Township of Brudenell, Lyndoch and Raglan Waste Recycling Strategy CIF No. 612

Prepared For:



Prepared By:



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EXECUTIVE SUMMARY

The Township of Brudenell, Lyndoch and Raglan is located within Renfrew County southeast of Algonquin Park. The Municipality is characterized by a small population (< 5000 full-time residents), 1112 single family homes 306 of which are seasonal with a full-time population of 1481.

The Township of Brudenell, Lyndoch and Raglan is required by Waste Diversion Ontario (WDO) to submit an updated Waste Recycling Strategy (WRS) to ensure the current Blue Box program is in-line with the Municipality's Integrated Waste Management Strategy along with the Province of Ontario's goal of reaching 60% waste diversion. The following report satisfies the WDO Waste Recycling Strategy requirement.

Through analysis of the Blue Box program, the Township of Brudenell, Lyndoch and Raglan has a comparable capture rate and cost/tonne to other Municipalities in the Rural Depot South Municipal Group. The Municipality should focus on initiatives that increase public awareness and public access to recycling.

The priority initiatives identified through this assessment include:

- 1. Public Education and Promotion Programs
- 2. Provision of Free Blue Boxes
- 3. Training of Key Program Staff
- 4. Enhancement of Recycling Depots

The goal of the Municipality is to increase the capture rate by 24% over the next six (6) years carried out by the initiatives identified in this report. The Municipality shall commence with a Promotion and Education (P & E) plan in 2011/2012. If the P and E plan does not suffice in achieving the determined goal additional initiatives should be considered.

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1.0 INTRODUCTION

The Township of Brudenell, Lyndoch and Raglan is located within Renfrew County southeast of Algonquin Park. The Municipality is characterized by a small population (< 5000 full-time residents), 1112 single family homes 306 of which are seasonal with a full-time population of 1481. In May of 2011 the Municipality decided to review the existing Blue Box material recycling program and develop a Waste Recycling Strategy. Jp2g Consultants Inc. was retained by the Municipality to assist in establishing the Blue Box material Waste Recycling Strategy (WRS) and align the municipalities program with Waste Diversion Ontario's (WDO) best practices.

1.1 Purpose and Stated Problem

The Municipality is required by WDO to submit an updated Waste Recycling Strategy (WRS) to ensure the current Blue Box material recycling program is in-line with the Municipality's Integrated Waste Management Strategy along with the Province of Ontario's goal of reaching 60% waste diversion. The following report establishes the Municipality's Waste Recycling Strategy to satisfy WDO data call requirements. The purpose of this report is to:

- Quantify the existing solid waste diversion and disposal trends in the Municipality
- > Address and improve the efficiency and effectiveness of the existing Blue Box program
- > Develop feasible future Municipal Solid Waste diversion goals and targets

The following Waste Recycling Strategy analyzes the current waste management procedures undertaken in the Municipality with primary focus on the existing Blue Box material recycling program in the Township of Brudenell, Lyndoch and Raglan. The following WRS outlines steps to be taken by the Municipality to ensure an effective and efficient Blue Box material recycling program is undertaken in-line with WDO's Best Practice questions. This report seeks to satisfy the WDO's requirements for; an updated Municipal Waste Recycling Strategy, establishment of performance measures, progression towards multi-municipal planning approaches, and examines waste diversion initiatives and alternatives for the Townships of Brudenell, Lyndoch and Raglan. The following report is structured in general accordance with the *Guidebook for Creating a Municipal Waste Recycling Strategy* provided by the Continuous Improvement Fund (CIF).

1.2 Planning Process and Funding

The planning process utilized for developing the Waste Recycling Strategy involved Municipal Staff working together with Jp2g Consultants Inc through support from the CIF. The process involved an initial correspondence between Municipal Staff and Jp2g Consultants Inc. in which the current and historical Blue Box material recycling program was discussed along with potential directions for an updated WRS. After initial correspondence a public notice was established and sent to the municipality, the public notice was not circulated. A final report was then completed in which WRS initiatives were evaluated. The WRS work plan and initial proposal is provided as **Appendix A**.

2.0 MUNICIPAL WASTE COLLECTION DEPOTS

The Township of Brudenell Lyndoch, and Raglan have three (3) operational collection depots each with a recyclables Transfer Station. The facilities are open to all seasonal and full time residents and are located in each of the Municipality's geographic townships.

The Brudenell Waste Disposal and Transfer Site is located in Lots 9 and 10 Concession 13, in the geographic Township of Brudenell. The waste collection depot operates under Certificate of Approval Number A412001, dated January 18, 2005 amended January 23, 2006.

