

Appendix B

Survey of Landfill Operators



Attachment B - Waste Export Alternatives Surveys

St. Marys Future Solid Waste Disposal Needs Environmental Assessment

R.J. Burnside & Associates Limited 292 Speedvale Avenue West Unit 20 Guelph ON N1H 1C4 CANADA

December 2019 300032339.0000



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1.0 Waste Export Alternatives Surveys

Per the Terms of Reference (TOR), some data for evaluation of the export Methods was collected through a survey of municipal and private waste service providers. Private waste service providers were asked a series of questions focussed on their operations, equipment, costs, and contract terms. A separate letter was sent to municipalities that operate landfill sites to determine if they would consider providing disposal capacity to the Town of St. Marys. These surveys, discussed in more detail below, were distributed in March 2015 with responses mostly received during April 2015.

1.1 Municipal Survey

Local (Municipal) Landfills within approximately 100 km of St. Marys are generally operated for the use of the municipality or county in which they are located. The only exception at the time of our surveys that the Study Team was aware is the Green Lane Landfill. The Green Lane Landfill was privately owned until 2007 when it was purchased by the City of Toronto for their waste disposal needs, making it a municipal landfill. A figure showing the location of these landfills is included in Appendix A.

No municipalities (sites) have previously expressed an interest in receiving waste from the Town of St. Marys. However, newspaper reports from early 2015 indicated that at least two municipalities were considering accepting waste from outside their communities as a revenue generating measure. With this in mind, the Town of St. Marys sent a letter asking if the municipality was (or was not) interested, subject to negotiations, in providing disposal capacity.

The survey was sent to 14 municipalities. Ten of these municipalities provided a response, written or by telephone, indicating that they were not interested in accepting St. Marys waste. The mailing list, an example letter/survey and the response summary table is provided as Appendix A.

Despite the apparent lack of interest in accepting the Town's waste, the Study Team decided to proceed with evaluating Local (Municipal) Landfills as a potential export Method.

1.2 Private Waste Service Providers Survey

The private waste service providers (operators) survey was developed and sent to various disposal sites, transfer facility and waste hauling (trucking) companies. This

¹ http://www.lfpress.com/2015/04/16/having-taken-a-big-revenue-hit-when-it-lost-two-majorcustomers-at-its-landfill-the-city-is-courting-new-clients-a-move-that-could-recoup-500000-of-thelost-cash, and http://www.mitchelladvocate.com/2015/03/30/taking-others-garbage-discussed-asrevenue-option-for-west-perth. Both accessed May 4, 2015. Attachment B - Waste Export Alternatives Surveys December 2019

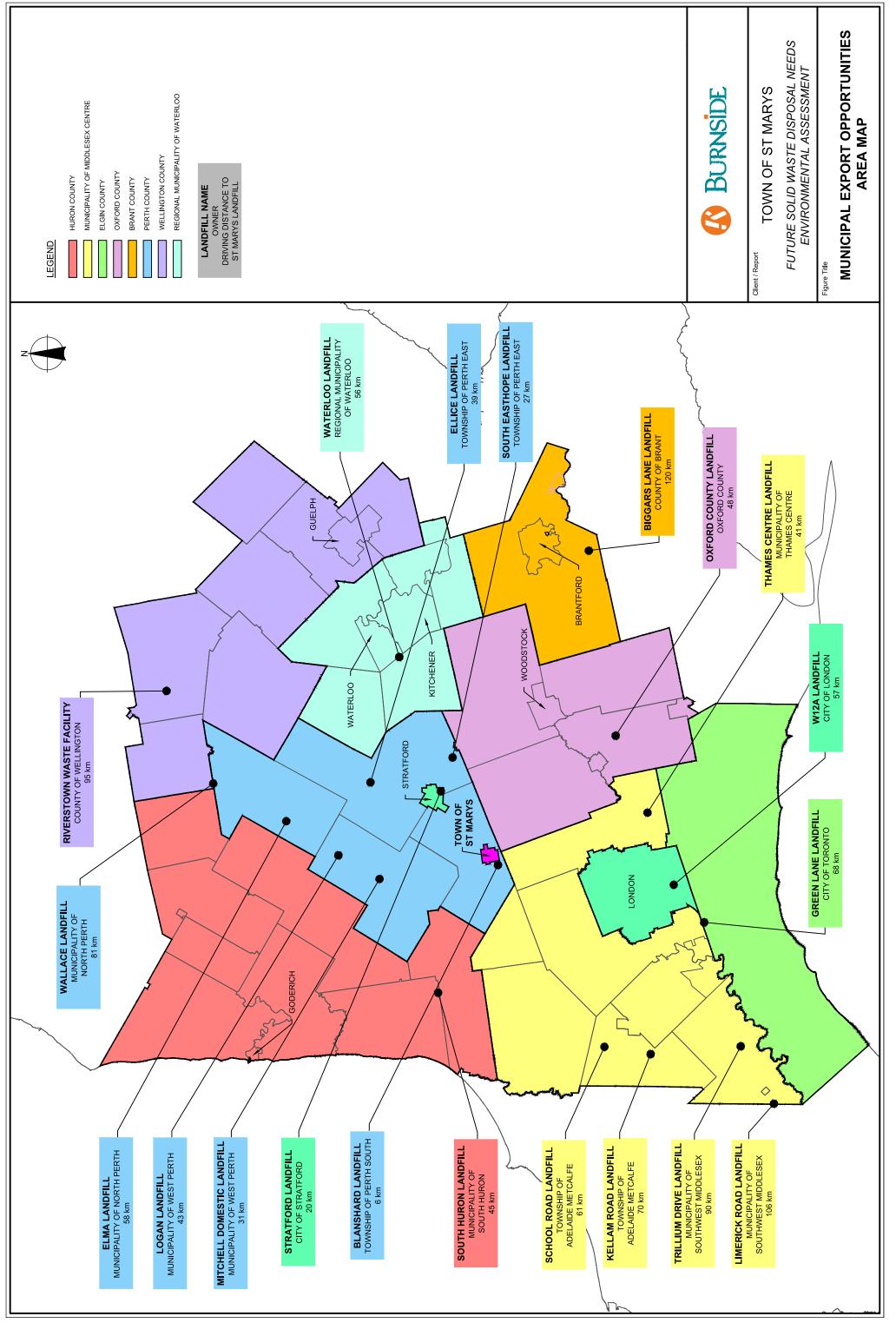
survey was intended to collect realistic, locally focused information on a variety of subjects including typical costs, contract length, site capacities, and haulage information. Burnside had identified a number of haulage firms and transfer station owners as well as disposal sites to assist in the preparation and population of the evaluation matrix. The survey and the list of private operators invited to respond are included in Appendix B.

