to enhance the local P&E distribution channels.” Pg. 57, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

P&E Funding

“A study of eight programs that are considered to be among the Ontario P&E leaders, as well as of other well-performing communities, revealed that their P&E costs, range from approximately \$0.83 to \$1.18 per household, with recovery rate at or exceeding 60%.” Pg. 59, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

This municipality reports a local budget for P&E programs of approximately \$1.05 per household.

Co-operation

The municipality co-operates with other municipalities other departments, schools, service organizations etc. to maximize P&E message & budget. An increased level of co-operation with municipality “A” would result in greater effectiveness for the current P&E program due to economies of scale and consistent content. Some modification to the collection system may be required to align the P&E message with the existing municipality “A” collection/processing program message. This will require further co-ordination with municipality “A” prior to the next local collection tender to insure local collection procedures are acceptable at the receiving MRF.

Web Site

The municipality has an internet presence providing residents with recycling, reuse and diversion information. This information is relatively static and is also available in printed form as a recycling calendar.

Online Recyclopedia

The municipality currently does not have an online recycling “how to” recyclopedia and recycling news/events listings. Staff have expressed and interest in adding these features to their existing site with CIF support.

Online P&E template access

The municipality currently does not have access to online P&E templates. Staff have expressed and interest in using these templates when they become available.

Established and enforced policies that induce waste diversion

“Municipalities need to utilize a combination of policy mechanisms and incentives to stimulate recycling and discourage excessive generation of garbage. Most of these policies are aimed toward causing a permanent shift in residents’ behaviour through the use of economic and non-monetary levers.” Pg. 64,, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Recycling bylaw

The municipality currently has no mandatory recycling by-laws in force. A waste management by-law has been enacted which establishes penalties for various infractions.

User Fees for Bagged Waste

The municipality currently has a user fee for refuse of \$3.00 per residential bag. The first 50 tags annually are provided free of charge and there are no bag limits currently in force.

Staff report that there is an unofficial 5 bag/week collection limit generally observed by most residents. There may be an opportunity to propose this 5 bag limit be made an official policy which will create the opportunity to adjust the limit downwards at some future date and increase diversion. Since the municipality already has a user fee for garbage, fears over increased roadside dumping following the adoption of bag limits should not be a concern. Additionally, diversion may be increased by reducing the number of free tags distributed annually.

It should be noted that, the Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007. Pg. 21, references a strong relationship between reduced bag limits and increased diversion. Statistics indicate that a 2 bag limit, supported by diversion alternatives, was found to result in higher recyclable material recovery rates.

Waste Exchange

The municipality currently does not have an online waste exchange, free to use by local residents, designed to encourage diversion and provide educational material. Staff have expressed interest in adding this service to the existing local web site.

Enforcement

The municipality enforces garbage and recycling rules through

public information, non-compliance notices, reason for leaving stickers and local by-law officers. Staff advise that local collection contractors could improve their curbside education activities and this will be addressed in the next collection tender.

Contracts

The greatest opportunity for program improvement is available at the end of the municipal contract cycle, therefore, it is critically important to identify any potential improvements in the local municipal recycling contracts which can be implemented immediately or at the next tender.

Review

The local collection contract expires in January 2010. Processing and marketing is done through the municipality "A" regional MRF.

2007 WDO datacall shows that the Municipality has net recycling costs of about \$285/tonne. The average recycling cost for this municipal grouping is \$294.84 with overall group costs ranging from \$80.15 - \$548.69.

Current local collection tenders are divided among several contractors with different service levels across the collection area which adds to the staff administrative burden. Collection payment is currently based on flat rate and/or per stop charges. Combined with a lack of weigh scales and contractor reluctance to participate in resident education, costs of this method of collection and administrative burden may be higher than desired. Monitoring and measurement of collection/diversion performance is also difficult without municipal scales.

Opportunities

Therefore, it is strongly recommended that the next RFP for collection/processing include a cost per tonne quotation in addition to, or preferably instead of, a flat rate cost for service.

Financial support for consulting services to assist staff with the preparation of a new recycling collection/processing RFP may be available through the Continuous Improvement Fund. Due to the rapidly approaching expiry date of current contracts, it is strongly recommended that staff submit an application to the CIF as soon as possible.

It is also strongly recommended that the new contract terms match the contract expiry date with the existing larger municipality "A" collection contract to generate the opportunity, on the next tender cycle, for the municipality to take advantage of multi-municipal co-operation, standardization of service levels and economies of scale in collection throughout the service area. This can be accomplished by working with municipality "A" to request that they include a provision in their next collection tender

requesting separate costs to collect local recyclables under the larger municipality “A” contract. Should this cost be deemed acceptable to council, they may elect to enter a subcontractor agreement with municipality “A” and take advantage of the resulting cost saving generated by the economies of scale available to the larger community.

G.A.P.

Following generally accepted principles (GAP) for effective procurement and contract management is considered to be a best practice in Ontario. For a full list of generally accepted procurement principles refer to http://www.stewardshipontario.ca/bluebox/pdf/eefund/KPMG_final_report_vol1.pdf page 50.

Accepted leading practices for effective procurement and contract management to extract the best value for municipal Blue Box contract needs include:

Planning procurements well in advance of service requirements.

Recognizing useful life of existing equipment, lead times for replacing this equipment, and lead times for the execution of the procurement process itself all require careful consideration. Failure to plan properly may mean costly maintenance and breakdowns and sub-optimal contracting/service levels.

Investigating and understanding suppliers’ markets to understand the players, dynamics, cost drivers, and innovators in order to maximize value when setting procurement strategy. This results in municipal staff becoming informed buyers.

Involving suppliers (in pre-procurement consultations) to help refine requirements, where own experience is limited, and to leverage innovation and capabilities of experienced suppliers. This results in municipal staff becoming smart buyers.

Developing a clear definition of services and performance requirements.

Using the appropriate procurement instrument, such as a Tender or an RFP.

Using a competitive procurement process and working to encourage multiple proponents/bidders.

Changes to the collection and processing stream may necessitate

amendments to existing or new contracts.

Assistance for the preparation of recycling collection and processing tenders is available free of charge at the following internet address:

<http://www.vubiz.com/stewardship/Welcome.asp>

Additional assistance is available from the CIF Program Managers upon request.