The Quadville (Lyndoch) Waste Transfer Site is located on Lot 22 Concession 12 in the geographic Township of Lyndoch. The site operated under Certificate of Approval A412002 last amended March 7, 2008.

The Raglan Waste Transfer Site is located in Part of Lots 24 and 25, Concession 14 in the geographic Township of Raglan. The site operates under Certificate of Approval A413001 most recently amended on June 24, 2010. Since the transfer station construction in December 2008 there has been an increase in diverted recyclables of 18% from 2009 - 2010.

3.0 MUNICIPAL WASTE MANAGEMENT PROFILE

The Township of Brudenell, Lyndoch and Raglan currently divert approximately 38% of all incoming municipal solid waste from their disposal sites (WDO Datacall 2010). The waste diversion program in the Municipality includes:

Blue Box Materials (See **Table 5**)
Leaf, Brush, and Yard Waste Organics (controlled burning)
Waste Electrical and Electronic Equipment
Tire Stewardship
Scrap Metal

Of the 484 tonnes of waste generated in 2010 approximately 181 tonnes of waste was diverted. The primary materials diverted were Blue Box materials, tires and scrap metal.

3.1 Blue Box Material Recycling Program

The Townships of Brudenell, Lyndoch and Raglan are in the Rural Depot South municipal grouping established by WDO. Blue Box material generated within the Municipality is dropped off by municipal residents at the three (3) aforementioned waste transfer stations. The Blue Box material is collected by Beauman Waste Management and taken to the Renfrew County Recycle Center in Renfrew, ON. Municipal demographic and waste management statistics have been summarized in **Tables 1 – 6** below.

Table 1
Township of Brudenell, Lyndoch and Raglan Demographics 2010

Total Population	Single Family Households (incl Seasonal)	Multi Family Households	Seasonal HHLDS	IC&I Establishments
1443	1142	0	315	few commercial
				establishments and
				campgrounds

Note: Information from and WDO Data Call Reports for Brudenell, Lyndoch and Raglan 2010.

As indicated in **Table 1** the total population figure is similar to the number of households in the Municipality. This is due to the additional seasonal residents that come to the area primarily during the summer months.

Table 2 2010 Waste Audit Data

Blue Box Material	Composition (%)	Total Waste Generated (Tonnes)	Total Blue Box Material in Waste Stream (Tonnes)	Target Capture Rate (%)	Blue Box Material Available for Diversion 70% of Total (Tonnes)	Recovered Blue Box Material (Tonnes)	Blue Box Material Remaining in Waste Stream (Tonnes)	Material Remaining for Diversion (%)
Commingled	34	484	164.56	70	115.20	76.14	39.05	8.07
Current Blue						16%		
Box Diversion								
Additional								8.07%
Blue Box								
Diversion								
Potential Future Blue Box Diversion								23.80%

Note: Data from the Municipality of Brudenell, Lyndoch Raglan Datacall 2010 and CIF 2010.

The above waste audit data presented in **Table 2** calculates the amount of available Blue Box material in the waste stream in the Municipality. The information above allows for an estimate of the amount of Blue Box material that should be collected in order to reach a Blue Box capture rate goal of 70%. Furthermore this table outlines the amount of total available Blue Box material that is currently being produced in the Municipality based on the Rural Depot South Municipal grouping waste composition average presented in CIF, 2010. The current Blue Box diversion rate in the Municipality is approximately 16% of the total waste volume. To reach a total capture rate of 70% the necessary increase of Blue Box diversion is 39.05 tonnes. A goal of 70% Blue Box material capture rate increases the total diversion for Blue Box Materials to 23.8%. The average diversion of Blue Box Materials in 2009 for Municipalities in the Rural Depot South Municipal group was 21.3% (CIF, 2010).

Table 3
Blue Box Material Program Cost Analysis 2010

Blue Box Activity	Cost/Tonne (\$)	Cost/Household (\$)	Total Cost (\$)
Transfer Station Municipal Costs	302.23	20.15	23011.73
Transfer Station Contracted Costs	110.41	7.36	8406.87
Promotion and Education	3.08	0.21	234.60
Administrative Costs	18.58	1.24	1414.52
Total Program Gross Cost	434.30	28.96	33067.72
Total Program Net Cost	433.91	28.93	33037.72

Note: Tonnes do not include glass collected from deposit/return stewardship program

Table 3 portrays the cost of individual activities in the 2010 Blue Box material recycling program for the Municipality. The program currently in place in the Municipality does not include a processing facility or curbside collection. The primary costs of the program are associated with Transfer Station upkeep and hauling diverted materials off-site. Promotional and Educational (P&E) aspects of the program consist of approximately 0.7% of the total program costs. P&E programs typically cost 1\$ per household and increase diversion by 2 – 5% (CIF, 2010). Additional costs associated with the Municipal Blue Box material recycling program are attributed to administrative costs. The provincial median Municipal Blue Box net cost/tonne for the Rural Depot South grouping calculated from the WDO Datacall reporting for 2010 was \$420.44 per diverted tonne, similar to the reported cost of Brudenell, Lyndoch and Raglan, \$433.91 per reported tonne.

