

Schedule "A"

RFP



REQUEST FOR PROPOSALS

Regina Community Housing (RCH) Services

RFP-1929

Submission Deadline: 1:00 PM, CDT on January 11, 2018

Submission Deadline: 2:00 PM, CDT on February 14, 2018

City of Regina



REQUEST FOR PROPOSALS

Materials Recovery Facility (MRF) Services

RFP #1959

Information Session: 1:30 p.m., CST, on January 11, 2012

Submission Deadline: 2:00 pm, CST, on February 16, 2012

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A. NOTICE

The City of Regina (City) seeks offers in response to this Request for Proposal (RFP) from entities qualified and experienced in constructing and operating a materials recycling facility (MRF) that is capable of handling, receiving, sorting, processing, storing, marketing, selling, and transporting Designated Materials and Contaminants collected from the City's Co-Mingled Recycling Collection Program.

This RFP specifically excludes the service for collection of recyclable material.

The City calls Proponents to introduce dynamic, creative MRF operations that contribute towards the diversion target City Council set of 40% diversion of Designated Materials from the City Landfill by 2015 and 65% diversion by 2020.

The City seeks to engage and to encourage innovation and welcomes multiple proposals from Proponents for the Services required in this RFP.

The City will also issue a Request for Proposals # 1922 for the collection of the Designated Materials in the Co-Mingled Recycling Collection Program (the "Collection RFP"). This RFP and the Collection RFP are independent projects. Proponents may submit Proposals for this RFP and for the Collection RFP, but a Proponent's Proposal for this RFP cannot be conditional or contingent on a Proponent being the successful Proponent for the Collection RFP.

The General Scope of Services and Requirements outlined in Section H of this RFP provides a foundation for the services the City requires in its MRF operation.

This RFP seeks a Proponent who will work collaboratively with the City to improve the efficiency of the City's recycling collection operations, increase the amount of material being diverted from landfills, enhance the overall cost effectiveness of the City's recycling programs, promote the City's environmental goals, and enhance community awareness of recycling.

The City will consider all eligible responsive proposals. The City requests each proposal demonstrate how it shows the best value to the City, achieve the City's existing long-term goals, and exhibits a progressive vision for the City.

B. BACKGROUND

At present, the City's Solid Waste Branch is responsible for providing weekly garbage collection. The City does not have a city-wide recycling program at this time, but on July 1, 2013 the City is implementing a city-wide Co-Mingled Recycling Collection Program for household recyclables.

This RFP addresses the City's need for a MRF service provider who can construct and operate a MRF and, if necessary to the Proponent's Proposal, a temporary Transfer Station that can process and market Designated Materials collected through the Co-Mingled Recycling Collection Program.

It is the City's desire that the MRF's operation commence with the start of the City's Co-Mingled Recycling Collection Program.

1. Demographics

The Co-Mingled Recycling Collection Program will involve approximately 60,000 single family households.

In 2010, there were approximately 60,000 single family households in Regina and based on the projected population growth, single family households would increase to 75,800 by 2030. The City projects that the tonnage of Designated Materials from the Co-Mingled Recycling Collection Program would increase from approximately 15,600 Tonnes in 2013 to 19,700 Tonnes by 2030, assuming no other changes to the City's solid waste programs.

The City makes no representations or warranties as to the tonnage of Collected Materials or to the percentage of Contaminants that may be contained in the Collected Materials.

The City intends to send all of the Collected Material from the Co-Mingled Recycling Collection Program to the MRF.

At present, the City operates collection bins for paper known as the Big Blue Bin Program. A contractor owns these bins and delivers bins to a processor. In 2010, the City's Big Blue Bin Program collected 4,500 Tonnes of Paper that was delivered to a processor. The contents of the Big Blue Bins will be transported to the Designated Facility for as long as the Big Blue Bin Program is operational.

The Saskatchewan Association of Rehabilitation Centres operates a collection service known as SARCAN. The Government of Saskatchewan has issued legislation for the recycling of most ready-to-serve, non-refillable beverage containers. All beverage containers under this legislation are subject to an environmental handling charge and deposit paid at point of purchase. SARCAN holds the exclusive contract with the government to refund the deposit paid on these containers. The deposit is an amount charged per beverage container as an incentive to return the container for recycling at SARCAN. The full deposit amount is refunded when beverage containers are returned at any SARCAN depot. The City estimates that SARCAN collected approximately 5,306

Tonnes of SARCAN Materials in 2010 from Regina. With the SARCAN program in place there is no guarantee as to the quantity of SARCAN Materials that will be part of the Collected Materials. It is not a legal requirement, at this time, that SARCAN Materials be returned to SARCAN. Proponents should investigate the SARCAN program as part of its research into this RFP.

The City does not guarantee that material from any source, other than the Co-Mingled Recycling Collection Program and the Big Blue Bin Program will come to the MRF.

The anticipated rollout of the Co-Mingled Recycling Collection Program will be implemented in two phases as follows:

Phase 1: Recycling Collection for Single Family Households

The first phase for the Co-Mingled Recycling Collection Program will begin in July 2013 and will provide approximately 60,000 single family households in Regina with 360 litre Carts or 90 litre Bags. City residents will be asked to put the Designated Materials in the Carts or Bags. The City's contractor will pick up the Carts and Bags on a bi-weekly schedule. Collection will take place daily throughout Regina five days per week including all holidays. All Collected Materials collected from the Co-Mingled Recycling Collection Program shall be delivered to the MRF.

Phase 2: Recycling for Multi-Residential Dwellings

The second phase of the City's recycling program will involve servicing multi-residential dwellings. This commencement date of this stage has not yet been determined.

Typically, the recovery rate of recyclables from multi-residential households is from 30% to 50% that of recovery from single family households. At this time, the City expects private sector entities will collect the Designated Materials from multi-residential dwellings. The Proponent will need to accommodate the anticipated growth in annual recyclables tonnage from these added customers.

The City cannot guarantee that the materials from multi-residential dwellings will go to the MRF.

2. Waste Composition

Table 1 (attached as Appendix A) presents results of a waste audit conducted in 2008 on samples of single family household waste within the City. This table shows the generation of individual materials within the waste stream. The City proposes that its Co-Mingled Recycling Collection Program will collect the Designated Materials which are highlighted in yellow on Table 1.

In addition, an estimate of Contaminants that would be collected with the Designated Materials is also identified on Table 1.

A full copy of "Solid Waste Audit of Regina Fleet Street Landfill" by Christina Canart, B.A. and Dr. Dena McMartin, Faculty of Engineering, University of Regina, Regina, Saskatchewan, 2009 is attached as Appendix C to this RFP.

The City does not expressly or by implication represent that the composition or quantity of Collected Materials will correspond to the information below. During the term of the Agreement or any extension thereof, the City will not entertain any requests for changes to the Unit Processing Fee due to changes in the proportions of various Designated Materials in the Collected Materials.

3. Projected Recyclables Recovery

Table 2 (attached as Appendix B) shows projected recovery of materials that would be collected from single family households following introduction of the City's proposed Co-Mingled Recycling Collection Program in 2013. The Designated Materials are shaded in yellow.

The City emphasizes that these estimates of Collected Materials are best estimates only based on the general data identified in Table 1, the performance of other representative curb side programs in other jurisdictions and the anticipated response of Regina residents in opting to use the Co-Mingled Recycling Collection Program for their "SARCAN" recyclables (rather than returning these materials to a SARCAN depot to redeem the deposit).

The composition and tonnages shown in Table 2 are estimates only.

While not solicited, the City anticipates that the Collected Material will include Contaminants and some of the hazardous Contaminants may include:

- syringes and sharps;
- batteries;
- compressed gas cylinders;
- computer equipment;
- telecommunication equipment;
- audio equipment ;
- video equipment; and
- other hazardous materials

Reasonable variations in the composition and tonnage of the Collected Materials are to be expected and are to be accommodated by the successful Proponent.

The City does not expressly or by implication represent that the composition or quantity of Collected Materials will correspond to the information in Table 2. During the term of the Agreement or any extension thereof, the City will not entertain any requests for changes to the Unit Processing Fee due to changes in the proportions of various Designated Materials in the Collected Materials.

For this reason, Proposals that exhibit processing flexibility in accommodating changes in either the composition or quantity of Collected Materials received will score higher in the technical evaluations described in the Requirements.

4. Proposed Bylaw Terms

The City is in the process of amending *The Waste Management Bylaw*, No. 9935 to address the Co-Mingled Recycling Collection Program. The amendments will not have the force of law until passed by City Council but at this time the City anticipates that the Bylaw will contain provisions detailing:

- the types of Designated Materials that will be accepted as part of the Co-Mingled Recycling Collection Program;
- obligations on recipients of the Co-Mingled Recycling Collection Program; and
- penalties for failure to comply with the requirements of the Co-Mingled Recycling Collection Program.

5. Regina Weather

Proponents are responsible for researching the weather conditions in Regina.

6. Agreement Term

The City intends to award an Agreement for a term of ten (10) years commencing on July 1, 2013, with an option to extend for two (2) subsequent terms of one (1) year each.

The award of subsequent terms after the initial term is dependent on funding approval each term and is subject to acceptable performance by the Operator and the services covered by the Agreement. The City shall be required to give the Operator notice thereof in writing not less than six (6) months before the date of expiry of the Term or of the renewal Term in the event that the City has exercised its option to renew.

7. RFP and Project Schedule

The RFP and project schedule is outlined in the following table; however, the City reserves the right to alter this schedule at any time according to its needs.

Activity	Milestone Date
Release of RFP	December 16, 2011
Information Session	1:30 pm, C.S.T., on January 11, 2012
Deadline for Submission of Questions	February 3, 2012
Proposal Closing Date	2:00 pm, C.S.T., on February 16, 2012
Interviews (if required)	Week of February 20, 2012
Notice of Award to Preferred Proponent	Week of March 5, 2012
Confirmation of Secured Land	On or before December 1, 2012
MRF or Transfer Station in Operation	On July 1, 2013
Permanent MRF in Operation	On July 1, 2014

C. DEFINITIONS

Capitalized terms used throughout this RFP shall have the following meanings:

1. **Applicable Laws** includes the common law and any and all statutes, by-laws; regulations, permits, approvals, certificates of approval, licenses, judgments, orders, injunctions, authorizations, directives, whether federal, provincial or municipal;
2. **Aseptic Containers** means any multi-layered beverage box container.
3. **Bad Weather** means weather unsuitable for outdoor activities, and or operational duties.
4. **Bags** mean the semi-transparent bags that are provided to certain Designated Residences for the storage of Designated Materials.
5. **Big Blue Bin Vehicles** means the vehicles used to collect the Paper placed in blue, collection bins located throughout the City that are used for the collection of Paper.
6. **Boxboard** means a lightweight paperboard used in making packaging boxes or cartons such as for cereals or shoes.
7. **Business Day** means a day other than a Saturday, Sunday or a Statutory Holiday in the Province of Saskatchewan.
8. **Cart** means the 360 litre cart that is provided to certain Residences for the storage of Designated Materials.
9. **City Landfill** means the landfill site and related waste disposal assets located at West ½ Section 3, Range 19, Township 18, West of 2nd Meridian in the Province of Saskatchewan.
10. **Coloured High Density Polyethylene (CHDPE)** shall mean opaque plastic containers labelled with the #2 code.
11. **Collected Materials** collectively means Designated Materials and Contaminants collected as part of the Co-Mingled Recycling Collection Program and delivered to the MRF for processing.
12. **Collected Material Processed** shall be calculated as the sum of (i) the Tonnes of Marketed Materials shipped to an End Market; (ii) the Tonnes of Residue shipped for disposal, and (iii) the Tonnes of Marketed Materials awaiting delivery to End Markets but which are still at the MRF or a remote material recovery facility.
13. **Collection Vehicles** means all vehicles used by the City or its designate to collect Collected Materials and includes Big Blue Bin Vehicles.

14. **Commencement Date** means the date specified in the Proponent's Proposal for the commencement of the Services, but which date cannot be later than July 1, 2013.
15. **Co-Mingled Recycling Collection Program** means the City program for collection from Designated Residences of Designated Materials for transportation to the Designated Facility.
16. **Consumer Price Index (CPI)** means the Consumer Price Index for All Items – Regina published by Statistics Canada or a comparable successor to such price index should Consumer Price Index for All Items – Regina be discontinued in its present form.
17. **Contaminants** shall mean any materials that are not Designated Materials that are collected as part of the Collected Materials.
18. **Contamination Rate** means the monthly percentage, by weight, of Contaminants in the Collected Material that are delivered to the Designated Facility as part of the Co-Mingled Recycling Collection Program, as calculated in the Monthly Composition Audit.
19. **Control** of a corporation or other entity is held by a person where securities of the corporation or other entity to which are attached more than 50% of the votes that may be cast to elect directors or persons acting in a similar capacity of the corporation or other entity are held, other than by way of security only, by or for the benefit of such Person.
20. **Designated Facility** means the location that has been approved in writing by the City to receive Collected Materials, being either a temporary Transfer Station or the MRF that is located within the City or within 10 kilometres of the City's centre or within the City's boundary, whichever is greater as shown on Appendix D to this RFP. For greater certainty, the Global Transportation Hub is entirely within the City's boundary.
21. **Designated Materials** means Paper, Glass, Tin, UCB, Polycoat Containers, PET Plastic, CHDPE Plastic, NHDPE Plastic, HDPE Plastic, and Aseptic Containers and such other materials that may be designated by the City from time to time..
22. **Designated Residences** means all residences approved by the City to be part of the Co-Mingled Recycling Collection Program from time to time.
23. **End Market** collectively means corporations, organizations or partnerships willing to accept or purchase Marketable Materials and includes brokers. For greater certainty, End Markets include the SARCAN program, but does not include a landfill, transfer station or any disposal facility.
24. **Equipment** means the vehicles and any other equipment and materials used by the Operator in the provision of the Services.
25. **Glass** means glass jars, bottles and containers used as food packaging.

- 26. High Density Polyethylene (HDPE Plastic)** means recyclable plastic, used for items such as milk containers, detergent containers and base cups of plastic soft drink bottles.
- 27. Marketable Materials** means the end products produced by the Operator from processing the Designated Materials at the Operator's MRF or such other material recovery facility as may be required.
- 28. Mixed Paper** means recovered paper that is not sorted into specific categories and includes, but is not limited to, Newsprint, Old Corrugated Containers, Boxboard, and Aseptic Containers.
- 29. Material Recovery Facility (MRF)** is a specialized facility that receives, separates and prepares Collected Materials for marketing to End Markets and includes all contiguous land and structures and improvements on such land used for the storage and processing of Collected Material.
- 30. Natural High Density Polyethylene (NHDPE Plastic)** means translucent plastic containers labelled with the #2 code.
- 31. Net Revenue (Net Loss)** means the total value of the invoices that the Operator has received from End Markets for the sale of the Marketable Material to the End Market less direct transportation costs (if any) incurred by the Operator in transporting the Marketable Materials to the End Markets.
- 32. Newsprint** shall include newspaper and advertising supplements and other paper grades.
- 33. Non-City Material** means material other than the Collected Material that is received and processed at the MRF.
- 34. Old Corrugated Containers** shall mean corrugated containers having liners of either test liner, jute or kraft.
- 35. Operating Year** means each twelve month period immediately following the Commencement Date and each subsequent anniversary of the Commencement Date.
- 36. Operator** means the Proponent that is awarded the Agreement with the City following the evaluation of all Proposals.
- 37. Paper** means paper products such as Boxboard, Mixed Paper, Newsprint, Old Corrugated Containers and Sorted Office Paper.
- 38. Polyethylene Terephthalate (PET Plastic)** means plastic resin used to make packaging, particularly soft drink bottles.

- 39. Polycoat Containers** means any paper-based carton packaging for beverage and food products that are made of bleached paperboard and polyethylene and some varieties that have a micro-thin layer of aluminum foil in the middle.
- 40. Processing Fee** is the fee payable pursuant to Section H, II, 2.
- 41. Proponent** means a legal entity that submits a proposal in response to this RFP.
- 42. Proposal** means the materials a Proponent submits in response to this RFP.
- 43. Recovery Rate** has the meaning set out in Section H, II, 1.
- 44. Recycling Collection Schedule** means Monday through Friday between the hours of 7:30 a.m. and 3:30 p.m. including Statutory Holidays with the exception of Christmas Day. In the event that a regularly scheduled day falls on Christmas Day, the City's collection contractor shall provide the collection services scheduled for Christmas Day on the next following Saturday following Christmas Day.
- 45. Required Recovery Rate** means a Recovery Rate of ninety (90%) percent or greater.
- 46. Requirements** mean the requirements specified herein.
- 47. Residue** means the Contaminants and the Designated Materials not captured during the MRF processing operations.
- 48. SARCAN Materials** mean Used Beverage Containers, PET Plastic, HDPE Plastic, beer bottles, Tin, mixed plastic, Polycoat Containers, used paint, and used electronics.
- 49. Services** collectively means all labour, materials, services, transportation, supplies, tools, equipment, apparatus and incidentals required to:
- transport Collected Materials from a temporary Transfer Station to a material recovery facility if the Operator's MRF is not yet in operation;
 - process the Collected Materials into Marketable Materials, including but is not limited to, receiving, inspecting, sorting, baling, storing, weighing, loading, marketing and transporting;
 - marketing Marketable Materials to End Markets;
 - Revenue Sharing; and
 - disposing of the Residue.
- For greater certainty, Services include all of these services even where such services are performed by a MRF that is not owned by the Operator.
- 50. Sorted Office Paper** means high grade paper from offices such as computer paper, sorted white ledger, copier paper and office stationary.

- 51. Statutory Holiday** means any of the following days which, from time to time may be added or removed by legislation:
- New Year's Day
 - Family Day
 - Good Friday
 - Easter Monday
 - Victoria Day
 - Canada Day
 - Saskatchewan Civic Holiday
 - Labour Day
 - Thanksgiving Day
 - Christmas Day
 - Boxing Day
- 52. Tin** means tin-coated steel containers, such as cans for food packaging. This includes food cans, Used Beverage Containers, aerosol cans and metal lids from bottles and jars.
- 53. Tipping Area** means the space located within the Transfer Station or MRF where the Collection Vehicles tip and unload the Collected Materials.
- 54. Tonne** means metric ton equal to 2205 lbs.
- 55. Transfer Station** means a place where Collected Materials are transferred from smaller Collection Vehicles into larger transport vehicles for movement to a MRF.
- 56. Used Beverage Containers (UBC)** means beverage, food and non-food cans made of aluminum material.
- 57. Unit Processing Fee** means unit charge specified in Schedule K which is attached hereto and forms part of this Agreement.

D. INSTRUCTIONS TO PROPONENTS

1. Submission of Proposals

Proponents should submit their proposals as follows:

- one (1) original signed copy in paper form;
- eight (8) hard copies in paper form which should also include any photographs of a temporary Transfer Station if such a Transfer Station is part of the Proponent's Proposal;
- one (1) version of the Proposal on compact disc in a PDF format; and
- one (1) DVD containing a video of a representative MRF in North America that the Proponent currently operates.

A Proponent may withdraw its proposal only if a written request for withdrawal has been received by the City's Purchasing Branch, before the closing time on the due date for the proposal to which it applies. Proposals confirmed as withdrawn shall be returned unopened to the Proponent. The withdrawal of a Proposal does not disqualify a Proponent from submitting another proposal prior to closing time.

No change(s) to Proposal submissions will be considered unless received in writing by the City's Purchasing Branch, before the proposal closing time and date. Changes by facsimile will be accepted if received prior to the stipulated proposal closing time. The City will not be responsible for failure to receive facsimile changes. The Proponent is responsible for ensuring facsimile changes are received prior to the stipulated proposal closing time.

The original copy of the proposal will be deemed to be the official proposal response.

Proposals will be received no later than 2:00 p.m. Central Standard Time, February 16, 2012 and shall be delivered to:

City of Regina Purchasing Branch
City Hall, 5th Floor
2476 Victoria Avenue
P.O. Box 1790
Regina, SK S4P 3C8

Original Proposals must be provided. Facsimiles or emails will not be accepted.

Proposals received after the above closing time and date will not be considered. Proposals will be publicly opened at a public opening and only the names of the responding proponents are read.

2. Information Session

There will be an information session regarding this RFP on January 11, 2012 at 1:30 p.m., Central Standard Time for any interested Proponents to attend. The session will take place in the City Hall, Main Level, Darlene Hincks Committee Room, 2476 Victoria Avenue, Regina, Saskatchewan.

The purpose of the information session will be to provide Proponents with a clear understanding of the City's requirements and respond to questions.

3. Informal or Unbalanced Proposals

Proposals which are incomplete, illegible or obscure in any way or that contain un-called for irregularities of any kind may be deemed informal or non-compliant and may be rejected.

Proposals that contain prices which appear to be as unbalanced as likely to affect adversely the interests of the City may be rejected.

Whenever the amount proposed for an item in a proposal does not agree with the extension of the estimated quantity and the proposed unit Price, the unit Price shall govern and the extended amount proposed for that item shall be corrected accordingly.

4. Omissions and Discrepancies

Proponents are required to notify the person listed in Inquiries, immediately in writing, either via fax or by e-mail of any discrepancies or omissions found in the RFP documentation or if the Proponent is in doubt as to the meaning of any provision of the RFP documentation.

The City will issue a formal written RFP addendum to correct any discrepancy or omission or to clarify the interpretation of any provision. An Addendum will be issued up to five (5) Business Days before the closing date, and will be sent to all registered Proponents by fax and/or by e-mail.

Any corrections or clarifications provided by the City will be deemed official only when issued to all registered Proponents in such a formal written addendum. The Proponent must acknowledge receipt of every Addendum in its proposal.

No verbal interpretations shall be made to a Proponent as to the meaning of any of the RFP documents. Every request for an interpretation shall be made in writing and all Proponents will receive written clarification.

5. Incurred Costs

The City will not be liable in any way for any costs incurred by Proponents in replying to this RFP.

6. Reservations

The City reserves the right to:

- Reject any or all proposals received in response to this RFP;
- Seek clarification from Proponents who respond to this RFP;
- Verify the validity of the information supplied in any Proposal;
- Waive or modify procedural and administrative irregularities due to honest or unintentional mistakes as identified in Proposals received, after discussion with the proponent;
- Negotiate with the Proponent(s) responding to this RFP, consistent with the objectives stated;
- Cancel this RFP at any time for any or no reason. If cancelled, the City is not responsible for any costs incurred by the proponent(s); and
- Accept the Proposal that appears to be in the best interest of the City.

7. Inquiries

All requests for information regarding this RFP should be addressed in writing and received by February 3, 2012 to the attention of:

Flora Melnechenko, Purchasing Agent II
City of Regina, Purchasing Branch
Fax: 306-352-1581
Email: purchasingbranch@regina.ca

No other City representative, agent, employee or elected official is authorized to speak on behalf of the City with respect to this RFP.

Any attempt by a Proponent to contact any City representative, agent, employee or elected official with respect to this RFP may result in the City rejecting the Proponent's proposal.

The decision making authority for this RFP rests with the City.

8. Subcontracting

It is anticipated that some companies may not be able to fully address the full requirements on their own. Such companies are encouraged to combine their resources with those of other companies. In such cases, it is mandatory that the RFP be submitted in the name of one of the Proponents who will act as the prime Proponent.

9. Collusion

Proposals shall be made without any connection, comparison of figures, or arrangements with or knowledge of any other person or persons making a proposal for the same Services and shall be in all respects fair and without collusion or fraud.

10. Proposal Acceptance Period

By submitting a proposal, each Proponent agrees that their proposal may be subject to acceptance by the City any time prior to one hundred and twenty (120) days after due date for submitting proposals.

11. Confidentiality

The City anticipates the Proponents may wish to treat certain elements of their submissions as confidential or proprietary. Proponents are advised, however, that freedom of information requirements in force in the Province of Saskatchewan may afford rights of production or inspection at the application of third parties. Further the Agreement entered into by the successful Proponent will by law be available for inspection by members of the public.

Proponent's proposal will be kept confidential during the evaluation phase but may be openly discussed at City Council should staff recommend the Proponent's submission.

12. News Release

Proponents must not make public announcements or news releases regarding this RFP or any subsequent award of Agreement without the prior written approval of the City.

13. Permits and Licenses

The Operator shall obtain and pay for all necessary permits and licenses required for the performance of the Services. The Operator will be required to comply with all Applicable Laws in performing the Services.

14. Additional Terms and Conditions

Any terms and conditions proposed by the Proponent inconsistent with or in addition to the mandatory Agreement Terms and Conditions highlighted in the draft agreement appended to this RFP as Appendix I shall be void and have no effect.

E. MANDATORY TERMS AND CONDITIONS

1. The successful Proponent shall enter into a formal, written Agreement with the City in substantially the same form and same term and conditions as the form of Agreement attached as Appendix I to this RFP which will incorporate the salient descriptions from the Proponent's Proposal that identify how the Operator will provide the Services in accordance with the terms of this RFP.
2. The Agreement shall include the mandatory terms and conditions which are highlighted in yellow in the form of Agreement attached as Appendix I to this RFP. The Proponent, in its Proposal must unconditionally acknowledge that these mandatory terms and conditions are completely acceptable to the Proponent without any further discussion or negotiation.
3. The unhighlighted terms and conditions in the form of Agreement attached as Appendix I to this RFP may be modified following award of the Agreement to the successful Proponent. Any modifications to the unhighlighted terms and conditions will be at the City's sole discretion and any proposed changes from the successful Proponent may or may not be accepted.

F. EVALUATION

The City will evaluate proposals and will select the Proposal that best meets the interests of the City. The City shall be the sole judge of its own best interests, the proposals, and the resulting Agreement. The City's decisions will be final.

The Technical Proposal and Cost of Services Proposals must be submitted in separate, sealed, clearly labelled packages prior to the closing time for submissions. The Technical Proposals will be opened and evaluated, while the Cost of Services Proposals will be held unopened until the completion of the evaluations for the Technical Proposals.

A five-step process will be used to evaluate the submissions received. An Evaluation Committee, made up of assigned representatives, will assess the Proposals on the basis of information provided by the Proponent at the time of the RFP submission and shall take into account subsequent interviews with the Proponent as may be required.

The five steps to the process are as follows:

- Step 1: opening of the Technical Proposals and the screening of the Technical Proposals based on the specified minimum requirements;
- Step 2: conducting a detailed evaluation of the remaining Technical Proposals and the selection of the Proposals that merit further consideration based on the specified criteria and interviews, as may be required;
- Step 3: opening of the Cost of Services Proposals;
- Step 4: finalizing the Proposal ranking; and
- Step 5: awarding the Agreement to the highest ranking Proponent.

STEP 1: Screening of Proposals

The purpose of this step is to screen out Proposals that do not meet the following minimum requirements:

The Proposal Submission Form (Appendix F), properly completed and signed;
The Cost of Services Submission Form (Appendix K) in a separate sealed envelope.

If any of the minimum requirements are not included the Proposal may be considered invalid or non-compliant and may be rejected accordingly.

STEP 2: Evaluation of Technical Proposals

The information requested in this RFP and submitted by Proponents will be used in the evaluation of the Proposals. Any Proponent taking exception to any of the City's response requirements and/or Agreement Terms and Conditions, will be evaluated accordingly.

Proposals will first be evaluated on technical merit without reference to cost. The Technical Proposal will be scored out of 75. Only those Technical Proposals which receive a minimum of 55 marks out of 75 based on technical merit will have their Cost of Services envelopes

opened. Proponents who do not obtain at least 55 marks out of 75 on the evaluation of its Technical Proposal will not have its Cost of Services Proposals opened.

Step 2 may include interviews and/or the request for supplemental information from selected Proponents to obtain comparable information required for decision-making. The City reserves the right to incorporate confidential discussions, interviews, presentations and other inquiries with Proponents or third parties for clarification of Proposal submissions into the City's evaluation of the Proposal.

The City reserves the right to attend a MRF operated by a Proponent during the evaluation process.

Proposals will be evaluated on the following with a possible score of 100 points.

Criteria	Weighting
Completed and signed Proposal Submission Form	Pass or Fail
(A) Technical Feasibility and Reliability	30 %
a) Overall Soundness of Facility Design (Design & Operations Plan, Drawings)	
b) Proven Reliability of Equipment and Processing System	
c) Ability of Proponent to produce quality materials	
d) Ability of Facility and Process to Respond to Quantity & Composition Fluctuations and Contingency Capabilities	
e) Features Relating to Workplace Safety, Worker Protection and Ergonomics	
f) Ability to Handle Additional Designated Materials	
(B) MRF Location, Transfer Station Location, Innovation and Economic Benefit to the City	6%
a) Location	
b) Innovation of Design	
c) Economic Benefit to the City	
d) Timing for Construction	
(C) Management Plan and Capabilities	31 %
a) Staff Experience	
b) Project Management Techniques	
c) Demonstrated Capability to Perform Services Required	
d) Safety Policies	
e) Employee Training Program	
(D) Social and Environmental Considerations	8 %
a) Social Responsibility	
b) Environment	
c) Innovative and/or Value Added	
Total Technical	75%
(E) Cost	25 %
Total Score	100 %

At the completion of Step 2, the Proposals undergoing further consideration will form the short list and proceed to Step 3.

STEP 3: Opening and Evaluation of Cost of Services Proposal

At this stage of the evaluation process, the Cost of Services envelopes will be opened for those Proposals which achieved or exceeded 55 points out of 75 points for the Technical Proposal.

The prices quoted by the Proponent in the Cost of Services Proposal provided in Appendix K, are used to calculate the annual cost for the Proposal. The total cost calculated for each Proposal will be compared to the lowest annual cost of all Proposals evaluated in Step 3 to calculate a price score for the Proposals using the following formula:

$$\text{Price Score} = \frac{\text{Lowest Total Annual Cost}}{\text{Proponent's Total Annual Cost}} \times 25 \text{ points}$$

The Total Score will then be the sum of the Technical Score plus the Price Score. The Proponent with the highest Total Score represents the best overall value Proposal to the City and accordingly will be selected as the preferred Proponent.

Proposal evaluation results are the property of the City. The City does not intend to disclose the evaluation results, either before, during, or after the RFP process.

By responding to this RFP, Proponents agree to accept the recommendations of the Evaluation Committee as final and binding.

G. CONTENTS OF PROPOSAL

The Proposal itself should be organized in the following format and informational sequence:

Envelope 1 – Technical Proposal

- Cover Letter;
- Corporate and Financial Capability;
- Experience and Qualifications;
- Response to Scope of Services and Requirements;
- Submission Form (Appendix F).

Envelope 2 – Cost of Services Proposal

- Cost of Services Submission Form (Appendix K) in a separate sealed envelope.

The information provided will be used in the evaluation of the Proposals. Proponents whose Proposals meet all of the requirements of this RFP will score higher than those Proposals who do not meet all of the requirements of this RFP.

I. Envelope 1 – Technical Proposal

1. Cover Letter

Provide a covering letter briefly introducing the Proponent and stating the Proponent's understanding of the service required and the requirement(s) that the Proponent is responding to. The letter should include the names of the persons who are authorized to make representation for the Proponent, their titles, addresses and telephone numbers. The letter should also state the location of the office of the Proponent. The letter should be dated and signed by an official authorized to make commitments and provide any clarifications with respect to the Proposal on behalf of the Proponent.

2. Corporate and Financial Capability

2.1 Corporate Structure

In its Proposal, Proponents shall include:

- a list of any parent corporations; and
- a list of any subsidiary corporations

The Proponent should provide separate organizational charts for each project phase. The organizational charts should, identify by name, the individuals who will fill the key positions. If the Proponent has not identified a specific individual to fill a specific position, they should identify the position by 'title' only. Resumes for personnel filling key positions should be included in an appendix to the Proposal.

Six months prior to the Commencement Date the Operator shall provide the City with a Saskatchewan Registry Corporate Profile Report showing that the Operator is licensed to do business in the Province of Saskatchewan.

2.2 Financial Capability

The City considers proof of financial solvency and bondability as essential attributes in the selection process. Therefore, the following financial information shall be supplied as part of the Proponent's Proposal:

- name, address, telephone number, and contact person of bonding agencies providing bonding or surety on past or existing jobs;
- ratings on any outstanding corporate bonds;
- its most recent audited or appropriately certified financial statements for the past three (3) years to facilitate the City's evaluation of the Proponent's Proposal with respect to financial condition, strength and resources;
- name, address, telephone number and contact person for the Proponent's corporate bank;

If the Proponent is a new company within the last year, the requirement for financial statements for the previous three years may be met by providing the most recent annual financial statements for its predecessor or parent company, with the understanding that further information may be requested in order to fully evaluate the financial capability and resources of the Proponent.

All financial statements submitted must be audited or contain a Review Engagement Report prepared by an accredited accountant.

3. Experience and Qualifications

3.1 History and Past Experience

The Proponents Proposal should identify and provide a brief history of all firms and companies associated in any way with the Proponent who will be involved in undertaking the Proponent's Proposal.

The Proponent's Proposal should identify the information regarding the types of Material Recovery Facilities and Transfer Stations services it has offered to other clients in North America and provide the names of representative selection of its clients. Proponents should only describe relevant corporate experience and individual experience for personnel who will be actively engaged in the project and include *curriculum vitas* of key personnel responsible for the Proponent's MRF or temporary Transfer Station or both as may be applicable for implementation and operation, marketing of Marketable Materials and disposing of Residue.

Proponents should provide or list relevant experience with respect to the development, construction and operation of other commercial and public

recyclable MRF projects, clearly detailing the experience of the Proponent in implementing, and constructing and operating comparative MRFs in North

America. No more than three examples should be provided. The description of relevant experience should include detail regarding:

- past and current experience with Material Recovery Facility operations;
- past and current experience with Transfer Station operations;
- the value and size of past and current contracts; and
- duration, location and processing methods (e.g., number of streams) utilized for past and current Material Recovery Facility operations and transfer station operations.

The Proponent's Proposal should provide the City with a list of at least two names, addresses, and telephone numbers of public entities in North America that can provide references documenting the Proponent's history of meeting performance and financial obligations for the recovery and sale of single stream recyclable materials.

The City may contact any or all of the contacts provided by the Proponent or other representatives from past clients of the Proponent. Proponents should provide contact persons and contact details for two or more past clients.

In addition, the City may, in its sole discretion, contact other customers or users of the Proponent's services, including such customers or users who are not listed as contact persons.

The Proponent will be required to disclose any company, partner, holding company or subsidiary to be involved in the provision of the Services, or any corporate officer, that has been involved within the past five years in litigation or arbitration arising out of performance of a municipal waste management contract, arising out of performance of a processing or marketing contract, arising or connected with violation of provincial or federal anti-trust laws, arising from or connected with allegations of corrupt practices or arising from operating permits and other operating requirements, including local, provincial and federal rules or regulations. In the case of national companies with multiple affiliated regional companies, the above disclosure should not be limited only to Regina, Saskatchewan or Canada. In the event that disclosure is limited by court authorized non-disclosure provisions, then general circumstances shall be described and disclosure requirements stated.

3.2 Sub-Contractors

The Proponent's Proposal should include a list of all of the Proponent's sub-contractors known at this stage and their sub-contractor's proposed role. The Proponent should identify the sub-contractor's placement in the primary management structure, how the Proponent will supervise the sub-contractors, and provide internal management descriptions for each sub-contractor.

The Proponent's Proposal should provide details on the independent auditor that the Proponent plans to use for the Independent Audits which are detailed in Appendix E. Details about the independent auditor should include:

- name and address of proposed independent auditor;
- description of the proposed independent auditor's experience auditing recyclable material collected as part of a city-wide collection program;
- working history between the proposed independent auditor and the Proponent; and
- proposed auditor's experience and ability to provide value added advice to the City on how to reduce the level of Contaminants within the Collected Materials.

4. Response to Scope of Services and Requirements

The Proponent's Proposals should include sufficient detail to address all City requirements as listed under the Scope of Services and Requirements Section of the RFP. The Proponent's Proposal should provide an overview of its understanding of the requirements for the Services required by this RFP and an outline of its technical plans to fulfill these requirements.

The Proponent's Proposal should identify:

- the total throughput capacity of the Proponent's MRF expressed in Tonnes/operating hour;
- Collected Material tonnage;
- tonnage capacity for incoming Tipping Area storage;
- tonnage for Collected Material storage;
- tonnage for Marketable Material storage;
- tonnage for Residue storage; and
- proposed operating schedule for the first year of operation (hours and shift/day, days/week, etc.).

4.1 Project Management Plan

The Proponent's Proposal should provide a project management plan, which should include a general explanation, detailed information and organizational charts illustrating who with the Proponent will be responsible for:

- design, construction, installation, commissioning, and operating of the MRF, the temporary Transfer Station or both as may be applicable;
- marketing of Marketable Materials; and
- disposal of the Residue.

The project management plan should clearly show the lines of authority and responsibility should be clearly indicated. The Proponent's Proposal should provide a general explanation and chart which specifies project team leadership and reporting responsibilities, and team interface with City project management and team personnel.

4.2 Operational Plan

The Proponent's Proposal should provide details of its proposed operational plan including, but not limited to, the following information:

- proposed site location of the MRF or temporary Transfer Station or both as may be applicable (include both the legal and civic address or addresses of such Designated Facilities;
- describe what steps the Proponent has taken to secure such locations;
- describe the proposed site(s) accessibility to highways and railways;
- diagram of the proposed site for the MRF or temporary Transfer Station or both if applicable that shows the location of buildings, roads, directional flow of traffic, scales, queuing provisions, etc.;
- plans and elevation drawings of the processing system that may be necessary to describe the system;
- building plan for the MRF or temporary Transfer Station or both if applicable, including a general interior floor plan of the entire building identifying entrance and exist truck Collection Vehicle doors, designated Tipping Area(s), area for auditing Collected Materials, Collected Material storage areas, Marketable Material storage areas, Residue storage areas, processing areas, loading docks, office space, City's office space and administration areas;
- long term storage areas for Collected Material, Marketable Material and Residue; and
- any other areas that the Proponent intends to have as part of the MRF and temporary Transfer Station, if applicable.

As part of the Proponent's operational plan it should include a detailed description of the Proponent's processing technology. The Proponent should provide a list of the major equipment to be used to separate the incoming Collected Materials, the manufacturer of major pieces of equipment (examples: Eddy current aluminum separator, optical scanners, multiple separation screens, balers, etc.).

The Proponent's operational plan should include a step by step description of the proposed processing operation at the MRF beginning with Collection Vehicles arriving at the Designated Facility until the Marketable Materials and Residue leave the Designated Facility. This process description should include:

- weighing incoming loads of Collected Materials;
- weighing outgoing loads of Marketable Materials;
- weighing outgoing loads of Residue;
- sorting Collected Materials;
- processing Designated Materials into Marketable Materials;
- dealing with a variety of Contaminants;
- dealing with hazardous Contaminants;
- dealing with Residue; and
- a flow chart showing the flow of Collected Material through the MRF processes.

As part of the operational plan the Proponent should provide details of the unloading site, including:

- interior height of the MRF or temporary Transfer Station or both as may be applicable;
- ingress pathways in the MRF and Transfer Station, if applicable and around the proposed site;
- egress pathways in the MRF and Transfer Station, if applicable and around the proposed site;
- identification of delivery Collection Vehicle access points; and
- Collected Material tonnage capacity for incoming Tipping Area storage.

Communication between the Operator and the City's collector for the Co-Mingled Recycling Collection program will be essential to the successful operation of the Designated Facility and the Co-Mingled Recycling Collection Program. The Proponent's Proposal should detail how the Operator will communicate with the Co-Mingled Recycling Collection Program collector.

As part of the operational plan the Proponent should provide a proposed design and construction timetable, including timelines showing all approvals required from other entities involved in the Services. The Proponent's Proposal should include such time-related displays, graphs, and charts as necessary to show tasks, sub-tasks, milestones, and decision points related to the scope of Service and the Proponent's plans for accomplishing the required Services.

Property and structure of any Designated Facility must meet or exceed site development standards of the municipality in which the Designated Facility(ies) will be located. Depending on the Proponent's proposed site for the Designated Facility(ies) site development standards may change. The Proponent should contact the appropriate municipality to obtain the site development standards for the Proponent's proposed location.

The Proponent's Proposal should demonstrate its knowledge of existing and proposed local, provincial, and federal environmental regulations and how it would comply with and implement potential changes to these regulations during the design, construction, and operation of a MRF during the term of the Agreement with the City.

4.3 Audit Plan

The Proponent's Proposal should detail how the Proponent will facilitate monthly audits of the Collected Materials so that the audit report will demonstrate the Operator's Recovery Rate, composition of the Collected Materials and the density of the Collected Materials. The composition audit must be conducted in accordance with the Monthly Composition Audit Protocol attached as Appendix E to this RFP. The Proponent's Proposal should also provide details on how it will at the Proponent's expense arrange for an independent third party to conduct

monthly composition audits for the first two years of the term of the agreement with the City.

4.4 Performance Plan

Receiving, sorting and processing the City's Collected Materials shall be the first priority for the MRF or temporary Transfer Station, as may be applicable in the Proponent's Proposal.

The Proponent's Proposal should identify other current or proposed users of the MRF and temporary Transfer Station as may be applicable. The Proposal should identify the mechanisms or methods the Proponent will use to ensure that the City's Collection Vehicles are not waiting more than 15 minutes to tip their loads at the MRF or temporary Transfer Station.

The Proponent's Proposal should discuss how the City's Designated Materials will be processed to meet the requirements of this RFP. In particular, Proponents should identify quality assurance/quality control program that demonstrates:

- the Proponent's plan to ensure that the Designated Materials are effectively and efficiently recovered from the Collected Material; and
- how the Proponent plans to achieve the Required Recovery Rate.

In its Proposal, the Proponent must be able to guarantee that its proposed provision of the Services will meet the Required Recovery Rate.

4.5 Marketing Plan

The Proponent's Proposal should provide its marketing plan for each of the various components of Designated Materials that are processed at the MRF into Marketable Materials.

The Proponent's marketing plan should include, but is not limited to:

- background, experience, knowledge, skills, ability and resources related to the marketing of materials the same as or similar to Designated Materials;
- a list of anticipated products to be produced in the MRF;
- current markets and prices for the various Marketable Materials;
- the Proponent's proposed End Markets for each Marketable Material,
- the location of those proposed End Markets;
- the Proponent's experience as an End Market, if any;
- how the Proponent has or will enter into sales arrangements with appropriate End Markets;
- how the Proponent will achieve the highest quality Marketable Material while balancing quality with optimizing revenue from the sale of the Marketable Materials;
- a description of how the Proponents will:
 - arrange all inventory controls for the Marketable Material,
 - transport the Marketable Material to the End Market,
 - track all Marketable Material sent to End Markets, and

- collect, in a timely manner, all revenue for the Marketable Material from End Markets;
- any unique challenges and opportunities for marketing the Marketable Materials, from Regina, Saskatchewan;
- describe the Proponent's access to markets; and
- its approach to sustaining markets for the Marketable Materials.

Proponents should complete Appendix J which captures some of the pricing for these points above.

The Proponent should identify its proprietary or confidential marketing information.

The Proponent's Proposal should provide a description of how it intends to market each of Tin, Glass, Paper and the various plastics contained within the Designated Material. In evaluating the Proposals the City would like to know:

- the proposed grade of Marketable Material(s) that is intended to be produced for each of those items;
- the current per Tonne market price for each of the Marketable Materials (net of transportation costs) – See Appendix J;
- what the Proponent would do if the proposed End Market became unavailable (i.e. alternate markets or storage plans); and
- how the Proponent will ensure collection of the revenue from the sale of each of those Marketable Materials.

The Proponent's Proposal should demonstrate that the Proponent's marketing plan contains contractual requirements, audit elements, documentation, reporting, policies and procedures that ensures that the Marketable Materials are being subsequently processed and sold and in a responsible manner.

If available, as part of its Proposal, the Proponent should provide signed, written statements from End Markets (including brokers, pre-processors and final markets in the supply chain) as may be applicable, that document where the Marketable Materials are processed and sold.

The City is aware that some Proponents may have experience as End Markets and that some Proponents (or entities that are not non-arms length from the Proponent) may wish to purchase the Marketable Materials. The City would permit a sale of the Marketable Materials to a Operator, or non-arms length entity from the Operator, if the Operator could satisfy the City that the sale price of the Marketable Material to the Operator, or non-arms-length entity from the Operator, was the same or exceeded the sale price of the Marketable Materials to another arms-length End Market. Therefore, Proponents whose marketing plans include sale of Marketable Materials to itself or to a non-arms length entity should provide information in its Proposal to demonstrate how such a sale will provide

for a sale price the same or in excess of the sale price of the Marketable Materials to another arms-length End Market.

4.6 Commencement Plan

The Proponent's Proposal shall provide the timeline that the MRF and temporary Transfer Station, if applicable to the Proponent's Proposal, will be operational and capable of delivering all of the Services.

The City strongly desires to have a permanent MRF providing all of the Services as early as possible.

The Proponent's Proposal shall also include a description of any proposed plan in the event the Operator will not have the MRF operational by July 2013.