Assistance is also available to help municipalities develop and/or negotiate agreements for jointly processing and/or collecting materials.

Conclusions

The municipality is making steady progress toward increased diversion and recycling efficiency. As with many smaller municipalities, budgetary and staff resources dedicated to recycling and diversion activities are limited. Other limiting factors include a large seasonal population increase, non-standard levels of service and multiple collection contractors.

Accordingly, staff must take advantage of any assistance available to them to improve the local program and several opportunities are noted below for consideration:

Opportunities

1. Adopt an official waste management master plan that includes a plan for recycling and diversion with clear goals, implementation timelines and a regular review procedure.
2. Explore opportunities for multi-municipal co-operation, especially with the municipality “A”, in collection, processing, container procurement and P&E.
3. Establish defined performance measures and methods to monitor them. Regular waste audits to establish base line performance and ongoing weight based data should be considered as a minimum.
4. Standardize and optimize collection within the service area.
5. Enhance training for staff in recycling core competencies.
6. Develop a promotion and education plan.
7. Enhance policies that increase recycling and diversion
8. Issue a new collection/processing RFP to optimize collection/processing and address program needs and deficiencies.

Recommendations

The following recommendations may assist staff in realizing some of the opportunities noted above:

1. Contact neighbouring municipalities, especially municipality “A”, to explore opportunities for co-operation.
2. Contact the Municipal Waste Association, for information on the Ontario, Best Practice, three year training program

currently under development.

3. Adopt a weekly bag limit for garbage and consider reducing this limit over time to 2 bags/week to increase diversion.
4. Reduce the number of free bag tags distributed each year to increase diversion and encourage recycling.
5. Apply to CIF for funding to assist staff in developing a new collection/processing RFP.
6. Apply to CIF for funding to assist staff in upgrading the local web site to enhance P&E, recycling and diversion.
7. Re-evaluate current target diversion rates and fix a timeline to achieve the target rate in an integrated waste management master plan.
8. Review the Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007. for suggested depot operating practices located at http://www.stewardshipontario.ca/bluebox/pdf/eefund/KPMG_final_report_voll.pdf page 107.
9. Review the P&E module on the Recyclers' Knowledge Network. <http://www.vubiz.com/V5/Stewardship/Home.asp> A specialized P&E course currently in development will be available in 2010 and staff are encouraged to participate when available.

End of report

Blue Box Recycling Program Assessment Reports

Municipality 2

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Notwithstanding this support, the views expressed are the views of the author(s), and Waste Diversion Ontario and Stewardship Ontario accept no responsibility for these views.

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Disclaimer

This report is provided as opinion for discussion only and is **not** designed to replace qualified engineering, architectural or legal advice in any way. Municipalities are cautioned to obtain qualified advice and certified/approved drawings and plans prior to undertaking or adopting any recommendations that may affect their programs or facilities.

Background

In the spring of 2009 CIF staff issued a Request For Expressions of Interest to determine which municipalities were interested in obtaining a professional recycling program assessment. The key considerations were the willingness of host municipalities to incorporate the advisement and the timeliness of the input. Municipality “2” expressed interest in the project and was selected to receive an assessment.

The Town was contacted on July 27, 2009 and referred the assessment team to an environmental consultant who are retained to assist the Town with an audit of its waste management programs and to develop a long term solid waste management plan. The recycling program was discussed in general and in detail with the environmental consultant, who also provided a draft report of the long-term solid waste management plan for the Town.

The service area of the Town has a total population of about 17,000 residents with about 6,180 single-family households, The Town is amalgamated with 4 surrounding townships.

About 6,180 single-family households are served by the curbside recycling program and residents have access to local depots. There is no collection for large items or yard waste.

Approximately 1,100 tonnes of recyclable material are marketed annually for a diversion rate of about 34% at a net cost of \$265 per tonne.

The Town has no municipal disposal capacity and all residue waste is currently hauled to a private disposal facility which is slated for closure, therefore, it is important that the Town is able to maximize the amount of waste diverted from disposal through programs such as the blue box.

The Town has a limited industrial tax base and its budget is divided over an urban/rural residential base. It is important for the Town to ensure that its programs are operating effectively and efficiently to provide taxpayers with good value for Town services.

The Town’s blue box collection and processing contract will expire at the end of 2009. A new RFP will need to be completed this fall. Development of the new proposal would benefit from a best practice assessment of the current blue box program to

provide a new contract and program service delivery that could be more efficient and effective to reduce costs and maximize recycling participation.

The Town has an incentive to examine best practices to most effectively offer standardized services to residents. This is also a rural municipality that doesn't have the economies of scale of an urban centre and therefore needs to find efficiencies in other areas.

Based on the information provided and the project interviews, the assessment team was able to make recommendations in a number of areas. Some may be immediately adopted or considered while others, with additional research, consulting and technical support, may be implemented at a later date.

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A Waste Management Plan Study has been scheduled for completion in the fall of 2009. This plan sets a target for the Town to endeavour to divert 60% of its waste stream from landfilling. No timeline has been set to achieve this target diversion rate.

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Multi-municipal planning approach to collection and processing

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Working jointly, municipalities can increase bargaining power with private service providers for collection and processing of recyclables. Pooling resources can result in increasing equipment, labour, and/or facility utilization, thereby realizing financial and operational efficiencies.

Co-operative planning can lead to improved performance across virtually all recycling program components, enhancing effectiveness and efficiency.” *Pg. 33, Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Current Level

The Town currently has a contract with a private contractor for collection and processing. The Town does not specify where the contractor can process material.

Opportunities

An opportunity exists to take advantage of economies of scale through co-operation with neighbouring municipalities in the following areas:

Collection:

Municipality “B” is the largest neighbouring municipality and opportunities should be explored to obtain pricing for recyclable collection using their collection contractor. Other nearby municipalities should also be approached to determine if their collection could be combined with the Town to achieve greater economies of scale.

Processing:

Municipality “B” is currently processing Town material. Opportunities should be explored with other municipalities to determine if processing at Municipality “B” is still the most cost-effective option. This may be accomplished by obtaining market pricing through the next RFP.

P&E:

Municipality “B” is the largest neighbouring municipality and opportunities should be explored to co-ordinate P&E with their program. An increased level of co-operation with Municipality “B” would result in greater effectiveness for the current P&E program due to economies of scale and consistent content. Some modification to the Town collection system may be required to align the P&E message with the existing Municipality “B” collection/processing program and P&E message.