Information collected by this survey was reviewed by the EA Team. The responses were used in evaluating the various export Methods. Numerical responses relating to costs and fuel economies helped determine overall implementation costs and emissions rates as described below.



Appendix A

Municipal Survey



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March 24, 2015

Manager of Public Works Stratford ON N5A 4S5 City of Stratford Lyndon Kowch 303 King St.

Town of St. Marys Solid Waste Disposal Needs Environmental Assessment Export Alternatives Assessment Subject:

The Town of 3t Marys is undertaking an Environmontal Accessment (EA) for solid waste disposa. The EA Terms of Reference (TOR) has recently been approved by the Minister of Environment and Climate Charge. The TOR's problem statement reads: The Town of St. Manys must identify a solution that addresses the Town's post-diversion municipal solid waste disposal needs over a 40 year planning period in a technically and economically feasible manner while minimizing impacts to the environment

owned by others, including municipalities such as your own. To this end, St Marys would appreciate if you could complete the brief survey form attached to this letter. A written response The TOR requires St. Marys to review the possibility of using approved waste disposal capacity is requested to facilitate our EA documentation.

St. Marys is looking for disposal of this entire waste stream for a 40 year period, though shorter 1,978 tonnes from residents and 5,347 tonnes from incustrial, commercial and institutional periods will be considered. Any disposal arrangement would be subject to further discussion, negotiation, environmental approvals, and so on. With this survey St. Marys is merely boking to 5 sources. It is expected that disposal requirements will grow approximately 1% annually. As background, during 2014 the St. Marys Landfill accepted a total of 7,325 tormes of waste, see if your municipality is interested in such further efforts. It in no way commits you accepting our waste. Should you have any questions please feel free to contact either one of the study team representatives indicated on the form.

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St. Marys Survey of Municipal Disposal Opportunities

St. Marys Environmental Assessment process. Please send the completed survey via mail, fax or email to Eurnside. Should you have any questions while preparing your response, please contact one of the The information collected by this survey will be made available to the public as part of the Town of study team representatives.

1465 Pickering Parkway, Suite 200 Pickering ON L1V 7G7 Email: St.Marys.Waste.EA@ijburnside.com Tel: 289-545-1051 Fax: 905-420-5247 R.J. Bumside & Associates Limited James Hollingsworth

Dave Blake, C.E.T. The Corporation of the Town of St. Marys Email: cblake@town.stmarys.on.ca Tet: 519-284-2340

Vame	Lynd	Lyndon Kowch	14	Name Lyndon Kowch	Å.				, a.	l. H
Title:	Mana	Manager of Public Works	c Works	- ² -		4) <i>1</i>	1	3 ₁	10	stati t
Vame of Municipality:		City of Stratford	ford			ati a		y.	1	
Address 1.	1	303 King St.								
Address 2:	5				i t					
City, Pro	ov. & Po	City, Prov. & Postal Code:	Stratford 0	Stratford ON N5A 4S5	5 ' 35	ha Maria				
phone:		(519) 271-0250, Ext 255	Ext 255		Fax:		(519) 273-2720	-	5	t J
-mail:	Ikowc	lkowch@stratfordcanada.ca	canada.ca			1			1	
Pre ^t erer	L Iche	Preference (check one):	🗆 mail, ,	Dhone,		□ fax,				
Please	compl	lete the fol t to further	lowing stat discussion,	Please complete the following statement (place check marks as appropriate): Subject to further discussion, negotiations, environmental approvals, etcetera, we are	enviror	marks a	is approva	priate): als, etcete	era, w	e are
			interested	2 D	not interested	sted				

in providing solid waste disposal capacity to the Town of St. Marys.

This has been confirmed/decided by:

Municipal Council, Committee of the Whole or similar decision.