As part of its commencement plan the Proponent shall describe its business plan solution, which should include, but is not limited to a detailed implementation schedule specifying the milestones and tasks, such as the following:

- project management plan;
- land acquisition plan;
- equipment, vehicles and facility acquisition plan (operating yard, processing facility(ies), transfer stations, offices, etc.). This may also include any design and construction plans if required by the Proponent's proposed solution;
- transportation acquisition plan;
- implementation of a temporary Transfer Station, if applicable to the Proponent's Proposal;
- construction plan; and
- start up and staffing plan for processing and marketing Services.

4.7 Contingency Plan

The Proponent's Proposal should provide the City with details of the plan that it will implement should the MRF or Transfer Station be unable to accept and process Collected Materials from the City for longer than three (3) days of time or if the Proponent is unable to find or deliver to End Markets.

As part of this RFP, a Proponent should submit to the City a detailed contingency plan. The Proponent's Proposal should outline and describe how a strike or emergency situation, such as ice storms, spill of materials, extreme snow storms, floods, fire or other natural disasters would affect the Services and the steps it would take during and after to adjust or resume the Services as needed. The strike contingency plan will address alternative methods for processing and marketing the Collected Materials so as to maintain Services in the event of a strike by the Operator's employees.

As part of this RFP, a Proponent should submit to the City an emergency response plan. The plan will detail those actions which the Operator will take to deal with

emergency situations such as ice storms, spill of materials, extreme snow storms, floods, fire or other natural disasters that would require deviation from normal operating procedures.

4.8 Sustainability Plan

Recognizing the City's goals to achieve 40% diversion rate by 2015 and 65% diversion rate by 2020, in its Proposal, the Proponent should provide a sustainability plan.

The sustainability plan should include a statement of the Proponent's sustainability goals, how the Proponent proposes to accomplish these goals and what measures will be used to determine if these efforts are achieved.

Proponents should propose a specific approach in designing, constructing, and operating similar material recovery facilities and transfer stations in such a manner as to:

- minimize the environmental impact of the transport of materials and individuals to and from the facility;
- minimize energy and water use;
- employ on-site renewable energy; and
- promote innovative waste minimization, diversion, and reuse technologies and concepts.

The Proponent's Proposal should contain a description of the Proponent's experience in implementing sustainability goals, and in designing, constructing and operating material recovery facilities and transfer stations in the manner the Proponent proposes in its response to the inquiry above and whether such facilities have received an environmental certification or rating.

The Proponent's Proposal should describe its experience in transporting Marketable Material and Contaminant like materials in a manner that minimizes the environmental impact of the transportation of such materials and propose a specific approach in acquiring and using alternative fuels to power equipment and/or vehicles, and maintaining equipment/vehicles that operate off of alternative fuels.

The Proponent's Proposal should describe any corporate sustainability efforts it has undertaken including, but not limited to, the use of post-consumer recycled products and non-toxic cleaning products throughout its operations.

Proponents should outline any environmental initiatives that they may incorporate into their operations that will reduce the impact of their operations on the environment. This may include, but is not limited to environmental certifications, Leadership in Energy and Environment Design (LEED) designations, and green fleet initiatives. As part of this RFP, the Proponent should also submit any relevant environmental policy documents that have been developed, for review.

The Proponent's Proposal should outline any initiatives or aspects of their proposed operations that may provide social benefits to Regina. This may include, but is not limited to providing employment to disadvantaged social groups, additional training of unskilled labour, or payment of wages above legislated minimum wages.

The Proponent is strongly encouraged to use the City's sustainability goals to achieve a 40% diversion rate at the Landfill by 2015 and a 65% diversion rate by 2020 as guidance in developing and articulating sustainability plan.

4.9 Safety Management Practices Plan

The Proponent should have a written health and safety plan and provide a copy of it to the City as part of its Proposal.

Such a health and safety plan should have a written accident prevention plan, loss prevention plan, and safety management system plan and describe details of these plans in its Proposal. The Proponent should also provide, as part of its Proposal a copy of any other safety and health management tools that the Proponent has in relation to the operation of a MRF.

The Proponents should identify in its Proposal any current, pending or unresolved litigation, citations, notices of violation, claims or other actions against the Proponent related to workplace fatalities, injuries, illnesses, or other workplace safety issues. The Proponents should identify the status of such matters and how any outstanding matters are being addressed.

4.10 Innovative and/or Value Added Information

Proponents may present within their Proposal innovative and/or value added suggestions that do not fit within the prescribed format or requirements.

II. Envelope 2 – Cost of Services Proposal

1. Response to Scope of Services and Requirements

Since the City's Co-Mingled Recycling Collection Program recycling program is a new program to Regina and Recovery Rates, level of Contaminants in the Collected Materials and composition of Collected Material composition estimates are only best estimates at this time.

Proponents are asked to provide a range of Unit Processing Fees based on ranges of Contamination Rates for Collected Materials and on ranges of annual Tonnes of Collected Materials delivered to the MRF or temporary Transfer Station in the table provided in the Submission Form attached as Appendix K:

The Operator shall share the revenue from the sale of the Marketable Materials with the City with 75% of the revenue being retained by the Operator and 25% of the revenue being paid to the City by the Operator.

All prices proposed shall be in Canadian Currency.

H. SCOPE OF SERVICES AND REQUIREMENTS

The Operator shall perform or arrange for all duties and functions pertaining to a Material Recovery Facility. These duties and functions shall include, at a minimum, the Services for the Collected Materials and marketing, transporting the Marketable Materials to End Markets whether at the Operator's MRF or, if necessary, through a temporary Transfer Station and use of a remote material recovery facility until such time as the Operator's MRF is capable of providing the Services.

If the Operator requires a temporary Transfer Station then such temporary Transfer Station shall receive, weigh and accept all incoming Collected Materials as provided for in this RFP. The Operator will be responsible for transporting the Collected Material from the temporary Transfer Station to a material recovery facility. If the Proponent's Proposal requires that the Collected Materials receive the Services at a material recovery facility that the Operator does not own then the Operator will be required to demonstrate to the City that such Collected Materials received the Services required by this RFP. If Collected Materials receive the Services at a material recovery facility that the Operator does not own then the Operator remains responsible for revenue sharing with the City in accordance with the terms of this RFP.

As soon as the Operator's MRF is operational then all Collected Materials shall be processed by the Operator to produce Marketable Material or Residue as provided for in this RFP.

This RFP specifically excludes services for the collection of Designated Materials as the City or its contractor will be required to provide these collection services and to deliver the Collected Material to the MRF.

I. MRF Requirements

1. Location

The Location of the MRF and any Transfer Station shall be located within the City boundary or within a radius of 10 kilometres from the centroid of the City, as shown in the map attached as Appendix D to this RFP. The Global Transportation Hub is entirely within the City's boundary.

2. Applicable Laws

The MRF, any temporary Transfer Station and all subsequent operations of the Services shall be in compliance with all Applicable Laws.

The Operator will be solely responsible to obtain and maintain all applicable approvals and licenses for the Services during the term of the Agreement with the City or any renewals thereof, including the costs of such approvals and licenses.

3. Hours of Operation

The Co-Mingled Recycling Collection Program is planned to regularly operate during the Recycling Collection Schedule. Generally, the City will not operate the Co-Mingled Recycling Collection Program on weekends (see exception below relating to Christmas Day).

Should Recycling Collection Schedule fall on a Statutory Holiday, the City's collection contractor shall not alter the Recycling Collection Schedule or its services and will be responsible for providing the collection service, in accordance with the established collection route(s) and the Recycling Collection Schedule.

The exception to the Statutory Holiday Recycling Collection Schedule identified shall be Christmas Day. In the event that a regularly scheduled collection day falls on Christmas Day, the City's collection contractor shall provide the collection services scheduled for Christmas Day on the next following Saturday following Christmas Day and the Operator shall operate the Designated Facility on such a Saturday. The Operator shall adjust its hours of operation of the Designated Facility to be able to accept Collected Material on Statutory Holidays with the exception of Christmas Day.

The days, dates and times of collection under the Co-Mingled Recycling Collection Program are subject to change during the term of the Agreement. The City shall provide the Operator with 7 days notice of any change in the Recycling Collection Schedule.

The Operator shall be required to perform the Services on whatever days or portion of days the City operates its Co-Mingled Recycling Collection Program and remain open to accepting Collection Vehicles until the last Collection Vehicle has tipped its contents at the Designated Facility.

If the Co-Mingled Recycling Collection Program does not operate or does not operate for a full day, as identified in this RFP due to Bad Weather or for such other reasons as the City may, in its sole discretion determine, then the City shall notify the Operator of the work stoppage and communicate the City's initial anticipated plan to return to the Recycling Collection Schedule or Holiday Collection Schedule. The City will notify the Operator when the Co-Mingled Recycling Collection Program resumes.

4. Receiving Collected Materials at the Designated Facility

The City's Co-Mingled Recycling Collection Program will ask citizens to place Designated Materials in the Carts or Bags. The City or its designated contractor will collect the Collected Materials from the Carts and Bags and deliver the Collected Materials to the Designated Facility. The City will undertake public education and bylaw enforcement measures to minimize the amount of Contaminants in the Collected Materials.

5. MRF Processing Requirement

The Operator's MRF shall have the capacity to initially process a minimum of 15,600 Tonnes of Collected Material per Operating Year. The MRF's capacity will need to be able to be expanded during the term of the Agreement to meet the City's anticipated increase in the number of Tonnes of Collected Materials and any variations in the tonnage of the Collected Materials over the course of the Operating Year and the term of the Agreement. The City estimates that the Tonnes of Collected Materials to be collected over the term of the Agreement as Collected Materials may increase to 19,700 Tonnes by 2030.

The City makes no representations of warranties as to the tonnage of Collected Materials that will be collected as part of the Co-Mingled Recycling Collection Program or any variations in the tonnage of Collected Materials over the term of the Agreement or to the percentage of Contaminants that may be contained in the Collected Materials.

It is desirable to the City that an Operator's Equipment be capable of producing a variety of Marketable Material from a Designated Material(s) in order to respond to market demands for a particular Marketable Material and to optimize revenue from the sale of the Marketable Materials. In its Proposal, the Proponent should identify the Equipment it will use and how that Equipment is capable of processing the Collected Materials, including producing a variety of Marketable Materials from each Designated Material.

The MRF shall be capable of processing all of the Designated Materials throughout the term of the Agreement with the City and any renewals thereof regardless of the tonnage of Collected Materials delivered to the MRF.

The Operator's MRF and at any temporary remote material recovery facility shall be capable of achieving or exceeding the Required Recovery Rate.

In addition to the Designated Materials, the Proponent should identify in its Proposal additional materials that the MRF is capable of processing including any additional cost of processing such items and the net benefit of marketing these items.

6. Audits

The Operator is required to identify and provide details on how it will conduct at least one (1) inbound composition audit of the Collected Materials per month for the Term of this Agreement or any extension thereof (the "Monthly Composition Audit") in accordance with the protocol in Appendix E.

The Monthly Composition Audit shall identify the following:

- the total Collected Material Tonnes per month,
- proportions of each Designated Material in the Collected Materials;
- proportion of Contaminants in the Collected Materials;
- the Contamination Rate; and

- calculated density of Collected Material.

All Monthly Composition Audits shall be performed by the Operator's suitably trained staff and a City employee is entitled to be present for such audits.

The Monthly Composition Audit is part of the Operator's Services and the cost of such audits shall be borne by the Operator.

For the first two Operating Years of this Agreement the Operator shall arrange for an independent party to conduct one (1) day of in-bound composition audits of the Collected Materials that are received at the Designated Facility per month (the "Independent Audit") in accordance with the protocol in Appendix E.

The Independent Audit shall identify the following:

- the total Collected Materials Tonnes per month,
- proportions of each Designated Material in the Collected Materials;
- proportion of Contaminants in the Collected Materials;
- the Contamination Rate; and
- calculated density of Collected Material.

A City employee is entitled to be present for all Independent Audits. The Independent Audit is part of the Operator's Services and the cost of such audits shall be borne by the Operator.

The Operator shall conduct at least one (1) Recovery Rate audit per month for the Term of this Agreement (the "Monthly Recovery Rate Audit") in accordance with the Operator's protocol which formed part of its Proposal.

The Monthly Recovery Rate Audit may be done in conjunction with the Monthly Composition Audit. The Monthly Recovery Rate Audit shall identify the Recovery Rate for the Operator's MRF or any temporary remote material recovery facility the Operator may be using to fulfill the Services. The Monthly Recovery Rate Audit is part of the Operator's Services and the cost of such audits shall be borne by the Operator. All Monthly Recovery Rate Audits shall be performed by the Operator's suitably trained staff and a City employee is entitled to be present for such composition audits.

The City may arrange for periodic audits of the Operator's performance. The City shall have the right to perform, at random and at any time throughout the Term for the purpose of verifying that the Operator is performing all of the Services in compliance with the requirements and obligations set out in this Agreement (the "City Audits"). Such City Audits may include composition audits of the Collected Materials, Marketable Material and Residue and Recovery Rate audits of the MRF.

The City Audits will be in addition to the Monthly Composition Audits, the Independent Audits, or the Recovery Rate Audits.

The Operator will, at no additional cost to the City, provide a suitable space to conduct the City Audits and assist with the City Audits by retrieving and transporting audit samples to a suitable audit space available at the MRF and providing other assistance as required.

The Operator shall co-operate fully and in a timely manner with any reasonable request for any City Audit by the City (whether conducted by internal or external auditor), and shall provide documents or procure the provision of documents relating to the Agreement and the Operator's performance of the Services.

In the event that the City Audit determines that the Operator has not complied with any requirement or obligation under this Agreement, the Operator shall immediately remedy such non-compliance and shall reimburse the City for the cost of conducting such City Audit. The City shall also be entitled to recover the cost of such City Audit from the Monthly Invoices submitted by the Operator in accordance with Section H, II, 4 (money owed to City).

In the event that the City Audit determines that the Operator has complied with all of the requirements under the Agreement, then the cost of conducting such City Audit shall be borne by the City.

7. Inventory Management Systems

The Operator shall maintain a storage inventory management system for material at the MRF and any temporary remote material recovery facility for tonnage of Collected Material waiting processing, Marketable Materials awaiting delivery to End Markets, and Residue awaiting disposal. The Operator shall be responsible for weighing and storing of such Marketable Materials and reporting the tonnage of each Marketable Material stored and awaiting sale as part of its Monthly, Quarterly and Annual Reports.

8. Sustainability Plan

The Operator shall maintain throughout the term of the Agreement and any renewals thereof a written sustainability plan recognizing the City's goals to achieve a 40% diversion rate at the Landfill by 2015 and a 65% diversion rate by 2020. The Operator's sustainability plan should:

- minimize the environmental impact of the transport of materials and individuals to and from the facility;
- minimize energy and water use;
- employ on-site renewable energy, where possible; and
- promote innovative waste minimization, diversion, and reuse technologies and concepts.

9. Contingency Plan

The Operator shall maintain throughout the term of the Agreement and any renewals thereof a written contingency plan for the Services that provides for the Operator being able to perform all Services, comply with all terms and conditions of the Agreement, and addresses alternative arrangements for the performance of the Services in the event of, but not limited to, ice storms, spill of materials, extreme snow storms, floods, fire, natural disasters that would require deviation from normal operating procedures, equipment breakdown at the MRF or Transfer Station, the Operator unable to process all Collected Materials, the Operator unable to store all the Collected Materials, a strike by the Operator's employees, Bad Weather, other service disruptions at the MRF or Transfer Station, a situation where the MRF or Transfer Station be unable to accept and process Collected Materials from the City for longer than three (3) days of time or where the Operator is unable to find or deliver Marketable Materials to End Markets

The contingency plan or plans above shall be updated annually by the Operator and a copy provided to the City within one (1) month of the updating of such a plan.

10. Strike Plan

The Operator acknowledges and agrees that its strike contingency plan will address alternative methods for the collection of Collected Material so as to maintain the Services in the event of a labour dispute between the Operator and Operator Personnel. The Operator shall maintain the Services in the event of such a labour dispute.

The Operator shall regularly monitor and update its strike contingency plan and shall notify the City within 24 hours of any changes to the contingency plan.

The Operator shall implement its strike contingency plan where necessary or at the direction of the City.

11. Emergency Plan

The Operator acknowledges and agrees that its emergency plan will detail those actions which the Operator will take to ensure the Services are maintained during emergency situations that would require deviation from normal operating procedures.

The City has authority in an emergency to stop the progress of the Services whenever, in its opinion, such stoppage may be necessary to ensure the safety of life, or the Services, or neighbouring property. This includes authority to make changes in the Services, and to order, assess and award the cost of such work, extra to this Agreement or otherwise, as may in its opinion be necessary. The City will immediately confirm in writing any such instructions to the Operator. The Operator shall take such measures as may be specified by the City that the City considers necessary for the purposes of removing any source of danger or to protect any person, property and the Services from danger.

The emergency plan shall be updated annually by the Operator and a copy provided to the City within one (1) month of the updating of such a plan.

12. Safety Management Practices Plan

The Operator acknowledges and agrees that it has and will follow its written health and safety plan. The Operator's health and safety plan shall have a written accident prevention plan, loss prevention plan, and safety management system plan.

The Operator's health and safety plan shall be updated annually by the Operator and a copy provided to the City within one (1) month of the updating of such a plan.

13. Employee Plans

The Operator's employees shall be alert, polite and courteous. The Operator shall further ensure that a high standard of service, courtesy and consideration is exhibited in all of its dealings with citizens, visitors and the general public, and that it conducts all of its operations, including its administrative functions, with the utmost regard for enhancing public relations, and in recognition of the need to uphold and maintain the positive public image of the City

In providing the Services the Operator shall:

- provide all labour required to perform the Services;
- ensure that all Operator Personnel have sufficient abilities, skills, knowledge, training, qualifications and experience to safely provide the Services;
- ensure that sufficient reserve personnel are available to provide the Services at all times; and
- ensure that all Operator Personnel charged with the operation of Vehicles possess the required class of license.

The Operator shall ensure that all Operator Personnel shall be at all times properly and sufficiently trained and instructed in the task or tasks that must be performed, and the need to maintain the highest standards of courtesy and consideration to the public to protect and promote the image and/or reputation of the City.

The Operator shall ensure all Operator Personnel have and wear all applicable safety equipment to be worn while performing the Services. The Operator must ensure that all Operator Personnel have and wear protective footwear, gloves, safety vests, eye protection and, upon request, noise protection and dust masks and any other safety equipment required by Applicable Laws or as a result of the operations proposed.

The Operator shall comply with fair wage practices.

The Operator shall comply with Applicable Laws so as to not unlawfully discriminate within the meaning and scope of all legislation which may be in force from time to time, including on the basis of gender, race, religion, marital status, sexual orientation, age and disability.

The Operator shall do all such things as may be reasonably required by the City from time to time to facilitate compliance by the City having regard to the need to eliminate unlawful discrimination and to positively promote equality of opportunity and good relations between persons of different backgrounds.

14. Regina Office

The Operator shall maintain an office in Regina, Saskatchewan that will be staffed by a competent person during all times that the Services are being performed. At a minimum, the office hours shall be 7:30 a.m. to 5:00 p.m. on Business Days, including Statutory Holidays, except Christmas Day. Phone numbers shall be established such that no long distance fees shall apply.

15. Tours Plans

The City, with reasonable advanced notice to the Operator, may be allowed to conduct tours of the MRF with the assistance and supervision of designated Operator's staff.

16. Contract Management

During the first year of the Term the Operator will attend monthly meetings with the City on the first Business Day of every month at a time and place to be agreed, to discuss the quality, performance and other matters related to the Services.

Such performance management meetings will continue in subsequent years of the Term as agreed to by both Parties, but shall occur no less than twice per Operating Year each year of the Term.

The Operator shall have procedures for reporting incidents to the City and other appropriate officials as required by Applicable Laws.

The Operator shall make best efforts to ensure continuous improvement in the way the Services are performed having regard to a combination of economy, efficiency and effectiveness, and shall assist the City in discharging its duty to achieve best value in the manner in which the Services are performed. The Contractor may propose changes to improve the economy and efficiency of the Services.

17. Communication with Collector Contractor

The Operator shall maintain a cordial and collegial working relationship with the Co-Mingled Recycling Collection Program collector to ensure an efficient operation of the Co-Mingled Recycling Collection Program using the methods and communication tools the Operator identified in its Proposal.

18. Media

The Operator shall notify the City of all requests for media interviews related to providing the Services to the City within one (1) hour of request. Before responding to any inquiries involving controversial issues, the Operator shall discuss proposed response with the City.

Copies of draft news releases or proposed trade journal articles shall be submitted to the City for review and approval at least five (5) working days in advance of release.

Copies of articles resulting from media interviews or news releases shall be provided to the City within five (5) days after publication.

19. Weighing and Weigh Scales

The MRF or any temporary Transfer Station shall have a truck weight scale capable of weighing the Collection Vehicles.

The Collection Vehicles delivering Collected Materials to the MRF shall not exceed the following dimensions:

- Gross Vehicle Weight Rating – 29,030 kg
- Maximum legal payload – 9,525.4 kg
- Wheel base – 538.480 cm
- Height with body lowered (driving) – 381.000 cm
- Height with body raised (tip to dump) – 591.820 cm
- Overall length with tail gate closed (driving) – 960.120 cm
- Overall length with tail gate raised – 1115.06 cm

The Collection Vehicles include the trucks used to haul the Big Blue Bins.

The Big Blue Bins are 7 ½' X 7 ½' X 24' and have a capacity of 48 yards, with an empty weight of 17,000 kg. A photograph of a Big Blue Bin is attached as Appendix G to this RFP.

All scales must be certified for trade by Consumer and Corporate Affairs Canada and be recertified every six months at the Operator's expense. All certification reports shall be provided to the City within thirty (30) days of the date that such reports are issued.

The MRF or temporary Transfer Station's scale shall weigh each Collection Vehicle on its way into the MRF or temporary Transfer Station and again on the way out of the MRF or temporary Transfer Station. The difference between the incoming and outgoing weights of the Collection Vehicle shall be the weight for that load of Collected Materials (the "Collected Material Tonnes").

All scales must be capable of printing a scale ticket that shows:

- Collection Vehicle's Driver's Name;
- Collection Vehicle Number;
- Collection Vehicle's Corporation;
- Collection Vehicle's route number;
- gross and tare Collection Vehicle weights;
- load weight of each Collection Vehicle entering the Designated Facility;
- the Collected Material Tonnes of each Collection Vehicle;

- individual load weight of each Collection Vehicle exiting the Designated Facility;
- calculated density of each load of Collected Materials;
- date and time of load entering the Designated Facility; and
- date and time of loading exiting the Designated Facility.

In the event such weigh scale is temporarily out of order, the Operator shall notify the City immediately and the Operator shall make alternate arrangements, as may be satisfactory to the City, in its sole discretion, acting reasonably, to record weights of the Collection Vehicles, at the Operator's cost.

The Operator shall provide the driver of each Collection Vehicle with a scale ticket for each load of Collected Material that is tipped at the Designated Facility.

20. Unloading Collected Materials at the Designated Facility

The City or its designated collector shall collect the Collected Material in Collection Vehicles and shall deliver the Collected Materials to the MRF.

The City or its designated collector shall dump the Collected Materials at the Designated Facility in the location the Operator designates for such delivery (the "Tipping Area"). The City or its designated collector shall then remove the Collection Vehicles from the MRF.

The Designated Facility shall be designed and operated by the Operator in such a way as to aid in the efficient receiving and unloading of Collection Vehicles. The Operator is responsible for coordinating incoming Collection Vehicles.

In particular, the Designated Facility shall:

- have a Tipping Area that can handle receiving twelve (12) Collection Vehicles daily making an average of two (2) loads per Business Day (24 loads total per Business Day);
- be able to safely accommodate each Collection Vehicle and the unloading of all Collected Material;
- have sufficient space for three (3) Collection Vehicles to queue on the Facility site without such queuing adversely affecting vehicular or pedestrian traffic in the vicinity of the Designated Facility;
- have a dedicated receiving area with two or more truck doors of sufficient height and width to provide safe ingress and egress for all Collection Vehicles.

The Designated Facility shall be able to accommodate the unloading of a minimum of two (2) Collection Vehicles at the same time.

Collection Vehicles that are part of the Co-Mingled Recycling Collection Program shall have unloading priority over other Operator's customer vehicles and the Operator's vehicles. The Operator's unloading process at the Designated Facility and

Transfer Station shall ensure that Collection Vehicles are unloaded within 15 minutes of arriving at the Designated Facility.

A City employee on-site at the Designated Facility as well as the drivers of the Collection Vehicles will monitor and record waiting times of Collection Vehicles at the Designated Facility to ensure the Collection Vehicles are unloaded within 15 minutes of arriving at the Designated Facility.

21. Sorting

Sorting operations at the MRF shall be by a series of manual or automated steps whereby the Designated Materials are separated from Collected Materials, processed into Marketable Materials and prepared for delivery to End Markets.

Even though Carts will be used for collecting most Designated Materials, some Collected Material may come in Bags and some may come in unsolicited plastic bags. The Operator shall open all Bags and unsolicited plastic bags and process the Collected Material contained therein regardless of whether the bag is clear or opaque, open or tied shut or sealed.

The sorting operations design objectives described in this Section are considered important for the efficient and effective completion of the Services:

- the design of the sorting operation should reveal that the MRF can reliably process, at minimum, 15,600 Tonnes of Designated Materials annually in the first Operating Year;
- the design of the sorting operation should reveal that the MRF can reliably process, an increased tonnage of Designated Materials, to 19,700 Tonnes by 2030;
- the MRF is able to achieve the Required Recovery Rate; and.
- the design of the sorting operations should provide for the flexibility to add Additional Designated Materials from the Co-Mingled Recycling Collection Program in the future and to respond to market changes in the types of Marketable Materials that the MRF is able to produce.

22. Contamination

The City makes no representations of warranties as to the tonnage of Collected Materials that will be collected as part of the Co-Mingled Recycling Collection Program or any variations in the tonnage of Collected Materials over the term of the Agreement or to the percentage of Contaminants that may be contained in the Collected Materials.

The Operator will be required to receive, inspect and sort the Collected Materials into Designated Materials and Contaminants.

Despite the City's efforts, the City anticipates that there will be Contaminants in the Collected Material. All Proponents acknowledge that the Collected Materials will contain Contaminants. Contaminants may include other packaging materials such as

mixed plastic containers, film plastic, etc. or non-recyclable material such as organics, hazardous materials etc..

It will be the Operator's responsibility, at its sole cost, risk and expense to dispose of all Contaminants, including any hazardous materials contained in the Contaminants in accordance with Applicable Law.

The Operator's trained employees shall inspect the dumped load of Collected Material in the Tipping Area.

If the Operator determines that a load of Collected Material, in whole or in part, contains high levels of Contaminants then the Operator shall isolate the load from other Collected Material and immediately notify the City. The City shall then have a City employee inspect such loads of Collected Material for Contaminants. If the City is unable to send a City employee to inspect the load the Operator shall take photos of such load and shall provide those photos to the City via email within 2 hours of such load being dumped in the Tipping Area. The photographs shall show the overall load, Contaminants and the Collection Vehicle identification number.

The Operator shall proceed to process such loads of Collected Materials regardless of the levels of Contaminants in the load.

23. Storage

The MRF shall provide for a reserve indoor storage capacity of such a size that it can, at any time, accommodate a minimum of three (3) days worth of Collected Material (except Glass and Tin which may be stored outdoors) in the event of an unscheduled equipment breakdown or unscheduled maintenance at the MRF.

Any alternate facility that is used by the Operator for reserve storage capacity must be as close to the City's collection routes for the Co-Mingled Recycling Collection Program as feasibly possible, with minimal impact to traffic and residential areas. The Operator shall be responsible for transporting the Collected Materials to such reserve storage facility.

The Operator shall maintain a storage and inventory management system at its MRF and at any temporary remote material recovery facility, for tonnage of Collected Material waiting processing, Marketable Materials awaiting delivery to End Markets, and of Residue awaiting disposal. The Operator shall be responsible for weighing and storing of such Marketable Materials and reporting the tonnage of each Marketable Material stored and awaiting sale as part of its Monthly, Quarterly and Annual Reports.

24. City Employees and Office Space for City within the MRF

The City has the right to station a City employee, or designate at the MRF or any temporary Transfer Station or at any material recovery facility not owned by the Operator at any time to monitor the Services.

The City may from time to time appoint one or more Inspectors to monitor and assist in the management of the Services and this Agreement. The City may, at any time during the Term, change the appointed Inspectors by written notice to the Operator.

The Operator acknowledges and agrees that the Inspector may make corrective orders or request that the Operator to stop performing any portion of the Services if the Services are not being executed in accordance with the provisions of the Agreement. The Operator acknowledges and agrees that the Inspector shall monitor waiting times of Collection Vehicles.

The Operator agrees to immediately comply with any orders or directions provided by the Inspectors, and shall cause the Operator Personnel to immediately comply with all orders issued by Inspectors.

The City may request that it be permitted to take photographs or video recording of the MRF, the Temporary Transfer Station, or at any material recovery facility not owned by the Operator, other property, Equipment, Collected Materials, Marketable Materials, and Residue for the purpose of monitoring the Services.

The MRF shall have a suitably furnished office with a desk, chair, shelving and climate controlled office available for the sole use of City employees. Such an office must be a minimum of 10 ft x 10 ft and be equipped with one telephone line, one computer line that has access to a high speed broadband connection. The office must have a lockable door.

The Operator shall permit City employees to be stationed periodically at the MRF for monitoring of daily operation, as well full visitation during working hours on a regular basis. City employees must have access to washroom facilities at the MRF. The MRF must also have one parking spot designated for the sole and exclusive use of City employees.

25. Quality Assurance/Quality Control

The quality assurance/quality control operations design, for the MRF and temporary Transfer Station if required for the Proponent's Proposal and the material recovery facility that the Operator will use until its MRF is capable of providing the Services, described in this Section are not mandatory but are considered important for the efficient and effective completion of the Services:

- a protected, well lit area, within the MRF or temporary Transfer Station or the material recovery facility that the Operator will use until its MRF is capable of providing the Services, of a sufficient area for auditing as required in this RFP;
- diverter chutes or other means of collecting samples of the Collected Material from the sorting operations;
- quality control sorting as necessary to ensure that Marketable Materials meet market specifications; and

- a description of how the MRF operates or the material recovery facility that the Operator will use until its MRF is capable of providing the Services will achieve the Required Recovery Rate as measured by the quarterly Recovery Rate Audits.

26. Transition Plan

The City is implementing the Co-Mingled Recycling Collection Program which is to commence in July, 2013 and an operating MRF is required to coincide with collection of Collected Materials.

If the Operator is not able to have a long-term MRF completely implemented and operational by July, 2013, then it shall provide a Transfer Station for transfer of the Collected Materials to an interim, remote MRF until the local, permanent MRF is operational. The Transfer Station must be located within the City boundary or within a radius of 10 kilometres from the centroid of the City, as shown in the map attached as Appendix D to this RFP. The Global Transportation Hub is entirely within the City's boundary.

This Transfer Station shall be capable of receiving all the Collected Material.

The Operator shall have a scale weigh in and out process at the Transfer Station to ensure that all Collected Materials are weighed at the temporary Transfer Station. The scale at the temporary Transfer Station shall meet the requirements in Section H, I, 19.

The Operator's transition plan shall include provisions for transporting Collected Material from the temporary Transfer Station to a material recovery facility and for a City employee to be at the temporary Transfer Station and at a material recycling facility where the Operator takes the Collected Material or Designated Material or Marketable Material, as the case may be, for processing and marketing until such time as the Operator's permanent MRF is fully operational and providing all of the Services.

Any contract that an Operator enters into with a material recovery facility to take Collected Materials until the Operator's own MRF is fully operational and providing all of the Services will need to ensure that the Operator is still providing all of the Services and meeting all of the requirements of the RFP.

In particular, the contract the Operator enters into with a material recovery facility until the Operator's permanent MRF is built should permit the City to participate in audits of the Collected Materials in the same manner as provided for the in the Monthly Composition Audit Protocol in Appendix E of this RFP, wherein it is not considered a valid audit until the City Representative signs the audit record.

If the Operator is unable to make contractual arrangements with the material recovery facility to allow such participation by the City in the Monthly Composition Audits

then the Proponent's Proposal shall indicate how the Proponent will conduct Monthly Composition Audits prior to transporting the Collected Material to a remote material recovery facility.

If the Operator intends to provide a temporary Transfer Station, then the Operator shall provide vehicles in sufficient number and frequency to transfer the Collected Materials within the operating hours from the temporary Transfer Station to the MRF.

In developing its transition plan the Operator should consider that the City strongly seeks to minimize the time to start permanent operations and that a temporary Transfer Station may only be in operation until July 1, 2014.

A permanent Transfer Station for the Services will be considered non-compliant.

If the Operator is still using its temporary Transfer Station on July 1, 2015 the City shall be entitled, in its sole discretion to terminate the Agreement.

27. Vehicles

The Operator must, at all times, provide, maintain and operate a sufficient number of vehicles, drivers, and other personnel to perform the Services required under this Agreement, and to comply with Applicable Laws throughout the Term.

All vehicles used in the Services must be capable of operating reliably under fully loaded conditions and must be kept in excellent running order at all times.

All such vehicles must be capable of transferring Collected Materials without adversely impacting the Collected Material's usability or increasing processing time at the MRF.

The Operator must ensure that all drivers of such have a valid licence for such vehicles. All such vehicles and the drivers of those vehicles shall comply with all Applicable Laws.

The Operator shall keep sufficient spare Equipment, including vehicles, to ensure that, in the event of Equipment breakdown, Services are continued in accordance with the terms of this Agreement.

The Operator shall not cause or permit vehicles to be loaded beyond the legal limit specified in *The Traffic Safety Act* (Saskatchewan) or *The Regina Traffic Bylaw 1997*, No. 9900 or other Applicable Laws.

Where, in the opinion of the City, vehicles used by the Operator are causing or are likely to cause damage to any private or public roadway, the City may direct the Operator at the Operator's own expense to make changes in or substitutions for such vehicles, to use alternate routes for hauling, to alter loading, or to remove the cause of

such damage in some other manner. The Operator will be responsible for all costs resulting from the overloading of vehicles.

28. Spillage and Loose Materials

The Operator shall promptly clean up any spillage or loose material resulting from its performance of the Services or make all other arrangements as may be required for the immediate clean up a spill. In the event of any spill, the Operator shall at its expense restore the affected areas back to original condition and shall comply with all Applicable Laws when reporting or cleaning up any spill.

The Operator shall report all spills or discharges of Collected Materials, pollutants or contaminants to the City in accordance with the requirements in Section H, I, 20.

Any vehicle or Equipment suffering oil spills, gasoline spills, antifreeze spills or the release of other known contaminants will cease operations until the Operator Supervisor arrives on site. Absorbent will be laid down immediately on any spill and as soon as the absorbent has had the desired effect, it is to be scraped from the road or affected property. If residue still remains following the use of absorbent, the Operator shall apply another layer of absorbent and will leave the site in a clean and tidy condition. In the event that the Operator fails to respond immediately to a mechanical or oil spill such that asphalt or other damage occurs, the Operator shall be responsible and liable for all costs and expenses to restore the road or property affected to its original condition.

29. Environmental Compliance

The Operator shall, in the performance of the Services, comply with environmental legislation and other environmental requirements of those federal, provincial, municipal or other governmental bodies, including without limitation The Environmental Management and Protection Act, 2002 (Saskatchewan) and the regulations and amendments thereto.

The Operator acknowledges and agrees there may be additional reporting requirements in relation to any spill, release or discovery of any substance of any amount that has caused, is causing or may cause an adverse effect on the environment. The Operator represents and warrants that it is familiar with these requirements and agrees to report any spill, release or discovery of any substance of any amount that has caused, is causing or may cause an adverse effect on the environment as may be required by Applicable Laws.

30. Processing Designated Materials

Once the Collected Materials are delivered to the MRF or temporary Transfer Station and deposited in the Tipping Area the Collected Materials then ownership and title to the Collected Materials and all risk, loss and liability relating to the Collected Materials passes to the Operator.

The MRF and the Transfer Station shall accept all Collected Materials regardless of the level of Contaminants.

The tonnage and composition of Collected Materials may vary throughout the Operating Year and over the term of the Agreement. The Operator shall be able to accommodate such fluctuations at no additional cost to the City.

Under the Co-Mingled Recycling Collection Program, the Designated Materials shall be processed at the MRF (or temporarily at a remote material recycling facility) into Marketable Materials and then marketed and sold by the Operator.

The Operator shall perform or arrange to have performed temporarily at a remote material recycling facility, the Services specified under the Agreement in a manner that accommodates the City's Recycling Collection Schedule and Holiday Collection Schedules, as may be amended from time to time.

The Operator shall process or arrange to have processed temporarily at a remote material recycling facility all of the Designated Materials in an environmentally and ethically responsible way.

31. Additional Designated Materials

The City reserves the right to delete or add materials to the list of Designated Materials collected through the Co-Mingled Recycling Collection Program at any time during the term of the Agreement or any extensions thereof.

In the event the City wishes to add Designated Materials collected through the Co-Mingled Recycling Collection Program ("Additional Designated Materials") then the City shall request the Operator assess the ability of the MRF to provide the Services for the Additional Designated Materials.

The Operator shall then identify the impact on the Additional Designated Materials on the MRF in terms of any additional capital, operating costs and potential revenue and the impact on Operator's proposed Processing Fee.

If the Operator can demonstrate to the City that the addition or deduction of Designated Materials has the effect of directly increasing the Operator's cost of providing the Services, then the City will negotiate with the Operator in good faith with a view to agreeing on any adjustments to the Agreement that may be required.

The Operator agrees to add any and all Additional Designated Materials or delete any Designated Materials as may be directed by the City from time to time.

Throughout the Term of the Agreement, the Operator may propose to the City any additional materials that the MRF is capable of processing including any additional cost of processing such items and the net benefit of marketing these items.

32. Marketing

The City requires that the Operator convert Designated Materials into Marketable Materials through processing at the MRF. The Operator shall then market all Marketable Materials.

Marketing shall include at minimum:

- managing the proposed grade of Marketable Material(s) that is intended to be produced for each of those items with a goal of maximizing revenue;
- obtaining access to markets for the Marketable Materials;
- sustaining suitable markets for the Marketable Materials;
- entering into contracts with End Markets for the sale of Marketable Materials;
- transporting the Marketable Material to the End Market;
- arranging all inventory controls for the Marketable Material;
- tracking all Marketable Material sent to End Markets; and
- collecting, in a timely manner, all revenue for the Marketable Material from End Markets.

During the term of this Agreement the Operator shall provide to the City, if requested by the City, copies of any and all current marketing agreements contracts relating to the sale of all Marketable Materials to primary and secondary markets for each commodity within 30 days of date that such request is made by the City. As such agreements change, expire and are renegotiated current and revised the Operator shall provide copies of all such agreements to the City.

If the Operator determines, after due diligence in researching markets, after using and exhausting its best efforts at marketing and after documenting and reporting the potential markets' responses to the Marketable Material, that that particular Marketable Material has no market (at a particular time), the Operator and the City shall meet jointly to determine an appropriate course of action and resolution to the any issues that may occur.

In the event the Province of Saskatchewan develops the Multi-Material Recycling Program ("MMRP"), or such similar program that requires the City to sell recyclable materials collected through a municipal recycling program, such as the Co-Mingled Recycling Collection Program to designated buyers, the Operator will be required to sell the Marketable Materials to such a designated buyer and to comply with the requirements of the MMRP. A copy of the MMRP description is attached as Appendix H.

In the event that the Operator wishes to sell the Marketable Material to itself or to an entity or person under the Control of the Operator the Operator shall satisfy the City that the sale price of the Marketable Material to the Operator or the entity or person under the Control of the was equal to or exceeded the sale price of the Marketable Materials to an arms-length End Market. Upon receipt of such information the City may, at its sole discretion consent to the sale of the Marketable Material to the Operator or the entity or person under the Control of the Operator.

The Operator shall be responsible for weighing, transporting and marketing all Marketable Material to reliable and ethical End Markets while optimizing revenue.

33. Residue

The Operator shall be responsible for the weighing, transporting and disposing of all Residue at its own cost to a licensed waste management facility, in accordance with Applicable Laws.

II. Financial Requirements

1. Required Recovery Rate

The MRF shall achieve or exceed the Required Recovery Rate of 90%.

The Operator shall ensure the MRF design and operation is capable of achieving the required Recovery Rate. Whether or not the Operator achieves the Required Recovery Rate will be determined from the calculation of the Recovery Rate for the MRF (or the material recovery facility that the Operator using until its own, permanent MRF providing all of the Services) in the Recovery Rate Audit.

The Recovery Rate is calculated as the ratio of the tonnage of Marketable Material produced at the Designated Facility quarterly to the tonnages of Collected Material Processed for the quarter at the Designated Facility, expressed as a percentage. For the purpose of calculating the Recovery Rate the tonnages of Marketable Material for the quarter as stated in the Quarterly Report for that quarter shall be used.

The Operator guarantees to the City that it shall operate the Designated Facility and carry out the Services in such a fashion that will meet or exceed the Required Recovery Rate at all times.

The Operator's Recovery Rate will be determined on a quarterly basis based on an average of the three Monthly Recovery Rate Audits and reported in the Quarterly Report for that quarter.

Payments

2. Processing Fee

The City shall upon receipt of the relevant Monthly Invoice and Monthly Report pay the Processing Fee to the Operator for the Services rendered during each month during the term of the Agreement or any extension thereof, such Processing Fee calculated as follows:

Processing Fee = applicable Unit Processing Fee prescribed in Appendix K x number of Tonnes of Collected Material Processed in the month

For further certainty, the steps to calculating the Processing Fee are as follows:

- (a) determine the Contamination Rate used to determine which row in Appendix K by using the average Contamination Rate from the Monthly Composition Audit and each monthly Independent Audit completed during the first two

- Operating Years and thereafter, based on the Contamination Rate in each Monthly Composition Audit;
- (b) determine the Collected Material Tonnes per Operating Year to determine which column in Appendix K by multiplying the Collected Material Tonnes for the respective month by 12;
 - (c) using the information from subsections (a) and (b) determine the applicable Unit Processing Fee in Appendix K;
 - (d) determine the number of Tonnes of Collected Material Processed for the month in question based on the Monthly Report;
 - (e) multiply the applicable Unit Processing Fee (determined in subsection (c)) by the number of Tonnes of Collected Material Processed (determined in subsection (d)); and
 - (f) the result of the calculation completed in accordance with subsection (e) will be equal to the Processing Fee for the month in question.

The Parties acknowledge and agree that following the first Operating Year, the Unit Processing Fees identified in Schedule "C" to this Agreement shall be adjusted and re-calculated to account for increases in the CPI. The Unit Processing Fees shall be adjusted, beginning in the second Operating Year, as follows:

$$\begin{array}{l} \text{Unit Processing Fee for previous Operating Year} \\ \times \\ 100\% \text{ of the percentage change in the CPI over the previous Operating Year} \end{array}$$

3. Revenue Sharing

The Operator shall share the Net Revenue (Net Loss) with the City in the following proportions (the "Revenue Sharing"):

- 75% of the Gross Revenue (Gross Loss) belonging to the Operator; and
- 25% of the Gross Revenue (Gross Loss) payable to the City from the Operator

Any uncollected invoices or bad debt incurred, experienced or accrued through the Marketing of the Marketable Materials will not reduce the value of the portion of Revenue Sharing that the City receives.

If during the Term, the MRF or any temporary, remote material recovery facility, or any portion thereof is damaged or destroyed by fire or by other casualty such that the Operator cannot provide the Services in accordance with the terms and conditions of this Agreement for a period of thirty (30) consecutive days or longer (the "Downtime"), then the City the City's Revenue Sharing portion for such Downtime shall be equal to an average of the Revenue Share payment for the three (3) quarters prior to such fire or other casualty occurred.

The City shall have the right to review all of the Operator's documentation relating to the sale of Marketable Materials.

4. Invoices

During the term of the Agreement and any extensions thereof, the Operator shall provide an invoice to the City within 15 days after the end of the applicable month with sufficient detail of the Processing Fee and the monthly calculation together with the supporting weigh scale records and details for that month (the “Monthly Invoice”).

The Monthly Invoice must show the calculation and amount of:

- payment due to Operator (Processing Fee payment);
- payment due to the City (Revenue Sharing payment); and
- all applicable taxes.

The Monthly Invoice shall specify the calculated net payment due to the Operator or City after set-off.

In addition to the payment items listed as part of the Monthly Invoice above, the following payments must be subtracted from the quarterly invoices:

Payments Due to the City including:

- less Liquidated Damages for Loss 1 where the Operator fails to or is unable to accept Collected Materials at a temporary Transfer Station or at the Operator’s MRF as specified in Appendix I Section 17 and 18 ;
- less Liquidated Damages for Loss 2 where the Operator fails to have a permanent MRF operational and providing all of the Services set out in this RFP on or before July 1, 2014 as specified in Appendix I Section 19 and 20;
- less Liquidated Damages for Operator’s delay in unloading Collection Vehicles as specified in Appendix Section 31; and
- less Liquidated Damages for Operator’s failure to meet the Required Recovery Rate in the Recovery Rate Audits for the 4th, 7th and 10th calendar month for each Operating Year or the 1st calendar month of the following Operating Year, as may be applicable for that quarterly invoice as specified in Appendix I Section 49;
- Liquidated Damages for the Operator’s failure to be able to process all of the Collected Materials at the Designated Facility; and
- the City’s costs for the City’s Audits, as shown on an invoice from the City to the Operator as permitted by Appendix I Section 59.