Containers:

Opportunities should be explored to co-ordinate volume purchases of recycling containers through Municipality “B’s” annual purchase. The Town may be able to obtain volume discount pricing if they add annual container purchases to the Municipality “B” order.

Establishing defined performance measures

“Proper management of a recycling program includes the monitoring and measurement of the program goals through the establishment of diversion targets and performance objectives. Targets and objectives must be realistic, measurable and relevant. Furthermore, targets and objectives are needed for the individual program components to be evaluated (e.g., curbside collection, depots, processing, promotion and education, etc.) Evaluation facilitates continuous improvement within the recycling program.” Pg. 38, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Types of data collected

The Town has performed waste audits to better understand the effectiveness of the recycling program and establish base rate diversion.

The Town pays for collection and processing by the tonne. The contractor provides data on a monthly basis to or at a greater frequency if required.

Data Requirements

In defining data requirements, the following questions should be answered as the Town continually improves their performance measures:

Will the measure track program outcomes as opposed to just outputs and inputs?

Is the measure for absolute impacts or relative impacts?

Can information pertaining to the measure be gathered systematically, consistently, and objectively?

Is there sufficient time and resources to gather, organize and interpret that information in order to tell a meaningful story to the evaluation audience?

Will the intended audiences perceive the measure as credible?

Will the knowledge gained through use of the measure be useful (e.g., for program improvement, adjustment in funding)?

Optimization of operations in collection and processing

“Optimization of operations is a process of critically assessing collection and processing functions and making changes that have a net positive effect on recovery rates and/or cost. A combination of data-driven, expertise-driven, and heuristic approaches can be used to optimize operations. Where collection and/or processing are outsourced, close collaboration with the contractor, sufficient flexibility in the use of contractor labour and assets, and thorough understanding of cost drivers contribute to optimization of the system.” Pg. 42, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Processing

Processing Facility

The Town does not own or operate a municipal facility and currently subcontracts processing. The Town does not receive a share of marketed materials revenue to offset some of the processing costs.

The Town does not generate large enough recyclable tonnage to consider operating their own facility.

Collection

Materials Collected

The Town currently collects a standard list of blue box recyclables including:

- Glass bottles and jars
- Metal food and beverage containers
- Aluminium foil and pie plates
- Plastic containers (#1,2,4,5,6)
- Gable top containers
- Aseptic containers
- Paper
- Cardboard
- Boxboard
- Plastic bags
- Styrofoam

Collection Process

The Town operates an alternate week collection program designed to compliment the processing operations at the MRF. Containers are collected one week and fibers are collected the next week.

Collection frequency is weekly in most areas complimented by two depots located at local waste management facilities. Recyclables are collected at least as frequently as garbage.

Collection Equipment

Collection equipment is supplied by contractors and was not reviewed.

Collection Containers

The Town provides no free recycling containers and charges \$7.00 for each for additional container.

The Best Practices Assessment Project final report states: “Provision of blue boxes entails the provision to households of free blue boxes in order to ensure ample household recycling capacity. This is usually done when programs are initiated and when materials are added and/or the program is repromoted. Additional blue boxes require an initial capital outlay, however, the added capacity may not only increase capture and potentially lower unit operating costs, but the minimization of home-made curb side containers may yield longer-term ergonomic benefits to collection crews.”

The Town requires residents to set out recyclables in a dedicated blue or grey box and material will not be picked up if the wrong box is set out.

Depots

The Town provides two depots in the service area located on existing landfill sites. Some of these unengineered sites may be at risk of premature closure due to increasingly stringent Provincial environmental standards. Accordingly, staff are reviewing the location, number and operating characteristics of these sites.

Additional information about better practices operating depots can be found in the Best Practices Project report located at http://www.stewardshipontario.ca/bluebox/pdf/eefund/KPMG_final_report_voll.pdf at page 107.

Scales

The Town has municipally owned weigh scales which makes monitoring and measurement of collections more effective. The processor provides monthly production reports but without residue tracking and routine waste audits, generation/diversion rates are difficult to calculate accurately.

Training of key program staff in core competencies

“Municipalities need to ensure that management program personnel are adequately trained on position-related competencies and responsibilities. Training provides the skills needed to develop, manage, monitor, document and promote the numerous and complex components of a successful recycling program. Regardless of the size or type of municipal program, training acts as an enabler of performance, facilitating the achievement of objectives in a cost-effective manner.” Pg. 45, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Current Training

Similar to many smaller municipalities, the Town currently has no dedicated recycling staff. The contractor provides the resources necessary for monitoring, complaint follow up and customer service. The Town currently has no budget or resources to provide ongoing training for recycling staff. The Town has an opportunity to improve their performance in this area that is now required to be reported annually under the revised WDO datacall.

Available Training

The municipality is encouraged to contact the Municipal Waste Association, <http://www.municipalwaste.ca/contact.cfm> for information on the Ontario Blue Box Recyclers Training program currently available to municipalities at nominal to no cost. This training was developed and offered through E&E Fund project #341 and was developed with input by municipal recycling experts specifically for Ontario municipal recycling staff.

Training of recycling staff in core competencies is considered a best practice. Further information is available at http://www.stewardshipontario.ca/bluebox/pdf/eefund/KPMG_final_report_vol1.pdf page 44.

Promotion and Education Program

“Planning and implementing targeted P&E programs that support recycling and waste diversion are vital to municipal Blue Box programs. Each community’s ability to design and deploy P&E is affected by community size, geography, resources (financial, skills-based and time) and many other factors.

The Town currently produces recycling calendars, compliance notices, public service announcements and recycle it right publications. No dedicated P&E plan has been adopted. There is some co-operation with local high schools, community service groups and youth organizations. Some opportunity exists to increase use of these groups to enhance the local P&E distribution channels.” Pg. 57, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

P&E Funding

“A study of eight programs that are considered to be among the Ontario P&E leaders, as well as of other well-performing communities, revealed that their P&E costs, range from approximately \$0.83 to \$1.18 per household, with recovery rate at or exceeding 60%.” Pg. 59, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

This municipality does not have a separate budget item for recycling P&E programs. An estimate of 0.50/hh was provided.