Dscussion with the County Warden, Mayor, Reeve or similar. Dscussion with the Chief Administrative Officer, Clerk, or similar.

Other means (please describe)

I am authorized to make these statements on behalf of the municipality.

é

mm / dd / yyyy Date: Signature:

(print name)

A response to Burnside by April 17, 2015 would be appreciated.

Town of St. Marys Solid Waste Disposal Needs Environmental Assessment Export Alternatives Assessment Potential Municipal Hosts - Mail Merge Listing & Response Table

First	Last	Title	Municipality	Addresss1	Address2	City	PCode		Response			
FIISL	Lasi	The	wunicipanty	Addresssi	Addressz	City	PCode	From	Title	Date	Method	Yes/No
Das	Soligo	Operations Superintendant	County of Wellington	74 Woolwich Street		Guelph	N1H 3T9					
Pamela	Antonio	Waste Management Coordinator	Oxford County	384060 Salford Road		Salford	N0J 1W0	Peter M. Crockett, P.Eng.	Chief Administrative Officer	21-Apr-15	Email w/ attachment	No
Deanna	Dakin	Waste Management Coordinator	Regional Municipality of Waterloo	925 Erb Street West		Waterloo	N2J 3Z4					
Don	Giberson	Environmental Services Director	Municipality of South Huron	322 Main Street South	P.O. Box 759	Exeter	N0M 1S6	Don Giberson	Environmental Services Director	13-Apr-15	Email w/ attachment	No
Ken	Bettles	Director of Pulic Works	Township of Perth South	3191 Road 122		St. Pauls	N0K 1V0	Ken Bettles	Director of Pulic Works	8-Apr-15	Email w/ attachment	No
Annette	Synowiec	Manager	City of Toronto	25th FI.E. 100 Queen St.		Toronto	M5H 2N2	Annette Synowiec	Director of Policy, Planning & Support	21-Apr-15	Telephone	No
Mike	Kraemer	Operations Manager	Municipality of West Perth	169 St. David Street,	P.O. Box 609	Mitchell	N0K 1N0					
Lyndon	Cowch	Works	City of Stratford,	82 Erie Street		Stratford	M5A 2M4					
Mark	Hackett	Manager of Environmental Services	Municipality of North Perth	330 Wallace Ave. N		Listowel	N4W 1L3	Patricia Berfelz	Clerk	21-Apr-15	Mail	No
Wes	Kuepfer	Public Works Manager	Township of Perth East	25 Mill St East	P.O Box 455	Milverton	N0K1M0	Theresa Campbell	Municipal Clerk	9-Apr-15	Email & Mail	No
Matthew	D'Hondt	Solid Waste/ Wastewater Operations Manager	County of Brant	26 Park Avenue	P.O. Box 160	Burford	N0E 1A0	Matthew D'Hondt	Solid Waste/ Wastewater Operations Manager	13-Apr-15	Email (attachment) sent to St. Marys	No
Paddy	Thomson	Director of Environmental Services	Municipality of Thames Centre	4305 Hamilton Rd.		Dorchester	NOL 1G3	Jarrod Craven	Director of Environmental Services (Acting)	7-Apr-15	Email w/ attachment	No
Fran	Urbshott	Administrator/Clerk	Township of Adelaide Metcalfe	2340 Egremont Drive	RR #5	Strathroy	N7G 3H6	Fran Urbshott	Administrator/Clerk	21-Apr-15	Email w/ attachment	No
Jaime	Farncisco	Public Works Manager	Municipality of Southwest Middlesex	153 McKellar Street	Box 218	Glencoe	NOL 1M0	Jaime Francisco	Public Works Manager	8-Apr-15	Email w/ attachment	No



Appendix B

Private Waste Service Providers Survey

R.J. Burnside & Associates Limited 1465 Pickering Parkway Suite 200 Pickering ON L1V 7G7 CANADA telephone (905) 420-5777 fax (905) 420-5247 web www.rjburnside.com



March 12, 2015

Via: Mail

«First_Name» «Last_Name» «Title» «Organization» «Address_1» «Address_2» «City» «Province» «PC_»

Re: Future Solid Waste Disposal Needs Environmental Assessment Study Waste Disposal Survey Project No.: 300032339.1000

The Town of St. Marys has identified waste export as a potential solution to meet the Town's future solid waste disposal requirements. R.J. Burnside & Associates Limited, on behalf of the Town, has identified your company as a potential service provider for disposal.

In order to evaluate the suitability of exporting the Town's waste, Burnside is requesting information regarding the services offered by your company. It would be appreciated if you would complete the relevant sections of the attached survey and return it to Burnside. The information will be incorporated into the Environmental Assessment study for evaluation against other alternative methods of solid waste disposal. The study, including information provided by your company, will be made available for public review.

Please complete the attached survey and return it to Burnside by April 3, 2015. Should you have any questions please contact the undersigned at 289.470.1310 or andrew.evans@rjburnside.com.

Yours truly,

R.J. Burnside & Associates Limited

m/m

Andrew Evans EIT, B. Eng biosci AE:cv

Enclosure(s)

Waste Disposal Survey

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James R. Hollingsworth, P.Eng. Technical Manager, Solid Waste

Waste Disposal Survey

The following survey has been designed to collect information regarding the availability of, as well as the environmental and financial implications of the complete scope of private waste disposal options.