The Operator’s quarterly invoice shall specify the calculated net payment due to the Operator or City after set-off taking into account less any applicable Liquidated Damages for Non-Performance and the costs for the City’s Audits.

The City shall make payment to the Operator within thirty (30) days of receipt and acceptance by the City of the invoice. Where the date for payment falls on Saturday, Sunday or a Statutory Holiday, the last day for payment shall be deemed to be the next Business Day following the thirtieth day.

In the event the payment due to the City exceeds the payment due to the Operator then the Operator shall pay to the City the City's proportion of the Revenue Sharing by certified cheque, electronic transfer or bank draft issued and delivered to the City no later than thirty (30) days after the last day of the month in which the Marketable Material was loaded and transported to a buyer. Such payment shall be accompanied by the Monthly Report for that month.

The Operator acknowledges and agrees that payment to the Operator will be made by the City out of the funds under the control of the City in its public capacity, and no member of Council or officer or employee of the City may be held personally liable or responsible to the Operator for payment under any circumstances whatsoever.

In the event that the City wishes to dispute any invoice received from the Operator, the City shall notify the Operator in writing within fifteen (15) days of the date that the City received the invoice, stating the reasons why the invoice is disputed. For the avoidance of doubt, the City may withhold payment of any disputed amount until any dispute is settled directly between the parties or in accordance with Appendix I Section 279.

Within five (5) Business Days of the Operator's receipt of any notice served by the City pursuant to Appendix I Section 105, the Operator shall respond by notifying the City as to whether or not it agrees with the statements made or with the supporting evidence supplied with the notice. If the Operator indicates that it does agree, or if the Operator fails to make such a response within that time limit, the City shall be entitled to retain on a permanent basis any amounts withheld by the City and to reclaim from the Operator the amount of any over-payment which may have been made to the Operator.

In the event that the Operator responds to the City's notice sent pursuant to Appendix I Section 105 that the Operator does not agree with all or any of the statements made in any notice served by the City, then the parties agree that matter or matters in question shall be determined pursuant to Appendix I Section 279.

5. Set-off and Moneys Due to the City

Notwithstanding any other provision in this Agreement, the City shall have the right to set-off and retain out of any monies due to the Operator such sum or sums as the City may deem necessary to protect the City from any claims against it by third parties arising out of the Operator's performance or non-performance of this Agreement and any payment to the City of Liquidated Damages which may have been, or may in the future be payable by the Operator under any provision of this Agreement.

The Operator agrees that should the amount retained in accordance with Appendix I Section 108 prove insufficient to meet the Operator's financial obligations, the City may enforce its claim for any deficiency against the Operator or the Performance Security. Should the amount retained exceed the total of any claims and associated

legal costs, the excess will be paid to the Operator without interest within thirty (30) days of a final determination of the amount properly owing.

Monthly, Quarterly and Annual Reporting

6. Monthly Report

Every monthly invoice shall be accompanied by the Operator's monthly report (the "Monthly Report"), which, at minimum, shall include:

- dates that Collected Materials were deposited at the MRF or temporary Transfer Station;
- scale tickets for all Collection Vehicles that deposited Collected Materials at the MRF or temporary Transfer Station during that month;
- monthly total tonnage of Designated Material by type and collection route number;
- monthly tonnage of Marketed Materials shipped to market;
- monthly tonnage of Marketed Materials awaiting delivery to End Markets but which are still at the MRF;
- the monthly tonnage of Residue generated from the Collected Material;
- the monthly tonnage of Residue shipped for disposal;
- the monthly tonnage of Collected Material Processed;
- the name and location of the licensed waste management facility where the Residue were disposed of;
- monthly Net Revenue (Net Loss) the Operator received from the sale of Marketable Materials by each Marketable Material and identification of the City's portion thereof;
- names and location each End Market for the Marketable Materials sold that month;
- the Processing Fee due to the Operator from the City;
- the Monthly Composition Audit report;
- the Monthly Independent Audit (for the first two Operating Years of the Agreement);
- the Monthly Recovery Rate Audit report;
- the overall Recovery Rate of the MRF for the month; and
- and such other material and information as the City may request from time to time.

Monthly reports of the previous month's activities will be due to the City by the last day of each month.

Following termination or expiration of the Agreement, the final Monthly Report is due on the 15th of the month following the final month of the term or from the date of termination.

7. Quarterly Report

The Operator shall provide the City with quarterly reports which shall be due to the City on the 15th day of the 4th, 7th and 10th calendar month for each Operating Year

and the 15th day of the 1st calendar month of the following Operating Year (the “Quarterly Report”). At minimum, the Quarterly Report shall include:

- dates that Collected Materials were deposited at the MRF or temporary Transfer Station;
- scale tickets for all Collection Vehicles that deposited Collected Materials at the MRF or temporary Transfer Station during that month;
- quarterly total tonnage of Designated Material by type and collection route number;
- quarterly tonnage of Marketed Materials shipped to market;
- quarterly tonnage of Marketed Materials awaiting delivery to End Markets but which are still at the MRF;
- quarterly tonnage of Residue generated from the Collected Material;
- quarterly tonnage of Residue shipped for disposal;
- quarterly tonnage of Collected Material Processed;
- name and location of the licensed waste management facility where the Residue were disposed of;
- monthly Net Revenue (Net Loss) the Operator received from the sale of Marketable Materials by each Marketable Material and identification of the City’s portion thereof;
- names and location each End Market for the Marketable Materials sold that quarter;
- the Processing Fee due to the Operator from the City;
- the Monthly Composition Audit report;
- the Monthly Independent Audit (for the first two Operating Years of the agreement);
- the Monthly Recovery Rate Audit report;
- the overall Recovery Rate of the MRF for the quarter; and
- and such other material and information as the City may request from time to time.

Following termination or expiration of the Agreement, the final Quarterly Report is due on the 15th of the month following the final month of the term or from the date of termination.

8. Annual Report

Annual reports will be due by October 31st of each year of the term of the Agreement between the City and the Operator (the “Annual Report”).

The Operator will provide its Annual Report in a printed format and electronically and shall contain, at minimum, the following information for Collected Material delivered at the MRF:

- annual total tonnage of Designated Material by type and collection route number;
- annual tonnage of Marketed Materials shipped to market;
- annual tonnage of Marketed Materials awaiting delivery to End Markets but which are still at the MRF;

- annual tonnage of Residue generated from the Collected Material;
- annual tonnage of Residue shipped for disposal;
- annual tonnage of Collected Material Processed;
- annual Net Revenue (Net Loss) the Operator received from the sale of Marketable Materials by each Marketable Material and identification of the City's portion thereof;
- the Processing Fee due to the Operator from the City;
- the Monthly Composition Audit report;
- the Monthly Independent Audit (for the first two Operating Years of the Agreement);
- the Monthly Recovery Rate Audit report;
- the overall Recovery Rate of the MRF for the Operating Year;
- and such other material and information as the City may request from time to time.
- the MRF's cost per Tonne to process Designated Material;
- the Operator's cost per Tonne for Residual disposal (including hauling cost);
- net revenue/Tonne for each Marketed Material;
- average revenue per Tonne for all Marketed Material; and
- such other material and information as the City may request from time to time.

Following termination or expiration of the Agreement, the final Annual Report is due on the 15th of the month following the final month of the term or from the date of termination.

9. Data Sharing

As part of the Service, the Operator shall keep records and data on a daily and cumulative basis regarding the City's Co-Mingled Recycling Processing Program which shall be available to the City upon request.

All data sharing provided to the City must be provided in the following forms:

- batch files must be in a format acceptable to the City (CSV type); and
- must be provided through a secure FTP site .

The Operator shall provide the Monthly, Quarterly and Annual Reports in a written format as well as electronically in a form the City can use in subsequent reporting and analysis.

The Operator shall maintain records for the Services for the term of this Agreement and any extensions thereof plus a period of 2 years following the termination of this Agreement.

The City may at any time request the Operator to produce for inspection any records and reports relating to the provision of the Services. The City may photocopy such records and reports as it deems appropriate.

10. Requirements Upon Termination

Upon termination of the Agreement, the Operator will perform the following activities:

- process all Collected Material to clear the Tipping Area and all processing lines;
- remove and dispose of all Residue at the City Landfill;
- empty all Marketable Materials from storage areas;
- prepare all Marketable Materials for delivery to End Markets;
- load all Marketable Materials onto vehicles intended for End Markets;
- ship all Marketable Materials to End Markets;
- pay any outstanding payments owed to the City; and
- submit final Monthly, Quarterly and Annual Reports.

11. Greenhouse Gas Credits

All rights, benefits, title and interest related in whole or in part to any greenhouse gas emission reduction created by Co-Mingled Recycling Collection Program, diversion of Collected Materials from the City Landfill, any processing of Collected Materials at a Designated Facility and any right to claim for its benefit any credit, allowance acknowledgement or offset with respect to such greenhouse gas emission reduction that may arise through the creation of a national program, provincial program or other government regulatory structure shall accrue to and be owned by the City.

12. Performance Security

A Performance Security will be required from the Operator prior to the execution of an Agreement. Such Performance Security shall be \$3,000,000.00 in the form of a cheque certified by the bank upon which it is drawn, a money order, an irrevocable bank letter of credit (no interest shall be payable on such deposits), or a performance bond signed and sealed by the Operator's surety from a surety company authorized by law to carry out business in the Province of Saskatchewan and approved by the City. Such deposits will be retained until completion of the Agreement to the satisfaction of the City.

Failure of an Operator to provide a Performance Security within seven (7) business days after the Operator and City have each executed the Agreement may be considered sufficient grounds for rejecting the Proposal and accepting the next most qualified Proposal or requesting new Proposals. The performance bond and irrevocable letter of credit must either automatically renew or be valid for the term of the Agreement in the amount specified, such that continuous coverage is provided throughout the term of the Agreement. No interest will be paid by the City.

APPENDIX A

Table 1 – 2008 Waste Audit Results

Material	Pop'n > SF HHs >	2011	2012	2013	2014	2015	2020	2025	2030
		199,254 60,958	202,644 61,995	206,114 63,057	209,579 64,117	212,711 65,075	225,513 68,991	237,094 72,534	247,778 75,803
Curbside SF Households									
Newspapers		4,023	4,091	4,161	4,231	4,294	4,553	4,787	5,002
Magazines		948	965	981	998	1,013	1,073	1,129	1,179
Telephone Books/Directories		627	637	648	659	669	709	746	779
Corrugated Cardboard		2,023	2,057	2,093	2,128	2,160	2,289	2,407	2,516
Boxboard		1,451	1,476	1,501	1,526	1,549	1,642	1,727	1,805
Fine Paper		1,100	1,119	1,138	1,157	1,175	1,245	1,309	1,368
Polycoat		144	146	149	151	154	163	171	179
Other		914	930	946	962	976	1,035	1,088	1,137
Total Paper		11,231	11,422	11,617	11,813	11,989	12,711	13,363	13,966
PET #1		589	599	609	620	629	667	701	732
HDPE #2		236	240	244	248	252	267	281	293
Clear Food & Beverage		1,403	1,427	1,451	1,475	1,498	1,588	1,669	1,744
Coloured Food & Beverage		612	623	633	644	654	693	729	761
Ferrous		506	515	524	532	540	573	602	629
Non-ferrous (aluminum)		350	356	362	368	373	396	416	435
Other		914	930	946	962	976	1,035	1,088	1,137
Total Containers		4,610	4,689	4,769	4,849	4,922	5,218	5,486	5,733
TOTAL (tonnes)		15,841	16,110	16,386	16,662	16,911	17,929	18,849	19,699
MR Households		16,500	16,781	17,068	17,355	17,615	18,675	19,634	20,519
Estimated MR Recovery (tonnes)		1,287	1,309	1,331	1,354	1,374	1,457	1,531	1,600
Additional Regional HHs		6,096	6,199	6,306	6,412	6,507	6,899	7,253	7,580
Estimated Regional (tonnes)		1,585	1,612	1,639	1,667	1,692	1,794	1,886	1,971
TOTAL (tonnes)		18,713	19,031	19,357	19,682	19,977	21,179	22,267	23,270

APPENDIX B

Table 2 – Projected Recovery of Materials

Material	2008 Audit			
	April Total (kg)	%	Total Sample (kg) 255,940	Kg/hh/yr 11,876
Newspapers	62.0	5.0%	12,884	56.4
Magazines	22.8	1.9%	4,738	20.7
Telephone Books/Directories	22.6	1.8%	4,697	20.6
Corrugated Cardboard	23.4	1.9%	4,863	21.3
Boxboard	39.6	3.2%	8,229	36.0
Fine Paper	43.6	3.5%	9,061	39.7
Tissue Paper	29.0	2.4%	6,027	26.4
Wallpaper	0.0	0.0%	0	0.0
Polycoat	10.2	0.8%	2,120	9.3
Other Paper	19.2	1.6%	3,990	17.5
Total Paper	272.4	22.1%	56,608	247.9
PET #1	9.2	0.7%	1,912	8.4
HDPE #2	9.0	0.7%	1,870	8.2
PVC #3	0.4	0.0%	83	0.4
LDPE #4	0.4	0.0%	83	0.4
PP #5	6.2	0.5%	1,288	5.6
PS #6	4.8	0.4%	997	4.4
Other #7	1.8	0.1%	374	1.6
Other Plastic Packaging	52.4	4.3%	10,889	47.7
Plastic Product	45.4	3.7%	9,435	41.3
Total Plastic	129.6	10.5%	26,932	117.9
Clear Food & Beverage	24.4	2.0%	5,071	22.2
Coloured Food & Beverage	27.6	2.2%	5,736	25.1
Other Glass	7.2	0.6%	1,496	6.6
Total Glass	59.2	4.8%	12,302	53.9
Bio-hazardous	19.2	1.6%	3,990	17.5
Other Hygienic Waste	3.0	0.2%	623	2.7
Total Hygienic Waste	22.2	1.8%	4,613	20.2
Ferrous	17.8	1.4%	3,699	16.2
Non-ferrous (aluminum)	20.4	1.7%	4,239	18.6
Other Metal	17.6	1.4%	3,657	16.0
Total Metal	55.8	4.5%	11,596	50.8
Animal	53.4	4.3%	11,097	48.6
Carcasses	0.0	0.0%	0	0.0
Total Meat Organics	53.4	4.3%	11,097	48.6
Kitchen-Vegetable	149.6	12.1%	31,089	136.1
Crop Residues	0.0	0.0%	0	0.0
Other Non-meat Organics	0.0	0.0%	0	0.0
Total Non-Meat Organics	149.6	12.1%	31,089	136.1
Trees, Yard-clipping stump > 2 inches	19.2	1.6%	3,990	17.5
Trees, Yard-clipping stump < 2 inches	7.2	0.6%	1,496	6.6
Grass	74.4	6.0%	15,461	67.7
Leaves	72.4	5.9%	15,046	65.9
Other Yard Waste	2.0	0.2%	416	1.8
Total LYW	175.2	14.2%	36,408	159.4
Pesticides/Herbicides	0.2	0.0%	42	0.2
Other Hazardous Waste	8.6	0.7%	1,787	7.8
Total Hazardous	8.8	0.7%	1,829	8.0
Textiles	63.4	5.1%	13,175	57.7
Tires	1.2	0.1%	249	1.1
Rubber/Shoes	13.0	1.1%	2,702	11.8
Batteries	10.2	0.8%	2,120	9.3
Paint/Solvent/Aerosol Cans	0.2	0.0%	42	0.2
Waste oils/filters	0.6	0.0%	125	0.5
Household C & D	71.8	5.8%	14,921	65.3
House Product	48.2	3.9%	10,016	43.9
Electronic Product	56.0	4.5%	11,637	51.0
Unidentifiable	0.0	0.0%	0	0.0
Total Other	264.6	21.5%	54,987	240.8
Total Containers				
Contamination Total	40.8	3.3%	8,479	37.1
TOTAL	1231.6	100.0%	255,940	1,120.65

APPENDIX C

Solid Waste Audit of Regina Fleet Street Landfill



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**Faculty of Engineering
University of Regina
Regina, Saskatchewan
March 2009**



**UNIVERSITY OF
REGINA**

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A number of people were involved in the City of Regina Waste Characterization Study 2007-8. Assistance from the City of Regina personnel was instrumental in the execution of this research. In particular, assistance from Joe Bladyko, Dennis Pelletier, Mark Smishek, Deborah Lewko, Michel Latoski, Brent Rostad, John Harrison, Dustin Truscott, Arnie Bauer and Gary Nieminen was appreciated. Cooperation from waste collection crews and the landfill personnel was essential to the project.

In addition, the students assisting with fieldwork, data collection and data analysis including the manual sorting of waste was indispensable. This included research participation by Dustin Austman, Aaron Wirth, Dave Keller and David Boschman. Liaison between the City of Regina and University of Regina personnel was performed by Dwight Mercer.

EXECUTIVE SUMMARY

The report summarizes the final results of the City of Regina Fleet Street Landfill Waste Characterization Study performed by the University of Regina (Faculty of Engineering) for the City of Regina. The purpose of the funded study was to provide the City of Regina with an updated Waste Characterization Study as part of the city's solid waste management and waste minimization programming. The results of the audit are intended to enable the City of Regina to plan more sustainable programming related to solid waste collection, waste minimization, and solid waste disposal.

The City of Regina contracted the University of Regina (Faculty of Engineering) to complete the research in the fall of 2007. In order to establish a methodological approach, the researchers completed a review of existing protocols and a trial run phase to establish methodology suitable to research at the Fleet Street Landfill location. Following the trial run, sampling occurred at the landfill on a continuous basis. Waste was sampled at the location throughout the months of October 2007 to October 2008. The results of sampling have been included in the following report.

The 2007-8 Regina Waste Characterization Study considered, so far as practical; the overall research approach, study design, sampling and measurement procedures, data analysis and reporting as contained in the Canadian Council of Ministers of the Environment (CCME) Waste Characterization Sub-committee report entitled "Recommended Waste Characterization for Direct Waste Analysis Studies in Canada, April 1999" and the Alberta Environment and Recycling Council of Alberta report entitled "Provincial Waste Characterization Framework, October 2005".

The 2007-8 Waste Characterization Study data was derived from a landfill-based, direct, waste analysis and established both empirical baseline data and relevant methodologies for the collection and presentation of solid waste characterized within the City of Regina. The study characterized representative land-filled solid waste for a twelve month period to reflect the seasonal changes in composition of the solid waste, and attempted to differentiate representative types of solid waste by both source generator and solid waste collection type.

The research focused on the characterization of waste generated within the City of Regina by the residential sector and included the sampling of front street automated, front street manual and rear street automated collection types. Additionally, the study included the sampling of the ICI sector and the Small Vehicle Transport station over a 3 month time period.

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2. METHODOLOGY

2.1 Review of Existing Protocols

The initial phase of the project involved researching existing protocols for conducting waste characterization analysis. Two primary sources were used for developing the protocols to be employed at the Fleet Street Landfill during the twelve-month sampling period including the "*Recommended Waste Characterization Methodology for Direct Waste Analysis Studies in Canada, April 1999*" generated by Canadian Council of Ministers of the Environment (CCME) and the "*Provincial Waste Characterization Framework, October 2005*" compiled by Alberta Environment and the Recycling Council of Alberta. Sampling protocols were obtained from the aforementioned documentation and adjusted for sampling at the Regina Fleet Street Landfill location.

2.2 Sample Selection Process

An effort was made to ensure that samples were randomly selected for the waste characterization process. In order to ensure that samples were obtained from all residential collection types, samples were obtained from collection types on a rotational basis. Trucks were then randomly provided to fieldwork personnel from landfill personnel.

Once the load was selected for sampling purposes, the sample was spread at the sampling site by the truck driver. This resulted in a sampling site of approximately 6 metres by 3 metres by 2 metres. In accordance with the recommended sampling weight as documented in the aforementioned literature, the researchers randomly selected 15 to 20 bags of waste in order to generate a sample of 100 kg to 130 kg each. The researcher established a visual grid over the sample in order to randomly select the characterization sample; resulting in the selection of waste approximately every three feet.



Figure 1 – Photo of Sample Site

2.3 Categorization of Waste

The sample selection was weighed prior to sorting in order to provide verification for sample weights throughout the characterization process. The waste categories were established based on discussions between the University of Regina and the City of Regina and through review of waste characterization literature.

1. Paper (e.g. newspaper, telephone books, postal)
2. Plastic (e.g. RPC's, polystyrene, film, bottles)
3. Glass (e.g. glass containers: coloured and clear)
4. Cardboard (e.g. boxes)
5. Metal (Ferrous & Non-ferrous) (e.g. aluminium, tin, beverage containers)
6. Hygienic Waste (e.g. sanitary products)
7. Meat Organics (e.g. meat)
8. Non-Meat Organics (e.g. orange peels, produce, food waste)
9. Yard Waste (e.g. grass clippings, wood, sod, tree stumps)
10. Hazardous (e.g. batteries, prescription drugs, paint, HHW & pesticides)
11. Other (e.g. drywall, leather, rubber, mattresses, bulky items)

The "Residual" category was developed to account for unsortable waste remaining at the end of each sampling. This waste was not sorted due to either size (e.g. coffee grinds, shredded receipts) and/or being unidentifiable. The "Other" category was established to account for atypical waste not deposited on a regular basis from the residential sector.

In addition, a breakdown of the main categories into sub-classes occurred in order to provide increased detail. For example, the range of plastics was sorted into nine categories with both a total weight and a sub-class weight for each type. Paper product classes were developed based on market for each type of material. Yard waste included a range of waste types including tree branches greater than or equal to 2 inches in diameter and therefore, suitable for grinding. A complete listing of categories and sub-categories are in Appendix A. Forty-nine (49) sub-categories were established (Chart 1).

Chart 1: October to April Sub-Categories

October to May Sub-Categories	
Paper	8
Plastic	9
Glass	3
Cardboard	2
Hygienic Waste	2
Metal	3
Meat Organics	2
Non-Meat Organics	3
Yard Waste	5
Hazardous	2
Other	10
Total	49

As the result of meetings following the trial phase of sampling between the University of Regina and City of Regina personnel, alterations to the waste categories and sub-categories were made. These changes were implemented in May 2008. This included the addition of a Household Hazardous category, as well as the reorganization and addition of a few sub-categories.

The categories for waste characterization beginning in May 2008 were as follows:

1. Paper (e.g. newspaper, telephone books, postal)
2. Plastic (e.g. RPC's, polystyrene, film, bottles)
3. Glass (e.g. glass containers: coloured and clear)
4. Cardboard (e.g. boxes)
5. Metal (e.g. aluminium, tin, beverage containers)
6. Hygienic Waste (e.g. sanitary products)
7. Meat Organics (e.g. meat)
8. Non-Meat Organics (e.g. orange peels, produce, food waste)
9. Yard Waste (e.g. grass clippings, wood, sod, tree stumps)
10. Hazardous (e.g. batteries, prescription drugs, paint, HHW & pesticides)
11. Household Hazardous (e.g. pharmaceuticals, electronics, automotive waste)
12. Other (e.g. drywall, leather, rubber, mattresses, bulky items)

In total, 55 sub-categories were established for sampling between May and October (Chart 2) and are given in further detail in Appendix B.

Chart 2: May to October Sub-Categories

May to October Sub-Categories	
Paper	8
Plastic	9
Glass	3
Cardboard	2
Hygienic Waste	2
Metal	6
Meat Organics	2
Non-Meat Organics	2
Yard Waste	5
Hazardous	2
Household Hazardous	8
Other	6
Total	55

The sorting was performed by two to three labourers (Figures 2 & 3) to ensure accurate sorting of the waste at the sampling site. The fieldwork personnel received training in the sort methodology, so they could efficiently identify and categorize items within the sample. In addition, labourers received safety training from city personnel.



Figure 2: Student Researchers at the Sample Site



Figure 3: Sampling at the Characterization Site

The researchers proceeded by sorting the sample into main categories, followed by the sub-categorization of the waste at the sample site (Figure 4). Individual categories were weighed first to obtain total material (category) weight, followed by the sorting of waste into sub-categories, where individual class weights were recorded. Two scales were used for this process including an industrial scale for weighing larger items and total category weights, along with a kitchen scale for the accurate weighing of the smaller sub-categories.



Figure 4: Sampling Site

2.4 Documentation and Analysis

The data was recorded at the landfill on the template included within this report as Appendix A and B. The data was entered weekly into a database for statistical analysis purposes. The data verification process occurred twice in order to ensure data was correctly entered into the database. A breakdown of residential waste by composition and sampling from the ICI waste sector has been included within this final report.

2.5 On-site Equipment

The following is a list of equipment that was used in performing the study at the sampling location.

- Industrial scale
- Kitchen scale
- Twelve main category sorting buckets
- Nine sub-category sorting buckets
- Three magnets
- Three knives
- One broom
- One shovel
- One rake
- Six pairs of tongs
- Three clipboards
- Two staples
- Two calculators
- Permanent markers

- Digital camera
- Data entry sheets
- Category definition sheets
- Pens and pencils

2.6 Safety Precautions

The supervisor and all workers received health and safety training to address safety concerns and general hazards of sorting waste. All workers were required to provide documentation of up-to-date Tetanus, Hepatitis A and Hepatitis B immunizations. In addition, at least one labourer with First Aid training was on-site at all times throughout the research study. Labourers attended Sharps training in order to address the possibility of contact with straight razors, syringes and/or broken glass. Fieldwork personnel were equipped with tongs, cut-resistant gloves and cut-resistant arm guards to avoid direct contact with sharps. Syringes and other sharp items were placed in a biohazard container when discovered within a sample.

The following safety equipment was used by workers at the site:

- High visibility vests
- Coveralls
- Tyvek overalls
- CSA approved steel toed safety boots
- Cut-resistant gloves
- Cut-resistant arm guards
- Protective eyewear
- Dust masks
- Rubber aprons
- Hard hats
- Ear plugs
- Sharps kit
- First Aid kits
- Fire Extinguisher
- Eyewash Station
- Antibacterial wipes
- Water
- Disinfectant soap and paper towels
- Radio for contact with landfill personnel
- Emergency contact information

3. OVERVIEW OF CITY OF REGINA WASTE MANAGEMENT SYSTEMS

In 2007, the most current year of information, the Solid Waste Management Division within the Public Works Department of the City of Regina comprised of 4 units: Residential Waste Collection, Commercial Waste Collection, Waste Minimization, and Waste Disposal at the Regina Landfill - the latter included both the Small Vehicle Transfer Station and the regular landfill active face for the large solid waste compactor trucks.

The Residential Waste Collection unit provided a residential solid waste management service to 58,125 households and collected 59,900 tonnes of material – roughly one tonne of solid waste per household. The Commercial Waste Collection unit provided a contract service to 244 clients and collected 3542 tonnes of material in 2007. The Waste Minimization Unit administers several recycling programs and is discussed later in this report. The Waste Disposal Unit receipts increased again in 2007 with 550,374 tonnes of solid waste accepted in total. From this total, 48,400 tonnes of clean concrete was accepted and recycled in 2007.

The Residential Waste Collection unit is undergoing a fundamental change in service delivery. During the 2006 to 2009 period there is a conversion of the front-street manual service (plastic bags on front street) to a front-street automated cart collection system. About 17,000 homes have been converted to date and the remaining 12,000 residential homes will be converted in 2009. The rear-alley automated system is largely unchanged at this time and consists of relatively new metal side-loading dumpster containers; however, there is the option to slowly convert some rear alley collection routes to the plastics carts in the future. In regard to further change, the Regina Landfill will be undergoing a new solid waste disposal cell expansion and is expected to receive solid waste by October 2010; subject to regulatory approval (figure 5).

Finally, the Solid Waste Management Division, in addition to this Regina Waste Characterization Study, has also contracted with a private consulting firm for an Integrated Solid Waste Management Study. The Integrated Solid Waste Management Study will review all current solid waste management practices and examine options for future practices. Data and information from the Regina Waste Characterization Study are expected to be used in the pending Integrated Solid Waste Management Study to outline a longer-term strategic solid waste management plan for the City.



Figure 5: Solid Waste Disposal Cell Expansion

4. OVERVIEW OF CITY OF REGINA WASTE DIVERSION ACTIVITIES

The hierarchy of activities for the one person Waste Minimization Unit is to promote the concepts of Reduce, Reuse, and Recycling of residential solid waste in Regina. Public expectations, based on regular surveys, call for more options for recycling and this is anticipated to increase in Regina and most other urban centres in Canada. What options are available to address this demand in Regina and what elements in the residential and commercial wastes streams have the greatest potential for diversion and/or recycling?

The Waste Minimization Unit manages the following programs:

- Big Blue Bin – residential paper recycling program
- Tinsel Mulch – residential natural Christmas tree composting
- Backyard Composting Program – residential organic diversion
- thINK Food – residential inkjet cartridge recycling
- Call2Cycle – a national stewardship program for used batteries
- School Visits – over 50 schools visited in 2007
- Public Events – numerous displays, parades and media appearances
- Special Events – Household Hazardous Waste events

The highest profile program is the Big Blue Bin residential paper collection program. This depot-based system of on major shopping malls throughout the city collected 5777 tonnes of paper and cardboard in 2007 which is a modest increase over the previous three years. It is estimated over 600,000 visits to the Bins are generated each year and almost 100,000 virgin trees are saved by recycling the used paper. However, commodity prices continue to decline while program operational expenses increase. In addition, the level of collection has only increased by a modest percentage over the past 10 years and an alternative option may be required. Nevertheless, the program enjoys a positive, high profile for both residential waste generators and the shopping malls themselves.

Changing demographics and a continued shift to plastic artificial Christmas trees contributed to the downward diversion rates of the Tinsel Mulch Program. Over 6,600 trees were collected and processed in 2006 but this declined to 4,173 trees in 2007. In the short-term, the program is still valuable in both informing the general public on how a renewable resource such as a discarded natural Christmas tree can be processed into both weed-controlling mulch and a composted soil conditioner. Some of this loss in compostable material is offset by the collection and diversion of woodchips from other City of Regina tree management programs to promote xeriscaping and compost soil treatment. However, the long-term option for the Tinsel Mulch program is neither optimistic nor realistic in organic waste diversion.

The Backyard Composting Program endeavours to change household behaviour to achieve organic diversion inside the property line of the waste generator. Yard waste is converted into compost without being handled and

disposed in the Regina Landfill where it will take up valuable space and then decompose to generate methane gas – a potent “green house “gas. The Backyard Composting Program, realistically, may include up to twenty percent of Regina households, however, an effective mechanism to reach the remaining eighty percent of households is now required. A separate curb-side residential organic waste collection system may be required to effect a greater diversion of this dominant waste within the residential solid waste.

Public information and public education are the “cornerstones” of a long-term social behaviour change. The general public needs to be first informed of alternative options and then educated to change their behaviour. In addition, changed behaviour must also include doing things well. Increased and sustained funding for public information and education will be required to modify and direct the general public.

5. OVERVIEW OF WASTE SOURCES SAMPLED

Three source generators were considered within the Waste Characterization Study 2007-8 including: 1) waste collected from the residential sector; 2) waste generated by IC&I sector and; 3) waste deposited at the landfill through the Small Vehicle Transport station.

5.1 Residential Waste Source

The main focus of the research was to develop a dataset for residential waste within the City of Regina. The study established representative data of solid waste generation for some of the 63 residential solid waste collection routes. Only solid waste generated within the City of Regina limits was characterized. During the year-long research project, a total of 127 residential samples were selected and sorted (Chart 3).

Chart 3: Number of Residential Samples

Number of Residential Samples By Month	
October-07	3
November-07	7
December-07	6
January-08	8
February-08	7
March-08	13
April-08	13
May-08	15
June-08	8
July-08	14
August-08	10
September-08	7
October-08	16
Total	127

5.2 Residential Collection Types

Residential waste collection within the City of Regina relies on three collection types including: 1) front street automated; 2) front street manual and; 3) rear alley automated. Of the 127 residential samples completed, this included 48 front street automated samples, 33 front street manual samples, and 50 rear alley automated samples (Chart 4).

Chart 4: Number of Residential Samples By Collection Type

Number of Residential Samples by Collection Type	
Front Street Automated	46
Front Street Manual	31
Rear Alley Automated	50
Total	127

6. RESIDENTIAL RESULTS

6.1 Waste Characterization

Throughout the 2007-8 Waste Characterization Study, 127 residential samples were characterized. Due to the change in categories and sub-categories within the research study timeframe, data has been provided separately for those samples taken from October to April and those taken from May to October.

Average data for waste composition in 57 samples evaluated between October 2007 and April 2008 are provided in Figure 5. On average, the non-meat organics was the highest contributor to waste sampled during this period at 17.6%. This included kitchen-vegetable, crop residues and other non-meat organics. The second highest contributor to waste generated during these months was Other at 17.3% which included textiles, tires, rubber/shoes, batteries, paint/solvent, waste oils/filters, household C&D, house product, electronic product and unidentifiable materials. Paper averaged at 17%, which was the third highest contributor to waste and included newspapers, magazines, telephone books, fine paper, tissue paper, wallpaper, polycoat and other paper. The fourth highest average was plastic which accounted for 10.5% of the waste sampled during this time period and included PET 1, PET 2, PET 3, PET 4, PET 5, PET 6, PET 7, other plastic packaging and plastic product.

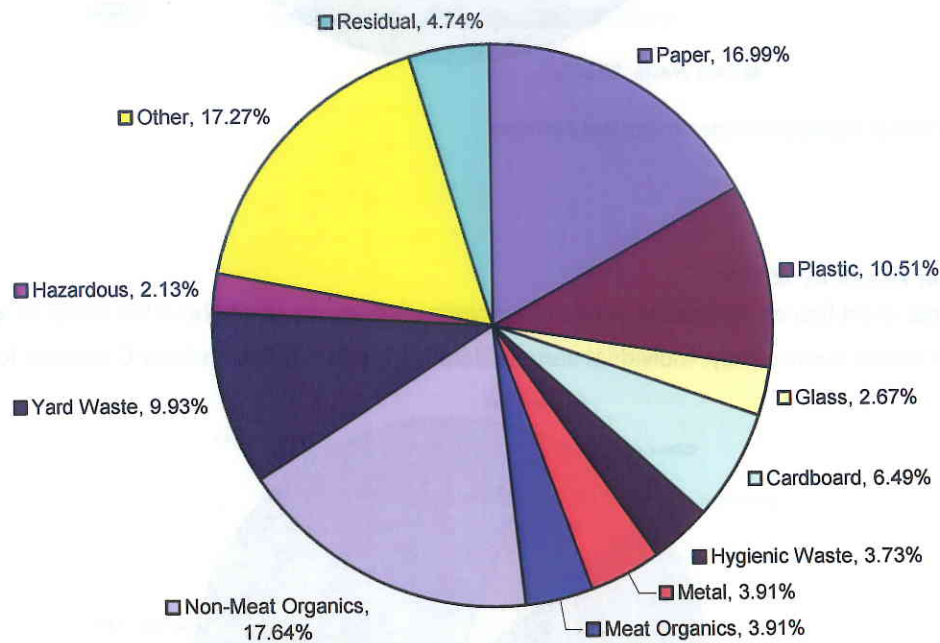


Figure 5: October to April Residential Waste Composition Averages

The average contributions of each waste category for the 70 samples taken between May and October 2008 are given in Figure 6. Yard waste contributed the most overall, with an average proportion of total waste of 29.9% during these months. Yard waste included trees (differentiated by two dimensions), grass, leaves and other yard waste. Paper accounted for the 11.4% of all waste sampled within this time period and included newspapers, magazines, telephone books, fine paper, tissue paper, wallpaper, polycoat and other paper. The non-meat

organics category accounted for 8.5% of all waste samples from May to October and included kitchen-vegetable product and other non-meat organics. The Other category accounted on average for about 23 % of all waste sampled and included textiles, tire, rubber/shoes, household C&D, house products and unidentifiable materials.

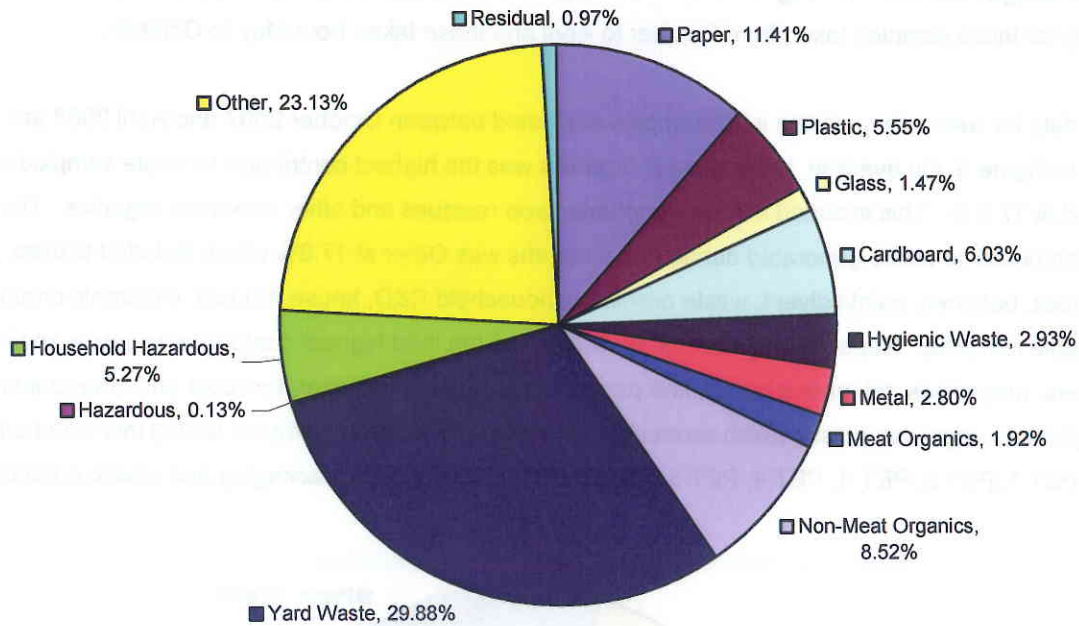


Figure 6: May to October Residential Waste Composition Averages

6.2 Residential Waste by Month

The following pie chart figures outline the waste characterization results throughout the study on a monthly basis throughout the twelve month study. Individual sample data is included in Appendices C through to O.