Ontario Regulation 101/94 outlines a list of mandatory Blue Box materials to be included in all Ontario Blue Box programs. **Table 4** compares O.Reg 101/94 with the materials included in the Township of Brudenell, Lyndoch and Raglan Blue Box program.

Table 4
Blue Box Materials

Recyclable Material	Required by	Included in Brudenell, Lyndoch and Raglan
	O.Reg 101/94	Blue Box Material Recycling Program
Newsprint	$\sqrt{}$	$\sqrt{}$
Other Printed Paper		$\sqrt{}$
Magazine/Catalogues		$\sqrt{}$
Phone Books		$\sqrt{}$
Corrugated cardboard		V
Boxboard		$\sqrt{}$
Gable Top Cartons		$\sqrt{}$
Tetrapak cartons		$\sqrt{}$
Aluminum Cans	V	$\sqrt{}$
Other Aluminum Packaging		V
and Foil		
Steel Cans	$\sqrt{}$	$\sqrt{}$
Empty Aerosol Cans		V
Empty Paint Cans		V
Clear Glass	$\sqrt{}$	V
Coloured Glass	$\sqrt{}$	V
PET Bottles (#1)	$\sqrt{}$	$\sqrt{}$
Other Bottles and Containers		$\sqrt{}$
(#3, #5, #7)		
LDPE/HDPE film (#2, #4)		$\sqrt{}$
HDPE containers (#2)		V
Polystyrene Foam (#6)		
Polystyrene Crystal (#6)		
Tubs & Lids (#2, #4, #5)		
Thermoform PET (#1)		

Outlined in **Table 4**, the current Municipal Blue Box material recycling accepts more materials than required by O. Reg 101/94. It should be noted that along with the required materials as stated by O.Reg 101/94 it is additionally required that two (2) supplementary materials be added to the Blue Box material recycling program. Through analysis of the Blue Box materials collected in the Municipality it is concluded that the current amount of material types collected exceed current provincial legislative requirements and is adequate for the Municipality.

Table 5
Blue Box Program Efficiency 2010

Study Area	Blue Box Material Capture Rate (%)	Blue Box Material Diversion Rate (%)	Total Waste Diversion Rate (%)	WDO E&E Factor	Blue Box Program Cost/Tonne (\$)
Townships of Brudenell, Lyndoch and Raglan	46	16	38	16.98 (2009)	433.34 404
Provincial Average for Rural Depot South Municipal Groupings	50 (2009)	21 (2008)	25 (2008)	13 (2009)	420.44

Note: Municipal Grouping Data from Waste Diversion Ontario and the CIF Guidebook 2010.

Table 5 provides a comparison between the Townships of Brudenell, Lyndoch and Raglan Blue Box material recycling efficiency and effectiveness statistics versus the Rural Depot South Municipal groupings in Ontario. As indicated in **Table 5** the Blue Box material capture rate is on par with the Rural Depot South Ontario average. The cost/tonne of the program in Brudenell, Lyndoch and Raglan is greater than the median for Rural Depot South municipal grouping (2010), however lower than the average Rural Depot South cost/tonne. The Blue Box material diversion rate is below the Rural Depot South diversion average therefore improvements to the Blue Box program effectiveness should be considered in future waste diversion initiatives. Promotion and education programs could significantly increase capture rate through public In determining an updated WRS for the Municipality program effectiveness improvements should be considered if plausible changes to the program can be made that could decrease the program's cost per tonne. Initiatives that decrease or maintain program costs and increase in total diversion rate should be pursued to reach a greater level of program efficiency and effectiveness. P&E mechanisms have had proven results by other Ontario Municipalities and should be considered to improve the current program effectiveness and efficiency. A complete list of initiatives has been provided in Appendix B.

3.2 Waste Electrical and Electronic Equipment

Waste Electrical and Electronic Equipment (WEEE) is collected and hauled from the waste transfer stations by Redi Recycling Inc. WEEE bins were established at the Brudenell, Lyndoch and Raglan sites in the summer of 2011 to assist collection of electronic equipment.