Co-operation

The Town currently does not co-operate with other municipalities other departments, service organizations etc. to maximize P&E message & budget. Some P&E is coordinated with the local college. An increased level of co-operation with Municipality “B” would result in greater effectiveness for the current P&E program due to economies of scale and consistent content. Some modification to the collection system may be required to align the P&E message with the existing Municipality “B” collection/processing program message. This will require further co-ordination with Municipality “B” prior to the next local collection tender to insure local collection procedures are acceptable at the receiving MRF.

Web Site

The municipality has an internet presence providing residents with recycling, reuse and diversion information. This information is relatively static and is also available in printed form as a

recycling calendar.

Online Recyclopedia

The municipality currently does not have an online recycling “how to” recyclopedia and recycling news/events listings.

Online P&E template access

The municipality currently does not have access to online P&E templates.

Established and enforced policies that induce waste diversion

“Municipalities need to utilize a combination of policy mechanisms and incentives to stimulate recycling and discourage excessive generation of garbage. Most of these policies are aimed toward causing a permanent shift in residents’ behaviour through the use of economic and non-monetary levers.” Pg. 64,, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Recycling bylaw

The Town currently has no mandatory recycling by-laws in force. A waste management by-law has been enacted which establishes penalties for various infractions.

User Fees for Bagged Waste

The Town currently has a user fee for refuse of \$1.50 per residential bag. No tags are provided annually free of charge and there are limits of three bags per week for residential properties and five bags per week for commercial properties. currently in force.

It should be noted that, the Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007. Pg. 21, references a strong relationship between reduced bag limits and increased diversion. Statistics indicate that a two bag limit, supported by diversion alternatives, was found to result in higher recyclable material recovery rates.

Waste Exchange

The Town currently does not have an online waste exchange, free to use by local residents, designed to encourage diversion and provide educational material.

Enforcement

The Town enforces garbage and recycling rules through public information, non-compliance notices, reason for leaving stickers and local by-law officers. Staff advise that local collection contractors could improve their curbside education activities and this will be addressed in the next collection tender.

Contracts

The greatest opportunity for program improvement is available at the end of the municipal contract cycle, therefore, it is critically important to identify any potential improvements in the local municipal recycling contracts which can be implemented immediately or at the next tender.

Review

The local collection, depot, processing and marketing contracts expire in spring 2010. Processing and marketing is done through the Municipality “B” regional MRF. Collection payment is currently based on fee per tonne charges. The Town receives no revenue from marketed materials.

Opportunities

Financial support for consulting services to assist staff with the preparation of a new collection/processing RFP may be available through the Continuous Improvement Fund. Due to the rapidly approaching expiry date of current contracts, it is strongly recommended that staff submit an application to the CIF as soon as possible.

It is also strongly recommended that the new contract terms match the contract expiry date with the existing Municipality “B” collection contract to generate the opportunity, on the next tender cycle, for the Town to take advantage of multi-municipal co-operation, standardization of service levels and economies of scale in collection throughout the service area. This can be accomplished by working with Municipality “B” to request that they include a provision in their next collection tender requesting separate costs to collect Town recyclables under the larger Municipality “B” contract. Should this cost be deemed acceptable to Town council, they may elect to enter a subcontractor agreement with Municipality “B” and take advantage of the resulting cost saving generated by the economies of scale available to the larger community.

G.A.P.

Following generally accepted principles (GAP) for effective procurement and contract management is considered to be a best practice in Ontario. For a full list of generally accepted procurement principles refer to http://www.stewardshipontario.ca/bluebox/pdf/eefund/KPMG_financial_report_vol1.pdf page 50.

Accepted leading practices for effective procurement and contract management to extract the best value for municipal Blue Box

contract needs include:

Planning procurements well in advance of service requirements.

Recognizing useful life of existing equipment, lead times for replacing this equipment, and lead times for the execution of the procurement process itself all require careful consideration. Failure to plan properly may mean costly maintenance and breakdowns and sub-optimal contracting/service levels.

Investigating and understanding suppliers' markets to understand the players, dynamics, cost drivers, and innovators in order to maximize value when setting procurement strategy. This results in municipal staff becoming informed buyers.

Involving suppliers (in pre-procurement consultations) to help refine requirements, where own experience is limited, and to leverage innovation and capabilities of experienced suppliers. This results in municipal staff becoming smart buyers.

Developing a clear definition of services and performance requirements.

Using the appropriate procurement instrument, such as a Tender or an RFP.

Using a competitive procurement process and working to encourage multiple proponents/bidders.

Changes to the collection and processing stream may necessitate amendments to existing or new contracts.

Assistance for the preparation of recycling collection and processing tenders is available free of charge at the following internet address:

<http://www.vubiz.com/stewardship/Welcome.asp>

Additional assistance is available from the CIF Program Managers upon request.

Assistance is also available to help municipalities develop and/or negotiate agreements for jointly processing and/or collecting materials.

Conclusions

The Town is making steady progress toward increased diversion and recycling efficiency. As with many smaller municipalities, budgetary and staff resources dedicated to recycling and diversion activities are limited. Other limiting factors include seasonal population increases and distance to recycling processors/markets.

Accordingly, staff must take advantage of any assistance available to them to improve the local program and several opportunities are noted below for consideration:

Opportunities

1. Adopt an official waste management master plan that includes a plan for recycling and diversion with clear goals, implementation timelines and a regular review procedure.
2. Explore opportunities for multi-municipal co-operation in collection, processing, container procurement and P&E.
3. Establish defined performance measures and methods to monitor them.
4. Enhance training for staff in recycling core competencies.
5. Develop and adopt a promotion and education plan.
6. Enhance policies that increase recycling and diversion
7. Issue a new collection/processing RFP to optimize collection/processing.

Recommendations

The following recommendations may assist staff in realizing some of the opportunities noted above:

1. Contact neighbouring municipalities to explore opportunities for co-operation.
2. Contact the Municipal Waste Association, for information on the Ontario, Best Practice, three year training program currently under development.
3. Consider reducing the weekly bag limit for garbage to two bags to increase diversion.