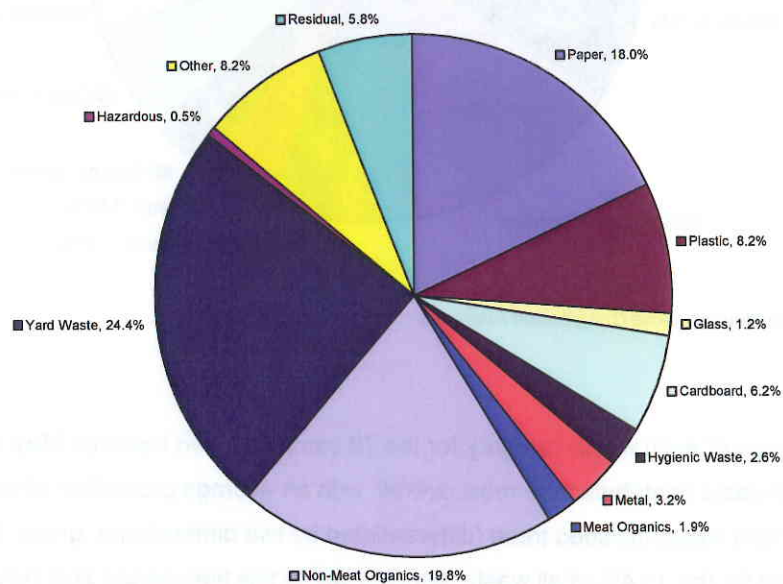


Figure 7: October 2007 Residential Waste Composition

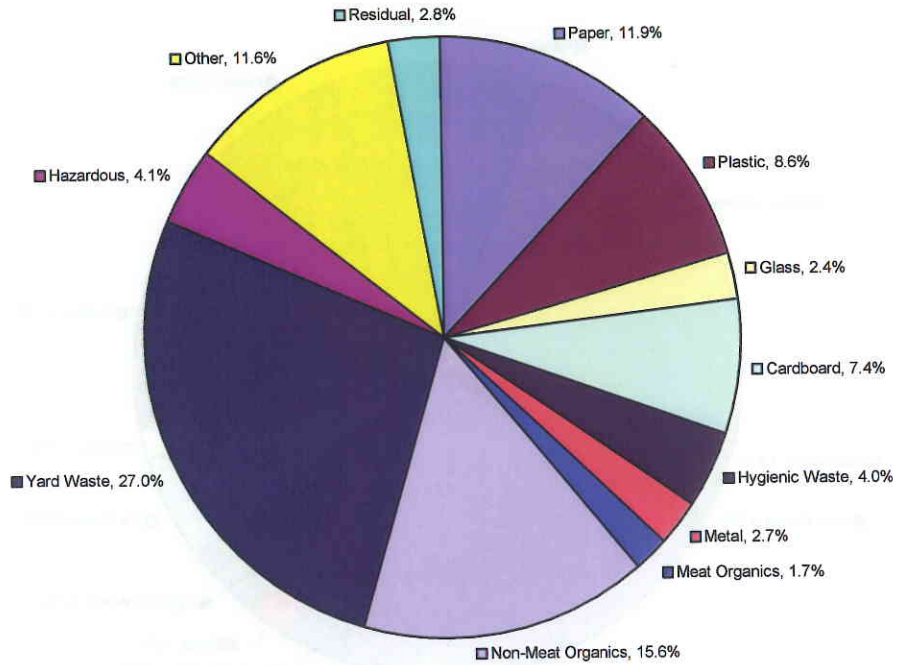


Figure 8: November 2007 Residential Waste Composition

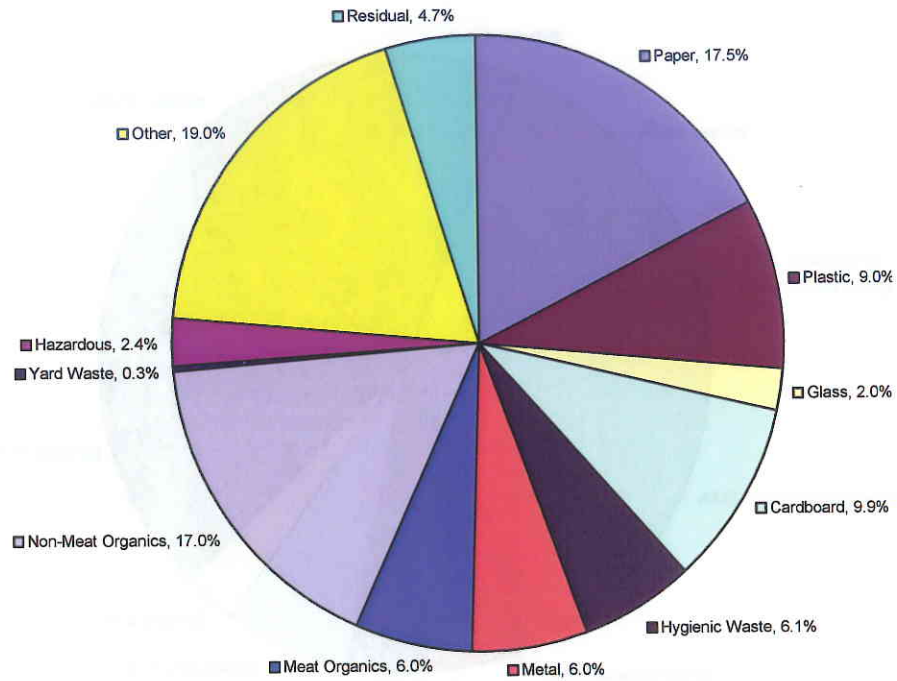


Figure 9: December 2007 Residential Waste Composition

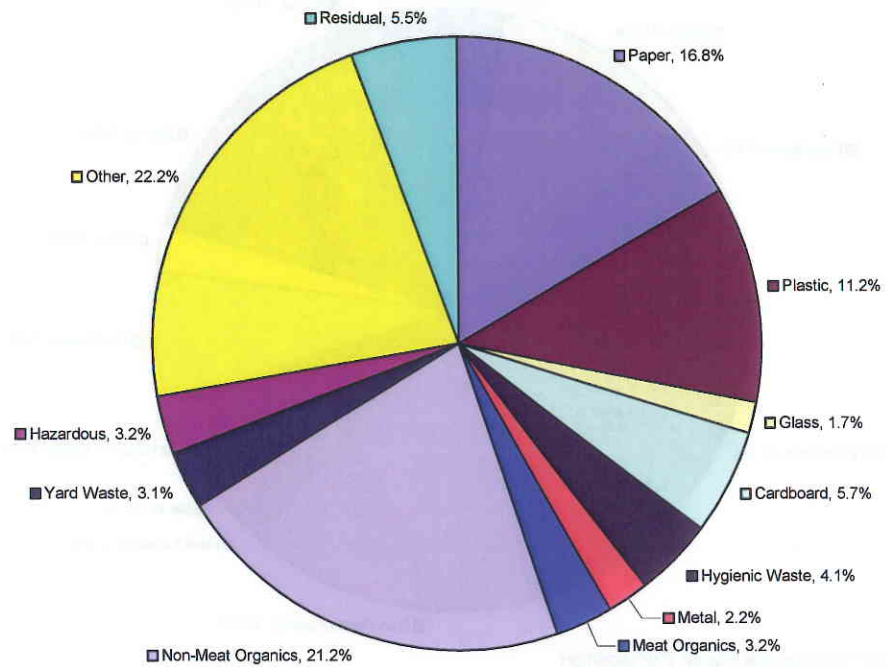


Figure 10: January 2008 Residential Waste Composition

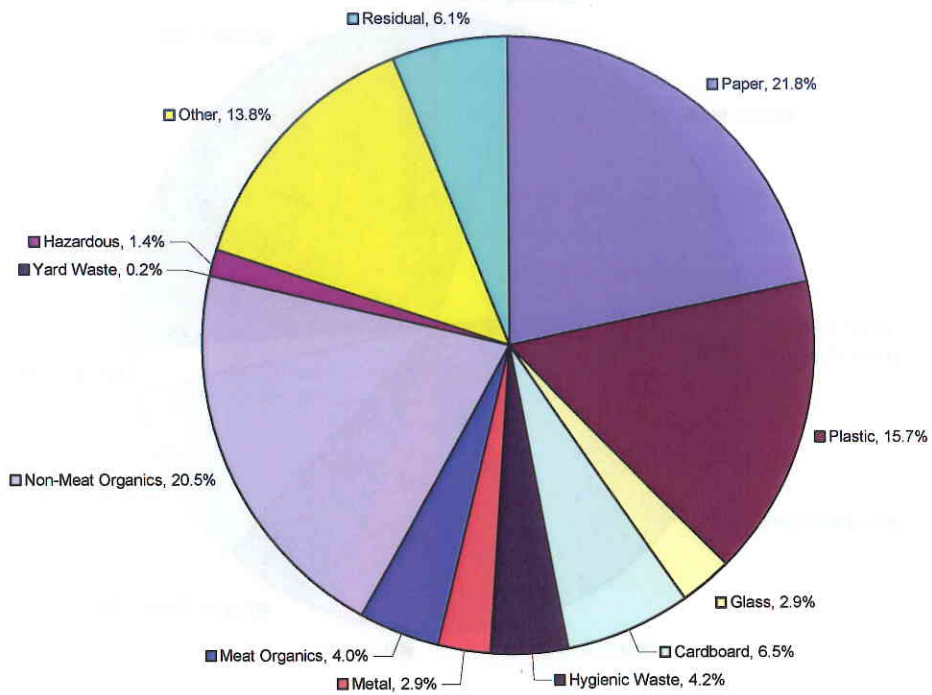


Figure 11: February 2008 Residential Waste Composition

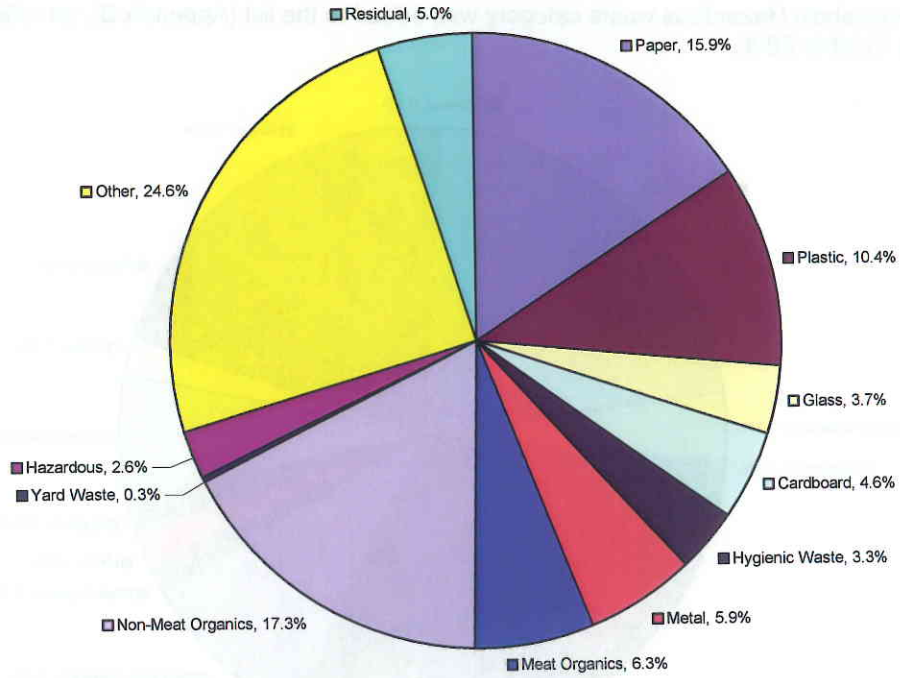


Figure 12: March 2008 Residential Waste Composition

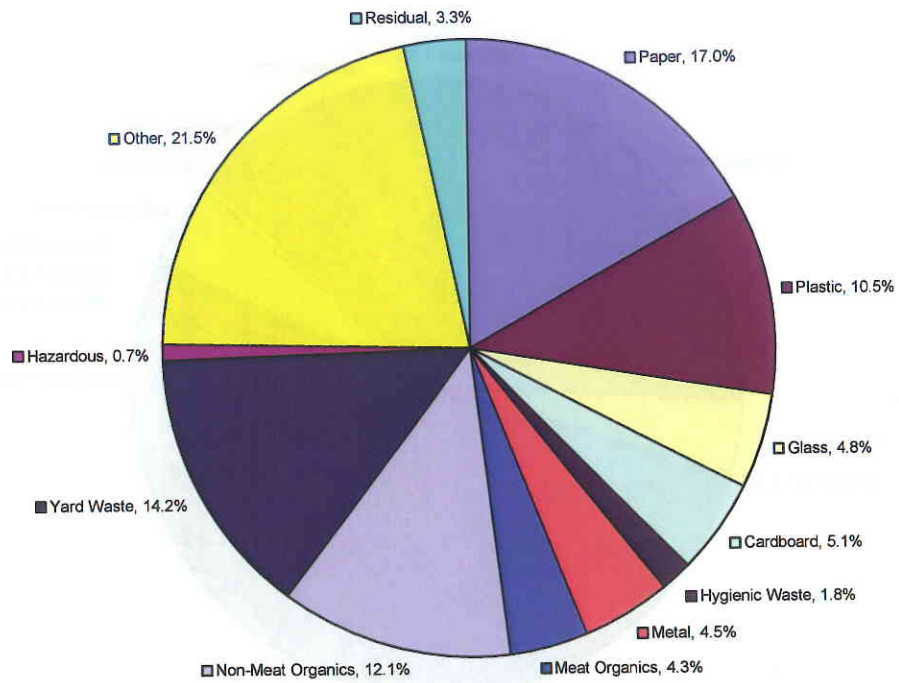


Figure 13: April 2008 Residential Waste Composition

In May 2008, a Household Hazardous waste category was added to the list (Appendix B), as reflected in the data from May to October 2008.

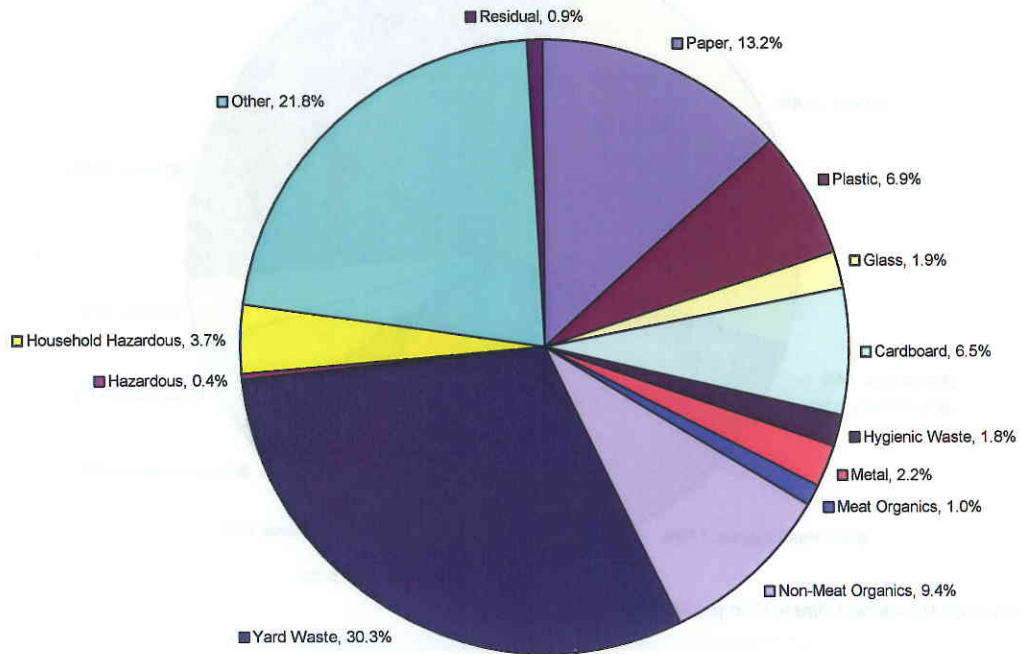


Figure 14:– May 2008 Residential Waste Composition

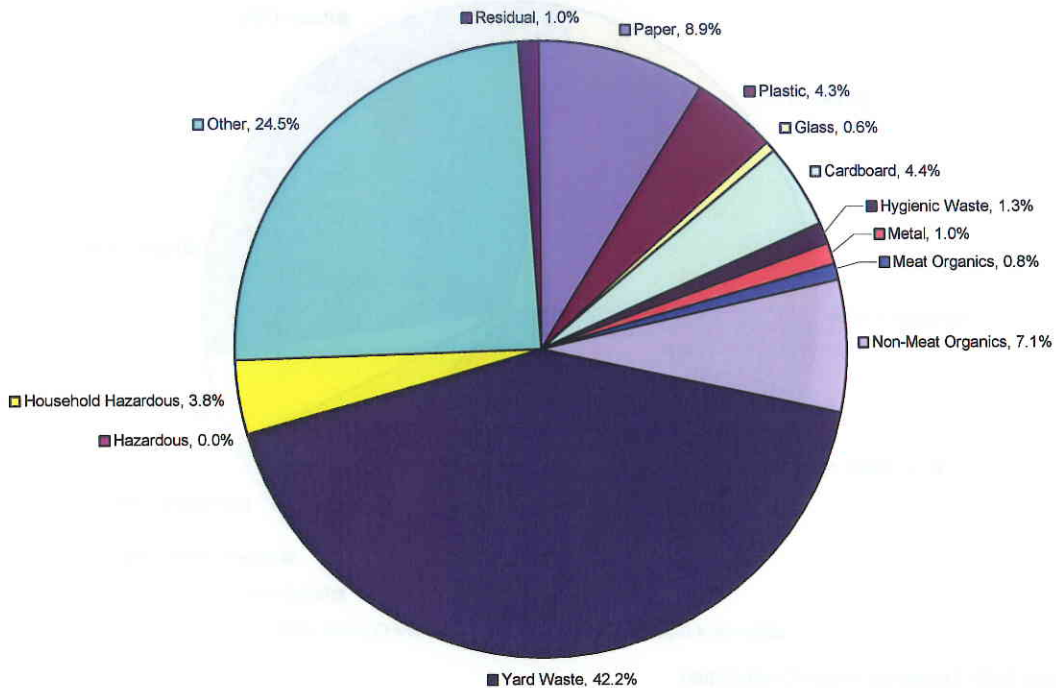


Figure 15: June 2008 Residential Waste Composition

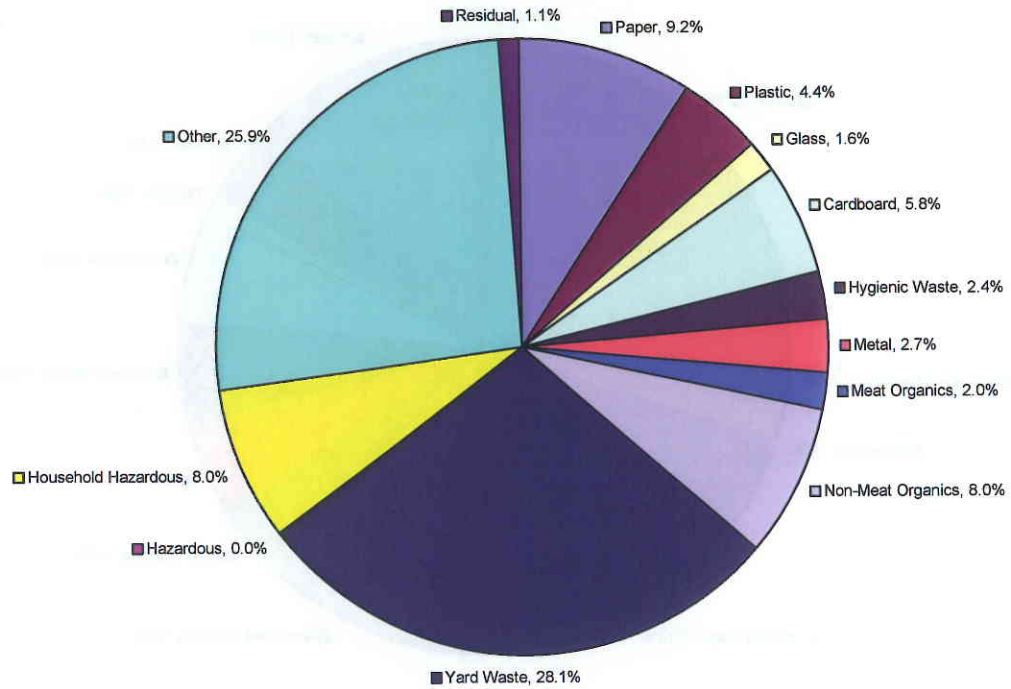


Figure 16: July 2008 Residential Waste Composition

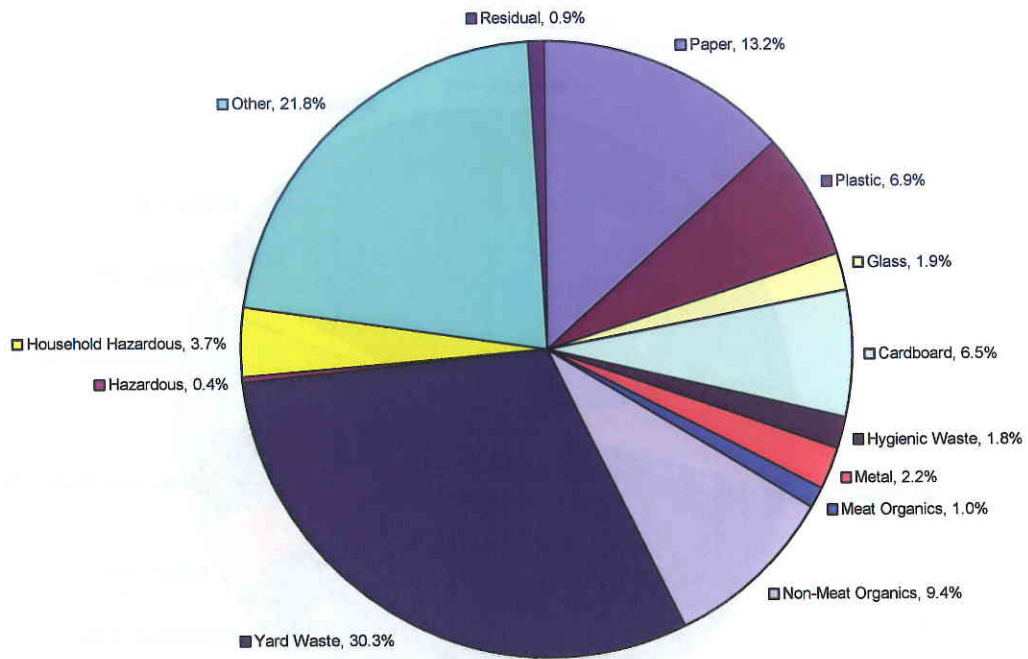


Figure 17: August 2008 Residential Waste Composition

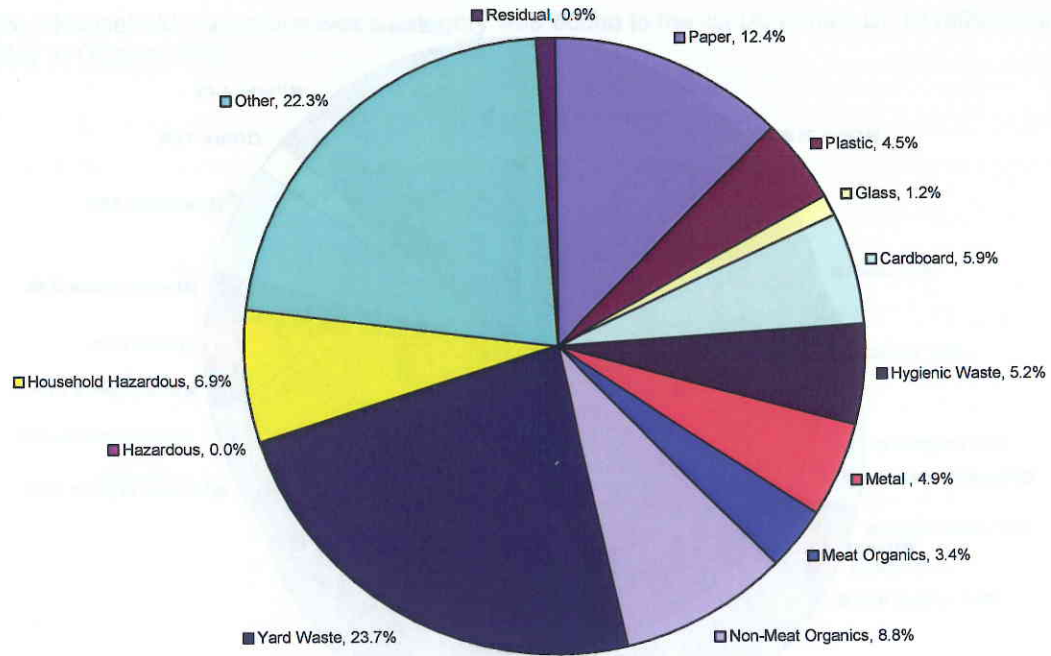


Figure 18: September 2008 Residential Waste Composition

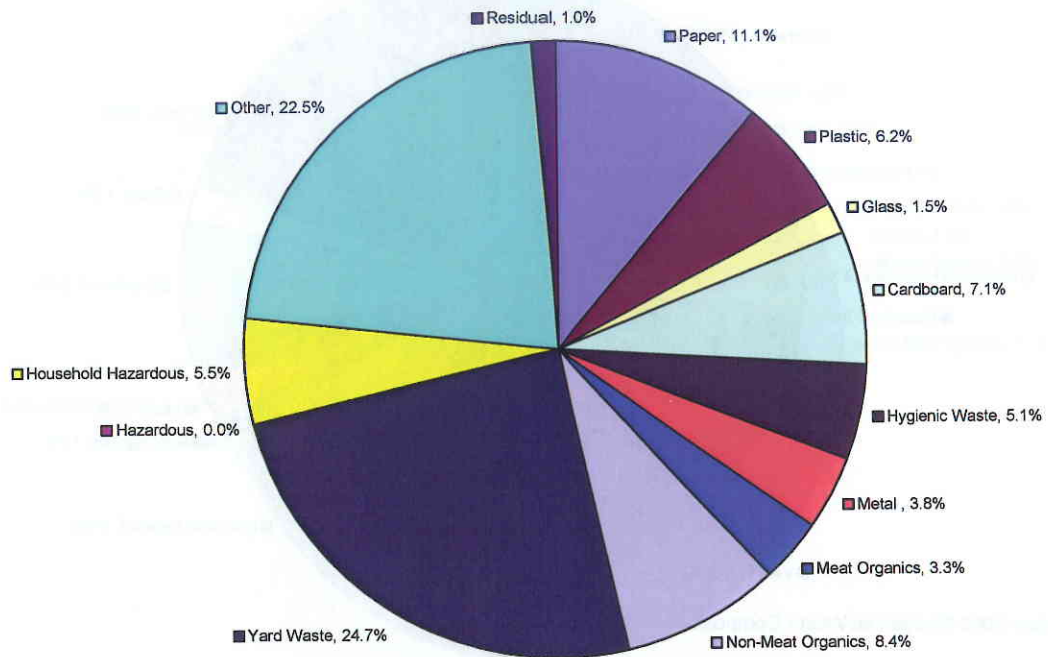
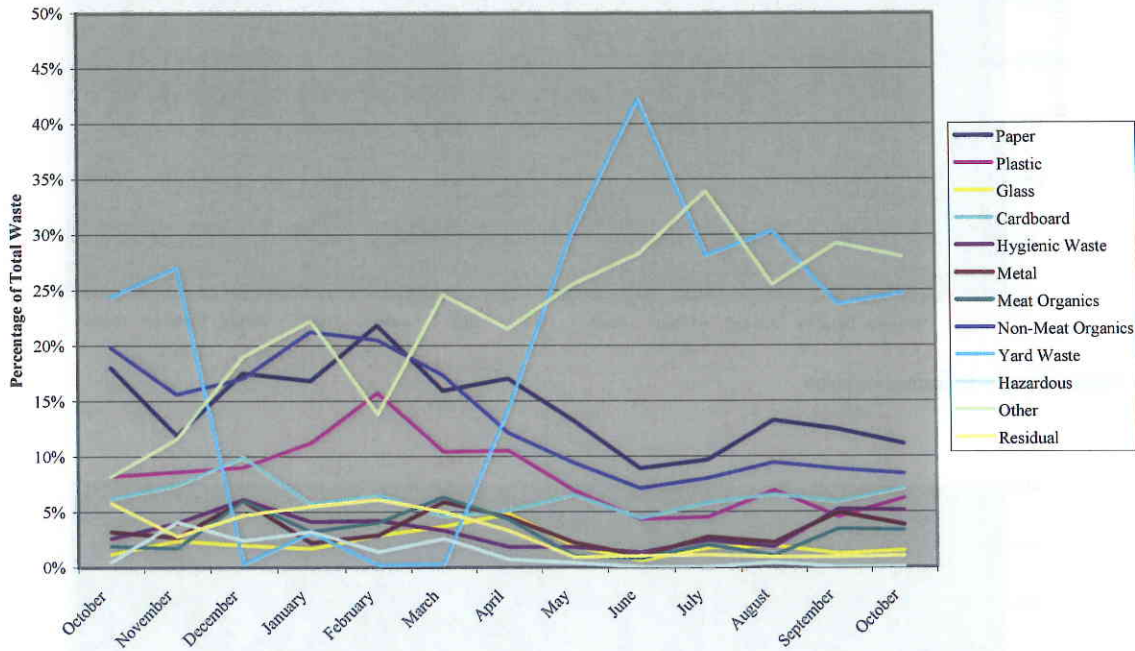


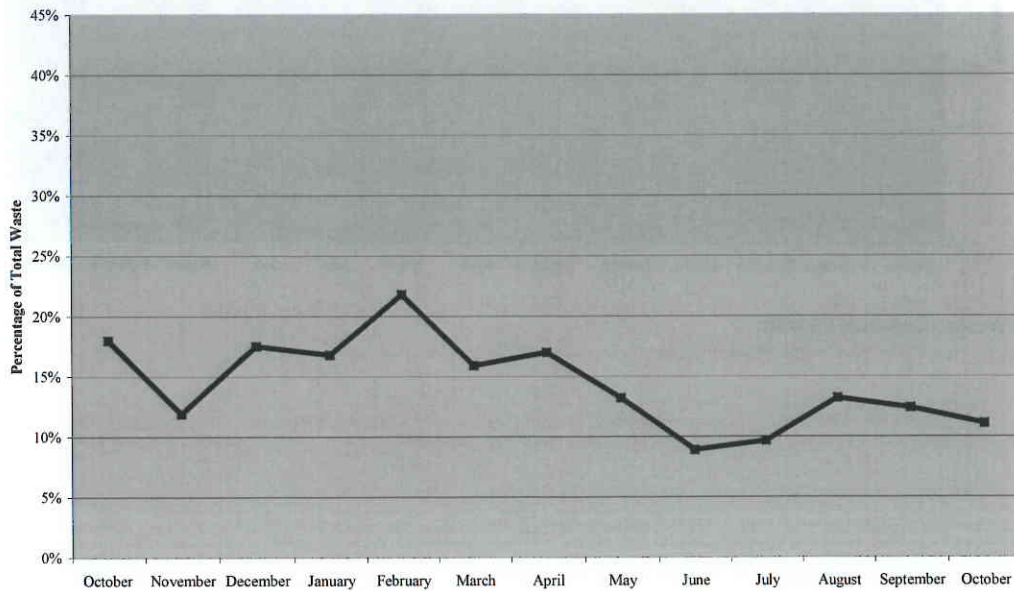
Figure 19: October 2008 Residential Waste Composition

6.3 Seasonal Variation

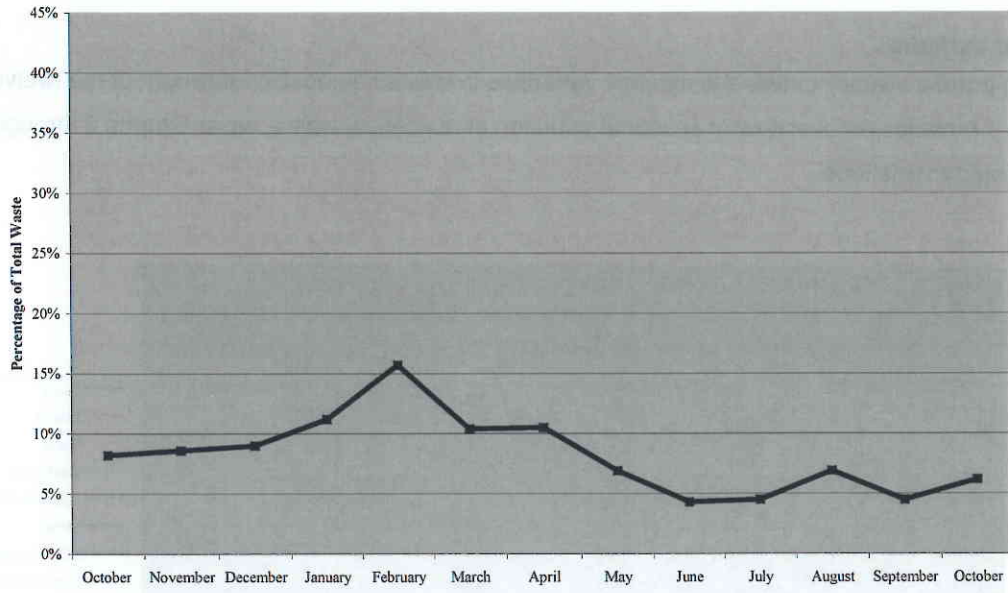
The following graphs visually outline the monthly variations in waste composition throughout the twelve month study. Graph 1 provides an overview of seasonal variation in residential waste, while Graphs 2 through 12 detail individual category variations.



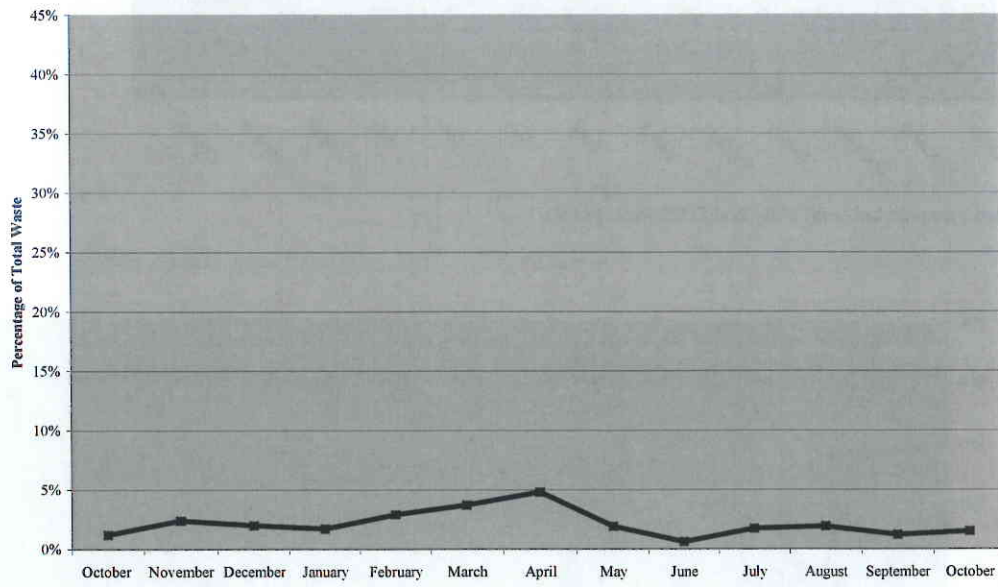
Graph 1: Seasonal Variation between 2007 and 2008 study period.



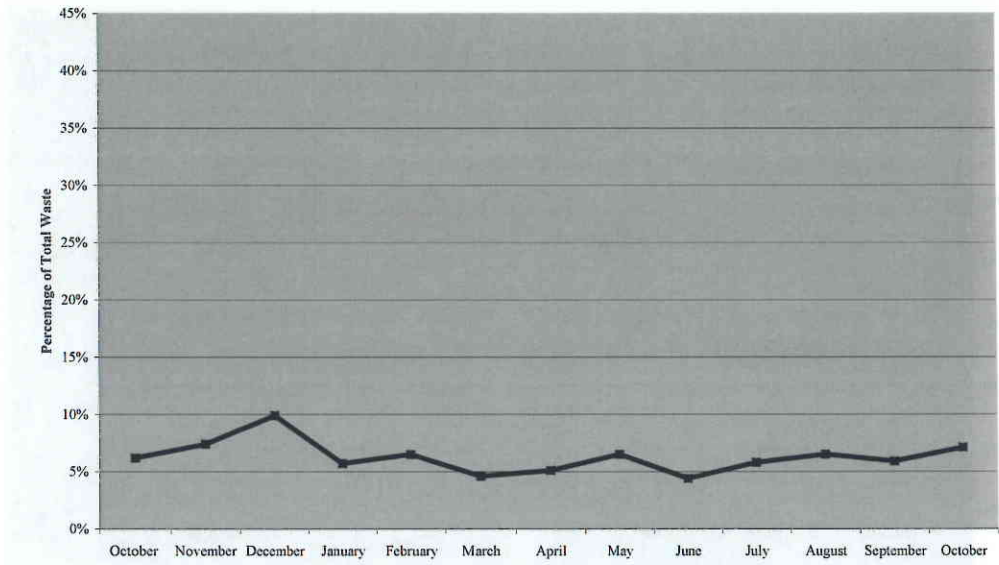
Graph 2: Paper Waste – Seasonal Variation



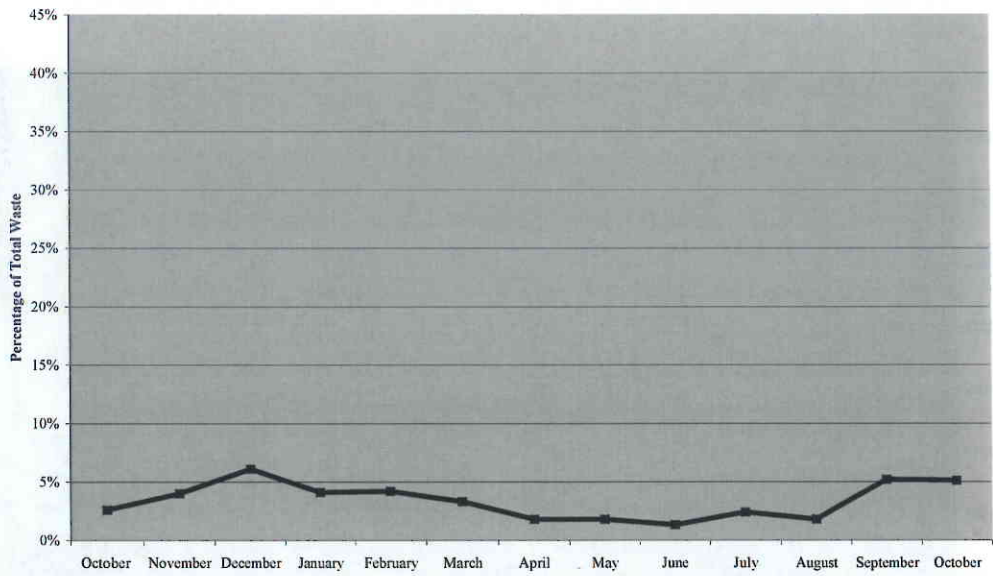
Graph 3: Plastic Waste – Seasonal Variation



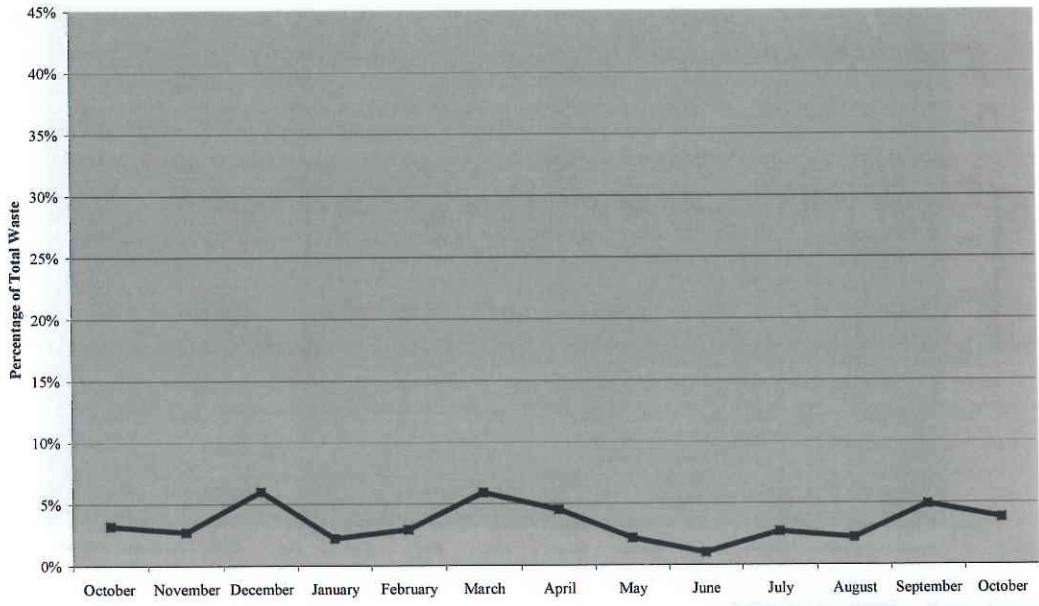
Graph 4: Glass Waste – Seasonal Variation



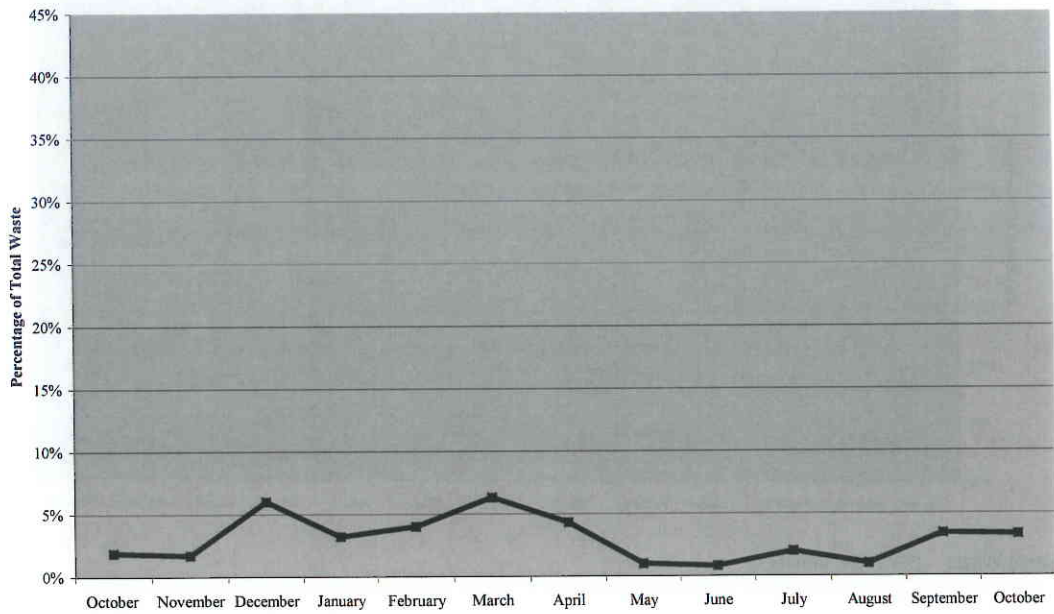
Graph 5: Cardboard Waste – Seasonal Variation



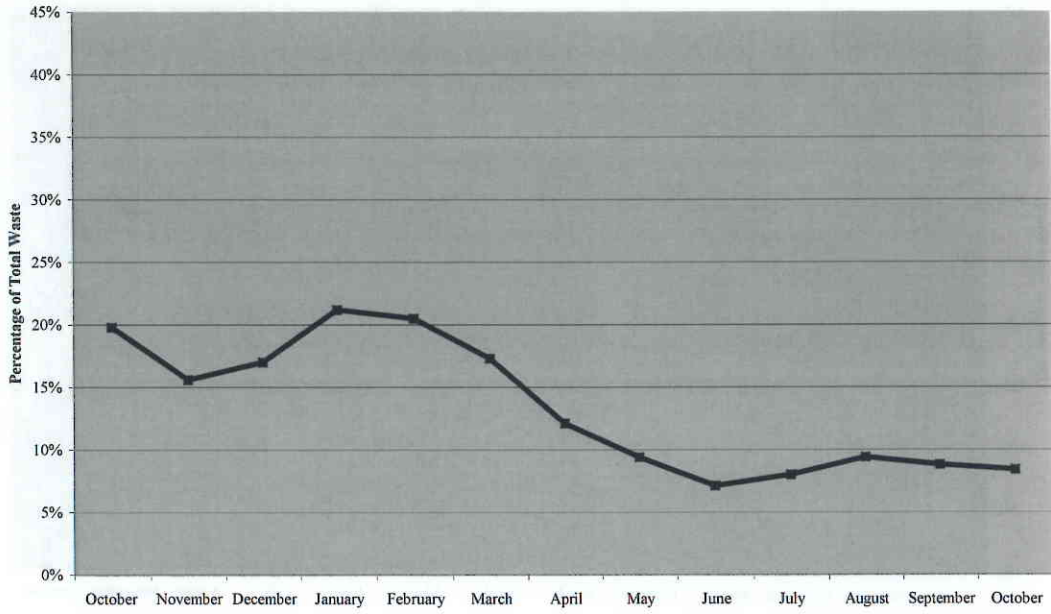
Graph 6: Hygienic Waste – Seasonal Variation



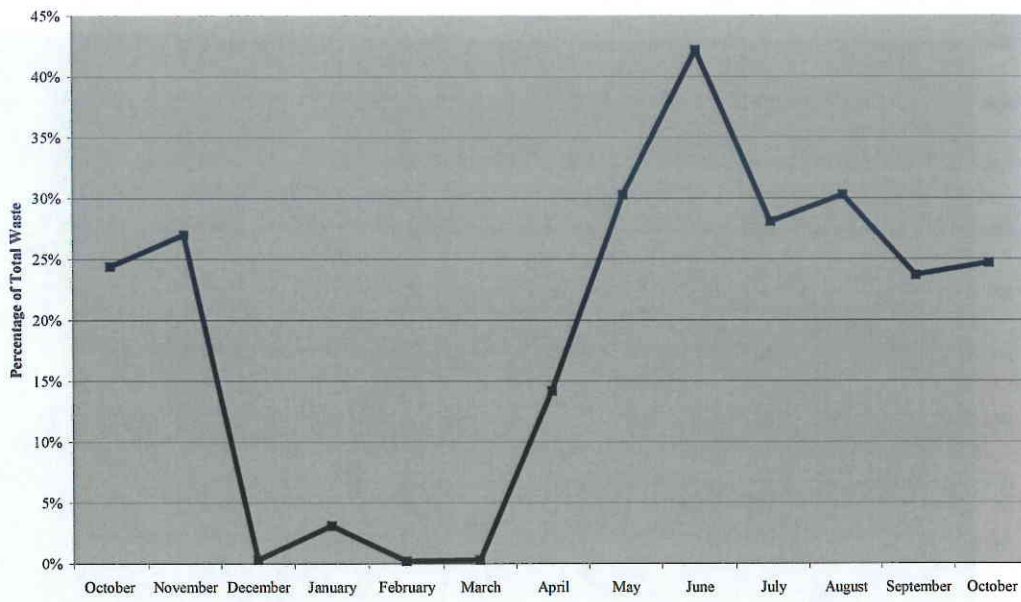
Graph 7: Metal Waste – Seasonal Variation



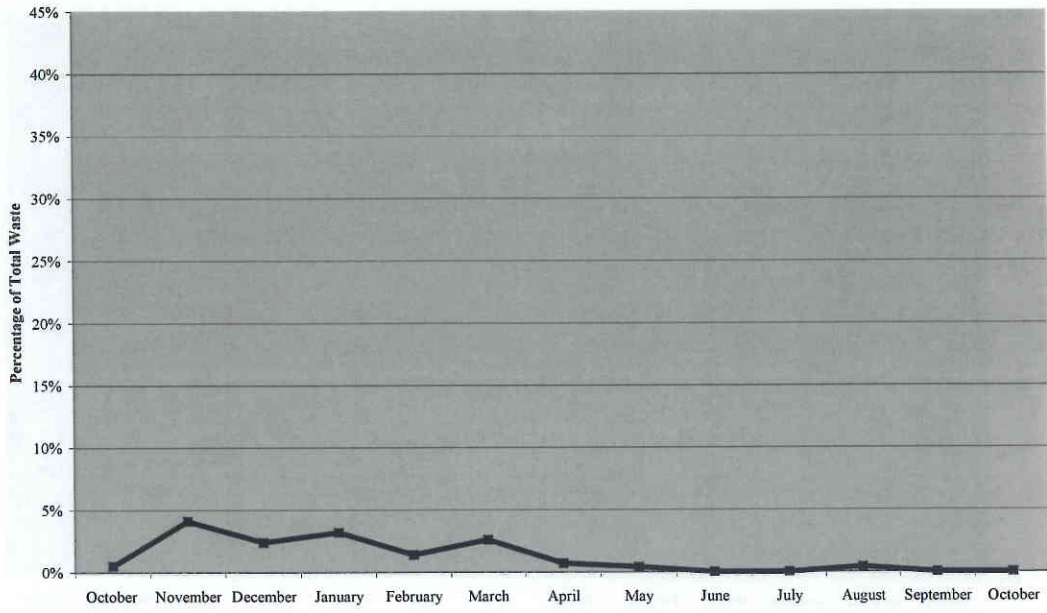
Graph 8: Meat Organics – Seasonal Variation



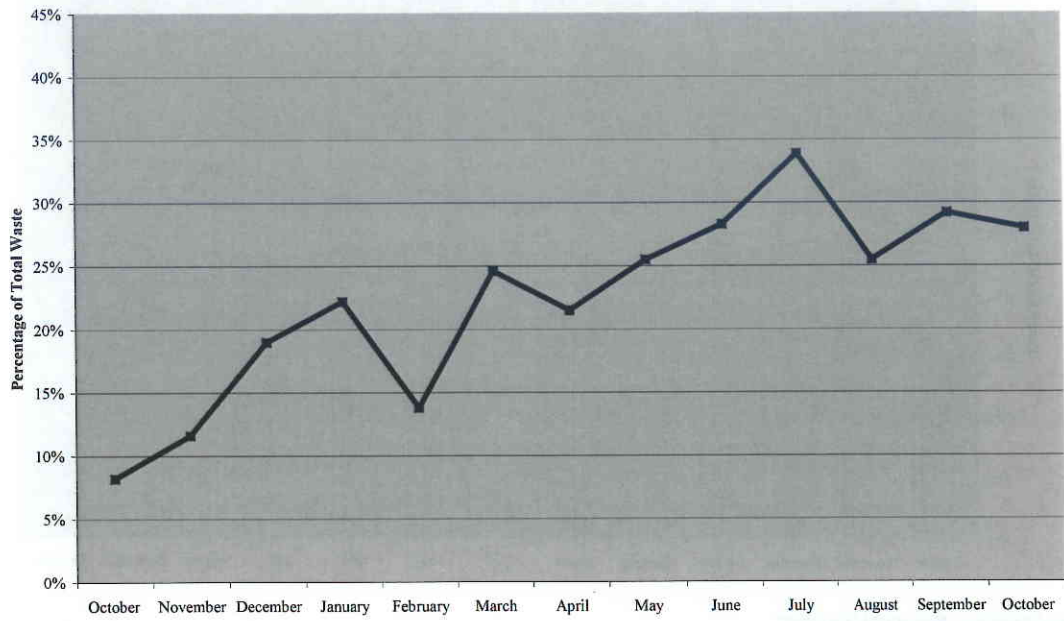
Graph 9: Non-Meat Organics – Seasonal Variation



Graph 10: Yard Waste – Seasonal Variation



Graph 11: Hazardous Waste – Seasonal Variation



Graph 12: Other Waste – Seasonal Variation

7. ICI SECTOR RESULTS

7.1 Waste Characterization

A total of 28 ICI samples were sorted during the sampling timeline. Of these, one trial run was completed in May to ensure residential methodology was applicable to the ICI sector. The remaining 27 samples the ICI waste stream was completed during the months of August to October 2008.