3.3 Tire Stewardship and Scrap Metals

Tire collection and processing was completed in 2009 by Ontario Tire Recovery Inc. registering the municipality for the Ontario Tire Stewardship Program. Currently the Municipality has tires removed under the Ontario Tire Stewardship program by ABC Scrap Metal. Scrap metal is removed from the transfer sites by Lesway Inc. In 2009 11.24 tonnes of white goods was diverted from the Municipality's transfer stations.

3.4 Yard Waste and Organics

Currently in the Municipality yard waste, brush and garden organics which are brought to the waste disposal sites are burned under controlled conditions effectively reducing the volume of waste from being landfilled.

4.0 WRS INITIATIVES

WRS initiatives are established mechanisms which enable efficient and effective improvements of a Municipality's Blue Box program. Through analysis of the Blue Box program, the Township of Brudenell, Lyndoch and Raglan is on par with the Rural Depot South Provincial average for Blue Box program efficiency (cost/tonne) and effectiveness (capture rate). The Municipality's current system does not warrant any legislative amendments as it exceeds requirements of O.Reg 101/94 and it is in-line with the provincial average for efficiency and effectiveness. The Municipality should seek to increase the capture rate of recyclable material improve the WDO e&e factor to increase WDO funding and preserve landfill space. As stated, potentially half of the Blue Box materials being produced in the Municipality are being disposed rather than diverted. An increase in public awareness should be considered to increase the amount of diverted recyclables.

4.1 Planned WRS Initiatives

Planned WRS initiatives have been assessed as part of this study to determine Priority Initiatives and Future Initiatives for the Municipality. A Priority Initiative is one which is best suited for the Municipality at the current time and should be considered in near future applications. A Future Initiative is one which could be suited from the Municipality however should be further assessed in revisions of the Municipality's WRS. Criteria utilized for assessing each option is provided in **Appendix B.** The initiatives of this assessment include:

- Promotional and Educational Programs;
- Training of Key Program Staff;
- Curbside Collection;
- Enhancement of Collection Depots;
- Provision of Free Blue Boxes;
- Multi-Municipal Collection and Processing;
- Standardized Service Levels and Collaborative Haulage Contracting;
- Establishing an Intra-Municipal Committee;
- Maximization of Diversion Research;
- Directed Tipping Fee Establishment;

 Following Generally Accepted Principals for Effective Procurement and Contract Management.

Priority Initiatives identified:

- 1. Public Education and Promotion Programs (88/100)
- 2. Provision of Free Blue Boxes (84/100)
- 3. Training of Key Program Staff (80/100)
- 4. Enhancement of Recycling Depots (80/100)

The Future Initiatives identified:

- 5. Tipping Fee Increase for Disposal of Recyclable Materials
- 6. Following Generally Accepted Principles for Effective Procurement and Contract Management
- 7. Multi-Municipal Collection and Processing

4.2 Priority Initiative Assessment

4.2.1 Promotional and Educational Programs

P and E efforts are crucial mechanisms for increasing the public participation, capture and diversion rates, and decreasing residue rate of a Blue Box program. The P&E mechanisms currently utilized in the Municipality include the production of brochures and pamphlets and erecting landfill signage at the Transfer Stations. **Table 6** summarizes the cost distribution associated with the current P & E program in the Municipality. Currently the Continuous Improvement Fund is offering a \$5000 grant for P&E for all Ontario Municipalities with a population below 30000 residents. The Municipality has applied for this grant.

Table 6
2010 Blue Box Program P & E Costs

P & E Mechanisms	Material Expense	Staff Expense	Total Cost	
Brochures/Pamphlets	150	84.60	234.60	

P & E mechanisms should be easily accessible by the public. P & E items could be effectively located at the municipal office (brochure/newsletter), at Municipal landfill sites (signage), and at home (newsletter and municipal website). It is proposed that the Townships of Brudenell, Lyndoch and Raglan updates the current promotional and educational efforts utilizing one or more of the mechanisms outlined in **Table 7**.

Table 7
P & E Priority Initiatives

Initiatives	Description
Option A Public P & E Program	Develop a Blue Box specific P & E Plan that could include materials such as: Landfill Signage Newspaper Articles/Advertisements Website Additions T Shirts/Hats
Option B Provision of Free Blue Boxes	Free blue boxes could allow Municipal residents to store and carry blue box material to the transfer stations. Provision of a free blue box would give residents an alternative to simply throwing recyclables in the garbage bag.
Option C Training of Key Program Staff	Ensure 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. It is recommended that where possible training occur from a third party, ie. webinars, recycling expos/seminars. Training of Key staff is a best practice and if completed increases WDO annual funding.