This survey has been designed to encompass the complete scope of the activities offered by private waste service providers. In order to assist you, the survey has been broken down into the following sections:

A. Waste Haulage, B. Waste Transfer, C. Landfill disposal and D. Thermal Disposal

Please complete the section(s) appropriate to your firm.

Please send the completed survey via mail, fax or email to:

St. Marys Solid Waste EA Attn: Andrew Evans R.J. Burnside & Associates Limited

1465 Pickering Parkway Suite 200 Pickering ON L1V 7G7 Fax: 905-420-5247 Email: <u>andrew.evans@rjburnside.com</u>

Please note that all information collected is for information purposes only and is not considered to represent a quotation or a guarantee on behalf of the provider. The information collected will be made available to the public as part of the Environmental Assessment process and reporting.

From / Contact for any Related Correspondence: (please indicate corrections or updates)

Title:	«Title	?»				
Organization or Agency:	า	«Organization	»			
Address 1:	-	«Address_1»				
Address 2:	-	«Address_2»				
City, Prov. 8	k Pos	tal Code:	«City» «Province» «Po	C_»		
Phone:	«Ph	one»		Fax:		
Email:	«Em	nail»				

Name: «First_Name» «Last_Name»

Section A – Waste Haulage

- A1. Please provide a typical haulage rate and disposal location? (\$/tonne, assuming 2000 5000 tonnes/year)
- A2. Please provide a brief list of disposal sites you currently haul to:

A3. What is the service area provided by your company? Does it include St. Marys?

- A4. What is your Environmental Compliance Approval (ECA), Certificate of Approval (CofA) or Environmental Activity and Sector Registry (EASR) number?
- A5. Please provide an estimate of your waste haulage fleet average fuel economy (preferably in Litres per Tonne Kilometer or US gallons per Ton Mile).
- A6. Do you offer haulage services to the U.S. (Y / N) If yes which States (circle) New York Michigan Ohio Other _____
- A7. If yes can you provide an approximate frequency of loads rejected at border? How are these handled/avoided?

A8. Frequency of load fires (#/year) _______A9. What is your current fleet size? Trucks: ______ Trailers: ______

A10. What is the typical duration of a contract? ______ years

A11. What is the maximum contract duration you are willing to negotiate? ______ years

A12. How have the tipping fees changed over the past 5 years (list of fees or percentage increases)?

A13. What methods are commonly used to adjust contract rates?

□ CPI □ Fuel price surcharges □ Other: _____

A14. Is there any other information you think should be considered regarding waste haulage?

Section B – Transfer Stations

B1. Is your site licensed/permitted to receive waste from St. Marys, Ontario (ECA Service Area)? (Y/N)

B2.	Do you have capacity to receive 2000-5000 tonnes/year from St. Marys? (Y / N)
B3.	What is your Environmental Compliance Approval (ECA) (or Certificate of Approval (CofA)) number?
B4.	Is waste from your site permitted to be hauled to the U.S.? (Y / N) If yes which States (circle) New York Michigan Ohio Other
B5.	If yes can you provide an approximate frequency of loads rejected at border? How are these handled/avoided?
B6.	Please provide a brief list of disposal sites you currently haul to:
B7.	What is the average throughput of your facility?tonnes/day
	What is the maximum ECA permitted throughput?tonnes/day
B9.	What is the current tipping fee at your facility? (assume 2000-5000 tonnes per year)\$/tonne
B10	. What is the typical duration of a disposal contract? years
B11	. What is the maximum contract duration you are willing to negotiate? years
B12	. How have the tipping fees changed over the past 5 years (list of fees or percentage increases)?
B13	. What methods are commonly used to adjust contract rates? □ CPI □ Fuel price surcharges □ Other:

B15. Is there any other information you think should be considered regarding waste transfer stations or your site specifically?

Section C – Landfill Sites

- C1. Is your site licensed/permitted to receive waste from St. Marys, Ontario (ECA Service Area)? (Y/N)
- C2. What is your Environmental Compliance Approval (ECA) (or Certificate of Approval (CofA)) number?
- C3. Do you have capacity to receive 2000-5000 tonnes/year from St. Marys? (Y / N)
- C4. What is the current gate tipping rate? ______\$/tonne
- C5. What is the estimated remaining capacity/operating life at your site? (in terms of volume and years) ______ m³ _____ years
- C6. Please provide an estimate on the contract price/ discount rates for larger contracts (2000-5000 tonnes per year)? _______\$/tonne

C7. What is the typical duration of a disposal contract? ______ years

- C8. What is the maximum contract duration you are willing to negotiate? ______ years
- C9. How have the tipping rates changed over the past 5 years (list of rates or percentage increases)
- C10. What methods are commonly used to adjust contract rates?

CPI
Fuel price surcharges
Other:

C11. Do you have any LFG collection? If yes please provide the approximate collection efficiency

C12. What kind of LFG system do you use? (i.e., flaring, gen-set, etc.)

C13. How does the site handle leachate?

C14. Are you aware of any significant environmental features, rare species, Aboriginal Treaties, rights or interests or other factors that currently, or may in the future, affect your operations? (Y / N) If yes, please explain _____

C15. Is there any other information you think should be considered regarding landfills or your site?