Chart 5: Number of ICI Samples

Number of ICI Samples	
May-08	1
August-08	6
September-08	10
October-08	11
Total	28

The following charts and figures display the waste composition of the ICI sector for the months of August through to October. Samples were obtained for a number of locations within the City of Regina. Due to confidentiality of organizations, information is provided in a month-by-month format. Individual sample data can be seen within Appendices P to R.

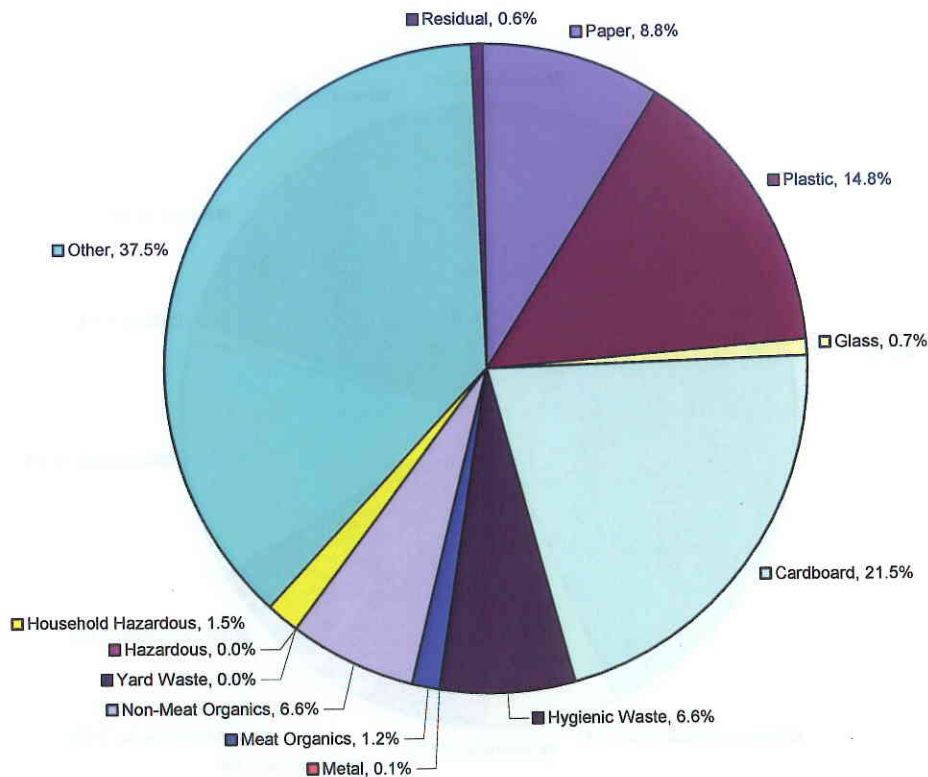


Figure 20: August 2008 ICI Waste Composition

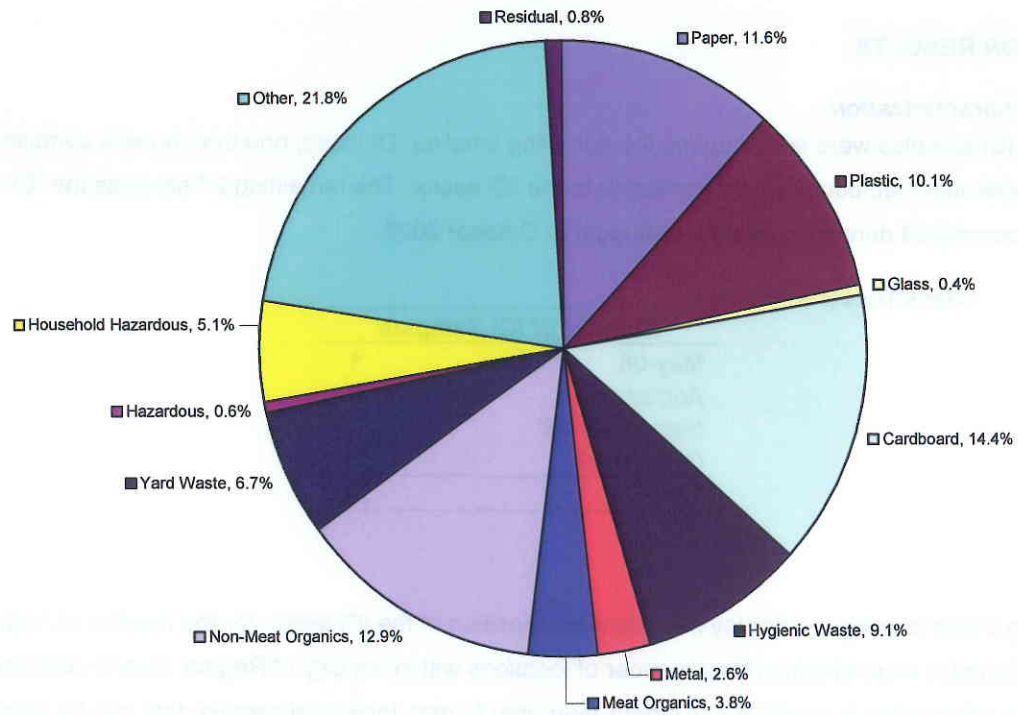


Figure 21 : September 2008 ICI Waste Composition

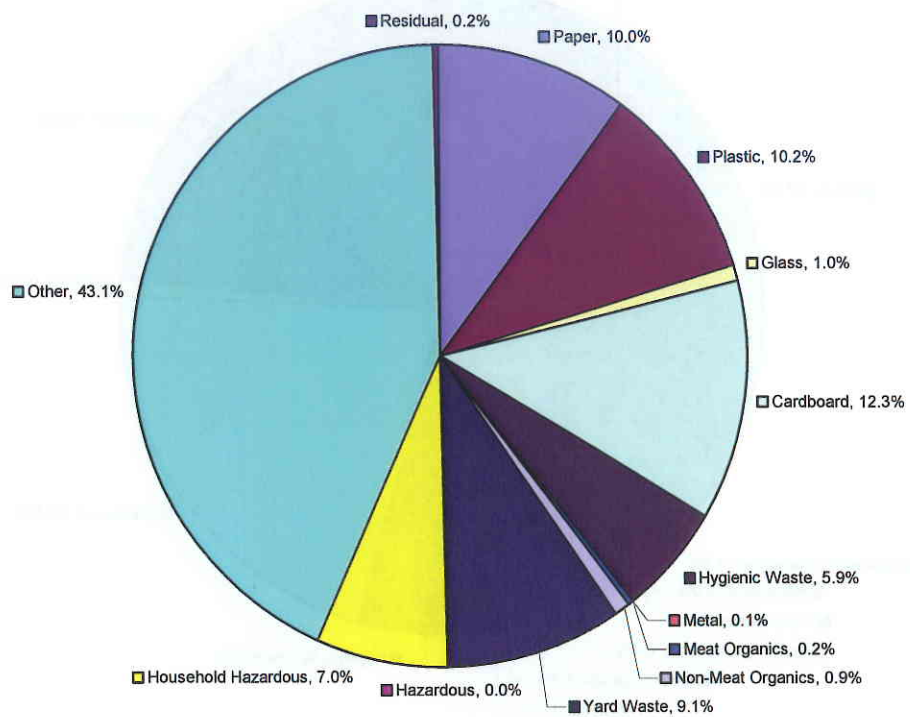


Figure 21 : October 2008 ICI Waste Composition

8. PROJECT SUMMARY

The City of Regina requested an updated Waste Characterization Study as part of its comprehensive solid waste management and waste minimization programming. The 2008 Regina Waste Characterization Study baseline data can later be used as resource data for the City of Regina's Integrated Solid Waste Management Study. The study enables the City to plan more sustainable programming related to solid waste collection, waste minimization and solid waste disposal.

The 2008 Waste Characterization Study data was derived from a landfill-based, direct waste analysis to establish both empirical baseline data and relevant methodologies for the collection and presentation of all sources of solid waste characterization data. This is the approach recommended in the April 1999 CCME study and will enable national benchmarking. It updates and replaces the earlier 1996 "Barlshen Study" which was largely an in-office research document from the Faculty of Engineering, University of Regina.

Direct waste analysis involves the actual quantification of waste through sampling and weighing trucks at a landfill and conducting waste audits and studies where samples are sorted by waste type and weighed. This method was selected by the CCME because it can potentially provide data that is more detailed and accurate.

Solid waste collection types in the City of Regina include front-street manual, front-street automated cart, rear alley automated dumpster, as well as private commercial solid waste contractors. During the one-year sampling phase, there was a major transition from front-street manual plastic bag collection to the new front street automated cart collection system. By the middle of 2009, almost all front street manual collection routes will be converted to the new front street automated cart system.

The Study is a representative sample of the land-filled solid waste within the City of Regina for a twelve month period to reflect the seasonal changes in composition of the solid waste, and attempted to differentiate representative types of solid waste by both the source generators and by solid waste collection type.

Further, the study attempted to track any changes in waste composition during the phased 2007 and 2008 service changes from front street manual to the front street automated cart-system. However, the changes were more substantial than planned and access to route boundary changes was a challenge.

8.1 RESIDENTIAL ORGANIC DIVERSION

The high percentage of organic waste in the Regina waste stream samples during the May to October solid waste collection period is a challenge for waste collection crews and an opportunity for composting. Grass clippings provide a strong base throughout this period, while the volume of fall leaves is tightly clustered in the late Fall period.

The 2008 Regina Waste Characterization Study sample suggests a total of 22,400 tonnes of residential yard waste is being discarded at the Regina Landfill annually. This represents approximately 30 percent of the average residential solid waste during the growing season, and does not include vegetable food waste. The percentage of yard waste in the sampling increased to 42 percent of all residential solid waste in the June 2008 sample.

Organic diversion from the residential solid waste sector could have the greatest impact on both the Waste Collection Unit and the Waste Disposal Unit at the Regina Landfill. Both backyard composting and a more formal municipal composting program merits serious consideration.

In addition, the planned closure and capping of the existing active cell at the Regina Landfill will require very large amounts of clean soil and compost to ensure the establishment of a stable vegetation cover to prevent slope erosion and water penetration. There is a good opportunity to consider the diversion of residential yard waste for a municipal compost operation at the Regina Landfill.

8.2 RESIDENTIAL PAPER AND CARDBOARD

Paper and cardboard are high profile commodities which the general public are accustomed to collecting and recycling either at a City of Regina Big Blue Bin or through a private subscription service. In general, paper and then cardboard are the first items a household will begin to recycle on a regular basis in Regina.

The 2008 Regina Waste Characterization Study sample suggests over 16,600 tonnes of newsprint and paper is being discarded at the Regina Landfill annually as compared to 5777 tonnes of paper product being collected by the Big Blue Bins for 2007. Unfortunately, it has not been possible to obtain the total amount of paper and newsprint being introduced into the Regina market place by the newspaper and flyer businesses. Nevertheless, the high tonnage of paper product still being found in the landfill samples suggests there is more material yet available to divert and recycle.

Fine paper, with its significant sampling weights was a surprise in the study. For the May to October 2008 sampling period, fine paper actually represented 37 percent of the residential sample weights versus 33 percent for newsprint.

Cardboard sampling weights tended to be more stable and generally averaged between 2.5 and 3.5 percent of the total sample weights. This equates to approximately 7342 tonnes of cardboard material being discarded at the Regina Landfill.

The operational costs of the Big Blue Bin program are largely fixed under a competitively tendered, medium-term contract. However, commodity prices for the processing and sale of this same product can fluctuate under world market conditions. In addition, there may be periods in time when the thermal value of the paper and cardboard might exceed the commercial value of the product for recycling.

8.3 RESIDENTIAL GLASS

There is a very low percentage of residential glass in the Regina waste stream sample and this amount is projected to decline future as glass is displaced by plastic packaging. The average sampling weights ranged between 1.6 percent to a high of 3.1 percent of the total sample over the year. Between 30-50 percent of the collected glass was coloured, for which there is currently no market. Glass recycling under current market and transportation conditions is not a sustainable option.

The 2008 Regina Waste Characterization Study sample suggests less than 2800 tonnes of all types of residential glass is being discarded at the Regina Landfill annually. This represents 0.5 % of the total waste stream, a very insignificant number. There is no stable market for glass in the Saskatchewan region. Glass is inert and is not anticipated to harm the environment through leaching or other environmental degradation processes. Beyond its sharps hazards, glass is most likely not a serious operational concern in sanitary landfill design and disposal. Furthermore, the small amount of glass in the waste stream does not displace high quantities of valuable space in the Regina Fleet Street Landfill.

However, for material management and public acceptance, a clear glass collection program is necessary to prevent consumers from discarding used glass in both the Big Blue Bins and the Metal Recycling Bins. The Glass Recycling Program should be retained until a possible curb-side recycling program is developed by the City.

8.4 HOUSEHOLD HAZARDOUS WASTE

Fortunately, there is a very low percentage of Household Hazardous Waste (HHW) in the Regina waste stream sample. The 2008 Regina Waste Characterization Study sample suggests that less than 1424 tonnes of all types of HHW is discarded at the Regina Landfill annually. This represents 2.4 percent of the residential waste stream and under 0.3 percent of the total waste stream. While this represents an insignificant percentage, the objective should be to reduce this number further. Fortunately, pesticides and herbicides were a very low percentage within this sampling.

The total percentages of Household Hazardous Waste (HHW) in the Regina Landfill sample is relatively low with the Rear Alley Automated routes generating the majority of sample weight. However, there are significant spikes

in the percentage of discarded HHW material which is of concern. These spikes in HHW discards most likely relate to the seasonal cleaning and use of HHW materials but the HHW appears in the samples throughout the winter months. In addition, statutory holidays in the spring and fall are also believed to contribute to basement and garage cleaning and the introduction of HHW into the Regina waste stream.

The proper collection, handling and disposal of HHW are expensive for a municipal government. A Product Stewardship program for a range of HHW materials should be considered by the federal and provincial governments as they are the governments who license and regulate these materials. The municipal governments should not be required to fund the end-of-life disposal from the municipal property tax base.

Nevertheless, it is not acceptable for HHW materials to be accepted at the Regina Landfill without at least some option for interception. In addition, more resources are needed to educate the Regina ratepayers on alternative products to HHW.

8.5 RESIDENTIAL METAL: FERROUS AND NON-FERROUS

There is a low percentage of residential metal (ferrous and non-ferrous) in the Regina waste stream sample. The average sampling weights ranged between 3.1 % to a high of 4.2 % of the total sample over the year.

The 2008 Regina Waste Characterization Study sample suggests less than 4400 tonnes of all types residential metal is being discarded at the Regina Landfill annually. This represents about 1 % of the total waste stream, a very insignificant number. There is a good market for ferrous metal in Regina (Evrax). However, the weight of ferrous metals in the landfill waste stream is currently low.

To encourage material management and public acceptance, a metal collection program is necessary to prevent consumers from discarding used metal in both the Big Blue Bins and the glass recycling bins. The Metal Recycling Program should be retained until a possible curb-side recycling program is developed by the City. At this time, the metal recycling program should be re-assessed to see if it is viable to collect and market this material.

8.6 RESIDENTIAL PLASTICS

Plastics represent a major challenge for any municipal government in Saskatchewan. The senior government allows for many types of plastic polymers, stable markets are at great distances and some packaging includes combinations of plastic and cardboard and plastic and metal. In addition, plastic bags and plastic film also exist as litter material and have separate cost implications.

The 2008 Regina Waste Characterization Study sample suggests 9710 tonnes of all types of residential plastic material is being discarded at the Regina Landfill annually. This gross number represents about 16 % of the total waste stream, and appears to be significant. However, up to 50 % of this total is plastic material and other plastic product for which there is no current recovery or recycling market.

In addition, the PET 1 and PET 2 plastic material, the plastics with the most marketability, represented less than 155 tonnes of sample material. This represents 0.26 percent of the weight in the residential waste stream and 0.03 percent of the total waste stream. It would appear the Saskatchewan Beverage Container Collection and Recycling Program is very effective in intercepting the PET 1 and PET 2 plastic material prior to the Regina Landfill.

However, one item of serious concern and high visibility at the Regina Landfill are the plastic film shopping bags. This material is a serious litter control problem within the City, within the Regina Landfill and on the lands surrounding the Regina Landfill. Plastic film bags do not decompose and can become airborne easily.

9. REFERENCES

- Canadian Council of Ministers of the Environment. (1999). Recommended Waste Characterization Methodology for Direct Waste Analysis Studies in Canada. Ontario: Richmond Hill.
- Alberta Environment, & Recycling Council of Alberta. (2005). Provincial Waste Characterization Framework. Alberta.

Appendix A: Sampling Template October 2007 – April 2008

	Date sampled	
	Truck #	
	Route #	
	Sample source	
	Weight of the waste in the load	
CATEGORY	SUB-CATEGORY	
PAPER	Newspapers	
	Magazines	
	Telephone Books/Directories	
	Fine Paper	
	Tissue Paper	
	Wallpaper	
	Polycoat	
	Other Paper	
	Total	
	Percentage of Total Sample	
PLASTIC	PET No.1	
	PET No.2	
	PET No.3	
	PET No.4	
	PET No.5	
	PET No.6	
	PET No.7	
	Other Plastic Packaging	
	Plastic Product	
	Total	
Percentage of Total Sample		
GLASS	Clear Food & Beverage	
	Coloured Food & Beverage	
	Other Glass	
	Total	
Percentage of Total Sample		
CARDBOARD	Corrugated Cardboard	
	Boxboard	
	Total	
	Percentage of Total Sample	
HYGIENIC WASTE	Bio-hazardous	
	Other Hygienic Waste	
	Total	
	Percentage of Total Sample	
METAL	Ferrous	
	Non-ferrous	
	Other Metal	

	Total	
	Percentage of Total Sample	
MEAT-ORGANICS	Animal	
	Carcasses	
	Total	
	Percentage of Total Sample	
NON-MEAT ORGANICS	Kitchen-Vegetable	
	Crop Residues	
	Other Non-meat Organics	
	Total	
	Percentage of Total Sample	
YARD WASTE	Trees, Yard-clipping stump > 2 Inches	
	Trees, Yard-clipping stump < 2 Inches	
	Grass	
	Leaves	
	Other Yard Waste	
	Total	
	Percentage of Total Sample	
HAZARDOUS	Pesticides/Herbicides	
	Other Hazardous Waste	
	Total	
	Percentage of Total Sample	
OTHER	Textiles	
	Tires	
	Rubber/Shoes	
	Batteries	
	Paint/Solvent/Aerosol Cans	
	Waste oils/filters	
	Household C & D	
	House Product	
	Electronic Product	
	Unidentifiable	
	Total	
	Percentage of Total Sample	
RESIDUAL	Total	
	Percentage of Total Sample	
TOTAL SAMPLE WEIGHT		
Number of Milk Jugs		

Appendix B: Sampling Template – May 2008 to October 2008

	Date sampled Truck # Route # Sample source Weight of the waste in the load	
CATEGORY	SUB-CATEGORY	
PAPER	Newspapers Magazines Telephone Books/Directories Fine Paper Tissue Paper Wallpaper Polycoat Other Paper	
	Total Percentage of Total Sample	
PLASTIC	PET No.1 PET No.2 PET No.3 PET No.4 PET No.5 PET No.6 PET No.7 Unidentified Pet No. (other packaging) Plastic Product	
	Total Percentage of Total Sample	
GLASS	Clear Food & Beverage Coloured Food & Beverage Other Glass	
	Total Percentage of Total Sample	
CARDBOARD	Corrugated Cardboard Boxboard	
	Total Percentage of Total Sample	
METAL (FERROUS &	Food & Beverage	

NON-FERROUS)	Aerosol Aluminum-foil Other ferrous Aluminum food & beverage Composites	
	Total Percentage of Total Sample	
HYGIENIC WASTE	Bio-hazardous Other Hygienic Waste	
	Total Percentage of Total Sample	
MEAT-ORGANICS	Animal Meat Carcasses	
	Total Percentage of Total Sample	
NON-MEAT ORGANICS	Kitchen-Vegetable Crop Residues	
	Total Percentage of Total Sample	
YARD WASTE	Trees, Yard-clipping stump > 2 Inches Trees, Yard-clipping stump < 2 Inches Grass Leaves Other Yard Waste	
	Total Percentage of Total Sample	
HAZARDOUS	Pesticides/Herbicides Other Hazardous Waste	
	Total Percentage of Total Sample	
HOUSEHOLD HAZARDOUS	Batteries Paint/Solvent/Aerosol Cans Automotive Waste Pharmaceuticals Household Cleaners Pesticides Electronics Other Household Hazardous Waste	
	Total	

	Percentage of Total Sample	
OTHER	Textiles	
	Tires	
	Rubber/Shoes	
	Household C & D	
	House Product	
	Unidentifiable	
	Total	
	Percentage of Total Sample	
RESIDUAL	Total	
	Percentage of Total Sample	
TOTAL SAMPLE WEIGHT		
Number of Milk Jugs		
Number of Sharps		

Appendix C: October 2007 Individual Sample Data

October 2007 Residential Waste Categories	
Yard Waste	24.4%
Non-Meat Organics	19.8%
Paper	18.0%
Plastic	8.2%
Cardboard	6.2%
Residual	5.8%
Metal	3.2%
Hygienic Waste	2.6%
Meat Organics	1.9%
Glass	1.2%
Hazardous	0.5%
Other	8.2%

	29-Oct	30-Oct	31-Oct	Total	
Date sampled	12639	12625	12625		
Truck #	?	18	6+18		
Route #	FSA	RAA	RAA		
Sample source	22650	22950	22240		
Weight of the waste in the load					
	KG	KG	KG	KG	
CATEGORY	KG	KG	KG	Total	
PAPER	Newspapers	7.20	5.40	11.80	24.4
	Magazines	0.60	0.00	0.00	0.6
	Telephone Books/Directories	6.60	0.00	0.63	7.2
	Fine Paper	2.80	2.00	5.00	9.8
	Tissue Paper	5.80	1.20	2.40	9.4
	Wallpaper	0.00	0.00	0.00	0.0
	Polycoat	0.40	0.40	0.80	1.6
	Other Paper	0.07	0.00	0.00	0.1
	Total	23.47	9.00	20.63	53.1
	Percentage of Total Sample	24.9%	8.8%	21.1%	18.0%

PLASTIC	PET No.1	1.20	0.20	0.13	1.5
	PET No.2	0.17	0.20	1.20	1.6
	PET No.3	1.00	0.00	0.00	1.0
	PET No.4	0.00	0.00	0.00	0.0
	PET No.5	0.40	0.20	0.10	0.7
	PET No.6	0.20	0.02	1.80	2.0
	PET No.7	0.17	0.00	0.00	0.2
	Other Plastic Packaging	3.40	1.40	4.80	9.6
	Plastic Product	1.21	6.20	0.09	7.5
	Total	7.75	8.22	8.12	24.1
Percentage of Total Sample	8.2%	8.0%	8.3%	8.2%	
GLASS	Clear Food & Beverage	1.00	0.40	1.10	2.5
	Coloured Food & Beverage	0.27	0.22	0.00	0.5
	Other Glass	0.42	0.00	0.00	0.4
	Total	1.69	0.62	1.10	3.4
	Percentage of Total Sample	1.8%	0.6%	1.1%	1.2%
CARDBOARD	Corrugated Cardboard	0.60	5.00	1.20	6.8
	Boxboard	2.60	7.00	2.00	11.6
	Total	3.20	12.00	3.20	18.4
	Percentage of Total Sample	3.4%	11.7%	3.3%	6.2%
HYGIENIC WASTE	Bio-hazardous	0.60	2.20	5.00	7.8
	Other Hygienic Waste	0.00	0.00	0.00	0.0
	Total	0.60	2.20	5.00	7.8
	Percentage of Total Sample	0.6%	2.1%	5.1%	2.6%
METAL	Ferrous	1.60	5.60	1.80	9.0
	Non-ferrous	0.20	0.06	0.02	0.3
	Other Metal	0.00	0.00	0.00	0.0
	Total	1.80	5.66	1.82	9.3
	Percentage of Total Sample	1.9%	5.5%	1.9%	3.2%
MEAT-ORGANICS	Animal	0.80	2.60	0.60	4.0
	Carcasses	0.00	1.60	0.00	1.6
	Total	0.80	4.20	0.60	5.6
	Percentage of Total Sample	0.8%	4.1%	0.6%	1.9%
NON-MEAT ORGANICS	Kitchen-Vegetable	19.40	12.20	15.00	46.6
	Crop Residues	0.00	0.00	0.00	0.0

	Other Non-meat Organics	0.00	11.60	0.00	11.6	
	Total	19.40	23.80	15.00	58.2	
	Percentage of Total Sample	20.6%	23.2%	15.3%	19.8%	
YARD WASTE	Trees, Yard-clipping stump > 2 Inches	0.00	0.00	0.00	0.0	
	Trees, Yard-clipping stump < 2 Inches	0.00	0.00	0.00	0.0	
	Grass	0.00	0.00	0.00	0.0	
	Leaves	19.40	25.20	23.60	68.2	
	Other Yard Waste	3.60	0.00	0.00	3.6	
	Total	23.00	25.20	23.60	71.8	
	Percentage of Total Sample	24.4%	24.6%	24.1%	24.4%	
HAZARDOUS	Pesticides/Herbicides	0.00	0.00	0.00	0.0	
	Other Hazardous Waste	0.60	0.05	0.80	1.5	
	Total	0.60	0.05	0.80	1.5	
	Percentage of Total Sample	0.6%	0.0%	0.8%	0.5%	
OTHER	Textiles	1.00	0.60	0.30	1.9	
	Tires	0.00	0.00	2.80	2.8	
	Rubber/Shoes	0.00	0.00	0.80	0.8	
	Batteries	0.00	0.40	0.09	0.5	
	Paint/Solvent/Aerosol Cans	0.00	0.00	0.00	0.0	
	Waste oils/filters	0.00	0.00	0.00	0.0	
	Household C & D	1.20	0.80	3.60	5.6	
	House Product	0.00	0.00	7.40	7.4	
	Electronic Product	0.00	0.00	0.27	0.3	
	Unidentifiable	1.40	3.62	0.00	5.0	
	Total	3.60	5.42	15.26	24.3	
	Percentage of Total Sample	3.8%	5.3%	15.6%	8.2%	
	RESIDUAL	Total	8.34	6.03	2.80	17.2
		Percentage of Total Sample	8.8%	5.9%	2.9%	5.8%
TOTAL SAMPLE WEIGHT		94.25	102.40	97.93	294.6	
Number of Milk Jugs		0	0	0	0	

Appendix D: November 2007 Individual Sample Data

November 2007 Residential Waste Categories	
Yard Waste	27.0%
Non-Meat Organics	15.6%
Paper	11.9%
Plastic	8.6%
Cardboard	7.4%
Hazardous	4.1%
Hygienic Waste	4.0%
Residual	2.8%
Metal	2.7%
Glass	2.4%
Meat Organics	1.7%
Other	11.6%

CATEGORY	Date sampled	2-Nov	5-Nov	7-Nov	8-Nov	13-Nov	15-Nov	29-Nov	Total	
		KG	KG	KG	KG	KG	KG	KG		
PAPER	Truck #	?	12526	12529	12529	12640	12639	12627		
	Route #	76	204	210	213	111	115	73		
	Sample source	RAA	FSA	FSA	FSA	FSA	FSA	RAA		
	Weight of the waste in the load	19780	22880	20620	19040	22650	21780	18390		
	SUB-CATEGORY	KG	KG	KG	KG	KG	KG	KG	KG	Total
	Newspapers	0.60	8.60	7.40	2.80	6.20	8.20	4.60	38.4	
	Magazines	0.43	0.00	0.48	0.10	0.60	0.98	0.00	2.6	
	Telephone Books/Directories	0.94	0.00	0.00	0.00	0.34	0.20	0.00	1.5	
	Fine Paper	2.00	8.60	4.00	2.60	3.20	1.00	2.20	23.6	
	Tissue Paper	1.40	3.00	3.40	2.20	1.20	1.60	1.20	14.0	
Wallpaper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0		
Polycoat	0.47	0.02	0.63	0.20	0.20	0.60	0.40	2.5		
Other Paper	0.00	0.00	0.00	0.12	1.00	0.80	0.80	2.7		
Total	5.84	20.22	15.91	8.02	12.74	13.38	8.40	85.3		
Percentage of Total Sample	5.0%	17.6%	16.7%	8.2%	13.2%	12.9%	9.1%	11.9%		
PLASTIC	PET No.1	0.20	2.00	1.40	0.80	1.40	0.60	0.40	6.8	
	PET No.2	0.80	2.80	2.10	1.00	1.00	1.20	1.20	10.1	
	PET No.3	0.11	0.00	0.05	0.00	0.10	0.00	0.20	0.5	

	PET No.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	PET No.5	0.00	0.30	0.40	0.60	0.20	0.40	0.20	0.40	0.20	0.40	0.20	0.40	0.20	0.40	0.20	0.40	0.20	0.40	0.20	
	PET No.6	0.40	0.60	0.86	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	
	PET No.7	0.00	0.00	0.00	0.38	0.10	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Other Plastic Packaging	3.03	7.40	7.80	5.40	4.40	4.40	3.40	4.40	3.40	4.40	3.40	4.40	3.40	4.40	3.40	4.40	3.40	4.40	3.40	
	Plastic Product	1.57	0.00	0.20	0.20	0.80	2.00	0.00	0.80	2.00	0.00	0.80	2.00	0.00	0.80	2.00	0.00	0.80	2.00	0.00	
	Total	6.11	13.10	12.81	8.78	8.40	8.00	8.00	8.40	8.00	8.00	8.40	8.00	8.40	8.00	8.00	8.40	8.00	8.40	8.00	
	Percentage of Total Sample	5.3%	11.4%	13.4%	9.0%	8.7%	7.7%	7.7%	8.7%	7.7%	7.7%	8.7%	7.7%	8.7%	7.7%	7.7%	8.7%	7.7%	8.7%	7.7%	
GLASS	Clear Food & Beverage	1.33	3.80	1.60	0.96	3.80	1.00	1.80	3.80	1.00	1.80	3.80	1.00	1.80	3.80	1.00	1.80	3.80	1.00	1.80	
	Coloured Food & Beverage	0.00	0.30	1.18	0.00	0.18	0.48	0.00	0.18	0.48	0.00	0.18	0.48	0.00	0.18	0.48	0.00	0.18	0.48	0.00	
	Other Glass	0.00	0.00	0.80	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Total	1.33	4.10	3.58	1.28	3.98	1.48	1.48	1.80	3.98	1.48	1.48	1.80	3.98	1.48	1.48	1.80	3.98	1.48	1.48	1.80
	Percentage of Total Sample	1.1%	3.6%	3.8%	1.3%	4.1%	1.4%	1.4%	1.9%	4.1%	1.4%	1.4%	1.9%	4.1%	1.4%	1.4%	1.9%	4.1%	1.4%	1.4%	1.9%
CARDBOARD	Corrugated Cardboard	8.20	1.20	0.84	1.40	1.00	4.60	9.00	1.00	4.60	9.00	1.00	4.60	9.00	1.00	4.60	9.00	1.00	4.60	9.00	
	Boxboard	5.60	4.20	4.14	3.20	3.60	5.80	0.00	3.60	5.80	0.00	3.60	5.80	0.00	3.60	5.80	0.00	3.60	5.80	0.00	
	Total	13.80	5.40	4.98	4.60	4.60	10.40	9.00	4.60	10.40	9.00	4.60	10.40	9.00	4.60	10.40	9.00	4.60	10.40	9.00	
	Percentage of Total Sample	11.9%	4.7%	5.2%	4.7%	4.8%	10.0%	9.7%	4.8%	10.0%	9.7%	4.8%	10.0%	9.7%	4.8%	10.0%	9.7%	4.8%	10.0%	9.7%	
HYGIENIC WASTE	Bio-hazardous	2.40	15.40	2.00	0.80	2.40	1.60	6.60	2.40	1.60	6.60	2.40	1.60	6.60	2.40	1.60	6.60	2.40	1.60	6.60	
	Other Hygienic Waste	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00		
	Total	2.40	15.40	2.00	0.80	2.60	1.60	6.60	2.60	1.60	6.60	2.60	1.60	6.60	2.60	1.60	6.60	2.60	1.60	6.60	
	Percentage of Total Sample	2.1%	13.4%	2.1%	0.8%	2.7%	1.5%	7.1%	2.7%	1.5%	7.1%	2.7%	1.5%	7.1%	2.7%	1.5%	7.1%	2.7%	1.5%	7.1%	
METAL	Ferrous	1.64	8.00	0.60	0.80	1.60	1.44	0.00	1.60	1.44	0.00	1.60	1.44	0.00	1.60	1.44	0.00	1.60	1.44	0.00	
	Non-ferrous	0.91	1.40	1.60	0.00	0.80	0.00	0.80	0.00	0.80	0.00	0.80	0.00	0.80	0.00	0.80	0.00	0.80	0.00	0.00	
	Other Metal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Total	2.55	9.40	2.20	0.80	2.40	1.44	0.80	2.40	1.44	0.80	2.40	1.44	0.80	2.40	1.44	0.80	2.40	1.44	0.80	2.40
	Percentage of Total Sample	2.2%	8.2%	2.3%	0.8%	2.5%	1.4%	0.9%	2.5%	1.4%	0.9%	2.5%	1.4%	0.9%	2.5%	1.4%	0.9%	2.5%	1.4%	0.9%	
MEAT-ORGANICS	Animal	0.80	3.60	3.20	0.80	1.40	0.80	1.40	0.80	1.40	0.80	1.40	0.80	1.40	0.80	1.40	0.80	1.40	0.80	1.40	
	Carcasses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Total	0.80	3.60	3.20	0.80	1.40	0.80	1.40	0.80	1.40	0.80	1.40	0.80	1.40	0.80	1.40	0.80	1.40	0.80	1.40	
	Percentage of Total Sample	0.7%	3.1%	3.4%	0.8%	1.5%	0.8%	1.5%	0.8%	1.5%	0.8%	1.5%	0.8%	1.5%	0.8%	1.5%	0.8%	1.5%	0.8%	1.5%	
NON-MEAT ORGANICS	Kitchen-Vegetable	10.20	22.00	32.40	12.00	12.80	14.80	7.40	12.80	14.80	7.40	12.80	14.80	7.40	12.80	14.80	7.40	12.80	14.80	7.40	
	Crop Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Other Non-meat Organics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Total	10.20	22.00	32.40	12.00	12.80	14.80	7.40	12.80	14.80	7.40	12.80	14.80	7.40	12.80	14.80	7.40	12.80	14.80	7.40	
	Percentage of Total Sample	8.8%	19.1%	34.0%	12.3%	13.3%	14.3%	8.0%	13.3%	14.3%	8.0%	13.3%	14.3%	8.0%	13.3%	14.3%	8.0%	13.3%	14.3%	8.0%	

YARD WASTE	Trees, Yard-clipping stump > 2 Inches	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.4	
	Trees, Yard-clipping stump < 2 Inches	0.00	0.00	0.00	1.00	0.00	5.00	18.20			24.2	
	Grass	4.40	0.00	0.00	18.20	27.80	0.00	0.00	0.00	0.00	50.4	
	Leaves	38.80	5.20	13.20	32.20	0.00	26.00	0.00	0.00	0.00	115.4	
	Other Yard Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	
	Total	46.60	5.20	13.20	51.40	27.80	31.00	18.20			193.4	
	Percentage of Total Sample	40.0%	4.5%	13.8%	52.7%	28.8%	29.9%	19.7%			27.0%	
HAZARDOUS	Pesticides/Herbicides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	
	Other Hazardous Waste	10.00	0.40	0.09	2.20	8.80	7.40	0.20	0.20	0.20	29.1	
	Total	10.00	0.40	0.09	2.20	8.80	7.40	0.20	0.20	0.20	29.1	
	Percentage of Total Sample	8.6%	0.3%	0.1%	2.3%	9.1%	7.1%	0.2%	0.2%	0.2%	4.1%	
OTHER	Textiles	2.80	6.40	2.40	3.00	7.60	3.00	0.00	0.00	0.00	25.2	
	Tires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	
	Rubber/Shoes	0.00	0.70	0.08	1.00	0.00	0.00	0.00	0.00	0.00	1.8	
	Batteries	0.56	0.40	0.00	0.00	0.40	0.06	0.00	0.00	0.00	1.4	
	Paint/Solvent/Aerosol Cans	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.4	
	Waste oils/filters	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	
	Household C & D	10.44	5.20	0.80	0.60	0.00	5.00	25.40	0.00	0.00	47.4	
	House Product	0.00	0.00	0.00	0.20	0.40	1.80	0.00	0.00	0.00	2.4	
	Electronic Product	0.14	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.3	
	Unidentifiable	1.40	1.20	0.76	0.60	0.00	0.00	0.00	0.00	0.00	4.0	
	Total	15.34	14.50	4.04	5.40	8.40	9.86	25.40	82.9			82.9
	Percentage of Total Sample	13.2%	12.6%	4.2%	5.5%	8.7%	9.5%	27.5%	11.6%			11.6%
RESIDUAL	Total	1.40	1.80	1.00	1.40	2.60	3.60	8.60			20.4	
	Percentage of Total Sample	1.2%	1.6%	1.0%	1.4%	2.7%	3.5%	9.3%			2.8%	
TOTAL SAMPLE WEIGHT		116.37	115.12	95.41	97.48	96.52	103.76	92.40			717.1	
Number of Milk Jugs		2	0	7	5	4	0	0			18	

Appendix E: December 2007 Individual Sample Data

December 2007 Residential Waste Categories	
Paper	17.5%
Non-Meat Organics	17.0%
Cardboard	9.9%
Plastic	9.0%
Hygienic Waste	6.1%
Metal	6.0%
Meat Organics	6.0%
Residual	4.7%
Hazardous	2.4%
Glass	2.0%
Yard Waste	0.3%
Other	19.0%

CATEGORY	Date sampled	3-Dec		11-Dec		19-Dec		27-Dec		Total	
		KG	RAA	KG	RAA	KG	RAA	KG	RAA		KG
	Truck #	12629	12633	12626	12626	12640	12627				
	Route #	75	81	71	78	116	18				
	Sample source	RAA	RAA	RAA	RAA	FSA	RAA				
	Weight of the waste in the load	20800	19100	21590	21500	21670	20390				
SUB-CATEGORY		KG	KG	KG	KG	KG	KG	KG	KG	KG	
PAPER	Newspapers	5.60	3.00	12.20	14.60	5.00	9.60	50.0			
	Magazines	0.40	1.60	1.00	0.00	5.20	0.00	8.2			
	Telephone Books/Directories	0.86	1.60	2.60	0.00	0.00	2.20	7.3			
	Fine Paper	1.40	1.00	3.00	7.60	6.00	1.60	20.6			
	Tissue Paper	1.20	0.80	1.60	1.00	2.60	1.60	8.8			
	Wallpaper	0.00	0.00	0.00	0.00	0.00	0.00	0.0			
	Polycoat	0.20	0.20	1.80	1.00	0.20	0.20	3.6			
	Other Paper	0.20	0.60	2.20	0.60	4.40	4.80	12.8			
	Total		9.86	8.80	24.40	24.80	23.40	20.00	111.3		
	Percentage of Total Sample		10.4%	8.9%	23.7%	22.6%	19.5%	18.4%	17.5%		
PLASTIC	PET No.1	0.20	0.08	0.60	0.60	1.60	1.20	4.3			
	PET No.2	0.80	0.80	0.80	0.80	1.40	1.20	5.8			
	PET No.3	0.00	0.00	0.20	0.20	0.20	0.20	0.8			
	PET No.4	0.00	0.00	0.00	0.00	0.00	0.00	0.0			

	PET No.5	0.20	0.40	0.60	0.40	0.40	1.00	3.0
	PET No.6	0.16	0.80	0.40	0.20	0.40	0.00	2.0
	PET No.7	0.00	0.00	0.20	0.00	0.20	0.00	0.4
	Other Plastic Packaging	3.00	2.80	8.00	9.20	7.20	7.40	37.6
	Plastic Product	0.00	1.00	0.40	0.00	1.40	0.40	3.2
	Total	4.36	5.88	11.20	11.40	12.80	11.40	57.0
	Percentage of Total Sample	4.6%	6.0%	10.9%	10.4%	10.7%	10.5%	9.0%
	Clear Food & Beverage	0.60	2.00	0.80	2.80	0.40	2.60	9.2
	Coloured Food & Beverage	1.80	0.00	0.00	0.40	0.20	0.00	2.4
	Other Glass	0.48	0.40	0.00	0.00	0.00	0.00	0.9
	Total	2.88	2.40	0.80	3.20	0.60	2.60	12.5
	Percentage of Total Sample	3.0%	2.4%	0.8%	2.9%	0.5%	2.4%	2.0%
	Corrugated Cardboard	1.80	7.80	2.80	6.20	7.80	5.20	31.6
	Boxboard	2.40	3.80	6.60	6.40	5.00	7.00	31.2
	Total	4.20	11.60	9.40	12.60	12.80	12.20	62.8
	Percentage of Total Sample	4.4%	11.8%	9.1%	11.5%	10.7%	11.2%	9.9%
	Bio-hazardous	4.40	3.60	1.40	8.00	5.20	16.20	38.8
	Other Hygienic Waste	0.20	0.00	0.00	0.00	0.00	0.00	0.2
	Total	4.60	3.60	1.40	8.00	5.20	16.20	39.0
	Percentage of Total Sample	4.8%	3.6%	1.4%	7.3%	4.3%	14.9%	6.1%
	Ferrous	0.00	1.60	1.60	3.20	2.20	2.80	11.4
	Non-ferrous	12.60	0.20	0.60	0.60	0.00	0.40	14.4
	Other Metal	0.00	0.00	0.00	12.60	0.00	0.00	12.6
	Total	12.60	1.80	2.20	16.40	2.20	3.20	38.4
	Percentage of Total Sample	13.2%	1.8%	2.1%	14.9%	1.8%	2.9%	6.0%
	Animal	18.40	1.60	6.80	1.60	3.40	6.60	38.4
	Carcasses	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Total	18.40	1.60	6.80	1.60	3.40	6.60	38.4
	Percentage of Total Sample	19.3%	1.6%	6.6%	1.5%	2.8%	6.1%	6.0%
	Kitchen-Vegetable	7.60	10.80	12.20	11.20	40.60	25.60	108.0
	Crop Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Other Non-meat Organics	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Total	7.60	10.80	12.20	11.20	40.60	25.60	108.0
	Percentage of Total Sample	8.0%	10.9%	11.8%	10.2%	33.8%	23.5%	17.0%
	Trees, Yard-clipping stump > 2	0.00	0.00	0.00	0.00	0.00	0.00	0.0

Inches	2.20	0.00	0.00	0.00	0.00	0.00	2.2
Trees, Yard-clipping stump < 2	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Inches	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Grass	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Leaves	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Other Yard Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Total	2.20	0.00	0.00	0.00	0.00	0.00	2.2
Percentage of Total Sample	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Pesticides/Herbicides	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Other Hazardous Waste	0.80	0.20	4.40	8.00	1.80	0.20	15.4
Total	0.80	0.20	4.40	8.00	1.80	0.20	15.4
Percentage of Total Sample	0.8%	0.2%	4.3%	7.3%	1.5%	0.2%	2.4%
Textiles	0.66	23.60	19.80	0.80	2.60	1.80	49.3
Tires	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Rubber/Shoes	0.40	0.16	0.00	0.00	0.00	0.60	1.2
Batteries	0.34	0.00	0.00	0.00	0.20	0.00	0.5
Paint/Solvent/Aerosol Cans	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Waste oils/filters	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Household C & D	23.00	21.80	2.40	5.00	5.40	0.00	57.6
House Product	0.20	3.20	0.00	0.00	0.20	0.40	4.0
Electronic Product	0.56	0.40	1.40	3.00	0.20	0.20	5.8
Unidentifiable	0.00	0.22	0.00	0.00	2.40	0.00	2.6
Total	25.16	49.38	23.60	8.80	11.00	3.00	120.9
Percentage of Total Sample	26.4%	50.1%	22.9%	8.0%	9.2%	2.8%	19.0%
Total	2.60	2.60	6.60	3.80	6.20	7.80	29.6
Percentage of Total Sample	2.7%	2.6%	6.4%	3.5%	5.2%	7.2%	4.7%
TOTAL SAMPLE WEIGHT	95.26	98.66	103.00	109.80	120.00	108.80	635.5
Number of Milk Jugs	8	4	0	3	5	3	23