Note: above described mechanisms are intended to be in addition to P&E mechanisms currently in place.

4.2.2 Enhancement of Recycling Depots

Enhancement of the a Waste Transfer Station would assist traffic flow, improve safety and user ease to increase the total diverted Blue Box material. The changes that are proposed to be made at the Quadville Transfer Station are the same as those that were completed at the Raglan Transfer Station in 2009 and Brudenell in 2011. The implementation of improvements at the Brudenell Site were completed mainly for safety reasons as the facility was beyond repair. The upgrades include addition of concrete dividing blocks, roadway upgrades and elevation of the attendant's booth. Raglan Transfer Station experienced a one year 18% increase in recyclable tonnes once upgrades were made. This increase occurred while the amount of generated recyclables at the other transfer stations remained consistent with previous years. Total diverted Blue Box material tonnes at each Transfer Station are outline in **Table 8**.

Table 8
Tonnes of Diverted Blue Box Material at Municipal Transfer Stations

	Raglan TS	Quadville (Lyndoch) TS	Brudenell TS
2009	33.3	21.6	15.7
2010	39.25	21.59	17.66

An 18% increase, as seen above at the Raglan Transfer Station, would likely occur at the Brudenell and Quadville Transfer Stations after upgrades have been made. The similar tonnage reported at the other two Transfer Stations indicates that; first Municipal residents who use the Transfer Stations did not use the Raglan station instead of the other sites, and second that there was not a uniform increase in generated recyclables across the entire municipality. The 18% increase occurred only at Raglan Transfer Station once upgrades were made, concluding the organizational enhancements allowed for a successful and user friendly recycling environment which increased tonnage of Blue Box materials.

4.3 Implementation Plan and Program Goals

The implementation of the P and E program should begin in 2011/2012. A goal for the WRS program is tentatively established at 4% capture rate increase per year (1.36% diversion rate increase per year) through public education over the next six (6) years to reach an eventual goal of 70% capture rate or approximately 115 tonnes of diverted Blue Box materials. It is recommended that Municipal council, in addition to the P and E plan, give consideration to upgrading the Quadville Transfer Station as the upgrades would improve aesthetics and ease of use at the sites. The upgrades have shown proven results of increased diversion at Raglan Transfer Station and have recently been completed at Brudenell Waste Disposal Site.

Future WRS updates should take into account effectiveness and efficiency for analysis and continuous improvement. The following section analyzes the priority and future initiatives that could be considered and included as part of the Municipality's WRS.

5.0 BLUE BOX PROGRAM CONTINGINCIES

Projected contingencies must be outlined in order to prepare for foreseen and unforeseen program dilemmas, setbacks, and inefficiencies in the WRS. The updated WRS likely will focus on primarily P&E and infrastructure enhancements. Contingencies with regards to these aspects of the Blue Box program are outlined below.

5.1 Promotional and Educational Contingencies

Promotional and educational contingencies are primarily with relation to staff availability and public access. A list of potential contingencies that may arise regarding the promotional and educational aspects of the WRS are listed and discussed in **Table 9**.

Table 9
Promotional and Educational Contingencies

P&E	Description and Solution
Contingencies	
Public Access to Email or Municipal Drop Box	The programs general public feedback system is a crucial part of public communication and involvement in the program. It is anticipated that there may be select members of the community that do not have access to the internet or have the ability to travel to the Municipal office to provide feedback. For these select community members consideration of alternate feedback mechanisms should be undergone. (ie telephone, mail, etc.)
Staff Availability and	The WRS requires educated/trained municipal staff and collection staff to
Program	promote to and educate the general public regarding the Municipalities
Understanding	WRS.
Budget	The public feedback system in order to be effective must include
Requirements	screening and documenting of Blue Box program concerns and questions from the public. Staff expenses may need to be considered pending the level of public feedback.
	Application to the CIF grant for P&E has been sought to cover expenses of an updated P & E program
P & E effectiveness	The effectiveness of the Blue Box program and including P & E is to be evaluated every 5 years as described in Section 6.0 , should certain P & E mechanisms be determined inefficient an evaluation of alternate methods will be required.

5.2 Transfer Station Enhancement Contingencies

Contingencies with respect to implementation and development of transfer station enhancements are associated primarily with cost. As discussed with Municipal Staff the total cost for the proposed development is \$55 000 for upgrades at both the Brudenell and Quadville Transfer Stations. The establishment of upgrades at the Quadeville site would cost approximately \$27 500. An application to the CIF has been made to alleviate these costs.