Section D – Thermal Disposal Sites

- D1. What is your Environmental Compliance Approval (ECA) (or Certificate of Approval (CofA)) number?
- D2. Can your site accept waste from St. Marys, Ontario (ECA Service Area? (Y / N)

D5. What is the average throughput of your facility? ______ tonnes/day

D6. What is the maximum ECA permitted throughput? ______ tonnes/day

D7. Please provide an estimate on the contract price/ discount rates for larger contracts (2000-5000 tonnes per year)?

D8. What is the typical duration of a disposal contract? ______ years

D9. What is the maximum contract duration you are willing to negotiate? ______ years

- D10. How have the tipping rates changed over the past 5 years (list of rates or percentage increases)
- D11. What thermal technology is used at your facility (incineration, gasification, etc.)?
- D12. What is the treatment and disposal process (or site) for bottom ash and fly ash?
- D13. Is energy recovery a part of your system, if so what form(s) are used? (Boiler & steam turbine, gas turbine, piston engines, secondary heat recovery, etc.
- D14. What is the approximate level of efficiency achieved at your facility (explain)?
- D15. Are there picking lines / material recovery equipment operating at your facility? If so please describe their operations.
- D16. Are you aware of any significant environmental features, rare species, Aboriginal Treaties, rights or interests or other factors that currently, or may in the future, affect your operations? (Y / N) If yes, please explain _____
- D17. Is there any other information you think should be considered regarding thermal disposal or your site?

GFL 16 Centennial Road Kitchener ON N2B 3G1

Kevin Still Miller Waste 8050 Woodbine Ave. Markham ON L6G 1B2

Clean Harbors 2258 River Road London ON N5W 6C2

Southwestern Landfill Walker Environmental Group PO Box 100 Thorold ON L2V 3Y8

BFI Canada Inc. Ridge Landfill 20262 Erieau Road Blenheim ON NOP 1A0 Challenger Motor Freight 300 Maple Grove Road Cambridge ON N3E 1B7

Doug Tilford Bluewater Recycling 415 Canada Avenue Huron Park ON NOM 1Y0

Peter Brand TRY Recycling 21463 Clarke Road Arva ON NOM 1C0

ECL Carriers 7236 Colonel Talbot Road London ON N6L 1H8

Waste Management Inc. Twin Creeks Landfill 8039 Zion Line Watford ON NOM 2S0

Emerald Energy from Waste Inc. 7656 Bramalea Road Brampton ON L5S 1C4 Amanda Tucker WasteCo 235 Curtis Drive Guelph ON N1K 1Y3

Progressive Waste Solutions 1209 North Service Road East Oakville ON L6H 1A7

Chris Elliott Green Valley Recycling 1200 Green Valley Road London ON N6N 1E3

Walkers Environmental Group Southwestern Landfill PO Box 100 Thorold ON L2V 38

Republic Services Inc. Carleton Farms Landfill 28800 Clark Road New Boston Michigan 43164

Brooks Road Environmental 160 Brooks Road Cayuga ON NOA 1E0

Survey Responses

Table 1 - Area Waste Hauler Information

First Name	Last Name	Title	Organization	Final Responses
Greg	Hale	Operations Manager	Challenger Motor Freight	Survey completed & emailed to R. J. Burnside & Associates
Amanda	Tucker	General Manager	WasteCo	Contact was made, however, the completed survey has not been provided.
Tony	Lopez	MRC and Centennial Operations Manager	GFL Environmental Inc	Survey completed & emailed to R. J. Burnside & Associates
Francis	Veilleux	President	Bluewater Recycling	No information provided - described as "commercially sensitive" and unavailable for public distribution
			Progressive Waste Solutions	No response to mailed letter or telephone calls regarding the survey
Rick	Vandersluis (Vice President	TRY Recycling	Survey completed & emailed to R. J. Burnside & Associates
Rick	Declercq	President	Green Valley Recycling	Survey completed & emailed to R. J. Burnside & Associates
Chris	Havens	Field Service Coordinator	Clean Harbors	Informed via email that Clean Harbors London is no longer active.
Ray	Fillion	Director, Business Development	ECL Carriers	Survey completed & faxed to R. J. Burnside & Associates

Table 2 - Waste Disposal Site Information

First Name	Last Name	Title	Organization	Final Responses
Shawn	Jordan	Sales Manager	Walker Environmental	Survey completed & emailed to R. J. Burnside
Snawn	Jordan	Sales Manager	Group	& Associates
Luiza	Furtado	Communications Manager	Waste Management Inc., Twin Creeks Landfill	Survey completed & emailed to R. J. Burnside & Associates
Robert	Web	Vice President	Republic Services Inc.,	Survey completed & emailed to R. J. Burnside
Robert	Veb	VICE FIESIGEIIL	Carleton Farms Landill	& Associates
Wes	Belanger	Operations Manager	BFI Canada Inc., Ridge	Survey completed & emailed to R. J. Burnside &
VVE5	Delaliyel	Operations Manager	Landfill	Associates
Joseph	lyng	General Manager	Emerald Energy from	Survey completed & emailed to R. J. Burnside
Joseph	Lyng	General Manager	Waste Inc.	& Associates
Richard	Weldon	General Manager	Brooks Road	Contact was made, however, the completed
Richard	Weldon	General Manager	Environmental	survey has not been provided.