Appendix F: January 2008 Individual Sample Data

January 2008 Residential Waste Categories	
Non-Meat Organics	21.2%
Paper	16.8%
Plastic	11.2%
Cardboard	5.7%
Residual	5.5%
Hygienic Waste	4.1%
Hazardous	3.2%
Meat-Organics	3.2%
Yard Waste	3.1%
Metal (Ferrous & Non-Ferrous)	2.2%
Glass	1.7%
Other	22.2%

Date sampled	7-Jan	9-Jan	11-Jan	14-Jan	16-Jan	18-Jan	28-Jan	30-Jan	
Truck #	12631	12529	12528	12639	12524	12627	12629	12532	
Route #	69	203	209	109	211	75	69	118	
Sample source	RAA	FSA	FSM	FSA	FSM	RAA	RAA	FSA	
Weight of the waste in the load	18660	21040	20320	19700	22250	19900	22140	18240	
CATEGORY	KG	KG	KG	KG	KG	KG	KG	KG	
PAPER	Newspapers	4.60	5.40	4.40	2.60	4.80	3.80	9.00	
	Magazines	0.00	0.00	1.00	4.20	3.20	0.20	0.00	
	Telephone Books/Directories	5.20	1.60	0.00	0.00	0.00	0.00	0.00	
	Fine Paper	5.00	3.40	17.80	6.00	2.20	2.20	3.00	
	Tissue Paper	2.40	1.80	0.60	2.40	1.40	2.80	2.20	
	Wallpaper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Polycoat	0.60	0.40	1.00	2.20	1.00	0.40	0.60	
	Other Paper	1.40	1.20	1.60	1.20	4.40	2.40	1.60	
	Total	19.20	13.80	26.40	18.60	17.00	19.20	12.40	15.20
	Percentage of Total Sample	17.6%	13.5%	25.6%	18.0%	15.5%	20.0%	11.5%	13.4%
PLASTIC	PET No.1	0.20	1.80	1.20	1.00	0.40	0.60	0.60	
	PET No.2	0.60	1.00	1.40	0.40	0.40	1.20	0.20	
	PET No.3	0.00	0.00	0.20	0.00	0.20	0.00	0.00	
	PET No.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

	PET No.5	0.40	0.60	0.20	0.20	0.20	0.80	0.20	0.60	0.80	3.8
	PET No.6	0.20	0.40	0.20	0.40	0.20	0.40	0.20	0.40	0.20	2.4
	PET No.7	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.2
	Other Plastic Packaging	5.40	3.80	12.60	6.60	9.80	4.60	7.80	9.20	9.20	59.8
	Plastic Product	0.00	0.40	1.40	0.80	5.80	0.20	4.20	2.40	2.40	15.2
	Total	6.80	8.00	17.20	9.60	17.80	6.80	14.80	13.40	13.40	94.4
	Percentage of Total Sample	6.2%	7.8%	16.7%	9.3%	16.2%	7.1%	13.8%	11.8%	11.8%	11.2%
	Clear Food & Beverage	0.20	3.00	0.80	2.20	3.00	1.40	0.80	1.20	1.20	12.6
	Coloured Food & Beverage	0.00	0.40	0.00	0.00	0.00	1.40	0.00	0.20	0.20	2.0
	Other Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Total	0.20	3.40	0.80	2.20	3.00	2.80	0.80	1.40	1.40	14.6
	Percentage of Total Sample	0.2%	3.3%	0.8%	2.1%	2.7%	2.9%	0.7%	1.2%	1.2%	1.7%
	Corrugated Cardboard	2.20	1.80	1.20	1.80	4.80	1.80	3.20	0.40	0.40	17.2
	Boxboard	4.60	5.40	2.60	3.60	3.00	4.80	3.80	3.40	3.40	31.2
	Total	6.80	7.20	3.80	5.40	7.80	6.60	7.00	3.80	3.80	48.4
	Percentage of Total Sample	6.2%	7.0%	3.7%	5.2%	7.1%	6.9%	6.5%	3.4%	3.4%	5.7%
	Bio-hazardous	7.60	6.40	1.20	2.80	3.80	6.00	3.00	3.80	3.80	34.6
	Other Hygienic Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Total	7.60	6.40	1.20	2.80	3.80	6.00	3.00	3.80	3.80	34.6
	Percentage of Total Sample	6.9%	6.2%	1.2%	2.7%	3.5%	6.2%	2.8%	3.4%	3.4%	4.1%
	Ferrous	1.60	4.80	1.80	1.20	1.60	0.40	2.00	0.40	0.40	13.8
	Non-ferrous	0.20	0.40	0.40	0.40	1.20	1.40	0.20	0.20	0.20	4.4
	Other Metal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Total	1.80	5.20	2.20	1.60	2.80	1.80	2.20	0.60	0.60	18.2
	Percentage of Total Sample	1.6%	5.1%	2.1%	1.5%	2.5%	1.9%	2.0%	0.5%	0.5%	2.2%
	Animal	1.00	7.60	3.20	2.00	4.80	2.60	1.60	4.20	4.20	27.0
	Carcasses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Total	1.00	7.60	3.20	2.00	4.80	2.60	1.60	4.20	4.20	27.0
	Percentage of Total Sample	0.9%	7.4%	3.1%	1.9%	4.4%	2.7%	1.5%	3.7%	3.7%	3.2%
	Kitchen-Vegetable	18.00	36.60	27.20	26.60	18.40	16.80	11.60	23.80	23.80	179.0
	Crop Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Other Non-meat Organics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Total	18.00	36.60	27.20	26.60	18.40	16.80	11.60	23.80	23.80	179.0
	Percentage of Total Sample	16.5%	35.7%	26.4%	25.7%	16.7%	17.5%	10.8%	21.0%	21.0%	21.2%
	Trees, Yard-clipping stump > 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0

Inches																			0.0
Trees, Yard-clipping stump < 2																			0.0
Inches																			1.8
Grass																			0.0
Leaves																			0.0
Other Yard Waste																			24.2
Total																			26.0
Percentage of Total Sample																			3.1%
HAZARDOUS																			
Pesticides/Herbicides																			0.0
Other Hazardous Waste																			27.2
Total																			27.2
Percentage of Total Sample																			3.2%
OTHER																			
Textiles																			38.8
Tires																			0.0
Rubber/Shoes																			3.8
Batteries																			0.4
Paint/Solvent/Aerosol Cans																			0.0
Waste oils/filters																			0.0
Household C & D																			55.4
House Product																			7.2
Electronic Product																			76.4
Unidentifiable																			5.4
Total																			187.4
Percentage of Total Sample																			22.2%
RESIDUAL																			
Total																			46.8
Percentage of Total Sample																			5.5%
TOTAL SAMPLE WEIGHT																			845.4
Number of Milk Jugs																			31

Appendix G: February 2008 Individual Sample Data

February 2008 Residential Waste Categories	
Non-Meat Organics	22.2%
Paper	21.0%
Plastic	15.1%
Cardboard	6.7%
Residual	5.9%
Hygienic Waste	4.4%
Meat-Organics	4.3%
Glass	3.2%
Metal (Ferrous & Non-Ferrous)	2.7%
Hazardous	1.2%
Yard Waste	0.2%
Other	13.2%

Date sampled	4-Feb	6-Feb	8-Feb	25-Feb	27-Feb	29-Feb	
Truck #	12632	12639	12527	12628	12639	12527	
Route #	68	113	205	68	113	205	
Sample source	RAA	FSA	FSM	RAA	FSA	FSM	
Weight of the waste in the load	18220	22060	22450	21110	21330	18180	
CATEGORY	KG	KG	KG	KG	KG	KG	
PAPER	Newspapers	3.40	10.40	6.80	11.60	3.80	
	Magazines	3.60	2.00	14.20	0.00	2.20	
	Telephone Books/Directories	0.00	0.00	1.00	0.00	0.00	
	Fine Paper	10.60	12.40	2.40	7.00	2.80	
	Tissue Paper	4.80	1.00	1.20	1.60	3.60	
	Wallpaper	0.00	0.00	0.00	0.00	0.00	
	Polycast	0.60	0.20	0.80	0.80	1.00	
	Other Paper	0.20	0.20	1.60	1.80	0.60	
	Total	23.20	26.20	28.00	22.80	14.00	20.20
	Percentage of Total Sample	22.7%	27.6%	26.9%	20.7%	14.5%	18.9%
PLASTIC	PET No.1	1.20	0.80	0.60	0.40	0.60	
	PET No.2	0.20	1.20	0.60	2.00	1.20	
	PET No.3	0.00	0.00	0.20	0.00	0.00	
	PET No.4	0.00	0.00	0.20	0.00	0.00	

PET No.5	0.40	0.80	0.80	0.20	0.20	0.20	0.20	2.6
PET No.6	0.40	0.20	0.40	0.20	0.20	0.20	0.20	1.6
PET No.7	0.40	0.00	0.20	0.00	0.00	0.00	0.40	1.0
Other Plastic Packaging	9.20	10.80	7.40	10.40	9.60	10.00	10.00	57.4
Plastic Product	0.20	2.80	4.60	7.60	7.00	0.80	0.80	23.0
Total	12.00	16.60	15.00	20.80	18.80	13.40	13.40	96.6
Percentage of Total Sample	11.8%	17.5%	14.4%	18.8%	19.4%	12.5%	12.5%	15.7%
Clear Food & Beverage	0.80	2.00	2.00	0.00	0.00	0.20	0.20	5.0
Coloured Food & Beverage	1.20	0.00	1.20	3.60	3.80	3.00	3.00	12.8
Other Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Total	2.00	2.00	3.20	3.60	3.80	3.20	3.20	17.8
Percentage of Total Sample	2.0%	2.1%	3.1%	3.3%	3.9%	3.0%	3.0%	2.9%
Corrugated Cardboard	2.60	9.80	0.80	0.80	4.60	2.60	2.60	21.2
Boxboard	0.60	2.20	3.00	5.60	4.20	3.00	3.00	18.6
Total	3.20	12.00	3.80	6.40	8.80	5.60	5.60	39.8
Percentage of Total Sample	3.1%	12.6%	3.7%	5.8%	9.1%	5.2%	5.2%	6.5%
Bio-hazardous	5.40	2.40	1.00	1.40	8.60	6.80	6.80	25.6
Other Hygienic Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Total	5.40	2.40	1.00	1.40	8.60	6.80	6.80	25.6
Percentage of Total Sample	5.3%	2.5%	1.0%	1.3%	8.9%	6.4%	6.4%	4.2%
Ferrous	2.40	3.00	2.00	2.60	0.80	2.20	2.20	13.0
Non-ferrous	0.40	1.40	1.60	0.60	0.20	0.40	0.40	4.6
Other Metal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Total	2.80	4.40	3.60	3.20	1.00	2.60	2.60	17.6
Percentage of Total Sample	2.7%	4.6%	3.5%	2.9%	1.0%	2.4%	2.4%	2.9%
Animal	2.40	6.80	4.40	3.00	4.80	3.20	3.20	24.6
Carcasses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Total	2.40	6.80	4.40	3.00	4.80	3.20	3.20	24.6
Percentage of Total Sample	2.4%	7.2%	4.2%	2.7%	5.0%	3.0%	3.0%	4.0%
Kitchen-Vegetable	21.40	17.40	24.80	15.40	17.60	29.80	29.80	126.4
Crop Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Other Non-meat Organics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
Total	21.40	17.40	24.80	15.40	17.60	29.80	29.80	126.4
Percentage of Total Sample	21.0%	18.3%	23.8%	13.9%	18.2%	27.9%	27.9%	20.5%
Trees, Yard-clipping stump > 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
YARD WASTE								

Inches Trees, Yard-clipping stump < 2 Inches Grass Leaves Other Yard Waste Total Percentage of Total Sample	0.00 0.00 0.00 0.00 0.00 0.00 0.0%	0.00 0.00 0.00 0.00 0.00 1.40 1.5%	0.00 0.00 0.00 0.00 0.00 0.00 0.0%	0.00 0.00 0.00 0.00 0.00 0.00 0.0%	0.00 0.00 0.00 0.00 0.00 0.00 0.0%	0.00 0.00 0.00 0.00 0.00 0.00 0.0%	0.00 0.00 0.00 0.00 0.00 0.00 0.2%
HAZARDOUS							
Pesticides/Herbicides Other Hazardous Waste Total Percentage of Total Sample	0.00 0.00 0.00 0.0%	0.00 0.00 0.00 0.0%	0.00 0.00 0.00 0.0%	0.00 0.00 0.00 0.0%	0.00 0.00 0.00 0.0%	0.00 0.40 0.40 0.4%	0.00 4.60 4.60 4.3%
OTHER							
Textiles Tires Rubber/Shoes Batteries Paint/Solvent/Aerosol Cans Waste oils/filters Household C & D House Product Electronic Product Unidentifiable Total Percentage of Total Sample	1.00 0.00 0.00 0.40 0.00 0.00 11.00 9.80 0.00 0.00 22.20 21.8%	0.20 0.00 0.20 0.00 0.00 0.00 0.60 0.40 0.00 0.00 1.40 1.5%	0.00 0.00 3.40 0.40 0.00 0.00 5.80 2.40 7.00 1.00 12.60 12.1%	7.60 0.00 0.00 0.20 0.00 0.00 10.80 0.00 0.00 0.20 23.20 21.0%	4.20 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.00 0.00 16.00 16.5%	1.80 0.00 0.00 0.00 0.00 0.00 7.60 0.40 0.00 0.00 9.80 9.2%	14.8 0.0 3.6 1.0 0.0 0.0 35.2 17.8 11.6 1.2 85.2 13.8%
RESIDUAL							
Total Percentage of Total Sample	7.40 7.3%	4.40 4.6%	7.60 7.3%	7.20 6.5%	3.00 3.1%	7.80 7.3%	37.4 6.1%
TOTAL SAMPLE WEIGHT	102.00	95.00	104.00	110.40	96.80	107.00	615.2
Number of Milk Jugs	2	7	1	3	2	3	22

Appendix H: March 2008 Individual Sample Data

March 2008 Residential Waste Categories

Non-Meat Organics	17.1%
Paper	15.4%
Plastic	10.6%
Meat-Organics	7.8%
Metal (Ferrous & Non-Ferrous)	5.7%
Residual	4.9%
Cardboard	4.8%
Glass	3.5%
Hygienic Waste	3.5%
Hazardous	2.4%
Yard Waste	0.7%
Other	23.6%

	5-Mar	7-Mar	10-Mar	12-Mar	14-Mar	17-Mar	19-Mar	24-Mar	26-Mar	28-Mar	28-Mar	31-Mar	
Date sampled													
Truck #	12529	12630	12527	12634	12638	12632	12639	12639	12525	12625	12525	12529	
Route #	209	79	203	76	108	68	109	109	81	81	211	207	
Sample source	FSM	RAA	FSM	RAA	FSA	RAA	FSA	FSA	RAA	RAA	FSM	FSM	
Weight of the waste in the load	23100	19190	20000	18980	21590	18410	22310	21050	23400	20520	20000	21500	
	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	
CATEGORY	SUB-CATEGORY												
PAPER	Newspapers	11.00	2.40	4.80	8.60	11.80	3.60	3.60	7.00	5.20	4.60	3.20	
	Magazines	1.20	2.40	7.60	1.80	0.00	1.40	2.60	6.40	0.00	0.00	4.20	
	Telephone Books/Directories	4.80	0.00	4.20	0.00	0.00	0.00	0.00	4.20	0.00	0.00	0.00	
	Fine Paper	4.80	0.80	1.20	0.80	2.80	9.00	6.20	1.20	6.40	2.60	4.60	
	Tissue Paper	1.00	0.20	0.60	0.80	1.60	1.60	1.80	0.80	0.20	2.40	1.40	
	Wallpaper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Polycoat	0.80	0.60	0.40	0.40	0.80	0.60	0.40	1.20	0.60	1.00	0.80	
	Other Paper	4.40	0.20	3.20	1.00	1.20	0.60	1.20	4.60	1.40	3.80	0.80	
	Total	28.00	6.60	22.00	13.40	18.20	16.80	17.20	9.40	25.40	13.80	14.40	15.00
	Percentage of Total Sample	24.3%	6.4%	18.5%	13.0%	17.5%	17.0%	16.0%	9.2%	25.2%	13.7%	13.8%	14.7%
PLASTIC	PET No.1	0.80	0.40	0.20	0.20	0.60	1.00	1.00	0.60	0.20	0.60	0.80	
	PET No.2	0.60	0.40	0.40	0.60	2.60	0.40	0.80	0.40	0.60	0.40	0.80	
	PET No.3	0.20	0.00	0.20	0.00	0.00	0.00	0.20	0.20	0.00	0.20	0.00	
	PET No.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	1.60	0.80	0.80	1.40	3.80	1.80	2.20	1.40	1.20	1.40	1.20	1.60	
Percentage of Total Sample	5.7%	2.9%	2.9%	4.1%	10.0%	5.3%	6.4%	4.1%	3.5%	4.1%	3.5%	5.3%	

	PET No.5	0.40	0.20	0.80	0.60	0.20	0.20	0.20	0.40	0.80	0.80	0.40	0.80	0.60	6.2
	PET No.6	0.80	0.20	0.60	0.80	0.20	0.20	0.20	0.20	0.80	1.60	1.40	0.80	0.60	8.2
	PET No.7	0.00	0.00	0.20	0.20	0.00	0.20	0.00	0.00	0.00	0.20	0.00	0.00	0.20	1.0
	Other Plastic Packaging	4.20	2.60	5.40	9.00	9.00	8.80	6.20	6.20	7.60	4.20	5.80	3.40	4.00	70.2
	Plastic Product	0.00	1.20	3.60	0.00	3.40	0.00	1.60	1.60	4.20	0.60	0.40	11.40	2.00	28.4
	Total	7.00	5.00	11.40	11.40	16.00	10.40	10.80	10.80	15.60	8.60	8.80	17.60	9.00	131.6
	Percentage of Total Sample	6.1%	4.8%	9.6%	11.1%	15.4%	10.5%	10.1%	10.1%	15.2%	8.5%	8.7%	16.9%	8.8%	10.4%
	Clear Food & Beverage	2.20	0.00	1.00	0.00	3.40	0.60	0.60	0.60	1.20	2.00	0.60	1.00	4.20	16.8
	Coloured Food & Beverage	6.40	2.40	1.80	1.00	0.20	5.40	4.80	4.80	0.00	3.60	0.00	2.40	0.80	28.8
	Other Glass	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.6
	Total	8.60	2.40	3.40	1.00	3.60	6.00	5.40	5.40	1.20	5.60	3.40	3.40	5.00	46.2
	Percentage of Total Sample	7.5%	2.3%	2.9%	1.0%	3.5%	6.1%	5.0%	5.0%	1.2%	5.6%	3.3%	3.3%	4.9%	3.7%
	Corrugated Cardboard	1.00	0.60	0.20	1.40	2.60	0.80	0.80	0.80	0.80	0.00	3.40	1.20	1.20	14.0
	Boxboard	1.20	4.80	4.60	3.40	3.80	2.60	1.40	1.40	4.80	3.60	2.60	4.80	6.60	44.2
	Total	2.20	5.40	4.80	4.80	6.40	3.40	2.20	2.20	5.60	3.60	6.00	6.00	7.80	58.2
	Percentage of Total Sample	1.9%	5.2%	4.0%	4.7%	6.1%	3.4%	2.0%	2.0%	5.5%	3.6%	6.0%	5.7%	7.7%	4.6%
	Bio-hazardous	0.60	6.60	0.80	4.60	8.60	2.20	7.20	2.60	2.60	1.40	3.40	0.00	4.20	42.2
	Other Hygienic Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Total	0.60	6.60	0.80	4.60	8.60	2.20	7.20	2.60	2.60	1.40	3.40	0.00	4.20	42.2
	Percentage of Total Sample	0.5%	6.4%	0.7%	4.5%	8.3%	2.2%	6.7%	2.5%	2.5%	1.4%	3.4%	0.0%	4.1%	3.3%
	Ferrous	2.00	1.40	1.80	1.40	2.20	2.80	2.60	2.60	3.80	2.80	1.20	1.60	2.20	25.8
	Non-ferrous	3.20	15.20	5.40	0.20	0.20	1.20	0.20	0.60	0.60	2.80	0.20	3.60	0.80	33.6
	Other Metal	0.00	0.00	0.00	0.00	0.00	15.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.2
	Total	5.20	16.60	7.20	1.60	2.40	19.20	2.80	4.40	5.60	1.40	5.20	5.20	3.00	74.6
	Percentage of Total Sample	4.5%	16.0%	6.0%	1.6%	2.3%	19.4%	2.6%	4.3%	5.6%	1.4%	5.0%	5.0%	2.9%	5.9%
	Animal	7.40	4.40	6.40	5.00	2.20	3.20	8.60	6.00	14.40	2.40	2.40	9.60	9.40	79.0
	Carcasses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	
	Total	7.40	4.40	6.40	5.00	2.20	3.20	8.60	6.00	14.40	2.40	2.40	9.60	9.40	79.0
	Percentage of Total Sample	6.4%	4.2%	5.4%	4.9%	2.1%	3.2%	8.0%	5.9%	14.3%	2.4%	2.4%	9.2%	9.2%	6.3%
	Kitchen-Vegetable	23.80	13.40	30.40	18.00	26.60	11.40	24.60	6.40	7.80	11.00	23.40	21.00	217.8	
	Crop Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	
	Other Non-meat Organics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	
	Total	23.80	13.40	30.40	18.00	26.60	11.40	24.60	6.40	7.80	11.00	23.40	21.00	217.8	
	Percentage of Total Sample	20.7%	12.9%	25.5%	17.5%	25.5%	11.5%	22.9%	6.3%	7.8%	10.9%	22.4%	20.6%	17.3%	
	Trees, Yard-clipping stump > 2 inches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	YARD WASTE														

	Trees, Yard-clipping stump < 2 Inches																	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Leaves	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.20	0.00	0.00	0.00
Other Yard Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.20	0.00	0.00	0.00
Percentage of Total Sample	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pesticides/Herbicides	1.00	12.80	0.00	10.40	0.00	5.80	2.40	0.00	0.00	0.00	0.20	0.60	0.00	33.2	0.60	0.00	0.00	0.00
Other Hazardous Waste	1.00	12.80	0.00	10.40	0.00	5.80	2.40	0.00	0.00	0.00	0.20	0.60	0.00	33.2	0.60	0.00	0.00	0.00
Total	0.9%	12.4%	0.0%	10.1%	0.0%	5.9%	2.2%	0.0%	0.0%	0.0%	0.2%	0.6%	0.0%	2.6%	0.6%	0.0%	0.0%	0.0%
Percentage of Total Sample																		
	7.40	7.60	2.20	10.60	2.00	3.40	15.60	6.40	4.20	24.00	0.00	3.40	0.00	86.8	0.00	0.00	0.00	0.00
Textiles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00
Tires	2.20	8.80	6.20	1.20	0.00	0.00	8.80	2.00	2.80	0.00	4.20	3.20	0.00	39.4	4.20	3.20	0.00	0.00
Rubber/Shoes	0.20	0.00	0.80	0.00	0.20	0.00	1.20	0.20	0.00	0.00	1.80	1.80	0.00	6.2	0.00	0.00	0.00	0.00
Batteries	0.00	0.00	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.4	0.00	0.00	0.00	0.00
Paint/Solvent/Aerosol Cans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00
Waste oils/filters	6.40	4.20	0.00	10.00	0.80	5.20	0.00	20.20	2.40	14.00	2.60	2.40	0.00	68.2	2.60	2.40	0.00	0.00
Household C & D	3.20	2.00	4.20	0.00	10.80	6.20	4.60	6.40	4.60	0.00	8.80	8.80	0.00	59.6	8.80	8.80	0.00	0.00
House Product	0.60	5.60	7.60	0.60	0.20	1.40	1.40	5.80	8.20	0.40	2.00	6.00	0.00	39.8	2.00	6.00	0.00	0.00
Electronic Product	4.40	0.40	0.00	0.00	2.00	0.00	0.00	0.00	0.60	0.60	0.00	0.00	0.00	7.4	0.00	0.00	0.00	0.00
Unidentifiable	24.40	28.60	24.40	22.40	16.00	16.20	21.60	48.80	21.60	41.80	19.40	25.60	0.00	310.8	19.40	25.60	0.00	0.00
Total	21.2%	27.6%	20.5%	21.8%	15.4%	16.4%	20.1%	47.7%	21.5%	41.5%	18.6%	25.1%	24.6%	24.6%	18.6%	25.1%	0.0%	24.6%
Percentage of Total Sample																		
	7.00	1.80	8.40	10.20	4.20	4.20	4.60	2.40	6.60	7.20	4.80	1.80	0.00	63.2	4.80	1.80	0.00	0.00
Total	6.1%	1.7%	7.0%	9.9%	4.0%	4.3%	4.3%	2.3%	6.6%	7.1%	4.6%	1.8%	0.0%	5.0%	4.6%	1.8%	0.0%	0.0%
Percentage of Total Sample																		
TOTAL SAMPLE WEIGHT	115.20	103.60	119.20	102.80	104.20	98.80	107.40	102.40	100.60	100.80	104.40	101.80	1261.2	1261.2	104.40	101.80	0.00	1261.2
Number of Milk Jugs	3	3	0	4	3	3	2	7	4	1	9	3	42	9	3	3	0	42

Appendix I: April 2008 Individual Sample Data

April 2008 Residential Waste Categories	
Paper	17.3%
Yard Waste	13.8%
Non-Meat Organics	12.0%
Plastic	10.5%
Cardboard	5.0%
Glass	4.7%
Metal (Ferrous & Non-Ferrous)	4.6%
Meat-Organics	4.2%
Residual	3.3%
Hygienic Waste	2.2%
Hazardous	0.7%
Other	21.9%

Date sampled	4-Apr	7-Apr	9-Apr	11-Apr	14-Apr	16-Apr	18-Apr	21-Apr	23-Apr	25-Apr	28-Apr	29-Apr	
	Truck #	Truck #	Truck #	Truck #	Truck #	Truck #	Truck #	Truck #	Truck #	Truck #	Truck #	Truck #	
Sample source	RAA	RAA	FSA	FSM	RAA	FSA	FSM	FSA	RAA	FSM	FSA	FSM	
Weight of the waste in the load	19610	21220	22180	19620	19080	21400	23850	24000	20100	22460	21130	21290	
CATEGORY	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	
SUB-CATEGORY	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	
PAPER	Newspapers	6.00	4.00	9.40	4.80	4.40	2.80	4.40	1.00	1.40	5.20	4.20	
	Magazines	2.20	5.40	0.00	2.00	1.00	4.40	1.20	0.00	6.20	0.00	0.40	
	Telephone Books/Directories	0.00	0.00	4.20	8.80	0.00	2.20	0.00	3.40	0.00	0.00	4.00	
	Fine Paper	2.80	6.40	2.40	2.20	2.20	2.60	2.60	1.60	4.20	2.80	8.00	
	Tissue Paper	2.40	2.80	0.60	1.00	2.40	4.80	2.40	1.40	2.80	2.20	4.20	
	Wallpaper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Polycoat	0.80	0.40	0.60	1.20	0.80	1.40	2.60	1.20	0.60	0.40	0.00	0.20
	Other Paper	2.80	4.40	3.00	0.20	2.60	2.60	1.40	0.40	0.20	0.00	1.00	0.60
	Total	17.00	23.40	20.20	20.20	13.40	23.00	20.80	15.40	8.20	15.00	11.20	21.60
	Percentage of Total Sample	17.4%	21.9%	20.4%	19.1%	12.5%	21.3%	20.8%	15.9%	7.0%	13.9%	12.8%	22.1%
PLASTIC	PET No.1	0.40	0.20	0.80	0.80	0.60	1.40	0.60	0.20	0.60	0.20	0.60	
	PET No.2	1.20	0.60	0.40	2.20	0.20	0.80	0.60	0.40	0.80	0.20	1.40	
	PET No.3	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.20	0.00	0.00	
	PET No.4	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	

	PET No.5	0.20	0.40	0.00	0.60	0.20	0.80	1.20	0.80	0.40	0.40	0.40	0.80	6.2
	PET No.6	0.20	0.20	0.20	0.40	0.20	0.60	0.80	0.80	0.20	0.80	0.20	0.20	4.8
	PET No.7	0.20	0.00	0.00	0.20	0.00	0.20	0.00	0.00	0.20	0.20	0.60	0.20	1.8
	Other Plastic Packaging	5.60	5.60	6.20	3.20	4.40	6.80	7.40	5.20	3.60	4.40	0.00	0.00	52.4
	Plastic Product	2.80	4.00	2.60	14.60	0.80	3.40	1.00	3.20	2.80	2.60	5.40	2.20	45.4
	Total	10.80	11.00	10.20	22.00	6.60	14.00	13.80	10.80	7.80	10.20	7.00	5.40	129.6
	Percentage of Total Sample	11.0%	10.3%	10.3%	20.8%	6.2%	13.0%	13.8%	11.2%	6.7%	9.5%	8.0%	5.5%	10.5%
GLASS	Clear Food & Beverage	1.60	2.60	1.60	2.60	3.20	1.80	1.80	0.60	4.60	1.00	1.00	2.00	24.4
	Coloured Food & Beverage	0.00	0.00	0.20	2.00	1.80	4.80	8.40	2.40	2.80	3.40	0.20	1.60	27.6
	Other Glass	0.40	0.20	3.00	0.00	1.40	0.00	0.00	0.00	0.00	0.00	2.20	0.00	7.2
	Total	2.00	2.80	4.80	4.60	6.40	6.60	10.20	3.00	7.40	4.40	3.40	3.60	59.2
	Percentage of Total Sample	2.0%	2.6%	4.8%	4.3%	6.0%	6.1%	10.2%	3.1%	6.3%	4.1%	3.9%	3.7%	4.8%
CARDBOARD	Corrugated Cardboard	3.60	2.80	0.80	0.00	0.80	4.80	2.00	3.40	2.00	0.40	0.40	2.40	23.4
	Boxboard	2.40	3.00	4.00	4.40	3.20	4.60	1.40	7.80	1.20	5.40	0.40	1.80	39.6
	Total	6.00	5.80	4.80	4.40	4.00	9.40	3.40	11.20	3.20	5.80	0.80	4.20	63.0
	Percentage of Total Sample	6.1%	5.4%	4.8%	4.2%	3.7%	8.7%	3.4%	11.6%	2.7%	5.4%	0.9%	4.3%	5.1%
HYGIENIC WASTE	Bio-hazardous	0.00	1.40	0.80	2.20	1.60	0.20	0.00	0.60	4.40	2.40	0.40	5.20	19.2
	Other Hygienic Waste	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	3.0
	Total	2.60	1.40	0.80	2.20	1.60	0.20	0.00	0.60	4.40	2.40	0.80	5.20	22.2
	Percentage of Total Sample	2.7%	1.3%	0.8%	2.1%	1.5%	0.2%	0.0%	0.6%	3.8%	2.2%	0.9%	5.3%	1.8%
METAL	Ferrous	0.00	0.40	2.60	0.60	3.60	2.00	1.40	0.80	2.80	1.40	0.40	1.80	17.8
	Non-ferrous	1.40	6.80	0.40	2.40	0.60	0.40	0.20	1.40	1.40	3.60	1.40	0.40	20.4
	Other Metal	6.20	0.00	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.6
	Total	7.60	7.20	14.40	3.00	4.20	2.40	1.60	2.20	4.20	5.00	1.80	2.20	55.8
	Percentage of Total Sample	7.8%	6.7%	14.5%	2.8%	3.9%	2.2%	1.6%	2.3%	3.6%	4.6%	2.1%	2.2%	4.5%
MEAT-ORGANICS	Animal	4.20	3.60	3.60	4.60	2.40	6.80	4.80	9.20	4.60	6.80	2.60	0.20	53.4
	Carcasses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Total	4.20	3.60	3.60	4.60	2.40	6.80	4.80	9.20	4.60	6.80	2.60	0.20	53.4
	Percentage of Total Sample	4.3%	3.4%	3.6%	4.3%	2.2%	6.3%	4.8%	9.5%	3.9%	6.3%	3.0%	0.2%	4.3%
NON-MEAT ORGANICS	Kitchen-Vegetable	8.40	13.20	12.00	14.20	7.80	9.80	11.20	4.80	13.80	20.20	12.40	21.80	149.6
	Crop Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Other Non-meat Organics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Total	8.40	13.20	12.00	14.20	7.80	9.80	11.20	4.80	13.80	20.20	12.40	21.80	149.6
	Percentage of Total Sample	8.6%	12.3%	12.1%	13.4%	7.3%	9.1%	11.2%	5.0%	11.8%	14.1%	18.8%	22.3%	12.1%
YARD WASTE	Trees, Yard-clipping stump > 2 Inches	0.00	8.60	0.00	0.00	0.00	0.00	0.00	0.00	10.60	0.00	0.00	0.00	19.2

	Trees, Yard-clipping stump < 2 Inches	7.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.2
	Grass	0.00	0.00	0.00	0.00	29.40	0.00	0.00	12.40	0.00	0.00	20.20	0.00	12.40	0.00	0.00	20.20	0.00	0.00	74.4
	Leaves	0.00	0.00	0.00	0.00	2.40	0.00	0.00	17.40	0.00	18.60	25.80	0.00	5.80	0.00	0.00	5.80	0.00	0.00	72.4
	Other Yard Waste	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.0
	Total	7.20	10.60	0.00	31.80	17.40	0.00	31.00	36.40	0.00	26.00	14.80	175.2	14.2%	15.1%	0.0%	29.6%	0.0%	31.1%	15.1%
	Percentage of Total Sample	7.4%	9.9%	0.0%	29.7%	16.1%	0.0%	32.1%	31.1%	0.0%	26.6%	14.80	14.2%	15.1%	0.0%	29.6%	0.0%	31.1%	15.1%	
HAZARDOUS	Pesticides/Herbicides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.2	0.00	0.00	0.20	0.00	0.00	0.00	0.2
	Other Hazardous Waste	1.80	2.40	0.00	1.60	0.20	0.00	0.00	0.00	0.00	0.20	2.40	8.6	0.00	2.40	0.00	0.00	0.00	0.00	8.6
	Total	1.80	2.40	0.00	1.60	0.20	0.00	0.00	0.00	0.00	0.20	2.40	8.8	0.7%	0.2%	0.2%	0.2%	0.0%	0.2%	0.7%
	Percentage of Total Sample	1.8%	2.2%	0.0%	1.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	2.2%	0.7%	0.2%	0.2%	0.2%	0.0%	0.2%	0.0%	
OTHER	Textiles	2.80	3.80	6.40	3.20	1.60	2.20	6.80	0.00	0.60	18.40	10.20	63.4	0.00	0.00	0.00	0.00	0.00	0.00	63.4
	Tires	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	1.2	0.00	0.00	0.00	0.00	0.00	0.00	1.2
	Rubber/Shoes	4.00	0.00	0.60	1.40	0.00	0.80	2.40	0.00	0.40	3.20	0.00	13.0	0.00	0.40	0.20	0.00	0.00	0.00	13.0
	Batteries	2.60	0.20	0.20	3.60	0.00	0.20	2.00	0.40	0.20	0.40	0.00	10.2	0.00	0.40	0.20	0.00	0.00	0.00	10.2
	Paint/Solvent/Aerosol Cans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.2	0.00	0.00	0.20	0.00	0.00	0.00	0.2
	Waste oils/filters	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.6	0.00	0.00	0.20	0.00	0.00	0.00	0.6
	Household C & D	6.00	12.00	3.60	0.00	24.60	0.00	4.80	0.00	19.60	1.20	0.00	71.8	0.00	0.00	0.00	1.20	0.00	0.00	71.8
	House Product	3.60	2.60	9.60	10.20	0.00	2.40	4.40	3.40	0.00	0.80	3.40	48.2	0.00	0.80	0.20	0.80	0.00	0.00	48.2
	Electronic Product	8.20	2.00	4.20	6.40	0.00	6.20	9.80	2.80	0.20	11.20	4.80	56.0	0.00	2.80	0.20	4.80	0.00	0.00	56.0
	Unidentifiable	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	Total	27.20	20.60	24.60	24.80	26.20	11.80	30.20	6.60	21.00	31.20	18.80	264.6	21.5%	19.2%	24.6%	29.0%	17.9%	29.0%	21.5%
	Percentage of Total Sample	27.8%	19.3%	24.8%	23.4%	24.5%	10.9%	30.1%	6.8%	17.9%	29.0%	18.80	264.6	21.5%	19.2%	24.6%	29.0%	17.9%	29.0%	
RESIDUAL	Total	3.00	5.00	3.60	4.40	2.40	6.40	4.20	1.80	5.80	4.20	0.00	40.8	0.00	0.00	0.00	0.00	0.00	0.00	40.8
	Percentage of Total Sample	3.1%	4.7%	3.6%	4.2%	2.2%	5.9%	4.2%	1.9%	5.0%	3.9%	0.0%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%
	TOTAL SAMPLE WEIGHT	97.80	107.00	99.00	106.00	107.00	107.80	100.20	96.60	117.00	107.60	97.80	1231.6							1231.6
	Number of Milk Jugs	2	5	2	4	0	5	0	2	2	7	0	29							29

Appendix J: May 2008 Individual Sample Data

May 2008 Residential Waste Categories	
Yard Waste	30.3%
Paper	13.2%
Non-Meat Organics	9.4%
Plastic	6.9%
Cardboard	6.5%
Household Hazardous	3.7%
Metal (Ferrous & Non-Ferrous)	2.2%
Glass	1.9%
Hygienic Waste	1.8%
Meat Organics	1.0%
Residual	0.9%
Hazardous	0.4%
Other	21.8%

Date sampled	1-May	2-May	6-May	7-May	12-May	13-May	13-May	14-May	15-May	16-May	19-May	20-May	22-May
Truck #	12631	12636	12529	12634	12625	12637	12631	12529	12631	12647	12625	12631	12529
Route #	77	108	210	6	68	108	76	210	76	?	68	70	210
Sample source	RAA	FSA	FSM	RAA	RAA	FSA	RAA	FSA	FSA	FSA	RAA	RAA	FSM
Weight of the waste in the load	19630	22440	19820	19000	22350	24830	20100	20360	20100	20450	22450	19580	19470
CATEGORY													
SUB-CATEGORY	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG
Newspapers	14.40	8.60	7.40	3.80	3.40	0.80	5.60	4.00	11.20	6.40	4.00	0.80	3.80
Magazines	0.40	5.60	8.40	2.20	0.00	0.00	2.80	2.20	0.20	1.20	2.40	1.40	0.00
Telephone Books/Directories	0.00	0.00	0.00	0.40	0.00	0.00	0.00	1.80	0.00	0.00	0.00	0.00	2.80
Fine Paper	15.60	6.20	4.60	3.60	2.60	0.40	12.20	3.00	2.60	4.60	2.80	0.80	5.00
Tissue Paper	2.40	2.80	0.00	1.20	0.80	0.40	2.80	1.00	0.60	2.00	0.60	0.20	2.40
Wallpaper	0.00	1.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00
Polycoat	0.00	0.00	0.40	0.40	0.40	0.20	0.40	0.20	0.20	0.40	0.40	0.20	0.60
Other Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00
Total	32.80	24.40	21.00	11.60	7.20	1.80	23.80	12.20	15.20	14.60	10.20	3.80	14.60
Percentage of Total Sample	33.0%	24.6%	21.2%	11.6%	7.3%	1.8%	22.3%	12.2%	15.0%	14.6%	10.7%	3.8%	15.7%
PET No.1	0.20	0.40	0.20	1.80	0.20	0.40	4.40	0.40	0.20	0.20	0.20	0.20	0.40
PLASTIC													

PET No.2	0.20	0.60	0.60	2.60	0.20	0.80	0.20	3.80	0.40	0.20	0.20	0.60
PET No.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PET No.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PET No.5	0.40	0.40	1.60	0.40	0.20	0.40	0.20	0.60	0.40	0.40	0.20	0.60
PET No.6	0.20	0.20	0.40	0.40	0.40	0.60	0.40	0.20	0.20	0.40	0.20	0.20
PET No.7	0.00	0.20	0.00	0.20	0.00	0.20	0.00	0.00	0.00	0.00	0.20	0.00
Unidentified Pet No. (other packaging)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Plastic Product	3.80	5.40	4.80	6.00	2.20	4.80	2.80	8.60	4.80	2.60	8.80	4.40
Total	4.80	7.20	7.60	11.40	3.20	11.20	3.80	14.00	6.00	3.80	9.80	6.20
Percentage of Total Sample	4.8%	7.3%	7.7%	11.4%	3.3%	10.5%	3.9%	13.9%	6.0%	4.0%	9.8%	6.7%
Clear Food & Beverage	0.60	3.20	2.40	2.60	0.40	0.40	0.40	2.60	0.20	0.60	0.40	3.00
Coloured Food & Beverage	0.40	0.00	1.00	0.00	0.00	1.00	0.60	0.00	0.00	0.20	0.00	4.60
Other Glass	0.00	3.40	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.00	6.60	3.60	2.60	0.40	1.40	1.40	3.20	0.20	0.80	0.60	7.60
Percentage of Total Sample	1.0%	6.7%	3.6%	2.6%	0.4%	1.4%	3.0%	0.2%	0.8%	0.6%	0.2%	8.2%
Corrugated Cardboard	7.20	2.80	1.80	2.40	0.40	2.40	2.40	3.40	4.00	1.20	0.80	6.20
Boxboard	0.00	0.60	2.00	4.20	6.00	0.40	5.20	0.00	2.80	3.80	16.00	4.00
Total	7.20	3.40	3.80	6.60	6.40	2.80	8.60	1.60	6.20	5.00	16.80	10.20
Percentage of Total Sample	7.2%	3.4%	3.8%	6.6%	6.5%	2.9%	8.1%	1.6%	6.1%	5.2%	16.9%	11.0%
Food & Beverage	0.60	2.60	0.60	2.00	0.80	0.20	1.40	0.30	0.20	0.40	0.80	0.80
Aerosol	0.00	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aluminum-foil	0.00	0.00	0.00	0.20	0.20	0.20	0.10	0.20	0.00	0.20	0.20	0.00
Other ferrous	3.20	1.80	0.20	0.40	0.00	0.40	0.00	0.00	0.40	0.40	2.20	1.40
Aluminum food & beverage	0.00	0.00	0.00	0.40	0.00	0.20	0.00	0.00	0.00	0.00	0.20	0.00
Composites	0.00	0.00	0.00	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.80	4.60	1.00	4.60	1.00	2.00	1.20	0.40	0.60	0.80	2.80	2.20
Percentage of Total Sample	3.8%	4.6%	1.0%	4.6%	1.0%	1.9%	1.2%	0.4%	0.6%	0.8%	2.8%	2.4%
Bio-hazardous	0.00	2.60	0.20	4.20	0.00	5.20	0.80	0.20	0.40	3.00	1.00	3.40
Other Hygienic Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	2.60	0.20	4.20	0.00	5.20	0.80	0.20	0.40	3.00	1.00	3.40
Percentage of Total Sample	0.0%	2.6%	0.2%	4.2%	0.0%	5.3%	0.7%	0.2%	0.4%	3.0%	1.0%	3.7%
Animal Meat	0.00	1.20	2.40	1.40	0.40	0.60	1.20	0.80	2.00	2.20	0.20	0.60
MEAT-ORGANICS												