6.0 MONITORING AND REPORTING

Monitoring and reporting of the WRS must be conducted in order to evaluate the proposed program against baseline capture rate, diversion rate and public participation. The primary goal of the updated WRS is to increase the capture rate through public awareness while maintaining the efficiency of the current program. An evaluation of the effectiveness of the program should be conducted to ensure the program continues to improve. Baseline data utilized for monitoring should be taken from the Municipal Waste Diversion Profile described as part of this report. Monitoring of the proposed program should be conducted every three (3) years to remain in line with a 4% annual increase in capture rate over the next six (6) years. Monitoring is to include an assessment of annual WDO data call reports to ensure the WRS goals are being

reached. Annually a statement regarding the capture rate and annual P and E activities should be completed. Under the circumstances the program is not reaching projected targets, an evaluation of the proposed P&E mechanisms should be undertaken and modified accordingly. In addition to assessment and monitoring of the program continuous methods of program improvement should be considered to attempt greater levels of program effectiveness and efficiency. To ensure continuous improvement of the program, monitoring, assessment and reporting of the program should take into account; capture rate and diversion rate goals, public input and participation, program costs, legislative mechanisms, technological advancements, multi-municipal planning approaches, and provincial legislation.

7.0 CONCLUSION

The Township of Brudenell, Lyndoch and Raglan is located within Renfrew County southeast of Algonquin Park. The Municipality is characterized by a small population (< 5000 full-time residents), 1112 single family homes 306 of which are seasonal with a full-time population of 1481.

The Township of Brudenell, Lyndoch and Raglan is required by Waste Diversion Ontario (WDO) to submit a Waste Recycling Strategy (WRS) to ensure the current Blue Box program is in-line with the Municipality's Integrated Waste Management Strategy along with the Province of Ontario's goal of reaching 60% waste diversion. The above report satisfies the WDO Waste Recycling Strategy requirement.

Through analysis of the Blue Box program, the Township of Brudenell, Lyndoch and Raglan has a comparable capture rate and cost/tonne to other Municipalities in the Rural Depot South Municipal Group. The Municipality should focus on initiatives that increase public awareness and public access to recycling.

The priority initiatives identified through this assessment include:

- o Public Education and Promotion Programs
- o Provision of Free Blue Boxes
- Training of Key Program Staff
- Enhancement of Recycling Depots

The goal of the Municipality is to increase the capture rate by 24% over the next six (6) years carried out by the initiatives identified in this report. The Municipality shall commence with a Promotion and Education (P & E) plan in 2011/2012. If the P and E plan does not suffice in achieving the determined goal additional Initiatives should be considered.

We trust that the contents of this report are satisfactory, please do not hesitate to contact the undersigned should you have any questions.

Yours truly,

Jp2g Consultants Inc.
Engineers • Planners • Project Managers

Patrick Judge, B.A. (Hon) Environmental Technologist Kevin Mooder, MCIP RPP VP Environmental Services

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APPENDIX A PROPOSAL AND WORK PLAN

October 5, 2010

Brudenell Lyndoch & Raglan 42 Burnt Bridge Road Palmer Rapids, ON K0J 2E0 mmantifel.blr@explornet.com

Attention: Ms. Michelle Mantifel

Re: Brudenell Lyndoch & Raglan
Blue Box Recycling Strategy
Jp2g Project No. 2106150A

Dear Michelle:

Further to our letter of August 11, 2010 as requested we provide our proposal fee for professional consulting services for the development of a Waste Recycling Strategy in order to increase municipal waste diversion rates. An Updated Waste Recycling Strategy will satisfy requirements for funding eligibility recently established by Waste Diversion Ontario (WDO). To prepare this proposal we have reviewed the following regulations and documents.

- Ontario Regulation 101/94 as amended (Recycling and Composting of Municipal Waste) established the standards, procedures and requirements for blue box material and leaf and yard waste management systems.
- Other 3R Regulations 102/94, 103/94 and 104/94 (Waste Audits, Waste Reduction Work Plans and Source Separation Programs)
- MOE publication 'Policy Statement on Waste Management Planning: Best Practices for Waste Managers' June 12, 2007
- Guidebook for Creating a Municipal Waste Recycling Strategy, March 2010 (and Accompanying Template)
- 2009 Annual Reports for the Municipal Waste Disposal Sites filed with MOE

Our proposed work plan involves initial consultation with municipal staff, public consultations to obtain input into the Waste Recycling Strategy, and presentation of the final plan to Council. There may be opportunities to reduce the consulting fees pending the availability of municipal staff resources.