4. Apply to CIF for funding to assist staff in developing a new collection/processing RFP.
5. Apply to CIF for funding to assist staff in upgrading the Town web site to enhance P&E, recycling and diversion.
6. Re-evaluate current target diversion rates and fix a timeline to achieve the target rate in an integrated waste management master plan.
7. Review the Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007. for suggested depot operating practices located at http://www.stewardshipontario.ca/bluebox/pdf/eefund/KPMG_final_report_vol1.pdf page 107.
8. Review the P&E module on the Recyclers' Knowledge Network. <http://www.vubiz.com/V5/Stewardship/Home.asp>
A specialized P&E course currently in development will be available in 2010 and staff are encouraged to participate when available.

End of Report

Blue Box Recycling Program Assessment Reports

Municipality 3

Background

In the spring of 2009 CIF staff issued a Request For Expressions of Interest to determine which municipalities were interested in obtaining a professional recycling program assessment. The key considerations were the willingness of host municipalities to incorporate the advisement and the timeliness of the input. The City, expressed interest in the project and was selected to receive an assessment.

The City was contacted on July 23, 2009. A site visit was arranged for August 19, 2009. The recycling program was discussed in general and in detail with waste management staff. The main transfer station and recycling depot were toured along with the central maintenance facilities. Depot and transfer process details were observed and discussed.

Staff provided considerable background and written materials, describing the current blue box program, for review.

The City has a total population of about 14,500 residents with about 6,650 single family households, 734 multi-residential households and 23 multi-residential buildings. Seasonal population increases place serious demands on the recycling system as the population nearly triples to about 45,000.

About 6,700 single family households are served by the curbside recycling program and about 2,300 households are served by a depot program in the townships surrounding the City. About 200 island residents are served by boat collection.

Approximately 1,710 tonnes of recyclable material are diverted annually for a diversion rate of about 33% at a net cost of \$294.00 per tonne.

The City has recycling program issues unique to north-western Ontario. Population density is low compared to southern Ontario urban centres; seasonal population increases contribute to the complexity of managing a viable blue box program; The City is dependent on a limited pool of service providers, primarily located in the neighbouring province.

Low volumes of recyclables available from the City and the surrounding area, makes diversion of these materials from landfill a difficult task, given current markets. Political and citizen input suggests a low tolerance for engaging in money-losing enterprises during times of financial constraint.

Based on the information provided and the project interviews, the assessment team was able to make recommendations in a number of areas. Some may be immediately adopted or considered while others, with additional research, consulting and technical support, may be implemented at a later date.

The City does not collect glass as part of the curbside recycling program, but provides for glass collection through the recycling depot. There is no legal requirement in Ont. Reg. 101/94 to include glass in the recycling program for a northern municipality under 15,000 population. Collection of glass through the depot is an effective way to manage this material and by keeping glass out of the curbside collection, the “value” of the single stream recycling material processed is likely to be relatively higher. Glass is a low value recyclable material that can cause operational and cross contamination problems in a single stream processing facility. There is no local market for recycled glass and shipping costs to southern markets are prohibitive.

The City has an incentive to examine best practices to most effectively offer standardized services to residents. This is also a rural municipality with a seasonal population increase providing service over a large undeveloped geographic area that doesn't have the economies of scale of an urban centre and therefore needs to find efficiencies in other areas.

Based on the information provided and the project interviews, the assessment team was able to make recommendations in a number of areas. Some may be immediately adopted or considered while others, with additional research, consulting and technical support, may be implemented at a later date.

The following assessment report is similar to the format of the Waste Diversion Ontario (WDO) annual data call best practices section;

Development and implementation of an up-to-date plan for recycling, as part of an integrated waste management system

“A recycling program plan that results from a thorough planning process is a strategic and practical guide for the design, management, operation, and optimization of a community’s Blue Box program. To be effective, it should reflect careful examination of all program components, and direct goal setting, action steps, and resource allocation to achieve meaningful results over time. Implementation of a well-conceived plan is facilitated by an overarching vision, purpose, and direction, allowing synergies to be realized across operational, geographical, and political boundaries. The recycling plan may be a stand alone document or may be incorporated into a larger integrated waste management plan.” Pg. 28, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Current Plan and Diversion Targets

A Waste Management Master Plan has been adopted by Council 12/15/2008. This plan indicates over forty years of existing local landfill life remains at current consumption levels. The plan does not set a target for diversion of its waste stream from landfill or provide an integrated recycling program plan.

The Provincial target diversion rate is 60% and some municipalities have set target diversion rates exceeding 65%. Staff is encouraged to establish diversion targets suitable for the local conditions along with a proposed date for achieving the diversion goals.

Review Process

Once diversion targets have been established and adopted, it is expected that a review process will be also be adopted. The review process should be designed to monitor progress and timelines and update the program objectives regularly.

Multi-municipal planning approach to collection and processing

“A widely-recognized principle of business is that significant efficiencies and economies can be obtained from larger scale activities. Many communities have found it advantageous to work co-operatively in providing solid waste management services.

Working jointly, municipalities can increase bargaining power with private service providers for collection and processing of recyclables. Pooling resources can result in increasing equipment, labour, and/or facility utilization, thereby realizing financial and operational efficiencies.

Co-operative planning can lead to improved performance across virtually all recycling program components, enhancing effectiveness and efficiency.” Pg. 33, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Current Level

The City currently processes recyclables at a private facility located in a large municipality in a neighbouring province. Collection is done with municipal staff who also operate a central transfer station and several small depots.

Opportunities

Normally, opportunities exist to take advantage of economies of scale through co-operation with neighbouring municipalities. However, in this location, excessive distance to neighbouring municipalities and low population/tonnage levels over large geographic areas reduce opportunities for multi-municipal co-operation.

An examination of the local program does reveal some limited opportunities worthy of further investigation in the following areas:

Transfer:

Material bulked for transfer collected under the new single stream system may now be compatible with another nearby municipal transfer system and opportunities should be explored to determine if cost savings can be achieved by utilizing this existing system. Concern was expressed over potential loss of preferred pricing at the MRF, lack of material storage in the event of dedicated

equipment breakdown and potential material cross contamination. However, due to the ever increasing cost of transfer shipping to the MRF, it is strongly recommended that staff explore the possibility of conducting an evaluation of this co-operative shipping opportunity. The CIF may be willing to provide some funding to conduct this evaluation and staff are encouraged to apply.

Processing:

Municipality “A” is the largest neighbouring municipality currently shipping similar material for processing at the same private MRF. Opportunities should be explored with Municipality “A” to determine if processing at the current MRF is still the most cost effective option. This may be accomplished by obtaining joint market pricing through the next processing RFP.