		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	1.20	2.40	1.40	0.40	0.60	1.20	0.80	2.00	2.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.60	0.60
	Percentage of Total Sample	0.0%	1.2%	2.4%	1.4%	0.4%	0.6%	1.1%	0.8%	2.0%	2.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.6%	0.6%
	NON-MEAT ORGANICS																						
	Kitchen-Vegetable	7.40	19.60	13.60	15.80	1.20	8.00	10.80	8.00	8.20	11.60	3.60	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.40	8.40
	Crop Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	7.40	19.60	13.60	15.80	1.20	8.00	10.80	8.00	8.20	11.60	3.60	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.40	8.40	
	Percentage of Total Sample	7.4%	19.8%	13.7%	15.8%	1.2%	8.2%	10.1%	8.0%	8.1%	11.6%	3.8%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.1%	9.0%	9.0%
	YARD WASTE																						
	Trees, Yard-clipping stump > 2 Inches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Trees, Yard-clipping stump < 2 Inches	0.00	0.00	0.00	0.00	0.00	13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Grass	7.40	19.20	13.20	12.20	21.60	30.60	18.40	31.20	14.60	14.20	22.40	12.40	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.20	10.20
	Leaves	6.80	0.00	8.60	8.20	11.80	12.00	5.60	12.40	5.60	3.60	9.00	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other Yard Waste	0.00	0.00	8.20	0.00	0.00	11.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	14.20	19.20	30.00	20.40	33.40	67.00	24.00	43.60	20.20	17.80	31.40	17.20	10.20	0.00	0.00	0.00	0.00	0.00	0.00	10.20	10.20	
	Percentage of Total Sample	14.3%	19.4%	30.3%	20.4%	34.0%	68.6%	22.5%	43.4%	20.0%	17.8%	32.8%	17.3%	11.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	11.0%	11.0%	
	HAZARDOUS																						
	Pesticides/Herbicides	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Percentage of Total Sample	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	HOUSEHOLD HAZARDOUS																						
	Batteries	0.00	0.00	0.00	0.20	0.00	0.00	0.20	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Paint/Solvent/Aerosol Cans	0.00	0.20	0.00	0.20	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00
	Automotive Waste	0.00	0.20	0.00	0.20	0.00	0.00	0.40	0.00	0.40	1.20	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.60
	Pharmaceuticals	0.20	0.00	0.20	0.00	0.00	0.00	0.20	0.20	0.00	0.20	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.20
	Household Cleaners	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Pesticides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Electronics	5.20	0.20	3.20	0.00	6.60	1.20	0.00	5.40	0.20	4.40	10.40	0.40	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	8.00
	Other Household Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00
	Total	5.40	0.60	3.40	0.60	6.60	1.20	0.80	6.20	0.60	6.00	10.40	1.00	8.80	0.00	0.00	0.00	0.00	0.00	0.00	8.80	8.80	
	Percentage of Total Sample	5.4%	0.6%	3.4%	0.6%	6.7%	1.2%	0.7%	6.2%	0.6%	6.0%	10.9%	1.0%	9.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.5%	9.5%	
	OTHER																						
	Textiles	2.40	8.20	7.40	2.60	0.40	0.00	4.80	0.40	7.60	12.00	1.00	9.60	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.00	11.00
	Tires	0.00	0.00	0.00	0.00	8.40	0.00	0.00	0.00	0.00	0.00	0.00	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Rubber/Shoes	0.00	0.20	0.20	0.20	0.40	0.00	0.80	0.40	0.00	0.40	0.20	11.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.40
	Household C & D	15.60	0.60	4.20	16.20	14.80	0.00	8.60	13.20	12.60	13.40	12.20	14.40	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	3.20

House Product	4.80	0.60	0.00	0.00	13.00	3.60	4.20	6.80	11.80	4.00	14.40	5.20	4.00
Unidentifiable	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
Total	22.80	9.60	11.80	19.00	37.00	3.60	18.80	20.80	32.00	29.80	27.80	45.00	18.60
Percentage of Total Sample	22.9%	9.7%	11.9%	19.0%	37.7%	3.7%	17.6%	20.7%	31.7%	29.9%	29.1%	45.2%	20.0%
RESIDUAL	0.00	0.00	0.60	2.00	1.40	1.00	1.40	0.80	1.20	0.60	1.00	0.80	2.20
Percentage of Total Sample	0.0%	0.0%	0.6%	2.0%	1.4%	1.0%	1.3%	0.8%	1.2%	0.6%	1.0%	0.8%	2.4%
TOTAL SAMPLE WEIGHT	99.4	99.0	99.0	100.2	98.2	97.6	106.8	100.4	101.0	99.8	95.6	99.6	93.0
Number of Milk Jugs	0	0	5	4	2	2	7	0	0	2	4	0	2
Number of Sharps	0	0	0	0	0	0	0	0	0	0	0	0	0

Date sampled	23-May	27-May	28-May	29-May	30-May
Truck #	12633	12529	12631	12635	12647
Route #	24	203	76	106	?
Sample source	RAA	FSM	FSA	RAA	FSA
Weight of the waste in the load	19230	20720	21250	23020	19680
CATEGORY	KG	KG	KG	KG	KG
PAPER	KG	KG	KG	KG	TOTAL
Newspapers	3.20	5.20	1.80	2.00	5.40
Magazines	0.00	1.40	0.00	0.00	0.40
Telephone Books/Directories	0.00	0.00	0.60	0.40	0.00
Fine Paper	1.20	2.60	2.60	2.40	3.00
Tissue Paper	1.40	1.40	1.60	0.60	2.40
Wallpaper	0.00	0.00	0.00	0.00	0.00
Polycoat	0.40	0.20	0.40	0.20	0.20
Other Paper	0.60	0.00	0.00	0.00	0.00
Total	6.80	10.80	7.00	5.60	11.40
Percentage of Total Sample	7.1%	11.0%	7.1%	5.8%	11.6%
PLASTIC					
PET No.1	0.40	0.20	0.20	0.20	0.20
PET No.2	0.40	0.40	0.20	0.80	0.40
PET No.3	0.00	0.20	0.00	0.00	0.20
PET No.4	0.00	0.00	0.00	0.00	0.00
PET No.5	0.20	0.20	0.20	0.20	0.40
PET No.6	0.20	0.40	0.40	0.40	0.40
PET No.7	0.00	0.00	0.20	0.20	0.00
Unidentified Pet No. (other packaging)	0.40	0.00	0.00	0.00	0.00
Plastic Product	3.40	4.40	2.60	4.80	4.60
Total	5.00	5.80	3.80	6.60	122.00
Percentage of Total Sample	5.2%	5.9%	3.9%	6.8%	6.9%
GLASS					
Clear Food & Beverage	1.00	0.60	0.80	1.20	2.00
Coloured Food & Beverage	0.00	0.20	0.00	0.00	0.00
Other Glass	0.00	0.00	0.00	0.00	0.00
Total	1.00	0.80	0.80	1.20	2.00
Percentage of Total Sample	1.0%	0.8%	0.8%	1.2%	2.0%
CARDBOARD					
Corrugated Cardboard	1.40	2.40	2.00	1.20	2.60
Boxboard	2.80	3.80	5.40	4.80	3.40

	Total		4.20	6.20	7.40	6.00	6.00	6.00	115.00
	Percentage of Total Sample		4.4%	6.3%	7.6%	6.2%	6.1%	6.5%	
METAL (FERROUS & NON-FERROUS)	Food & Beverage	0.40	0.40	0.60	0.40	0.60	0.60	0.60	0.60
	Aerosol	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00
	Aluminum-foil	0.00	0.20	0.20	0.20	0.20	0.20	0.20	0.00
	Other ferrous	4.60	3.20	0.60	0.20	1.20	1.20	3.20	3.20
	Aluminum food & beverage	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00
	Composites	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	5.00	4.00	1.60	0.80	2.00	39.80	2.2%	2.2%
	Percentage of Total Sample	5.2%	4.1%	1.6%	0.8%	2.0%	2.0%	2.2%	
HYGIENIC WASTE	Bio-hazardous	1.20	0.60	4.40	0.40	3.40	3.40	31.20	0.00
	Other Hygienic Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	1.20	0.60	4.40	0.40	3.40	31.20	1.8%	1.8%
	Percentage of Total Sample	1.3%	0.6%	4.5%	0.4%	3.5%	1.8%	1.8%	1.8%
MEAT-ORGANICS	Animal Meat	0.60	0.40	1.60	0.80	0.40	0.40	0.00	0.00
	Carcasses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.60	0.40	1.60	0.80	0.40	17.00	1.0%	1.0%
	Percentage of Total Sample	0.6%	0.4%	1.6%	0.8%	0.4%	1.0%	1.0%	1.0%
NON-MEAT ORGANICS	Kitchen-Vegetable	8.40	11.40	7.80	10.40	12.00	7.40	7.40	0.00
	Crop Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	8.40	11.40	7.80	10.40	12.00	167.20	9.4%	9.4%
	Percentage of Total Sample	8.8%	11.6%	8.0%	10.7%	12.2%	9.4%	9.4%	9.4%
YARD WASTE	Trees, Yard-clipping stump > 2 Inches	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Trees, Yard-clipping stump < 2 Inches	0.20	0.40	0.00	0.00	0.00	0.00	0.00	0.00
	Grass	12.40	38.00	27.60	12.20	30.20	7.40	6.80	6.80
	Leaves	5.00	5.20	4.20	41.00	8.40	0.00	0.00	0.00
	Other Yard Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	23.40	43.60	31.80	53.20	38.60	539.20	30.3%	30.3%
	Percentage of Total Sample	24.5%	44.4%	32.4%	54.8%	39.2%	30.3%	30.3%	30.3%
HAZARDOUS	Pesticides/Herbicides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other Hazardous Waste	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	6.60	0.00	0.00	0.00	0.00	7.00	7.00	7.00
	Percentage of Total Sample	7.0%	0.0%	0.0%	0.0%	0.0%	7.0%	7.0%	7.0%

	Percentage of Total Sample	6.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	
HOUSEHOLD HAZARDOUS	Batteries	0.00	0.20	0.20	0.00	0.00	0.00	1.20	
	Paint/Solvent/Aerosol Cans	0.00	0.20	0.20	0.00	0.00	0.00	1.40	
	Automotive Waste	0.00	0.40	0.00	0.00	0.00	0.00	3.40	
	Pharmaceuticals	0.00	0.20	0.00	0.00	0.00	0.00	1.40	
	Household Cleaners	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Pesticides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Electronics	7.40	0.40	4.00	0.40	0.00	0.00	57.40	
	Other Household Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.40	
	Total	7.40	1.40	4.40	0.40	0.00	0.00	65.20	
	Percentage of Total Sample	7.7%	1.4%	4.5%	0.4%	0.0%	0.0%	3.7%	
OTHER	Textiles	9.60	4.20	2.80	3.80	5.60	2.40		
	Tires	0.00	0.00	5.60	0.00	0.00	0.00	0.00	
	Rubber/Shoes	0.00	0.00	0.20	0.00	0.20	0.00	0.00	
	Household C & D	10.40	6.40	11.00	0.00	6.00	0.00	15.60	
	House Product	5.20	1.20	6.80	0.00	3.80	0.00	4.80	
	Unidentifiable	0.20	0.00	0.00	7.80	0.00	0.00	0.00	
	Total	25.40	11.80	26.40	11.60	15.60	387.40		
	Percentage of Total Sample	26.6%	12.0%	26.9%	12.0%	15.9%	21.8%		
	RESIDUAL	Total	0.60	1.40	1.00	0.00	0.80	16.80	
		Percentage of Total Sample	0.6%	1.4%	1.0%	0.0%	0.8%	0.9%	
TOTAL SAMPLE WEIGHT		95.6	98.2	98.0	97.0	98.4	1776.8		
Number of Milk Jugs		0	2	3	0	1	34		
Number of Sharps		0	0	0	0	0	0		

Appendix K: June 2008 Individual Sample Data

June 2008 Residential Waste Categories	
Yard Waste	42.2%
Paper	8.9%
Non-Meat Organics	7.1%
Cardboard	4.4%
Plastic	4.3%
Household Hazardous	3.8%
Hygienic Waste	1.3%
Residual	1.0%
Metal (Ferrous & Non-Ferrous)	1.0%
Meat Organics	0.8%
Glass	0.6%
Hazardous	0.0%
Other	24.5%

Date sampled	9-Jun	10-Jun	18-Jun	19-Jun	20-Jun	23-Jun	24-Jun	30-Jun	
Truck #	12637	12637	12631	12529	12635	12636	12631	12529	
Route #	109	102	12	207	108	109	70	207	
Sample source	FSA	FSA	RAA	FSM	FSA	FSA	RAA	FSM	
Weight of the waste in the load	22070	23010	22020	23900	24860	23570	23020	23250	
SUB-CATEGORY	KG	KG	KG	KG	KG	KG	KG	KG	TOTAL
Newspapers	2.20	3.40	4.80	0.60	4.60	5.60	4.60	1.40	27.20
Magazines	3.20	1.20	0.60	0.20	1.00	0.00	0.00	0.40	6.60
Telephone Books/Directories	1.80	0.00	0.00	0.00	0.00	1.60	0.00	0.00	3.40
Fine Paper	5.40	3.20	2.60	0.80	2.80	1.40	0.40	2.20	18.80
Tissue Paper	2.20	2.20	1.40	2.00	1.20	1.00	0.20	1.60	11.80
Wallpaper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polycoat	0.60	0.40	0.00	0.20	0.40	0.20	0.20	0.40	2.40
Other Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	15.40	10.40	9.40	3.80	10.00	9.80	5.40	6.00	70.20
Percentage of Total Sample	15.4%	10.8%	10.3%	3.9%	10.2%	9.9%	5.1%	6.1%	8.9%
CATEGORY									
PAPER									
PET No.1	0.20	0.20	0.20	0.60	0.40	0.20	0.20	0.40	2.40
PET No.2	0.40	0.20	0.20	0.20	0.20	0.20	0.20	0.40	2.00
PET No.3	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
PLASTIC									

NON-MEAT ORGANICS	Kitchen-Vegetable	8.00	5.60	6.60	10.80	9.40	1.40	2.80	11.20	55.80
	Crop Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	8.00	5.60	6.60	10.80	9.40	1.40	2.80	11.20	55.80
	Percentage of Total Sample	8.0%	5.8%	7.2%	11.0%	9.6%	1.4%	2.6%	11.4%	7.1%
YARD WASTE	Trees, Yard-clipping stump > 2 Inches	0.00	3.00	4.00	0.00	0.00	0.00	0.00	0.00	7.00
	Trees, Yard-clipping stump < 2 Inches	0.00	2.20	2.40	2.60	0.00	11.20	6.40	0.00	24.80
	Grass	23.60	28.60	19.60	45.20	37.40	31.60	8.20	29.40	223.60
	Leaves	10.80	12.00	8.00	8.80	8.20	9.40	4.00	6.60	67.80
	Other Yard Waste	3.00	0.00	0.00	0.00	0.00	6.20	0.00	0.00	9.20
	Total	37.40	45.80	34.00	56.60	45.60	58.40	18.60	36.00	332.40
	Percentage of Total Sample	37.4%	47.4%	37.3%	57.6%	46.6%	58.9%	17.6%	36.7%	42.2%
HAZARDOUS	Pesticides/Herbicides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Percentage of Total Sample	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HOUSEHOLD HAZARDOUS	Batteries	0.00	0.20	0.00	0.20	0.00	0.20	0.00	0.00	0.60
	Paint/Solvent/Aerosol Cans	0.60	0.60	1.40	0.20	0.00	0.20	0.00	0.00	3.00
	Automotive Waste	0.00	0.40	0.00	0.00	0.60	0.00	0.00	0.40	1.40
	Pharmaceuticals	0.20	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.40
	Household Cleaners	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Pesticides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Electronics	3.00	4.20	8.80	0.20	0.00	2.20	0.00	6.00	24.40
	Other Household Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	3.80	5.40	10.20	0.60	0.80	2.60	0.00	6.40	29.80
	Percentage of Total Sample	3.8%	5.6%	11.2%	0.6%	0.8%	2.6%	0.0%	6.5%	3.8%
	OTHER	Textiles	6.20	5.00	0.00	8.40	2.20	4.80	0.40	12.60
Tires		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rubber/Shoes		0.00	0.20	0.00	0.00	0.20	0.00	0.00	0.40	0.80
Household C & D		3.80	8.80	23.60	0.00	4.40	10.20	41.80	9.00	101.60
House Product		3.40	3.40	0.00	3.00	6.00	0.00	32.60	2.60	51.00
Unidentifiable		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		13.40	17.40	23.60	11.40	12.80	15.00	74.80	24.60	193.00
Percentage of Total Sample	13.4%	18.0%	25.9%	11.6%	13.1%	15.1%	70.7%	25.1%	24.5%	
RESIDUAL	Total	1.00	0.60	1.00	1.20	1.60	1.20	0.40	0.80	7.80

	1.0%	0.6%	1.1%	1.2%	1.6%	1.2%	0.4%	0.8%	1.0%
Percentage of Total Sample									
TOTAL SAMPLE WEIGHT	100.0	96.6	91.2	98.2	97.8	99.2	105.8	98.0	786.8
Number of Milk Jugs	0	0	1	1	2	1	0	0	5
Number of Sharps	1	0	0	0	0	1	0	0	2

Appendix L: July 2008 Individual Sample Data

July 2008 Residential Waste Categories	
Yard Waste	28.1%
Paper	9.7%
Non-Meat Organics	8.0%
Household Hazardous	8.0%
Cardboard	5.8%
Plastic	4.5%
Metal (Ferrous & Non-Ferrous)	2.7%
Hygienic Waste	2.4%
Meat Organics	2.0%
Glass	1.7%
Residual	1.1%
Hazardous	0.0%
Other	25.9%

Date sampled	2-Jul	3-Jul	4-Jul	7-Jul	11-Jul	14-Jul	15-Jul	17-Jul	22-Jul	24-Jul	25-Jul	28-Jul	29-Jul	30-Jul
Truck #	12629	12529	12640	12627	12625	12633	12632	12527	12529	12639	12629	12529	12631	12635
Route #	7	210	108	?	68	24	7	214	210	15	79	201	5	106
Sample source	RAA	FSM	FSA	FSA	RAA	RAA	RAA	FSM	FSM	FSA	RAA	FSM	RAA	RAA
Weight of the waste in the load	23530	22250	24150	20300	21860	21250	19880	22200	22400	24620	22240	22300	23160	21720
SUB-CATEGORY	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG
Newspapers	2.80	1.60	2.80	0.80	2.00	8.00	0.20	6.00	1.40	0.20	0.40	6.00	4.00	0.40
Magazines	0.00	0.40	0.00	0.00	0.80	3.20	0.40	0.40	0.60	0.00	0.00	0.00	0.00	0.20
Telephone Books/Directories	0.00	0.00	1.80	1.60	0.00	0.00	1.60	0.00	0.00	0.00	0.00	1.20	1.20	0.00
Fine Paper	0.60	3.00	3.40	5.20	4.20	5.40	4.60	4.80	4.00	0.40	2.40	4.40	4.60	4.20
Tissue Paper	2.60	0.60	0.40	0.60	1.00	0.80	0.20	0.60	2.20	0.40	1.60	2.40	3.20	0.80
Wallpaper	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polycoat	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.00	0.20
Other Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00
Total	6.20	5.80	8.60	8.40	8.40	17.60	7.20	12.00	8.40	1.20	4.60	14.20	13.40	5.80
Percentage of Total Sample	6.0%	5.9%	10.3%	8.3%	11.8%	17.9%	8.2%	12.2%	8.6%	1.2%	5.3%	14.5%	14.0%	5.4%
PET No.1	0.60	0.20	0.20	0.40	0.20	0.40	0.20	0.20	0.20	0.20	0.20	0.40	0.20	0.60
PET No.2	0.40	0.20	0.20	0.20	0.20	0.40	0.60	0.40	0.20	0.20	0.20	0.20	0.40	0.40
PET No.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.20	0.00	0.00	0.40

Kitchen-Vegetable	9.40	10.00	5.20	7.40	6.40	9.00	4.20	9.40	7.60	1.60	4.80	6.60	7.80	5.20	94.60
Crop Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.40	10.40
Total	9.40	10.00	5.20	7.40	6.40	9.00	4.20	9.40	7.60	1.60	4.80	6.60	7.80	15.60	105.00
Percentage of Total Sample	9.0%	10.2%	6.2%	7.3%	9.0%	9.2%	4.8%	9.5%	7.8%	1.6%	5.5%	6.7%	8.2%	14.6%	7.9%
Trees, Yard-clipping stump > 2 Inches	0.00	0.00	0.00	0.00	0.00	4.40	0.00	0.00	0.00	0.00	0.00	6.00	0.00	0.00	10.40
Trees, Yard-clipping stump < 2 Inches	3.60	0.00	11.00	0.60	0.00	0.00	0.00	0.00	5.20	15.80	0.00	8.60	0.00	0.00	44.80
Grass	22.60	38.80	31.20	45.40	0.00	25.40	9.00	21.00	13.00	10.80	15.20	16.60	25.80	27.40	302.20
Leaves	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Yard Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.60	0.00	0.00	0.00	0.00	22.60
Total	26.20	38.80	42.20	46.00	0.00	29.80	9.00	21.00	18.20	49.20	15.20	31.20	25.80	27.40	380.00
Percentage of Total Sample	25.2%	39.4%	50.6%	45.2%	0.0%	30.4%	10.3%	21.3%	18.7%	48.0%	17.4%	31.8%	27.0%	25.7%	28.6%
Pesticides/Herbicides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.20
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.20
Percentage of Total Sample	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
Batteries	0.00	0.00	0.00	0.20	0.00	0.70	0.20	0.20	0.20	0.00	0.00	0.20	0.00	0.00	1.70
Paint/Solvent/Aerosol Cans	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.40
Automotive Waste	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.60	1.20
Pharmaceuticals	0.20	0.00	0.00	0.00	0.00	0.20	0.00	0.20	0.00	0.00	0.00	0.00	0.20	0.00	0.80
Household Cleaners	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pesticides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electronics	15.00	0.00	0.00	6.60	12.20	1.00	0.20	3.60	11.00	31.60	18.40	1.20	0.20	8.20	109.20
Other Household Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.20
Total	15.20	0.40	0.00	6.80	12.20	1.90	0.40	4.00	11.60	31.60	18.40	1.40	0.80	8.80	113.50
Percentage of Total Sample	14.6%	0.4%	0.0%	6.7%	17.1%	1.9%	0.5%	4.1%	11.9%	30.9%	21.1%	1.4%	0.8%	8.3%	8.5%
Textiles	10.80	12.60	6.00	7.00	9.60	3.60	22.60	13.40	9.00	8.20	3.60	10.20	15.20	2.60	134.40
Tires	0.00	0.00	0.00	8.20	0.00	0.00	8.00	0.00	8.40	0.00	7.00	0.00	0.00	0.00	31.60
Rubber/Shoes	0.00	0.00	0.00	0.00	0.40	0.00	0.60	0.20	0.00	0.00	0.00	0.00	0.40	0.60	2.20
Household C & D	11.00	8.00	8.40	3.20	13.60	14.80	10.20	8.00	3.00	0.00	21.20	3.60	10.40	15.40	130.80
House Product	0.00	3.80	0.00	1.00	1.20	3.40	0.00	6.20	6.20	0.00	2.00	8.00	8.40	2.20	42.40
Unidentifiable	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	21.80	24.40	14.40	19.40	24.80	21.80	41.40	27.80	26.60	8.20	33.80	21.80	34.40	20.80	341.40
Percentage of Total Sample	21.0%	24.8%	17.3%	19.1%	34.7%	22.2%	47.2%	28.2%	27.3%	8.0%	38.7%	22.2%	36.1%	19.5%	25.7%
Total	1.20	1.00	0.80	1.40	0.80	1.00	1.20	1.00	1.40	0.60	0.60	1.20	1.00	1.40	14.60

Percentage of Total Sample	1.2%	1.0%	1.0%	1.4%	1.1%	1.0%	1.4%	1.0%	1.4%	1.0%	1.4%	0.7%	1.2%	1.0%	1.3%	1.1%
	104.0	98.4	83.4	101.8	71.4	98.1	87.8	98.6	97.4	102.4	87.4	98.2	95.4	106.6	1330.9	
	0	1	1	2	0	3	1	2	2	0	0	1	1	2	16	
	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	

Appendix M: August 2008 Individual Sample Data

August 2008 Residential Waste Categories	
Yard Waste	30.3%
Paper	13.2%
Non-Meat Organics	9.4%
Plastic	6.9%
Cardboard	6.5%
Household Hazardous	3.7%
Metal (Ferrous & Non-Ferrous)	2.2%
Glass	1.9%
Hygienic Waste	1.8%
Meat Organics	1.0%
Residual	0.9%
Hazardous	0.4%
Other	21.8%

Date sampled	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	12-Aug	13-Aug	14-Aug	15-Aug	26-Aug	
Truck #	12626	12626	12527	12632	12629	12527	12633	12639	12631	12629	
Route #	72	72	214	76	7	202	24	15	79	?	
Sample source	FSA	RAA	FSM	FSA	RAA	FSM	RAA	RSA	RAA	RAA	
Weight of the waste in the load	24160	22760	22340	20350	22010	23010	23660	24100	21220	23920	
	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG
CATEGORY											TOTAL
PAPER											
Newspapers	11.20	3.20	0.80	4.20	6.40	2.60	1.20	3.60	0.40	2.20	35.80
Magazines	4.00	0.00	0.00	0.20	2.20	0.20	0.00	0.40	0.00	3.20	10.20
Telephone Books/Directories	3.20	0.00	0.00	0.00	0.00	0.00	3.20	0.00	0.00	1.80	8.20
Fine Paper	0.00	0.40	3.00	2.80	6.00	0.60	2.80	4.00	0.40	3.00	23.00
Tissue Paper	3.00	0.60	1.20	1.60	1.80	2.60	2.20	2.60	0.20	1.40	17.20
Wallpaper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polycoat	0.20	0.20	0.40	0.20	0.20	0.00	0.20	0.20	0.20	0.20	2.00
Other Paper	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Total	21.60	4.60	5.40	9.00	16.60	6.00	9.60	10.80	1.20	11.80	96.60
Percentage of Total Sample	20.0%	4.9%	5.7%	7.7%	16.7%	5.6%	9.7%	10.8%	1.2%	12.2%	9.5%
PLASTIC											
PET No.1	0.20	0.60	0.80	0.20	0.60	0.20	0.60	0.60	0.20	0.20	4.20
PET No.2	0.20	0.20	0.40	0.60	0.40	0.40	0.40	0.40	0.20	0.80	4.00
PET No.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.20

PET No.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
PET No.5	0.20	0.20	0.20	0.40	0.20	0.40	0.20	0.40	0.20	0.40	0.20	0.40	0.20	0.40	0.20	0.40	0.20	0.40	0.20	
PET No.6	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	
PET No.7	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	
Unidentified Pet No. (other packaging)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Plastic Product	1.80	0.60	2.00	2.00	4.00	4.00	1.60	3.40	3.20	3.00	3.00	3.20	3.00	1.00	10.20	12.60	13.0%	4.4%	30.80	
Total	2.60	2.00	3.60	5.40	4.6%	4.6%	3.0%	4.3%	4.7%	4.6%	4.6%	4.7%	4.6%	1.60	12.60	13.0%	13.0%	4.4%	44.60	
Percentage of Total Sample	2.4%	2.1%	3.8%	4.6%	4.3%	4.3%	3.0%	4.3%	4.7%	4.6%	4.6%	4.7%	4.6%	1.6%	13.0%	13.0%	13.0%	4.4%	44.60	
GLASS																				
Clear Food & Beverage	0.40	1.20	4.40	4.20	4.20	1.00	0.40	0.40	1.80	0.60	0.20	0.60	0.20	1.60	15.80				15.80	
Coloured Food & Beverage	0.20	0.00	3.80	0.20	0.20	0.40	0.00	0.00	0.00	0.80	0.00	0.80	0.00	0.00	5.40				5.40	
Other Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	
Total	0.60	1.20	8.20	4.40	4.40	1.40	0.40	0.40	1.80	1.40	0.20	1.40	0.20	1.60	21.20				21.20	
Percentage of Total Sample	0.6%	1.3%	8.7%	3.8%	3.8%	1.4%	0.4%	0.4%	1.8%	1.4%	0.2%	1.4%	0.2%	1.7%	21.2%				21.2%	
CARDBOARD																				
Corrugated Cardboard	2.00	1.40	2.60	2.60	2.60	3.60	1.20	1.20	3.60	1.20	0.40	1.20	0.40	4.00	22.60				22.60	
Boxboard	1.80	1.20	2.80	6.20	6.20	2.40	1.20	1.20	5.00	0.80	0.80	0.80	0.60	8.80	30.80				30.80	
Total	3.80	2.60	5.40	8.80	8.80	6.00	2.40	2.40	8.60	2.00	1.00	2.00	1.00	12.80	53.40				53.40	
Percentage of Total Sample	3.5%	2.8%	5.7%	7.5%	7.5%	6.0%	2.3%	2.3%	8.7%	2.0%	1.0%	2.0%	1.0%	13.2%	53.4%				53.4%	
METAL (FERROUS & NON-FERROUS)																				
Food & Beverage	0.20	1.40	0.20	0.40	0.40	0.20	0.20	0.20	0.40	0.20	0.20	0.40	0.20	0.20	3.60				3.60	
Aerosol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	
Aluminum-foil	0.20	0.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	1.60				1.60	
Other ferrous	4.00	0.00	0.00	12.80	12.80	0.00	1.20	1.20	2.00	3.00	0.20	3.00	0.20	9.60	32.80				32.80	
Aluminum food & beverage	0.40	0.40	0.80	0.20	0.40	0.40	0.20	0.40	1.60	0.40	0.40	0.40	0.20	0.20	4.80				4.80	
Composites	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	
Total	4.80	1.80	1.20	13.60	13.60	0.80	2.00	2.00	4.40	3.80	0.60	3.80	0.60	10.20	43.20				43.20	
Percentage of Total Sample	4.4%	1.9%	1.3%	11.6%	11.6%	0.8%	1.9%	1.9%	4.5%	3.8%	0.6%	3.8%	0.6%	10.5%	43.2%				43.2%	
HYGIENIC WASTE																				
Bio-hazardous	1.20	3.20	0.20	0.60	0.60	3.60	0.00	0.00	0.20	2.20	0.00	2.20	0.00	0.40	11.60				11.60	
Other Hygienic Waste	0.00	0.00	0.00	0.00	0.00	0.00	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.40				3.40	
Total	1.20	3.20	0.20	0.60	0.60	3.60	3.40	0.00	0.20	2.20	0.00	2.20	0.00	0.40	15.00				15.00	
Percentage of Total Sample	1.1%	3.4%	0.2%	0.5%	0.5%	3.6%	3.2%	0.2%	0.2%	2.2%	0.0%	2.2%	0.0%	0.4%	15.0%				15.0%	
MEAT-ORGANICS																				
Animal Meat	0.40	0.40	7.40	1.00	1.00	2.40	3.20	0.40	0.40	2.40	0.00	2.40	0.00	0.20	17.80				17.80	
Carcasses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	
Total	0.40	0.40	7.40	1.00	1.00	2.40	3.20	0.40	0.40	2.40	0.00	2.40	0.00	0.20	17.80				17.80	
Percentage of Total Sample	0.4%	0.4%	7.9%	0.9%	0.9%	2.4%	3.0%	0.4%	0.4%	2.4%	0.0%	2.4%	0.0%	0.2%	17.8%				17.8%	

NON-MEAT ORGANICS	Kitchen-Vegetable	9.80	2.40	11.80	11.20	7.60	5.80	9.40	11.00	0.80	4.40	74.20	
	Crop Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Total	9.80	2.40	11.80	11.20	7.60	5.80	9.40	11.00	0.80	4.40	74.20	
	Percentage of Total Sample	9.1%	2.5%	12.6%	9.6%	7.6%	5.4%	9.5%	11.0%	0.8%	4.5%	7.3%	
YARD WASTE	Trees, Yard-clipping stump > 2 Inches	0.00	16.80	0.00	0.00	0.00	9.20	0.00	5.60	0.00	0.00	31.60	
	Trees, Yard-clipping stump < 2 Inches	0.00	13.20	0.00	10.60	2.60	0.00	0.80	0.00	13.80	0.00	41.00	
	Grass	40.60	7.60	36.00	28.20	22.20	35.40	28.60	11.20	0.00	16.60	226.40	
	Leaves	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Other Yard Waste	0.00	13.40	0.00	11.00	0.00	19.20	0.00	0.00	0.00	0.00	43.60	
	Total	40.60	51.00	36.00	49.80	24.80	63.80	29.40	16.80	13.80	16.60	342.60	
Percentage of Total Sample	37.5%	54.0%	38.3%	42.6%	24.9%	59.8%	29.8%	16.9%	13.7%	17.1%	33.7%		
HAZARDOUS	Pesticides/Herbicides	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.40	
	Other Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.60	0.00	8.60	
	Total	0.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	8.60	0.00	9.00	
	Percentage of Total Sample	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	8.5%	0.0%	0.9%	
HOUSEHOLD HAZARDOUS	Batteries	0.20	0.00	0.00	0.00	0.00	0.20	0.00	0.20	0.00	0.00	0.60	
	Paint/Solvent/Aerosol Cans	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	
	Automotive Waste	0.00	0.00	0.00	0.00	0.20	0.00	0.40	0.00	0.00	0.00	0.60	
	Pharmaceuticals	0.20	0.00	0.00	0.00	0.20	0.00	0.00	0.20	0.00	0.00	0.60	
	Household Cleaners	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Pesticides	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	
	Electronics	0.00	0.00	11.40	0.40	9.20	4.20	0.40	6.80	0.00	4.00	36.40	
	Other Household Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Total	1.60	0.00	11.40	0.40	9.60	4.40	0.80	7.20	0.00	4.00	39.40	
	Percentage of Total Sample	1.5%	0.0%	12.1%	0.3%	9.6%	4.1%	0.8%	7.2%	0.0%	4.1%	3.9%	
	OTHER	Textiles	12.60	0.40	0.40	10.60	14.20	8.00	14.40	12.40	2.40	17.40	92.80
		Tires	0.00	8.00	0.00	0.00	0.00	0.00	0.00	7.00	0.00	0.00	15.00
Rubber/Shoes		0.00	0.00	0.00	1.40	0.60	0.60	0.60	0.00	0.00	0.40	3.60	
Household C & D		0.00	5.20	2.20	0.00	7.40	1.00	8.00	6.60	37.00	3.60	71.00	
House Product		7.40	0.00	0.60	0.00	1.00	0.00	5.80	10.40	33.20	0.40	58.80	
Unidentifiable		0.00	11.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.60	
Total		20.00	25.20	3.20	12.00	23.20	9.60	28.80	36.40	72.60	21.80	252.80	
Percentage of Total Sample		18.5%	26.7%	3.4%	10.3%	23.3%	9.0%	29.2%	36.5%	72.2%	22.5%	24.9%	
RESIDUAL	Total	1.20	0.00	0.20	0.80	0.60	0.60	0.60	1.00	0.20	0.40	5.60	
	Percentage of Total Sample	1.2%	0.0%	0.2%	0.8%	0.6%	0.6%	0.6%	1.0%	0.2%	0.4%	5.6%	

	1.1%	0.0%	0.2%	0.7%	0.6%	0.6%	1.0%	0.2%	0.4%	0.6%
Percentage of Total Sample										
TOTAL SAMPLE WEIGHT	108.2	94.4	94.0	117.0	99.6	106.6	98.6	100.6	96.8	1015.4
Number of Milk Jugs	1	0	3	2	1	0	0	1	0	9
Number of Sharps	0	0	1	1	0	0	0	0	0	2

Appendix N: September 2008 Individual Sample Data

September 2008 Residential Waste Categories	
Yard Waste	23.7%
Paper	12.4%
Non-Meat Organics	8.8%
Household Hazardous	6.9%
Cardboard	5.9%
Hygienic Waste	5.2%
Metal (Ferrous & Non-Ferrous)	4.9%
Plastic	4.5%
Meat Organics	3.4%
Glass	1.2%
Residual	0.9%
Hazardous	0.0%
Other	22.3%

Date sampled	2-Sep	3-Sep	4-Sep	8-Sep	25-Sep	26-Sep	29-Sep	
Truck #	12636	12635	12529	12634	12640	12527	12627	
Route #	109	108	210	6	116	202	32	
Sample source	FSA	FSA	FSM	RAA	FSA	FSM	RAA	
Weight of the waste in the load	22850	23320	22410	20910	23830	22540	21450	
SUB-CATEGORY	KG	KG	KG	KG	KG	KG	KG	TOTAL
Newspapers	4.40	4.00	6.20	7.20	0.40	8.00	2.40	32.60
Magazines	0.00	0.00	1.20	0.60	0.00	1.20	0.00	3.00
Telephone Books/Directories	0.00	0.00	0.00	0.00	3.20	0.00	1.60	4.80
Fine Paper	5.80	3.20	7.00	2.00	2.00	4.80	4.60	29.40
Tissue Paper	1.60	1.80	3.40	1.20	0.60	1.20	1.80	11.60
Wallpaper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polycoat	0.20	0.20	0.20	0.20	0.40	0.40	0.60	2.20
Other Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	12.00	9.20	18.00	11.20	6.60	15.60	11.00	83.60
Percentage of Total Sample	12.3%	9.5%	18.3%	11.4%	6.5%	20.6%	10.4%	12.4%
PET No.1	0.20	0.20	0.40	0.20	0.20	0.60	0.80	2.60
PET No.2	0.20	0.40	0.40	0.20	0.40	0.20	0.20	2.00
PET No.3	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.20

	PET No.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PET No.5	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.40	1.60			
	PET No.6	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	1.40			
	PET No.7	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20				
	Unidentified Pet No. (other packaging)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Plastic Product	3.80	3.60	3.40	4.20	4.20	2.40	2.40	2.40	3.80	3.80	3.80	3.80	3.80	2.20	22.00			
	Total	4.80	4.60	4.60	5.00	5.00	3.40	3.40	3.40	3.80	3.80	3.80	3.80	3.80	3.60	30.00			
	Percentage of Total Sample	4.9%	4.7%	4.7%	5.1%	5.1%	3.4%	3.4%	5.0%	5.0%	5.0%	5.0%	5.0%	3.6%	4.5%				
	GLASS																		
	Clear Food & Beverage	0.00	0.20	0.60	1.40	1.40	1.80	0.00	0.00	0.00	0.00	0.00	0.00	2.00	6.00				
	Coloured Food & Beverage	0.00	0.40	0.40	0.20	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	2.40				
	Other Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Total	0.00	0.60	1.00	1.60	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.20	8.40				
	Percentage of Total Sample	0.0%	0.6%	1.0%	1.6%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	1.2%				
	CARDBOARD																		
	Corrugated Cardboard	4.00	3.40	2.80	2.80	5.80	3.00	1.40	3.00	1.40	3.00	1.40	3.00	1.40	23.20				
	Boxboard	1.20	2.80	3.40	1.60	3.00	1.60	3.00	1.60	3.00	1.60	3.00	1.60	3.00	16.60				
	Total	5.20	6.20	6.20	4.40	8.80	4.60	4.40	4.60	4.60	4.60	4.40	4.60	4.40	39.80				
	Percentage of Total Sample	5.3%	6.4%	6.3%	4.5%	8.7%	6.1%	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%	5.9%					
	METAL (FERROUS & NON-FERROUS)																		
	Food & Beverage	0.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	1.20				
	Aerosol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Aluminum-foil	0.20	0.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	1.00				
	Other ferrous	0.00	6.40	0.60	6.00	6.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	27.00				
	Aluminum food & beverage	0.60	0.60	0.40	0.60	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	3.60				
	Composites	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Total	0.80	7.20	1.40	7.00	6.80	4.60	4.60	4.60	4.60	4.60	4.60	4.60	4.60	32.80				
	Percentage of Total Sample	0.8%	7.4%	1.4%	7.1%	6.7%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	6.1%	4.9%				
	HYGIENIC WASTE																		
	Bio-hazardous	0.00	11.20	0.00	4.40	10.60	3.20	2.00	3.20	2.00	3.20	2.00	3.20	2.00	31.40				
	Other Hygienic Waste	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.40				
	Total	3.40	11.20	0.00	4.40	10.60	3.20	2.00	3.20	2.00	3.20	2.00	3.20	2.00	34.80				
	Percentage of Total Sample	3.5%	11.5%	0.0%	4.5%	10.5%	4.2%	1.9%	4.2%	1.9%	4.2%	1.9%	4.2%	1.9%	5.2%				
	MEAT-ORGANICS																		
	Animal Meat	0.40	6.00	1.40	2.00	3.80	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	22.60				
	Carcasses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	Total	0.40	6.00	1.40	2.00	3.80	4.40	4.40	4.40	4.40	4.40	4.40	4.40	4.40	22.60				
	Percentage of Total Sample	0.4%	6.2%	1.4%	2.0%	3.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	5.8%	3.4%				

NON-MEAT ORGANICS	Kitchen-Vegetable	11.20	7.40	8.80	6.60	9.00	7.00	9.00	59.00
	Crop Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	11.20	7.40	8.80	6.60	9.00	7.00	9.00	59.00
	Percentage of Total Sample	11.5%	7.6%	8.9%	6.7%	8.9%	9.3%	8.5%	8.8%
YARD WASTE	Trees, Yard-clipping stump > 2 Inches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Trees, Yard-clipping stump < 2 Inches	9.40	0.00	0.00	0.00	0.00	0.00	0.00	9.40
	Grass	24.20	22.40	12.00	21.40	10.20	9.60	18.00	117.80
	Leaves	0.00	0.00	0.00	0.00	16.00	5.00	11.40	32.40
	Other Yard Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	33.60	22.40	12.00	21.40	26.20	14.60	29.40	159.60
	Percentage of Total Sample	34.5%	23.0%	12.2%	21.7%	25.9%	19.3%	27.9%	23.7%
HAZARDOUS	Pesticides/Herbicides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Percentage of Total Sample	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HOUSEHOLD HAZARDOUS	Batteries	0.00	0.20	0.00	0.00	0.20	0.00	0.20	0.60
	Paint/Solvent/Aerosol Cans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Automotive Waste	0.00	0.00	0.00	0.60	0.00	0.60	1.20	2.40
	Pharmaceuticals	0.00	0.00	0.00	0.00	0.20	0.00	0.20	0.40
	Household Cleaners	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.20
	Pesticides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Electronics	11.20	2.00	0.00	7.40	11.40	1.00	9.80	42.80
	Other Household Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	11.20	2.20	0.00	8.20	11.80	1.60	11.40	46.40
	Percentage of Total Sample	11.5%	2.3%	0.0%	8.3%	11.7%	2.1%	10.8%	6.9%
	OTHER	Textiles	5.00	7.80	24.60	13.20	8.40	5.80	15.20
Tires		0.00	0.00	0.00	9.40	0.00	0.00	0.00	9.40
Rubber/Shoes		0.00	0.00	1.40	1.00	0.00	0.60	0.60	3.60
Household C & D		7.20	9.60	13.60	2.40	0.40	6.80	2.40	42.40
House Product		2.00	2.20	4.40	0.20	1.20	2.00	3.00	15.00
Unidentifiable		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		14.20	19.60	44.00	26.20	10.00	15.20	21.20	150.40
Percentage of Total Sample		14.6%	20.2%	44.7%	26.6%	9.9%	20.1%	20.1%	22.3%
RESIDUAL	Total	0.60	0.60	1.00	0.60	1.20	1.00	1.40	6.40

	Percentage of Total Sample	0.6%	0.6%	1.0%	0.6%	1.2%	1.3%	1.3%	0.9%
TOTAL SAMPLE WEIGHT		97.4	97.2	98.4	98.6	101.2	75.6	105.4	673.8
Number of Milk Jugs		1	1	0	1	0	0	3	6
Number of Sharps		0	0	0	1	0	0	0	1

Appendix O: October 2008 Individual Sample Data

October 2008 Residential Waste Categories

Yard Waste	24.7%
Residual	1.0%
Plastic	6.2%
Paper	11.1%
Non-Meat Organics	8.4%
Metal (Ferrous & Non-Ferrous)	3.8%
Meat Organics	3.3%
Hygienic Waste	5.1%
Household Hazardous	5.5%
Hazardous	0.0%
Glass	1.5%
Cardboard	7.1%
Other	22.5%