Optional consulting activities not directly related to the Blue Box Recycling Plan but could be provided if necessary include:

Scope of Work: BLR Waste Recycling Strategy

Meeting 1

Meeting with municipal staff to:

- Discuss existing and historical recycling efforts
- Discuss current and prospective Waste Diversion Rates
- Discuss applicable Waste Recycling Strategy options

Quantify projected solid waste diversion rates and establish adequate recycling strategies to meet the Municipalities waste diversion goals

Provide projected diversion rates and proposed Waste Recycling Strategies to the Municipality

Prepare Notice to Public providing:

- Reasons for an Updated Waste Diversion Strategy
- Projected Diversion Rates
- Proposed Waste Recycling Strategy

(Public may respond through correspondence or a questionnaire available at Municipal office)

Compile requests and suggestions from the Public, screen requests and include in the draft Waste Recycling Plan

Assess the needs of the community along with the Municipality's Waste Diversion Goals and prepare a draft Waste Recycling Plan in accordance with the listed regulations and documents

Meeting 2

Review draft Waste Recycling Plan with the Municipality

(Allow for public input on the draft Waste Recycling Plan)

Conduct a final assessment of the input provided by the Municipal Staff and Public and prepare final draft plan

Final Meeting

Review updated strategy with the Municipality and prepare final Waste Recycling Strategy Plan

Note: Notices to the public will be sent out using select media by the Municipality. The cost of notification is not provided in the Jp2g budget. Public input shall be sent to the Municipality and forwarded to the Consultant.

Recommended options for Public notification and consultation include:

Public Notification:

- 1. Notices mailed to the Public by the Municipality
- 2. Notice posted on the Municipality Website
- 3. Notice placed in local newspaper
- 4. Notice placed in Municipal Newsletter

Public Input:

- 1. Public respond via correspondence to the Municipality which is then sent to the Consultant
- 2. Public input obtained at an information booth located at the Municipal office through completing a questionnaire and providing opinion on the Waste Recycling Strategy
- 3. Public respond through online blog linked to the Municipal Website
- 4. Public input obtained through a Public Consultation Meeting with Municipal Staff and Consultant. The Public Consultation Meeting (Meeting #2) proposed to be scheduled concurrently with a Council or Committee meeting.

It is our experience that public input is very limited for studies of this nature unless innovative means are implemented by the municipality i.e. recycling contest, T-shirts and hats. These activities may all be eligible for finding and can be discussed further at Meeting #1.

We trust that the above work program and cost estimate summarized in the Scope of Work table are satisfactory. Please do not hesitate to contact the undersigned should you have any questions.

Yours very truly,
Jp2g Consultants Inc.
Engineers • Planners • Project Managers

Patrick Judge, BA Environmental Technologist Kevin Mooder, MCIP, RPP Project Manager

APPENDIX B WRS INITIATIVE ASSESSMENT

			Criteria (Score out of 5)				
	Description of Initiatives/Best Practices	% Waste Diverted	Proven Results	Economically Feasible	Accessible to Public	Ease of implementation	
Promotion	and Outreach						
	Public Education and Promotion Program	4	5	4	5	4	88
	Training of Key Program Staff	2	5	4	5	4	80
Collection							
	Optimization of Collection Operations	4	4	1	5	2	64
	Tipping Fee Increase for Waste Containing Recyclables	5	4	5	3	1	72
	Enhancement of Recycling Depots	5	5	2	4	4	80
	Provision of Free Blue Boxes (P&E)	4	4	3	5	5	84
Transfer a	nd Processing						
	Optimization of Processing Operations		Contr	actor Co	onducts	Processi	ing
Partnersh	ips						
	Multi-Municipal Collection and Processing of Recyclables	4	4	3	4	2	68
	Standardized Service Levels and Collaborative Haulage Contracting	4	3	3	4	2	64
	Intra-Municipal Committee	2	3	5	3	2	60
Additiona	l Research						
	Assess Tools and Methods to Maximize Diversion	4	4	2	2	4	64
Administr	ation						
	Following Generally Accepted Principles for Effective Procurement and Contract Management	3	4	4	-	4	75
	Driority Initiatives - Total Score of 90.						

Notes: Priority Initiatives = Total Score of 80+

Future Initiatives = Total Score 70-79

Description of Initiatives:

Initiative descriptions have been summarized from the CIF Guidebook 2010.