Additionally, a much larger Municipality “B” has contracted to process material at a different private MRF close to the current processor. It is strongly recommended that staff approach Municipality “B” to explore the possibility of processing local material under the existing Municipality “B” contract and, if that option is not currently available, to request Municipality “B” obtain a price for processing City material at the next Municipality “B” contract renewal date. This strategy should introduce an element of competition into the currently limited processing options and may result in significant cost savings.

P&E:

Municipality “A” is the largest neighbouring municipality that collects material in a similar way. Opportunities should be explored to co-ordinate P&E with their program. An increased level of co-operation with Municipality “A” would result in greater effectiveness for the current local P&E program due to economies of scale and consistent content. Local radio stations cover most of the service area in both municipalities opening opportunities for standardized public service announcements and other co-ordinated P&E.

Containers:

Low volumes of blue box container acquisition and distribution each year contributes to higher than average costs. Opportunities should be explored to co-ordinate volume purchases of recycling containers through combining the annual purchase with other communities. The City may be able to obtain volume discount pricing if they add their annual container purchases to the volume orders of other municipalities. This may require the change to a more generic blue box, however that has not proven to create any

issues for residents in other communities that have combined their container orders.

Establishing defined performance measures

“Proper management of a recycling program includes the monitoring and measurement of the program goals through the establishment of diversion targets and performance objectives. Targets and objectives must be realistic, measurable and relevant. Furthermore, targets and objectives are needed for the individual program components to be evaluated (e.g. curbside collection, depots, processing, promotion and education, etc.) Evaluation facilitates continuous improvement within the recycling program.” Pg. 38, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Types of data collected

The City does not perform waste audits to better understand the effectiveness of the recycling program and base rate diversion.

The City does obtain monthly data from the MRF via invoices for tonnage processed. Tonnage shipped is cross checked against municipal weigh tickets.

Data Requirements

In defining data requirements, the following questions should be answered as the City continually improves their performance measures:

Will the measure track program outcomes as opposed to just outputs and inputs?

Is the measure for absolute impacts or relative impacts?

Can information pertaining to the measure be gathered systematically, consistently, and objectively?

Is there sufficient time and resources to gather, organize and interpret that information in order to tell a meaningful story to the evaluation audience?

Will the intended audiences perceive the measure as credible?

Will the knowledge gained through use of the measure be useful (e.g., for program improvement, adjustment in funding)?

Optimization of operations in collection and processing

“Optimization of operations is a process of critically assessing collection and processing functions and making changes that have a net positive effect on recovery rates and/or cost. A combination of data-driven, expertise-driven, and heuristic approaches can be used to optimize operations. Where collection and/or processing are outsourced, close collaboration with the contractor, sufficient flexibility in the use of contractor labour and assets, and thorough understanding of cost drivers contribute to optimization of the system.” Pg. 42, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Processing

Processing Facility

The City does not own or operate a municipal facility and currently subcontracts processing to a private MRF out of province.

The City does not generate large enough recyclable tonnage to consider operating their own facility.

The processing of the recyclables is carried out under contract with a processor at their facility in Municipality “B”. The new agreement for single stream processing currently has a charge for the processing of materials and the no revenue is returned from the materials sold. The new agreement will run on a month to month basis until other options are explored or market conditions improve.

For the next contract cycle, it would be advisable to negotiate a revenue sharing agreement with the processor, as it has been demonstrated that revenue sharing agreements for processing offer a more beneficial arrangement for municipal programs. Potential exists to explore the possibility of a processing agreement that combines the local material with neighbouring municipalities to obtain volume pricing advantages.

Collection

Materials Collected

The program accepts the full range of fibres (ONP, boxboard, OCC, fine paper as well as gable top and aseptic containers). The container stream includes aluminum and steel containers as well as rigid plastic containers #1-7. Excluded from the program are film plastic and polystyrene. Glass containers are not included in the curbside collection program, but are collected through the

central recycling depot. The City also provides for a depot based collection of waste and recycling in the rural areas of the City, seasonal marine collection, May to September, and ICI collection services.

Collection Process

The service area is made up of an urban core and an extensive sub-urban/rural area. Providing curbside collection services in the rural area is a challenge as there is a large expenditure for a small amount of material collected.

The City operates a modified single stream collection program designed to compliment the processing operations at the private MRF. The system is modified in that glass is not collected curbside. Glass collection is not mandatory but is provided at depots and is handled as a separate commodity.

Collection frequency is weekly complimented by several depots located at population centers within the service area. Recyclables are collected at least as frequently as garbage.

A growing residential segment of the City is the development of multi-residential (i.e. condos) units. Staff indicated that limited services are provided to multi-residential units, but are offered as part of the ICI waste collection program.

There is an opportunity for the City to increase the capture of recyclables from the multi-residential segment. Multi-residential recycling services are included in the blue box program plan, which means that costs and collected tonnage are eligible for funding through the blue box program.

Multi-residential recycling is a program area that has been identified for improvement across the province. There have been a number of projects undertaken through the E&E fund in regards to multi-residential recycling and staff are encouraged to review these project results for information at; <http://www.stewardshipontario.ca/bluebox/ee fund/projects.htm#c2>

The City is encouraged to consider developing, enhancing and expanding the current recycling services offered to multi-residential units. Funding to assist with the development of a comprehensive multi-residential program could be requested from the CIF for activities such as program planning or implementing alternative collection strategies and provision of promotion and education materials.

Collection Equipment

Collection equipment is owned by the City and is currently configured for co-collection of garbage and single stream recyclables. Labrie collection trucks are new and some minor reliability issues were reported but are expected to be resolved under warranty. Collection routing has been optimized and is currently completed with a four day cycle and fewer staff and equipment than was required under the previous collection program.

Collection Containers

The Best Practices Assessment Project final report states: “Provision of blue boxes entails the provision to households of free blue boxes in order to ensure ample household recycling capacity. This is usually done when programs are initiated and when materials are added and/or the program is repromoted. Additional blue boxes require an initial capital outlay, however, the added capacity may not only increase capture and potentially lower unit operating costs, but the minimization of home-made curb side containers may yield longer-term ergonomic benefits to collection crews.”