Survey Section A - Waste Haulage

Organization: Question:	Challenger Motor Freight	TRY Recycling	ECL Carriers	Walker Environmental Group	Waste Management of Canada Corporation, Twin Creeks Landfill	Emerald Energy from Waste Inc.
A1. Please provide a typical haulage rate and disposal location? (\$/tonne, assuming 2000 – 5000 tonnes/year)	\$35 - \$42 per metric tonne		\$26/ mt in the Detroit, MI area	\$ 24.50 PMT from St. Marys to WEG Niagra Landfill, assumes 33MT per load	on location and waste type	Disposal at Emerald Energy from Waste in Bramption: \$16.50 per tonne (for haulage)
A2. Please provide a brief list of disposal sites you currently haul to:	Green Lane (St Thomas, ON); Carlton Farms (New Boston, MI); Pinetree (Lenox, MI); Walker Bros (Niagra Falls, ON)			WEG, Niagra Landfill (Ontario) and Covanta WTE (Niagra Falls, N.Y.)	but internalize the majority of our volume in Soutwest Ontario to our Twin Creeks	Niagra Waste Landfill (Niagral Falls ON); York-Durham Energy Center (Oshawa ON); Emerald Energy from Waste (Bramption ON)
A3. What is the service area provided by your company? Does it include St. Marys?	Any and all	Ontario and yes	Yes	Southern Ontario. Yes, it would include St. Marys	The service is all Ontario which includes St. Marys	Yes
A4. What is your Environmental Compliance Approval (ECA), Certificate of Approval (CofA) or Environmental Activity and Sector Registry (EASR) number?	A841577	A040146		A8248	Hauling: A840311	A8597
A5. Please provide an estimate of your waste haulage fleet average fuel economy (preferably in Litres per Tonne Kilometer or US gallons per Ton Mile).	4.5 miles per gallon	Service provided by Republic Waste	4.2/MPG	1.8 kilometres per liter		
A6. Do you offer haulage services to the U.S. (Y / N) If yes which States (circle) New York; Michigan; Ohio; Other	Y: New York, Michigan		Y: All	Y: New York, Ohio, Pennsylvania	Y: Haulage availability in each State	Ν
A7. Please provide an estimate on the contract price/ discount rates for larger contracts (2000-5000 tonnes per year)?	1 load in 100. Loads are redirected to Canadian Landfills		D15. Are there picking lines / material recovery equipment operating at your facility? If so please describe their operations	-	Negligable load rejections. Numerous contingency sites are available in Ontario if loads are rejected. If rejected in Michigan, alternate sites are Petrolia or Twin Creeks Landfill	

Survey Section A - Waste Haulage

Organization:					Waste Management of	
Question:	Challenger Motor Freight	TRY Recycling	ECL Carriers	Walker Environmental Group	Canada Corporation, Twin Creeks Landfill	Emerald Energy from Waste Inc.
A8. Frequency of load fires (#/year)	1 fire in 20 years		D16. Are you aware of any significant environmental features, rare species, Aboriginal Treaties, rights or interests or other factors that currently, or may in the future, affect your operations? (Y / N) If yes, please explain	0	Negligable	None
A9. What is your current fleet size? (Trucks and Trailers)	Trucks: 68; Trailers:90		Trucks: 134; Trailers: 178	Trucks: 17, Trailers: 14, Walking Floors: 11,	In Ontario: Trucks: 10, Trailers: 20	Trucks > 100
A10. What is the typical duration of a contract? (years)	3 - 5 years with extensions		3 - 7	1 - 5	Municipal disposal contracts range from 5 - 25 years	1 - 5
A11. What is the maximum contract duration you are willing to negotiate? (years)	5	10 - 20	10	10	25	10+
A12. How have the tipping fees changed over the past 5 years (list of fees or percentage increases)?	We only do hauling; customer looks after tipping fees		Unaware of this	+/- 5% continual decline with par dollar & cheap fuel, stabilizing now with lower Canadian dollar	typically include CPI or change of law/tax clauses	Fee changes are dependant on customer and materials; some have risen, some have fallen
A13. What methods are commonly used to adjust contract rates? (CPI, Fuel price surcharges, Other)	CPI, Fuel price surcharges	СРІ	CPI, Fuel price surcharges	CPI, Fuel price surcharges	CPI, Fuel price surcharges	CPI, Fuel price surcharges

Survey Section A - Waste Haulage

Organization: Question:	Challenger Motor Freight	TRY Recycling	ECL Carriers	Walker Environmental Group	Waste Management of Canada Corporation, Twin Creeks Landfill	Emerald Energy from Waste Inc.
A14. Is there any other information you think should be considered regarding waste haulage?			trailer payloads	recycling services. This offers an integrated system for waste management and one	small. Therefore, roll-off and curbside collection vehicles	Dumurrage or Wait times may apply if there are delays at either end of the trip in excess of 1 hour. Minimum weight load will apply.
				Service		