Public Education and Promotion

To be effective, a municipal Blue Box program needs to be supported by a Promotion and Education (P&E) component that is appropriately designed and funded, and incorporates specific audience, defined messages and media, planned frequency of communication, and monitoring of results. A well-designed and implemented P&E program can have effects on virtually all other elements of the Blue Box system, including planning, collection, processing, marketing, and policy development. A P&E program could include; brochures, t-shirts, hats, development of a communications strategy, landfill signage, etc.

Training of Key Program Staff

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. Equally important to training is ensuring these staff provides the public with knowledge obtained to promote recycling.

Economic Incentives- Increase and Amend Tipping Fees

The basic objective of User Pay/Economic Incentives, as relates to recycling programs, is to place a cost on disposing of waste which will cause system users to divert appropriate material to diversion programs. The intended result is a decrease in waste disposed and an increase in recycling volumes.

Enhancement of Recycling Depots

To be effective considerations of safety, accessibility, location and organization all contribute to the overall success of a recycling depot. Currently there is an enhanced collection depot at the Raglan Transfer Station. Consideration has been, and should continue to be given to enhancing collection depots at Brudenell and Quadville sites.

Provision of Free Blue Boxes

Providing free blue boxes helps to ensure that residents have sufficient storage capacity for recyclables. While this is initially done at the roll-out of a blue box program, many municipalities offer free boxes to new residents or residents moving into new homes. Some municipalities also offer one extra free bin for residents each year. However in municipalities offering only basic recycling services, one blue box container may be sufficient.

Multi Municipal Collection and Processing

A widely-recognized principle of business is that significant efficiencies and economies can be obtained from larger scale activities. The same principal applies to recycling programs. Therefore, it is considered a fundamental Best Practice for municipalities to explore a multi-municipal approach to planning recycling activities. Considerable amount of industry research and data analysis indicates nearly all municipalities can benefit from a co-operative approach to planning and/or providing recycling services.

Standardized Service Levels and Collaborative Haulage Contracting

Collaborative haulage contracts for Blue Box materials can take advantage of increased purchasing power through municipal partnerships and ensures that the partner municipalities provide common levels of services to its residents. Standardizing collection programs among municipal partners being diverted from disposal, allows for common education and promotion materials, increase collector efficiencies, and can potentially reduce overall costs.

Inter-municipal Committee

A committee comprised of representatives from local municipalities work towards common regional goals. Committee members can identify opportunities for beneficial collaborations between municipalities and can provide support and feedback on each other's waste diversion programs.

Assess Tools and Methods to Maximize Diversion

Waste recycling programs fail or succeed based on their ability to overcome public barriers to participation. Additional research on the appropriate tools and methods can help how to best maximize opportunities to divert Blue Box materials from the waste stream and reduce waste going to disposal.

Possible topics may include:

The types of waste diversion behaviours currently undertaken in each household;

Perceived barriers to participation in waste diversion programs

Willingness to participate in waste recycling programs;

The tools residents need to increase their participation in recycling programs.

This information can be collected through telephone surveys and focus groups. Methods and tools identified through the survey can be tested for performance using focus groups or through a pilot project.

Follow Generally Accepted Principals for Effective Procurement and Contract Management

A considerable number of municipalities in Ontario, including Brudenell Lyndoch and Raglan, contract out the hauling and processing of recyclables. To ensure that municipalities obtain good value for money, Municipalities should follow generally accepted principals (GAP) for effective procurement and contract management. Key aspects of GAP include planning the procurement well in advance issuing clear RFPs, obtaining competitive bids, and including performance based incentives.

Description of Screening Criteria:

Evaluation Criteria have been provided by the CIF in the *Guidebook for Creating a Municipal Waste Recycling Strategy*. The criteria assist in evaluating which initiatives are best suited for the Municipalities Waste Recycling Strategy. Priority initiatives are those which score highly in the WRS assessment matrix and Future initiatives are those that score reasonably well and should be considered in future evaluations of the Municipalities WRS. The Evaluation Criteria are as follows:

% Waste Diverted – This refers to how much waste an option may potentially help to divert. Some options may divert more than others, while other options may not directly divert waste but instead support other programs or initiatives that do.

Proven Results - Some options are considered tried and true, while others may be newer and less tested.

Reliable Market/End Use – Not included in this assessment as the Municipality does not process their diverted materials.

Economic Feasibility – This refers to whether an option is economically feasible for the municipality considering it. Municipalities will need to weigh the cost of the option against their ability to afford it and the resulting benefit.

Accessible to Public – This considers if the option will be easy or difficult for the public to access or use. This will depend in large part on how the option interfaces with the target audience.

Ease of Implementation – Some options are less costly and easier logistically and politically to implement than others. This criterion considers the level of cost and effort involved in implementing the option.