The City charges \$9.00 each for recycling container under a full cost recovery policy. Staff will currently pick up recycling in bags, if set out beside a blue box, and this does not currently result in rejections at the MRF. Staff did not report any concerns with lack of container capacity, however, this policy may need to be re-evaluated if the recycling program is promoted more heavily to achieve a fixed diversion target.

Depots

The City has piloted a rural depot program and currently has three rural drop off depots located close to “built up” areas. Staff indicated that this program has been operationally successful and is planning to expand the number of rural depot locations which should capture more material.

This program is an innovative method for providing a recycling collection service to low density areas and minimizing the cost for the service. Resources could be requested from the CIF to assist with the development of this alternative collection service and possibly evaluate different depot configurations and collection services, as well as monitoring and reporting on the program.

As an enhancement to the curbside recycling program, the City operates a central recycling depot located at the City transfer

station. Staff indicated that the depot is well utilized by residents.

Provision of a recycling depot drop off location is considered a best practice. Staff indicated that changes are being made to the configuration of the central depot to improve the operation of the site. The types of bins being used at the site allow for easy collection and unloading with municipal equipment. Signs could be improved at the site to enhance resident compliance and ease of use.

Additional information about better practices operating depots can be found at:

http://www.stewardshipontario.ca/bluebox/pdf/eefund/KPMG_final_report_vol1.pdf *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007, pg. 107.*

The City is encouraged to review these operating practices for potential improvements to local operating conditions at their depots.

Transfer Facility

The City owns and operates the transfer facility that handles both recyclables and garbage. The recycling facility was constructed as a 3 sided, covered enclosure with adequate storage for materials. The facility includes a loading bay that has a compactor unit designed for loading materials into 40-yard bins. Some operational issues that impact the effectiveness of the operations are noted with this system including movement of material between buildings prior to loading. Changes to the operations and site are being planned to address some of these issues. The compactor unit is not strong enough to burst most recycled bottles and would benefit from perforation of material prior to compaction. Perforation should also result in greater load density and hence reduced shipping costs to the MRF.

There are 2 separate bays for the collection of fibres, one for mixed fibres and the other for cardboard/boxboard. The compactor unit located in the building does not function adequately for fibres. The work around solution has been to load fibres into an open top walking floor trailer in the waste transfer facility. Even without compaction, maximum allowable weights for interprovincial loads can be attained with this method.

Operational issues with litter and loss of material occur when transferring fibre from the recycling transfer facility to the waste transfer facility. Also, double handling fibres in this manner

results in increased costs that may no longer be necessary with single stream processing.

The container stream is stored and loaded in the transfer facility. Containers are stored in sealed bins and the bins are loaded onto a transport for shipment to the processor. Staff indicated that there has not been any issue from the processor with the current compaction density of the containers.

Hauling the trailers to the processor is carried out by a private contractor. Cost of transportation has increased due to the price of fuel. The hauling contract has been extended pending council decision to continue transfer of garbage out of province or to resume use of local landfill.

Training of key program staff in core competencies

“Municipalities need to ensure that management program personnel are adequately trained on position-related competencies and responsibilities. Training provides the skills needed to develop, manage, monitor, document and promote the numerous and complex components of a successful recycling program. Regardless of the size or type of municipal program, training acts as an enabler of performance, facilitating the achievement of objectives in a cost-effective manner.” Pg. 45, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Current Training

Similar to many smaller municipalities, the City currently has no dedicated budget or resources to provide ongoing training for recycling staff. Ongoing driver training and transfer station staff training is provided. The City has an opportunity to improve their performance in this area that is now required to be reported annually under the revised WDO datacall.

Available Training

The municipality is encouraged to contact the Municipal Waste Association, <http://www.municipalwaste.ca/contact.cfm> for information on the Ontario Blue Box Recyclers Training program currently available to municipalities at nominal to no cost. This training was developed and offered through E&E Fund project #341 and was developed with input by municipal recycling experts specifically for Ontario municipal recycling staff.

Training of recycling staff in core competencies is considered a best practice. Further information is available at http://www.stewardshipontario.ca/bluebox/pdf/eefund/KPMG_final_report_vol1.pdf Pg. 44.

Promotion and Education Program

“Planning and implementing targeted P&E programs that support recycling and waste diversion are vital to municipal Blue Box programs. Each community’s ability to design and deploy P&E is affected by community size, geography, resources (financial, skills-based and time) and many other factors. ” Pg. 57, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

The City currently produces recycling calendars, compliance notices, public service announcements and recycle it right publications. There is some co-operation with local high schools, community service groups and youth organizations. Some opportunity exists to increase use of these groups to enhance the local P&E distribution channels.

P&E Funding

“A study of eight programs that are considered to be among the Ontario P&E leaders, as well as of other well-performing communities, revealed that their P&E costs, range from approximately \$0.83 to \$1.18 per household, with recovery rate at or exceeding 60%.” Pg. 59, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

This municipality reports a local budget for P&E programs of approximately \$0.72 per household.

Co-operation

The recycling program co-operates with other departments, schools, service organizations etc. to maximize P&E message and minimize costs. An increased level of co-operation with Municipality “A” may result in greater effectiveness for the current P&E program due to economies of scale and consistent content.

The program has transitioned to single stream recycling collection and therefore, it is recommended that a comprehensive communications effort be undertaken to inform residents of the changes and garner their support for the program. This will be challenging given the limited resources that are available to staff. It is recommended that staff apply to the CIF for funding necessary to support the P&E effort required to promote the program changes.

As a long term goal, development of a P&E plan is advisable. A

P&E plan would assist staff with addressing what materials are needed, how to deal with the issues to get the best result and provide a framework for budgeting for P&E. Information on developing a P&E plan is available on the Recyclers Knowledge Network which can be accessed at:
<http://www.vubiz.com/stewardship/Welcome.asp>

Web Site

The municipality has an internet presence providing residents with recycling, reuse and diversion information. This information is relatively static and is also available in printed form.

Online Recyclopedia

The municipality currently does not have an online recycling “how to” recyclopedia and recycling news/events listings. Staff has expressed an interest in adding these features to their existing site with CIF support.

Online P&E template access

The municipality currently does not have access to online P&E templates. Staff has expressed an interest in using these templates when they become available.