Survey Section B - Transfer Stations

Organization:				Waste Management of Canada
Question:	GFL Environmental Inc	TRY Recycling	Green Valley Recycling	Corporation, Twin Creeks Landfill
B1. Is your site licensed/permitted to	v	v	v	v
receive waste from St. Marys, Ontario		1	1	'
(ECA Service Area)? (Y/N)				
B2. Do you have capacity to receive 2000-	v	v	Y	v
	T	1	Ĩ	T
5000 tonnes/year from St. Marys? (Y / N				
B3. What is your Environmental	ECA: # A140219	A040146	6751-6DFQ4A	Nearest to St. Marys is our London,
Compliance Approval (ECA) (or Certificate				Waterloo, Cambridge, Mount Forest
of Approval (CofA)				or Petrolia transfers
number?				
B4. Is waste from your site permitted to	Y. Michigan	Y. Michigan	Y. Michigan	Y. Haulage availability in each state
be hauled to the U.S.? (Y/N) If yes	-			
which States (New York; Michigan; Ohio;				
Other)				
B5. If yes can you provide an approximate	No rejection, provided there is no	None to date	None that we are aware of	Negligable load rejections. Numerous
	hazardous or radioactive materials			contingency sites are availble in
How are these	present			Ontario
handled/avoided?				
B6. Please provide a brief list of disposal	Ridge Landfill,ON: Pinetree Landfill,	Carleton Farms, Republic Waste	W12A Landfill, City of London; Ridge	We haul to hundreds of sites but
sites you currently haul to:	МІ		Landfill, Blenheim; Greenlane	internalize the majority of our waste
			Landfill, Toronto	volume in Southwest Ontario to our
				Twin Creeks Landfill (Lambton,
				Ontario) or Pine Tree Landfill
				(Michigan)
B7. Please provide an estimate on the	290 - 340		D15. Are there picking lines /	Twin Creeks Landfill accepts 3000
contract price/ discount rates for larger			material recovery equipment	
contracts (2000-5000 tonnes per year)?			operating at your facility? If so please	
			describe their operations	
B8. What is the maximum ECA permitted	350		D16. Are you aware of any significant	Twin Creeks Landfill has no daily
throughput? (tonnes/day)			environmental features, rare species,	limit, just 750,000/year limit
			Aboriginal Treaties, rights or interests	
			or other factors that currently, or	
			may in the future, affect your	
			operations? (Y / N)	
			If yes, please explain	

Survey Section B - Transfer Stations

Organization:				Waste Management of Canada
Question:	GFL Environmental Inc	TRY Recycling	Green Valley Recycling	Corporation, Twin Creeks Landfill
B9. What is the current tipping fee at your facility? (assume 2000-5000 tonnes per year) \$/tonne	waste (ICI) \$24.50/ tonne		MSW: \$94/ tonne; Mixed C&D: \$74/ tonne, see website for others	\$70 - \$80 for a transfer station
B10. What is the typical duration of a disposal contract? (years)	Negotiable		We review rates yearly	Municipal disposal contracts range from 5 - 25 years
B11. What is the maximum contract duration you are willing to negotiate? (years)	3 - 5	10 - 20	2	25
B12. How have the tipping fees changed over the past 5 years (list of fees or percentage increases)?	First increase of \$3 in past 5 years I'm aware of due to Landfill increases	Typically CPI increases	Mixed C&D rates increased from \$68 in 2008 to \$74 in 2015	Transfer station increases have been minimal, less than 5% over the last 5 years
B13. What methods are commonly used to adjust contract rates? (CPI, Fuel price surcharges, Other)	CPI, Fuel price surcharges	СРІ	Fuel price surcharges, labour rates, tipping & landfills	CPI, Fuel price surcharges
B14. Are you aware of any significant environmental features, rare species, Aboriginal Treaties, rights or interests or other factors that currently, or may in the future, affect your operations? (Y / N) If yes, please explain		Ν		None known
B15. Is there any other information you think should be considered regarding waste transfer stations or your site specifically?				Consideration for transfer offering recyclable mining and CNG offerings

Survey Section C - Landfill Sites

Organization:	TRY Recycling	Walker Environmental Group	Waste Management of Canada	Republic Services Inc., Carleton
Question:	, ,		Corporation, Twin Creeks Landfill	Farms Landill
C1. Is your site licensed/permitted to receive waste from St. Marys, Ontario		Y	Y	Y
(ECA Service Area)? (Y/N)				
C2. What is your Environmental		0084-78RKAM	Twin Creeks: A032203	
Compliance Approval (ECA) (or Certificate				
of Approval (CofA) number?				
C3. Do you have capacity to receive 2000-	Y	Y	Y	Y
5000 tonnes/year from St. Marys? (Y / N				
C4. What is the current gate tipping rate? (\$/ tonne)	Retail rate is \$124.65/ tonne	Gate rate is \$55 to \$70 but able to provide contract rate of \$45 to \$55/	\$40 - \$50 per MT depending on contract	18 CDN
		tonne		
C5. What is the estimated remaining		14.5 million & 13	20,000,000 & >25	60,000,000 & 75
capacity/ operating life at your site? (in				
terms of volume m ³ and years)				
C6. Please provide an estimate on the	To be negotiated	50	Negligible	Subject to negotiation
contract price/ discount rates for larger				
contracts (2000-5000				
tonnes per year)?				
C7. Please provide an estimate on the		3 - 5	D15. Are there picking lines /	5 - 20
contract price/ discount rates for larger			material recovery equipment	
contracts (2000-5000 tonnes per year)?			operating at your facility? If so please	
C8. What is the maximum contract	10 - 20	10	describe their operations	10
duration you are willing to negotiate?	10 - 20	10	D16. Are you aware of any significant environmental features, rare species,	
duration you are winnig to negotiate?			Aboriginal Treaties, rights or interests	
			or other factors that currently, or	,
			may in the future, affect your	
			operations? (Y / N)	
			If yes, please explain	
C9. How have the tipping rates changed		Same as in A12.	Landfill disposal rates have	Have not increased in 5 years
over the past 5 years (list of rates or			decreased over the last 5 years in	
percentage increases)			order to compete with the Michigan	