Established and enforced policies that induce waste diversion

“Municipalities need to utilize a combination of policy mechanisms and incentives to stimulate recycling and discourage excessive generation of garbage. Most of these policies are aimed toward causing a permanent shift in residents’ behaviour through the use of economic and non-monetary levers.” Pg. 64,, *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007.*

Recycling bylaw

The City currently has no mandatory recycling by-laws in force. A waste management by-law has been enacted which establishes penalties for various infractions.

User Fees for Bagged Waste

The City currently has a user fee for refuse of \$2.00 per residential bag. No tags are provided free of charge and there are no bag limits currently in force.

It should be noted that, the *Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007. Pg. 21*, references a strong relationship between reduced bag limits and increased diversion. Statistics indicate that a 2 bag limit, supported by diversion alternatives, was found to result in higher recyclable material recovery rates. However, in this location, large areas are undeveloped and unsupervised which offers an increased risk of roadside and lake dumping and therefore, council is reluctant to adopt any bag limits at this time.

Waste Exchange

The City currently does not have an online waste exchange, free to use by local residents, designed to encourage diversion and provide educational material. Staff has expressed interest in adding this service to the existing City web site.

Enforcement

The City enforces garbage and recycling rules through public information, non-compliance notices, reason for leaving stickers, transfer station spotters and local by-law officers.

Contracts

The greatest opportunity for program improvement is available at the end of the municipal contract cycle, therefore, it is critically important to identify any potential improvements in the local municipal recycling contracts which can be implemented immediately or at the next tender.

Review

Processing and marketing is done through an out of province private MRF. The contract has expired and processing is currently done on a month to month basis. Council is reluctant to negotiate another long term contract until market conditions for recyclables improve.

The local transfer hauling contract has expired and hauling of garbage and recyclables has been extended pending redefinition of the scope of work.

Opportunities

The 2008 WDO datacall shows that the City has net recycling costs of \$294.00/tonne. The average recycling cost for this municipal grouping is \$524.01 with overall group costs ranging from \$45.26 - \$4,283.11

Financial support for consulting services to assist staff with the preparation of a new recycling collection/processing RFP may be available through the CIF.

It is strongly recommended that any new contract terms for processing and transfer hauling match the contract expiry dates with the existing Municipality "A" and or Municipality "B" contracts to generate the opportunity, on the next tender cycle, for the City to take advantage of multi-municipal co-operation and economies of scale in both transfer hauling and processing.

G.A.P.

Following generally accepted principles (GAP) for effective procurement and contract management is considered to be a best practice in Ontario. For a full list of generally accepted procurement principles refer to http://www.stewardshipontario.ca/bluebox/pdf/eefund/KPMG_financial_report_vol1.pdf page 50.

Accepted leading practices for effective procurement and contract management to extract the best value for municipal Blue Box contract needs include:

Planning procurements well in advance of service requirements.

Recognizing useful life of existing equipment, lead times for replacing this equipment, and lead times for the execution of the procurement process itself all require careful consideration. Failure to plan properly may mean costly maintenance and breakdowns and sub-optimal contracting/service levels.

Investigating and understanding suppliers' markets to understand the players, dynamics, cost drivers, and innovators in order to maximize value when setting procurement strategy. This results in municipal staff becoming informed buyers.

Involving suppliers (in pre-procurement consultations) to help refine requirements, where own experience is limited, and to leverage innovation and capabilities of experienced suppliers. This results in municipal staff becoming smart buyers.

Developing a clear definition of services and performance requirements.

Using the appropriate procurement instrument, such as a Tender or an RFP.

Using a competitive procurement process and working to encourage multiple proponents/bidders.

Changes to the collection and processing stream may necessitate amendments to existing or new contracts.

Assistance for the preparation of recycling collection and processing tenders is available free of charge at the following internet address:

<http://www.vubiz.com/stewardship/Welcome.asp>

Additional assistance is available from the CIF Program Managers upon request.

Assistance is also available to help municipalities develop and/or negotiate agreements for jointly processing and/or collecting materials.

Conclusions

The City is making steady progress toward increased diversion and recycling efficiency. As with many smaller municipalities, budgetary and staff resources dedicated to recycling and diversion activities are limited. Other limiting factors include a very large seasonal population increase, non-standard levels of service and limited private contractors.

Accordingly, staff must take advantage of any assistance available to them to improve the local program and several opportunities are noted below for consideration:

Opportunities

1. Adopt an official waste management master plan that includes a plan for recycling and diversion with clear goals, implementation timelines and a regular review procedure.
2. Explore opportunities for multi-municipal co-operation, especially with Municipality "A" and Municipality "B", in processing, transfer hauling, container procurement and P&E.
3. Establish defined performance measures and methods to monitor them. Regular waste audits, to establish base line performance, and ongoing weight based data should be considered as a minimum.
4. Standardize and optimize collection/depots within the service area.
5. Enhance training for staff in recycling core competencies.
6. Develop a promotion and education plan.
7. Enhance policies that increase recycling and diversion
8. Issue a new collection/processing RFP to optimize collection/processing and address program needs and deficiencies.

The following recommendations may assist staff in realizing some of the opportunities noted above:

Recommendations

1. Contact neighbouring municipalities, especially Municipality "A" and Municipality "B", to explore opportunities for co-operation.

2. Contact the Municipal Waste Association, for information on the Ontario, Best Practice, three year training program currently under development.
3. Apply to CIF for funding to acquire recyclable container perforation equipment.
4. Apply to CIF for funding for the P&E effort required to support program changes to single stream collection.
5. Apply to CIF for funding to assist staff in developing a new transfer/processing RFP.
6. Apply to CIF for funding to assist with capital improvements at the transfer station and depots.
7. Apply to CIF for funding to assist staff in upgrading the City web site to enhance P&E, recycling and diversion.
8. Re-evaluate current target diversion rates and fix a timeline to achieve the target rate in an integrated waste management master plan.
9. Review the Blue Box Program Enhancement and Best Practices Assessment Project, Final Report, July 2007. for suggested depot operating practices located at http://www.stewardshipontario.ca/bluebox/pdf/eefund/KPMG_final_report_vol1.pdf page 107.
10. Review the P&E module on the Recyclers' Knowledge Network. <http://www.vubiz.com/V5/Stewardship/Home.asp> A specialized P&E course currently in development will be available in 2010 and staff are encouraged to participate when available.
11. Discontinue collection of recycling from island properties by boat, as costs are prohibitive, or reduce collection service on islands to depot service only.

End of Report

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