Survey Section C - Landfill Sites

Organization: Question:	TRY Recycling	Walker Environmental Group	Waste Management of Canada Corporation, Twin Creeks Landfill	Republic Services Inc., Carleton Farms Landill
C10. What methods are commonly used to adjust contract rates? CPI Fuel price surcharges Other	СРІ	CPI, Fuel price surcharges	CPI, Fuel price surcharges	CPI. US\$ exchange rate subject to negotiation
C11. Do you have any LFG collection? If yes please provide the approximate collection efficiency		Yes, approximately 85%	Full LFG collection including permanent and temporary vertical and horizontal wells. Collection efficiency estimated at 85%	Yes, 14 generators
C12. What kind of LFG system do you use? (i.e., flaring, gen-set, etc.)		 1 megawatt electrical generation; - 4,500 scfm direct use project (send 1 fg to nearby papermill); - 7,500 scfm of flaring capacity 	Current LFG destruction system is flare with LFGTE in planning stage	gen-set
C13. How does the site handle leachate?		Collection system, on-site primary treatment, discharge to sanitary sewer	Leachate collection and bulking with disposal to willing municipal licensed receivers and seasonal disposal to onsite poplar plantation	Leachate is collected ans trucked off site for treatment
C14. Are you aware of any significant environmental features, rare species, Aboriginal Treaties, rights or interests or other factors that currently, or may in the future, affect your operations? (Y / N) If yes, please explain		N	Our Twin Creeks Landfill has a willing host (Township of Warwick), Community Host agreement with Warwick, Impact Benefits Agreement with Walpole First Nation, Impact Benefits agreement with Landfill Neighbours, Property Value Protection, Liaison Comment, etc. Agreements are in place with all stakeholders.	

Survey Section C - Landfill Sites

Organization: Question:	TRY Recycling	Walker Environmental Group	Waste Management of Canada Corporation, Twin Creeks Landfill	Republic Services Inc., Carleton Farms Landill
C15. Is there any other information you think should be considered regarding landfills or your site?		Company is currently undertaking a project to site a new landfill in Beachville, ON. If approved, this site could provide a secure & long term waste disposal option for St. Marys at significantly reduced haulage costs.	Twin Creeks is 301 hectares & 101.8 hectares are licensed for landfilling with over 25 years available capacity, leachate collection system, Best management practices for odour, dust, litter, Energy from waste planning. Landfill has a site specific liner including primary (leachate) and secondary (groundwater) collection systems. Between the two layers is a recompacted clay liner, 0.75m thick. Poplar tree plantations are also used by phytoremediation	continues to receive waste from numerous customers in Ontario

Survey Section D - Thermal Treatment Sites

Organization:		Organization:	
Question:	Emerald Energy from Waste Inc. Question:		Emerald Energy from Waste Inc.
D1. What is your Environmental Compliance Approval (ECA) (or Certificate of Approval (CofA))	CofA 4591-56VSTN	D11. What thermal technology is used at your facility (incineration, gasification, etc.)?	Two stage gasification
D2. Can your site accept waste from St. Marys, Ontario (ECA Service Area? (Y / N)	Y	D12. What is the treatment and disposal process (or site) for bottom ash and fly ash?	Bottom Ash: Quench cooling, gravity draining, magnetic separation (ferrous
D3. Do you have capacity to receive 2000-5000 tonnes/year from St. Marys?(Y/ N)	Y		recovery). Fly Ash: Shipped off site for disposal
D4. What is the current gate fee? \$/tonne	85 to 95	D13. Is energy recovery a part of your system, if	The steam produced is used to generate
D7. What is the average throughput of your facility?	365	so what form(s) are used? (Boiler & steam turbine, gas	electricity and for direct use by local recycled paper mill
D6. What is the maximum ECA permitted throughput?	455	D14. What is the approximate level of efficiency achieved at your facility (explain)?	Difficult to calculate; in addition to our turbine, we have a direct user for our steam
D7. Please provide an estimate on the contract price/ discount rates for larger contracts (2000- 5000 tonnes per year)?	90	D15. Are there picking lines / material recovery equipment operating at your facility? If so please describe their operations	No picking is done at our site
D8. What is the typical duration of a disposal contract? (years)	10 - 20	D16. Are you aware of any significant environmental features, rare species, Aboriginal	Ν
D9. What is the maximum contract duration you are willing to negotiate? (years)	20	Treaties, rights or interests or other factors that currently, or may in the future, affect your operations? (Y / N)	
D10. How have the tipping rates changed over the past 5 years (list of rates or percentage increases)		D17. Is there any other information you think should be considered regarding thermal disposal or your site?	