Date sampled	1-Oct	2-Oct	3-Oct	7-Oct	9-Oct	14-Oct	15-Oct	16-Oct	17-Oct	20-Oct	22-Oct	23-Oct
Truck #	12631	12528	12631	12625	12627	12528	12630	12627	12627	12640	12528	12633
Route #	79	212	79	68	21	200	12	208	81	116	15	24
Sample source	RAA	FSM	FSA	RAA	FSA	FSM	FSA	FSA	FSA	FSA	FSM	RAA
Weight of the waste in the load	22580	21920	22580	21920	22500	22340	22930	22280	24160	24100	21690	22740
CATEGORY	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG
PAPER												
Newspapers	0.20	0.00	8.00	0.20	0.40	2.80	1.00	3.00	4.00	0.00	11.80	0.60
Magazines	0.00	0.00	1.60	0.00	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00
Telephone Books/Directories	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.40	0.00	0.00	0.00
Fine Paper	2.00	6.40	4.40	2.00	14.20	6.20	3.40	4.40	2.00	8.40	7.20	3.60
Tissue Paper	1.80	2.00	0.60	1.80	10.60	0.60	0.80	2.00	0.80	1.40	1.60	1.40
Wallpaper	0.20	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00
Polycoat	0.40	0.60	0.40	0.40	1.40	0.20	0.20	0.40	0.20	0.40	0.20	0.20
Other Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.60	9.00	15.00	4.60	26.60	10.60	5.40	9.60	10.40	10.20	21.00	5.80
Percentage of Total Sample	4.6%	9.2%	15.7%	4.6%	26.9%	10.8%	5.6%	9.6%	10.5%	10.7%	21.0%	5.9%
PET No.1	2.00	0.80	0.80	2.00	0.60	0.40	0.20	0.40	0.20	0.40	0.20	0.40
PET No.2	0.20	0.20	0.40	0.20	0.60	0.40	0.20	0.60	0.40	0.20	0.20	0.20
PET No.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NON-MEAT ORGANICS	Kitchen-Vegetable	7.00	7.40	11.40	7.00	11.80	7.00	6.40	9.00	11.60	8.60	6.40	7.00	8.80
	Crop Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	7.00	7.40	11.40	7.00	11.80	7.00	6.40	9.00	11.60	8.60	6.40	7.00	8.80
	Percentage of Total Sample	7.1%	7.5%	11.9%	7.0%	11.9%	7.1%	6.6%	9.0%	12.1%	8.7%	6.7%	7.0%	9.0%
YARD WASTE	Trees, Yard-clipping stump > 2 Inches	4.00	11.40	4.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Trees, Yard-clipping stump < 2 Inches	0.00	0.00	0.00	0.00	0.00	6.40	0.00	0.00	5.00	0.00	0.00	0.00	0.00
	Grass	11.00	6.00	14.60	11.00	0.00	7.20	0.00	6.00	8.20	9.40	11.60	0.00	9.00
	Leaves	8.20	7.20	6.20	8.20	10.20	35.00	7.00	21.20	6.60	10.40	10.20	18.80	19.60
Other Yard Waste	0.00	0.00	0.00	0.00	0.00	0.00	23.60	0.00	0.00	0.00	0.00	0.00	2.00	
Total	23.20	24.60	24.80	23.20	10.20	48.60	30.60	27.20	19.80	19.80	21.80	18.80	30.60	
Percentage of Total Sample	23.4%	25.1%	26.0%	23.2%	10.3%	49.3%	31.7%	27.3%	20.6%	20.0%	22.8%	18.8%	31.2%	
HAZARDOUS	Pesticides/Herbicides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Percentage of Total Sample	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
HOUSEHOLD HAZARDOUS	Batteries	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.20	0.00	0.20	0.20	0.20	0.00
	Paint/Solvent/Aerosol Cans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00
	Automotive Waste	0.00	8.60	0.00	0.00	0.00	0.40	0.00	0.60	0.00	0.00	0.00	0.00	2.40
	Pharmaceuticals	0.00	0.00	0.00	0.20	0.00	0.20	0.00	0.20	0.00	0.20	0.00	0.20	0.00
Household Cleaners	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Pesticides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	
Electronics	0.00	2.00	14.20	0.00	0.00	3.00	2.00	1.00	7.60	6.20	6.60	9.20	3.00	
Other Household Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	0.00	10.60	14.20	0.20	0.00	3.80	2.00	2.00	10.60	6.60	6.60	9.60	6.00	
Percentage of Total Sample	0.0%	10.8%	14.9%	0.2%	0.0%	3.9%	2.1%	2.0%	11.0%	6.7%	7.1%	9.6%	6.1%	
OTHER	Textiles	4.00	2.00	0.00	4.00	9.00	2.40	13.80	14.60	3.40	7.00	14.20	2.00	3.00
	Tires	7.20	0.00	0.00	7.20	0.00	0.00	0.00	0.00	0.00	9.20	7.80	7.40	0.00
	Rubber/Shoes	2.20	0.60	0.00	2.20	0.00	0.60	0.00	3.20	0.20	0.00	1.20	0.00	0.80
	Household C & D	4.60	6.00	11.00	4.60	25.20	1.40	14.60	3.40	12.60	3.80	0.00	6.20	7.00
House Product	4.40	1.80	0.00	4.40	0.00	4.60	6.20	6.40	2.00	2.20	5.00	8.00	3.40	
Unidentifiable	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	22.40	10.40	11.00	22.40	34.20	9.00	34.60	27.60	18.20	22.20	28.20	23.60	14.20	
Percentage of Total Sample	22.6%	10.6%	11.5%	22.4%	34.5%	9.1%	35.9%	27.7%	19.0%	22.4%	28.5%	23.6%	14.5%	
RESIDUAL	Total	2.00	1.00	1.20	2.00	1.20	0.80	0.40	0.80	0.80	0.60	0.40	1.00	0.60
	Percentage of Total Sample	2.0%	1.0%	1.2%	2.0%	1.2%	0.8%	0.4%	0.8%	0.8%	0.6%	0.4%	1.0%	0.6%

	Percentage of Total Sample												
	2.0%	1.0%	1.3%	2.0%	1.2%	0.8%	0.4%	0.8%	0.6%	0.4%	1.0%	0.6%	
TOTAL SAMPLE WEIGHT	99.0	98.2	95.4	95.8	99.0	95.6	95.4	99.8	96.0	99.0	95.6	100.2	98.0
Number of Milk Jugs	1	1	2	4	1	4	2	0	1	3	2	2	2
Number of Sharps	0	0	1	0	0	0	0	0	0	0	0	0	0

Date sampled	27-Oct	28-Oct	29-Oct
Truck #	12628	12639	12527
Route #	?	112	202
Sample source	RAA	FSA	FSM
Weight of the waste in the load	24060	23120	22620
CATEGORY	KG	KG	KG
PAPER	TOTAL	TOTAL	TOTAL
Newspapers	0.60	0.40	2.60
Magazines	0.00	0.00	0.80
Telephone Books/Directories	0.00	3.20	1.40
Fine Paper	9.00	4.40	4.40
Tissue Paper	1.40	3.00	0.80
Wallpaper	0.00	0.00	0.00
Polycoat	0.20	0.40	0.20
Other Paper	0.00	0.00	0.00
Total	11.20	11.40	10.20
Percentage of Total Sample	11.2%	12.3%	10.4%
PLASTIC			
PET No.1	0.40	0.40	0.20
PET No.2	0.20	0.40	0.40
PET No.3	0.00	0.00	0.00
PET No.4	0.00	0.00	0.00
PET No.5	0.40	0.40	0.20
PET No.6	0.20	0.20	0.20
PET No.7	0.00	0.20	0.00
Unidentified Pet No. (other packaging)	0.00	0.00	0.00
Plastic Product	4.60	6.60	6.00
Total	5.80	8.20	7.00
Percentage of Total Sample	5.8%	8.8%	7.1%
GLASS			
Clear Food & Beverage	2.40	0.00	0.00
Coloured Food & Beverage	0.40	0.00	0.20
Other Glass	0.00	0.00	0.00
Total	2.80	0.00	0.20
Percentage of Total Sample	2.8%	0.0%	0.2%
CARDBOARD			
Corrugated Cardboard	3.60	3.80	4.80
Boxboard	2.20	4.40	11.00
			47.20
			63.60

	Total	5.80	8.20	15.80	110.80
	Percentage of Total Sample	5.8%	8.8%	16.1%	7.1%
METAL (FERROUS & NON-FERROUS)	Food & Beverage	0.00	0.00	0.20	0.60
	Aerosol	0.20	0.00	0.00	0.60
	Aluminum-foil	0.20	0.20	0.20	3.00
	Other ferrous	2.20	0.00	4.60	50.80
	Aluminum food & beverage	0.20	0.20	0.20	5.00
	Composites	0.00	0.00	0.00	0.00
	Total	2.80	0.40	5.20	60.00
	Percentage of Total Sample	2.8%	0.4%	5.3%	3.8%
HYGIENIC WASTE	Bio-hazardous	4.20	2.00	7.60	80.00
	Other Hygienic Waste	0.00	0.00	0.00	0.00
	Total	4.20	2.00	7.60	80.00
	Percentage of Total Sample	4.2%	2.2%	7.7%	5.1%
MEAT-ORGANICS	Animal Meat	2.00	1.40	5.00	51.60
	Carcasses	0.00	0.00	0.00	0.00
	Total	2.00	1.40	5.00	51.60
	Percentage of Total Sample	2.0%	1.5%	5.1%	3.3%
NON-MEAT ORGANICS	Kitchen-Vegetable	7.40	6.20	8.20	131.20
	Crop Residues	0.00	0.00	0.00	0.00
	Total	7.40	6.20	8.20	131.20
	Percentage of Total Sample	7.4%	6.7%	8.3%	8.4%
YARD WASTE	Trees, Yard-clipping stump > 2 Inches	0.00	0.00	0.00	23.40
	Trees, Yard-clipping stump < 2 Inches	0.00	0.00	0.00	11.40
	Grass	5.80	0.00	0.00	99.80
	Leaves	18.60	15.80	11.40	214.60
	Other Yard Waste	0.00	11.60	0.00	37.20
	Total	24.40	27.40	11.40	386.40
	Percentage of Total Sample	24.4%	29.5%	11.6%	24.7%
HAZARDOUS	Pesticides/Herbicides	0.00	0.00	0.00	0.00
	Other Hazardous Waste	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00

	Percentage of Total Sample	0.0%	0.0%	0.0%	0.0%
HOUSEHOLD HAZARDOUS					
Batteries		0.00	0.00	0.20	0.0%
Paint/Solvent/Aerosol Cans		0.00	1.00	0.00	1.20
Automotive Waste		0.00	3.60	0.00	4.00
Pharmaceuticals		0.00	0.00	0.00	15.60
Household Cleaners		0.00	0.00	0.00	1.00
Pesticides		0.00	0.00	0.00	0.00
Electronics		0.80	0.00	7.60	0.60
Other Household Hazardous Waste		0.00	0.00	0.00	63.20
Total		0.80	4.60	7.80	0.00
Percentage of Total Sample		0.8%	4.9%	7.9%	5.5%
OTHER					
Textiles		14.60	2.00	6.40	102.40
Tires		0.00	0.00	8.00	46.80
Rubber/Shoes		0.60	0.00	0.00	11.60
Household C & D		11.00	16.40	3.60	131.40
House Product		6.20	4.00	1.00	59.60
Unidentifiable		0.00	0.00	0.00	0.00
Total		32.40	22.40	19.00	351.80
Percentage of Total Sample		32.3%	24.1%	19.3%	22.5%
RESIDUAL					
Total		0.60	0.80	1.00	15.20
Percentage of Total Sample		0.6%	0.9%	1.0%	1.0%
TOTAL SAMPLE WEIGHT		100.2	93.0	98.4	1566.6
Number of Milk Jugs		0	1	4	30
Number of Sharps		1	0	0	2

Appendix P: August 2008 Individual Sample Data

August 2008 ICI Waste Composition

Paper	8.8%
Plastic	14.8%
Glass	0.7%
Cardboard	21.5%
Hygienic Waste	6.6%
Metal	0.1%
Meat Organics	1.2%
Non-Meat Organics	6.6%
Yard Waste	0.0%
Hazardous	0.0%
Household Hazardous	1.5%
Other	37.5%
Residual	0.6%

Sample #	1	2	3	4	5	6
Date sampled	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	27-Aug
Route #	?	24	?	76	79	64
CATEGORY						
PAPER						
SUB-CATEGORY	KG	KG	KG	KG	KG	KG
Newspapers	2.80	0.00	0.00	0.00	1.40	1.60
Magazines	0.00	0.00	0.00	0.00	0.00	0.40
Telephone Books/Directories	0.00	0.00	0.00	0.00	0.00	0.00
Fine Paper	3.80	0.00	3.20	0.00	16.40	6.80
Tissue Paper	4.60	0.00	3.00	0.00	1.60	1.20
Wallpaper	0.00	0.00	0.00	0.00	0.00	0.00
Polycoat	0.60	0.00	0.20	0.20	0.40	0.60
Other Paper	0.00	0.00	0.00	0.00	0.00	0.00
Total	11.80	0.00	6.40	0.20	19.80	10.60
Percentage of Total Sample	14.9%	0.0%	7.9%	0.2%	20.6%	10.7%
PLASTIC						
PET No.1	3.60	0.40	0.20	0.00	0.40	2.40
PET No.2	4.40	0.00	0.20	0.00	0.40	1.60
PET No.3	0.00	0.00	0.00	0.00	0.00	0.00
PET No.4	0.00	0.00	0.00	0.00	0.00	0.00

	PET No.5	0.20	0.00	0.20	0.00	0.20	0.40	1.00
	PET No.6	0.60	0.00	0.20	0.00	0.20	0.40	1.40
	PET No.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Unidentified Pet No. (other packaging)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Plastic Product	8.80	4.00	8.40	0.00	32.40	12.60	66.20
	Total	17.60	4.40	9.20	0.00	33.60	17.40	82.20
	Percentage of Total Sample	22.2%	4.4%	11.4%	0.0%	34.9%	17.6%	14.8%
	GLASS							
	Clear Food & Beverage	0.00	0.00	0.80	0.00	0.20	2.80	3.80
	Coloured Food & Beverage	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.80	0.00	0.20	2.80	3.80
	Percentage of Total Sample	0.0%	0.0%	1.0%	0.0%	0.2%	2.8%	0.7%
	CARDBOARD							
	Corrugated Cardboard	4.00	6.20	3.80	0.00	9.80	3.80	27.60
	Boxboard	26.40	24.80	5.60	0.00	20.60	14.00	91.40
	Total	30.40	31.00	9.40	0.00	30.40	17.80	119.00
	Percentage of Total Sample	38.3%	30.8%	11.6%	0.0%	31.6%	18.0%	21.5%
	METAL (FERROUS & NON-FERROUS)							
	Food & Beverage	0.00	0.00	0.00	0.00	0.00	0.40	0.40
	Aerosol	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Aluminum-foil	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Other ferrous	4.20	0.00	6.20	5.40	7.00	12.40	35.20
	Aluminum food & beverage	0.00	0.00	0.60	0.00	0.00	0.60	1.20
	Composites	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	4.20	0.00	6.80	5.40	7.00	13.40	36.80
	Percentage of Total Sample	5.3%	0.0%	8.4%	5.5%	7.3%	13.5%	6.6%
	HYGIENIC WASTE							
	Bio-hazardous	0.40	0.00	0.00	0.00	0.00	0.20	0.60
	Other Hygienic Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.40	0.00	0.00	0.00	0.00	0.20	0.60
	Percentage of Total Sample	0.5%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%
	MEAT-ORGANICS							
	Animal Meat	4.00	0.00	0.00	0.00	0.00	2.40	6.40
	Carcasses	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	4.00	0.00	0.00	0.00	0.00	2.40	6.40
	Percentage of Total Sample	5.0%	0.0%	0.0%	0.0%	0.0%	2.4%	1.2%
	NON-MEAT ORGANICS							
	Kitchen-Vegetable	9.20	0.00	3.40	0.00	0.00	24.00	36.60

	Crop Residues	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	9.20	0.00	3.40	0.00	0.00	0.00	0.00	0.00	24.00	36.60			
	Percentage of Total Sample	11.6%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%	24.2%	6.6%			
YARD WASTE	Trees, Yard-clipping stump > 2 Inches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Trees, Yard-clipping stump < 2 Inches	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Grass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Leaves	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Other Yard Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Percentage of Total Sample	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
HAZARDOUS	Pesticides/Herbicides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Other Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Percentage of Total Sample	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
HOUSEHOLD HAZARDOUS	Batteries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Paint/Solvent/Aerosol Cans	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Automotive Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Pharmaceuticals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Household Cleaners	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Pesticides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Electronics	0.00	0.80	0.00	5.00	0.00	2.60	0.00	8.40	0.00	0.00			
	Other Household Hazardous Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	Total	0.00	0.80	0.00	5.00	0.00	2.60	0.00	8.40	0.00	0.00			
	Percentage of Total Sample	0.0%	0.8%	0.0%	5.1%	0.0%	2.6%	0.0%	1.5%	0.0%	0.0%			
	OTHER	Textiles	0.60	0.00	38.60	0.00	4.60	0.00	3.60	47.40	0.00	0.00		
Tires		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Rubber/Shoes		0.00	0.00	6.00	0.00	0.00	1.20	7.20	0.00	0.00	0.00			
Household C & D		0.00	64.60	0.00	86.20	0.00	2.40	153.20	0.00	0.00	0.00			
House Product		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Unidentifiable		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Total		0.60	64.60	44.60	86.20	4.60	7.20	207.80	0.00	0.00	0.00			
Percentage of Total Sample	0.8%	64.1%	55.2%	88.3%	4.8%	7.3%	37.5%	0.0%	0.0%	0.0%				
RESIDUAL	Total	1.20	0.00	0.20	0.80	0.60	0.60	0.60	3.40	0.6%	0.6%			
	Percentage of Total Sample	1.5%	0.0%	0.2%	0.8%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%			

	79.4	100.8	80.8	97.6	96.2	99.0	553.8
TOTAL SAMPLE WEIGHT							
Number of Sharps	0	0	13	0	0	0	13

Stainless Steel (304)	15.2	19.9	15.5	17.3	17.1	17.5	123.7
Aluminum (6061)	3.2	4.3	3.4	3.8	3.7	3.7	26.3
Inconel (718)	0.5	0.7	0.6	0.7	0.6	0.6	4.3
Stainless Steel (316)	2.1	2.8	2.2	2.5	2.4	2.4	17.1
Aluminum (7075)	1.1	1.5	1.2	1.4	1.3	1.3	9.2
Inconel (600)	0.3	0.4	0.3	0.4	0.3	0.3	2.1
Stainless Steel (304) - Total	21.3	28.3	21.8	24.7	24.1	24.5	172.6
Aluminum - Total	4.5	6.0	4.6	5.2	5.0	5.0	35.5
Inconel - Total	0.8	1.1	0.9	1.1	0.9	0.9	6.4
Stainless Steel (316) - Total	2.6	3.5	2.8	3.2	3.1	3.1	22.2
Aluminum (7075) - Total	1.2	1.6	1.2	1.5	1.4	1.4	10.2
Inconel (600) - Total	0.3	0.4	0.3	0.4	0.3	0.3	2.1
Total Weight	30.7	40.9	31.6	36.2	34.8	34.8	248.7
Number of Sharps	13	13	13	13	13	13	13

Appendix Q: September 2008 Individual Sample Data

September 2008 ICI Waste Composition	
Paper	11.6%
Plastic	10.1%
Glass	0.4%
Cardboard	14.4%
Hygienic Waste	9.1%
Metal	2.6%
Meat Organics	3.8%
Non-Meat Organics	12.9%
Yard Waste	6.7%
Hazardous	0.6%
Household Hazardous	5.1%
Other	21.8%
Residual	0.8%

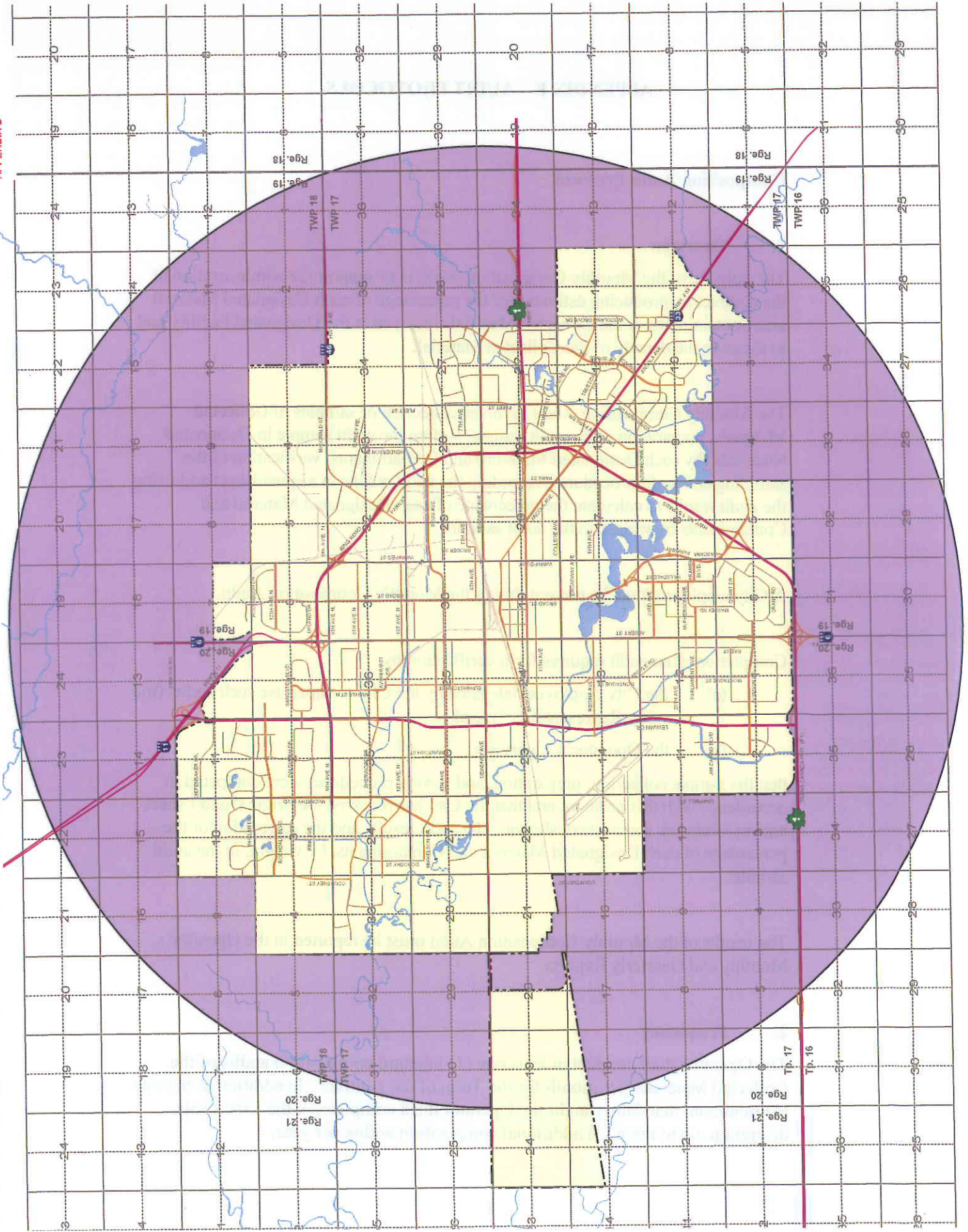
Sample #	1	2	3	4	5	6	7	8	9	10	TOTAL
Date sampled	3-Sep	8-Sep	9-Sep	10-Sep	15-Sep	17-Sep	18-Sep	19-Sep	23-Sep	30-Sep	
Route #	64	66	10	64	63	73	42	79	44	42	
SUB-CATEGORY	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG
PAPER											
Newspapers	2.00	0.40	6.80	0.00	9.60	0.40	0.40	0.00	0.40	0.00	20.00
Magazines	3.20	0.00	4.00	1.00	0.00	0.00	0.00	0.00	0.80	0.00	9.00
Telephone Books/Directories	1.60	0.00	1.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20
Fine Paper	2.40	12.40	2.60	6.40	3.60	2.60	1.20	4.60	5.20	1.00	42.00
Tissue Paper	0.80	3.00	1.40	2.40	4.00	0.60	0.40	0.60	9.60	0.20	23.00
Wallpaper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polycoat	0.60	0.20	0.20	0.40	1.40	0.20	0.00	14.80	0.40	0.20	18.40
Other Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	10.60	16.00	16.60	10.20	18.60	3.80	2.00	20.00	16.40	1.40	115.60
Percentage of Total Sample	10.7%	15.8%	16.3%	9.4%	18.6%	3.8%	2.4%	19.3%	16.6%	1.4%	11.6%
PLASTIC											
PET No.1	0.80	0.80	0.20	0.20	0.20	0.40	0.60	0.00	0.40	0.00	3.60
PET No.2	0.40	0.00	0.40	0.20	4.40	0.20	0.00	0.00	0.20	0.60	6.40
PET No.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PET No.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	PET No.5	0.40	0.00	0.20	0.20	0.60	0.20	0.00	0.00	0.00	0.00	0.20	0.40	2.20
	PET No.6	0.20	0.00	0.20	0.40	0.80	0.00	0.00	18.20	0.20	0.00	0.80	20.80	
	PET No.7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Unidentified Pet No. (other packaging)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Plastic Product	5.80	7.40	8.20	1.80	4.40	6.80	16.40	6.00	2.80	8.00	67.60		
	Total	7.60	8.20	9.20	2.80	10.40	7.60	17.00	24.20	3.80	9.80	100.60		
	Percentage of Total Sample	7.6%	8.1%	9.0%	2.6%	10.4%	7.7%	20.4%	23.3%	3.8%	10.1%	10.1%		
	GLASS													
	Clear Food & Beverage	0.60	0.00	0.40	0.20	0.60	0.60	0.00	0.60	0.80	0.00	3.80		
	Coloured Food & Beverage	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.40		
	Other Glass	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	Total	0.80	0.00	0.40	0.20	0.60	0.60	0.00	0.60	1.00	0.00	4.20		
	Percentage of Total Sample	0.8%	0.0%	0.4%	0.2%	0.6%	0.6%	0.0%	0.6%	1.0%	0.0%	0.4%		
	CARDBOARD													
	Corrugated Cardboard	6.00	0.00	3.00	3.20	3.00	14.00	8.80	2.80	2.40	4.00	47.20		
	Boxboard	11.40	3.40	13.60	8.00	8.40	1.20	25.20	7.00	2.60	15.40	96.20		
	Total	17.40	3.40	16.60	11.20	11.40	15.20	34.00	9.80	5.00	19.40	143.40		
	Percentage of Total Sample	17.5%	3.4%	16.3%	10.3%	11.4%	15.4%	40.9%	9.4%	5.1%	20.0%	14.4%		
	METAL (FERROUS & NON-FERROUS)													
	Food & Beverage	0.20	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.40		
	Aerosol	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20		
	Aluminum-foil	0.20	0.00	0.20	0.20	0.20	0.00	0.00	0.00	0.20	0.00	1.00		
	Other ferrous	2.40	8.20	7.60	32.00	0.00	0.00	0.00	28.40	1.00	0.00	79.60		
	Aluminum food & beverage	0.20	0.60	0.20	0.60	0.40	6.60	0.00	0.00	0.60	0.00	9.20		
	Composites	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	Total	3.20	8.80	8.00	33.00	0.60	6.60	0.00	28.40	1.80	0.00	90.40		
	Percentage of Total Sample	3.2%	8.7%	7.8%	30.3%	0.6%	6.7%	0.0%	27.4%	1.8%	0.0%	9.1%		
	HYGIENIC WASTE													
	Bio-hazardous	0.00	6.00	0.20	0.00	19.40	0.00	0.00	0.00	0.40	0.00	26.00		
	Other Hygienic Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	Total	0.00	6.00	0.20	0.00	19.40	0.00	0.00	0.00	0.40	0.00	26.00		
	Percentage of Total Sample	0.0%	5.9%	0.2%	0.0%	19.4%	0.0%	0.0%	0.0%	0.4%	0.0%	2.6%		
	MEAT-ORGANICS													
	Animal Meat	0.00	0.00	2.20	0.20	13.00	0.00	0.00	0.00	3.00	19.60	38.00		
	Carcasses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	Total	0.00	0.00	2.20	0.20	13.00	0.00	0.00	0.00	3.00	19.60	38.00		
	Percentage of Total Sample	0.0%	0.0%	2.2%	0.2%	13.0%	0.0%	0.0%	0.0%	3.0%	20.2%	3.8%		
	NON-MEAT ORGANICS													
	Kitchen-Vegetable	3.00	0.00	8.40	9.40	15.40	36.60	0.00	5.80	7.40	42.60	128.60		

Appendix R: October 2008 Individual Sample Data

October 2008 ICI Waste Composition	
Paper	10.0%
Plastic	10.2%
Glass	1.0%
Cardboard	12.3%
Hygienic Waste	5.9%
Metal	0.1%
Meat Organics	0.2%
Non-Meat Organics	0.9%
Yard Waste	9.1%
Hazardous	0.0%
Household Hazardous	7.0%
Other	43.1%
Residual	0.2%

Sample #	1	2	3	4	5	6	7	8	9	10	11	
Date sampled	2-Oct	6-Oct	15-Oct	16-Oct	17-Oct	21-Oct	24-Oct	27-Oct	28-Oct	29-Oct	30-Oct	
Route #	41	10	73	66	63	42	64	63	26	58	64	
CATEGORY												
PAPER	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	KG	TOTAL
Newspapers	0.00	0.00	0.00	6.60	0.00	0.00	6.40	3.60	4.00	0.00	2.20	22.80
Magazines	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.80	0.00	0.00	5.40	6.80
Telephone Books/Directories	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Paper	0.20	0.20	8.80	8.20	0.00	0.00	8.00	10.60	2.20	15.40	9.00	62.60
Tissue Paper	0.00	0.80	0.00	3.40	0.00	0.00	2.20	1.40	0.00	0.00	6.40	14.20
Wallpaper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Polycoat	0.20	0.20	0.20	0.20	0.00	0.00	0.40	0.20	0.00	0.20	0.20	1.80
Other Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.40	1.20	9.00	18.40	0.00	0.00	17.60	16.60	6.20	15.60	23.20	108.20
Percentage of Total Sample	0.4%	1.2%	9.0%	18.7%	0.0%	0.0%	17.5%	16.3%	6.2%	15.9%	26.5%	10.0%
PLASTIC												
PET No.1	0.00	0.40	0.40	0.40	0.00	0.00	0.40	0.20	0.00	0.80	0.40	3.00
PET No.2	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.40	0.00	0.00	0.00	0.80
PET No.3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PET No.4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



APPENDIX E – AUDIT PROTOCOLS

Composition Audit Protocol

1. Overview

The purpose of the Monthly Composition Audit is to support the administration of the contract by producing estimates of the percentage of each Designated Material and Contaminants in the Collected Materials received at the Designated Facility and to measure the density of the Collected Material.

The Monthly Composition Audit involves collection of samples of Collected Materials, preparation of an audit sample, sorting the audit sample in Designated Materials (by each Designated Material) and Contaminants, verification of the sampling and audit procedures, recording the audit results in a spreadsheet and using the audit results to calculate the percentage of each Designated Material and Contaminants by weight in the audit sample.

A City employee must be present during the Monthly Composition Audit.

Completion of an audit requires from verification by:

- (a) the City employee delegated by the City to supervise such audits (the “City Representative”); and
- (b) the Operator’s supervisor;

that the sample collection, preparation, and sorting procedures were completed in accordance with this protocol and that the City has received the original audit sheet and an electronic spreadsheet showing the audit results and the calculation of the percentage of each Designated Material and Contaminants, by weight, in the audit sample.

The results of the Monthly Composition Audit must be reported in the Operator’s Monthly and Quarterly Reports.

2. Frequency

The Operator shall conduct at least one (1) inbound composition audits of the Collected Materials per month for the Term of the contract. In addition to the one (1) minimum mandatory audit the Operator must complete, at the City’s sole discretion, up to three (3) additional composition audits per year.

Scheduling the inbound composition audit will be at the sole discretion of the City. A minimum of one week's notice will be provided to the Operator.

Audits shall be conducted between the hours of 8:30 a.m. and 4:30 p.m. Monday to Friday (statutory holidays excluded) with no more than one inbound composition audit to be completed on any Business Day.

3. Material and Method

The Operator shall provide a secure, well-lit space of sufficient area within the Designated Facility for undertaking the audit work.

The Operator shall supply all labour, supervision, materials and equipment required to complete the audit. The Operator's employees assigned to the audit work will be trained in the successful execution of this protocol and be familiar with the specifications of the Designated Material and Contaminants. The Operator shall provide its employees with the personal protective equipment appropriate for handling Collected Materials.

The City Representative shall observe the audit process.

Scales used for the inbound composition audit must be certified by Corporate and Consumer Affairs Weights and Measures Canada. The weigh scale shall be calibrated every six months at the Operator's expense. The City may request proof of scale accuracy at any time. Scales used for the Monthly Composition Audit must have a capacity rated from 0.01 kg and to at least 40 kg and must be capable of providing weight measurements within +/- 1% of true weight.

All weights are to be recorded to two decimal places in kilograms.

The weigh scales must be "zeroed out" before any weights are obtained.

The Monthly Composition Audit shall, at minimum, identify the following:

- the total collected Tonnes per month of Collected Materials,
- proportions of each Designated Material in the Collected Materials;
- proportion of Contaminants in the Collected Materials;
- the Contamination Rate;
- composition of the City's Collected Materials for each Designated Material; and
- density of Collected Material.

The Monthly Composition Audit specified above are part of the Operator's Services and the cost of such audits shall be borne by the Operator.

a) Sampling

One sample must be collected from each of six randomly selected locations in the inventory of Collected Material on the Designated Facility's tipping floor. A loader or similar equipment can be used to collect individual samples. The six random samples are then to be combined and thoroughly mixed. The weight of the combined samples must be greater than 500 kg.

Care must be taken to ensure the sampling, combining and mixing of the samples does not affect the characteristics of the Collected Material by way of tearing, breaking, crushing, or otherwise changing the condition of the items in the Collected Material.

The combined sample is then further reduced by successive "cone and quartering" to produce an audit sample of a minimum of 250 kg.

The City Representative may direct the Operator to discard a particular audit sample and to repeat the sampling procedure until a suitable audit sample is produced.

b) Sorting

The weight of the audit sample must be determined and recorded on the audit sheet prior to sorting.

The designated sorting area must be clear of extraneous materials and swept clean prior to the start of the sorting.

The sorting bins must be designed and assigned to a specific Designated Material category. The tare weights of the empty sorting bins are to be measured and recorded on the audit sheet.

The audit sample must be manually sorted by the Operator's employees and each individual item of the audit sample must be assigned to a Designated Material category or to the Contaminant category.

The sorting bins must be weighed and the gross weight must be recorded on the audit sheet and again the Designated Material category each time a bin becomes full and when the audit sample is completing sorted.

Once sorting is finished the Collect Materials, excluding the Contaminants, are to be returned to the inventory of Collected Materials awaiting processing. Contaminants are to be dealt with in accordance with the requirements of the RFP and Applicable Laws.

4. Quality Assurance / Quality Control

The audit sheet must state the type of audit, the date and the time the sample was obtained, as well as the beginning and end times for the sorting portion of the audit. It must also record the names of the Operator's staff supervising, the City Representative observing the audit.

The audit sheet is to be a record of the quantitative measurements and is not to include any written commentary regarding working conditions, weather, exceptions or other information.

Audit results will be verified and the completed audit sheet will be signed-off by the City Representative, and the Operator's supervisor. The document bearing the original signatures will be retained by the City. The Operator will make and retain a copy of the document. Audit data sheets that are not verified and signed by the City Representative and the Operator's supervisor will be considered invalid and will cause the audit to be deemed incomplete and will not contribute to the Operator's minimum audit frequency obligation.

5. Calculations and Results

The Operator will enter the verified audit results into an electronic spreadsheet, in a form acceptable to the City. The spreadsheet will calculate the net weight of Collected Material by subtracting the tare weight from gross weight. The sum of the net weights recorded against each Designated Material category will be the weight of that Designated Material in the audit sample.

The spreadsheet will present the weight of materials in each material category and will total the individual Designated Material weights for all Designated Materials categories and express the result as the total weight of sorted Collected Materials.

The spread sheet will calculate the ratio of the weight of Designated Material in each individual Designated Material Category to the total weight of sorted materials and express the result as a weight percentage. The sum of the weight percentages for all material categories must be 100 percent.

Results are to be provided to the City Representative by the end of the next Business Day following the sorting of the audit sample.

Recovery Rate Audit Protocol

The purpose of the Recovery Rate Audit is to produce quantitative information on the ability of the MRF to recover Designated Materials when processing Collected Materials.

The details of such a Recovery Rate Audit it to be specified by Proponents in accordance with the terms of this RFP.

APPENDIX F – SUBMISSION FORM

Appendix F has been designed to assist proponents in submitting a complete proposal, however, it is the responsibility of each proponent to ensure that all necessary information is included in their proposal.

Proponents Checklist

All proposals shall be submitted in the format identified in Section G, Contents of Proposal.

- Cover Letter Yes ___ No ___
- Corporate and Financial Capability Yes ___ No ___
- Experiences and Qualifications Yes ___ No ___
- Response to Scope of Services and Requirements Yes ___ No ___
- Confirmation/acceptance of mandatory Agreement Terms and Conditions Yes ___ No ___
- Completed and signed Proposal Submission Form, Appendix F Yes ___ No ___
- One (1) original signed Proposal in paper form Yes ___ No ___
- Eight (8) copies of Proposal in paper form Yes ___ No ___
- One (1) version of Proposal on CD in PDF format Yes ___ No ___
- One (1) Digital Video Disc (DVD) containing a video of a MRF in North America that the Proponent currently operates Yes ___ No ___
- Completed Current Marketable Materials Data, Appendix J Yes ___ No ___
- Completed and signed Cost of Services Submission Form, Appendix K in a separate sealed envelope. Yes ___ No ___

APPENDIX F – SUBMISSION FORM

Proponent Information (Please Print)

Company Name:		
Address:		Contact:
		Phone:
City:	Province:	Fax:
Postal Code:		Email:

Addenda

The proponent acknowledges the following Addenda have been received. The modifications to the proposal documents noted therein have been considered and the effects are included in the price.

Addendum Number ____ Dated _____

Addendum Number ____ Dated _____

Addendum Number ____ Dated _____

Declaration

- a) The Proponent declares that it has obtained and read the RFP documents.
- b) The Proponent declares that it will comply with all of the rules and regulations of the RFP.
- c) The Proponent declares that all information, which it has provided or will provide to the City during the RFP process, is true.
- d) The Proponent declares that if its proposal is accepted, it will supply the City with a performance security in the amount of \$3,000,000.00 in one of the following forms (please check one):

- _____ Bond
- _____ Irrevocable Letter of Credit
- _____ Certified Cheque
- _____ Bank Draft

- e) The Proponent acknowledges and accepts the Mandatory Agreement Terms and Conditions as stated in Appendix I.

This Proposal is irrevocable, made for good consideration and acceptance thereof by the City of Regina, and shall be binding on the undersigned from the date of acceptance.

SIGNED, SEALED AND DELIVERED

this ____ day of _____ A.D., 20____.

(Seal)

Signature of Proponent

Name and Title (Please Print)

OR, In the case of an individual or individuals:

Signature of Proponent

Signature of Witness

Name and Title (Please Print)

Name of Witness (Please Print)

Signature of Proponent

Signature of Witness

Name and Title (Please Print)

Name of Witness (Please Print)

APPENDIX G – Big Blue Bin Photographs



The document was prepared by 8 members of the Multi-Material Recycling Program Advisory Committee. The members of the committee are listed in the Appendix. The document was prepared by the Multi-Material Recycling Program Advisory Committee. The document was prepared by the Multi-Material Recycling Program Advisory Committee.

APPENDIX H

The document was prepared by 8 members of the Multi-Material Recycling Program Advisory Committee. The members of the committee are listed in the Appendix. The document was prepared by the Multi-Material Recycling Program Advisory Committee. The document was prepared by the Multi-Material Recycling Program Advisory Committee.

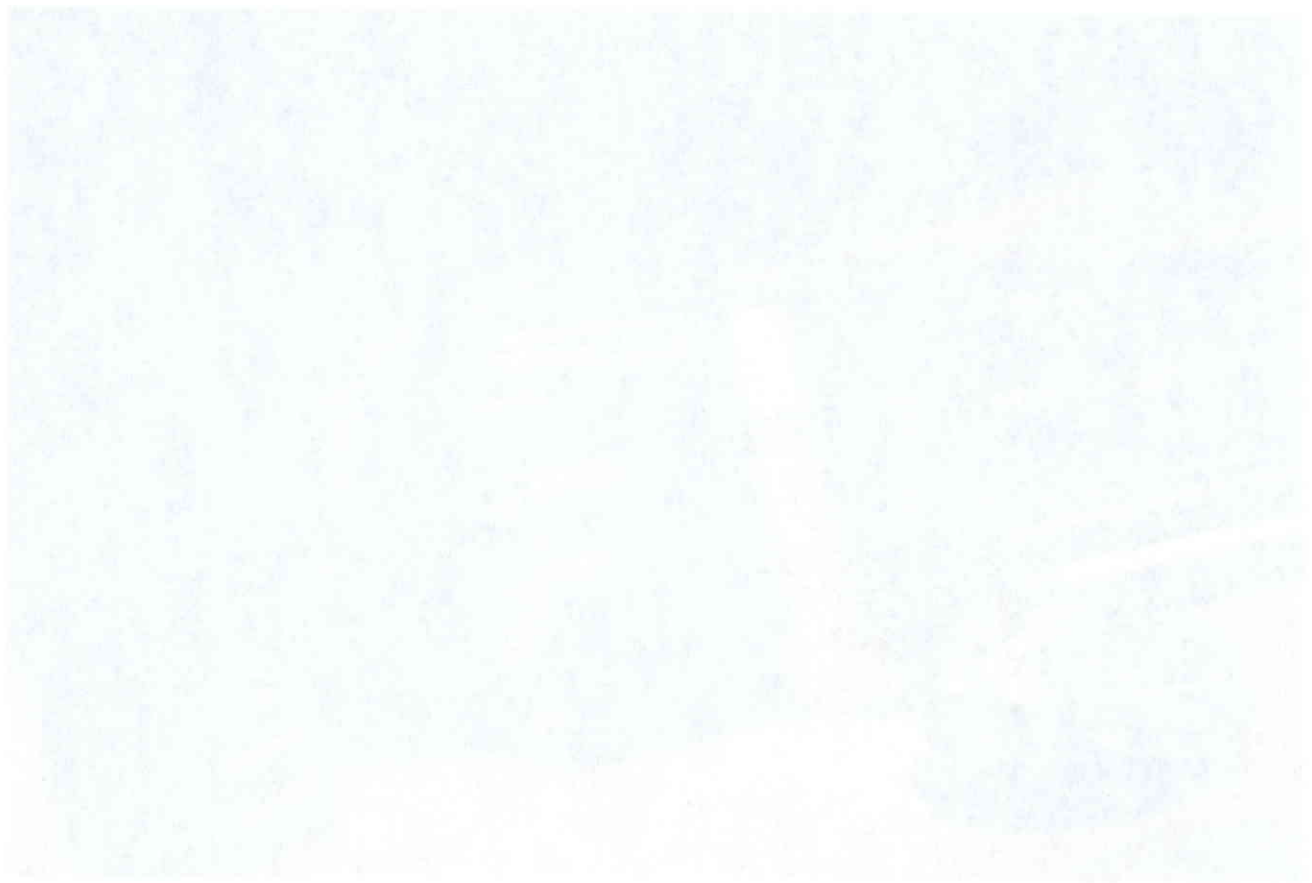
Multi-Material Recycling Program Advisory Committee Final Report



This document was prepared by Saskatchewan's Ministry of Environment in order to capture the discussions and feedback prepared by those participating on the Multi-Material Recycling Program Advisory Committee. Committee members were provided an opportunity to review and provide input into the development of this document.

The Saskatchewan Ministry of Environment would like to thank committee members for their time and commitment to this consultation process of providing advice on funding instruments and program delivery models for a Multi-Material Recycling Program for Saskatchewan.

Multi-Material Recycling Program
Advisory Committee Final Report



Advisory Committee Final Report

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1.0 Introduction

The Saskatchewan Ministry of Environment is evaluating the potential for a province-wide, multi-material recycling program (MMRP). The ministry has been faced with continual pressure to provide a recycling program for paper, plastic, tin and glass resulting from residential post-consumer packaging and printed materials. Many municipalities have active recycling programs but are finding it difficult to sustain their programs due, in part, to decreasing salvage values for the recyclable material that they collect. This salvage revenue is usually one of the primary sources of funding for the municipal recycling programs. The collection and transportation of these materials are also issues due to distance to market and Saskatchewan's overall population base versus geographic area. These issues have led to researching the feasibility of a province-wide program and what the Saskatchewan Ministry of Environment might do to mitigate some of the financial challenges facing municipal recycling programs.

As part of the Saskatchewan Ministry of Environment's decision-making process, an external working committee was formed comprised of stakeholders from industry, municipalities and non-profit organizations. The committee members provided expertise regarding current programs as well as addressing the recycling needs or issues in their respective areas.

This report provides a summary of the comments received from members of the Advisory Committee and the Technical Sub-Committee regarding a potential MMRP for the Province of Saskatchewan.

2.0 Background

The Government of Saskatchewan has set out a framework for a working model of sustainability in action. One of the key outcomes is sustainable waste management that takes into consideration the efficient use of resources by producing less waste, utilizing waste as a resource, increasing recycling and ensuring effective waste management. In moving forward with achieving the desired outcome of sustainable waste management, the province is working towards the development of a Municipal Solid Waste Management Plan and examining the potential for a MMRP.

While reduction of waste and the re-use of materials continue to be encouraged as the preferred methods of reducing the amount of waste being disposed in landfills, recycling remains an important component of waste minimization. Stakeholders in Saskatchewan, including municipalities and other groups, have identified product stewardship as a possible means of providing financial stability for recycling programs. In some areas these programs would not be sustainable with salvage revenue as the sole source of funding.

Paper products typically account for approximately 30 per cent of the total municipal solid waste stream. While existing operations in Saskatchewan are recycling significant amounts of paper products in some areas, paper continues to be an issue at many landfills in the province. Diverting paper products from landfills through reduction, re-use and recycling will be integral in moving the ministry forward on its key outcomes for sustainable waste management.

Saskatchewan has mandated other product stewardship programs or set environmental handling charges for waste materials such as used oil, scrap tires, beverage containers, paint and end-of-life electronics. The Saskatchewan Ministry of Environment has committed to leading a process to review delivery models and to develop a proposal for a MMRP for residential post-consumer packaging and printed materials (i.e., paper, plastic, tin, and glass).

3.0 Advisory Committee - Terms of Reference

The Advisory Committee's Terms of Reference are included in Appendix B. The Terms of Reference were circulated to all members with an introductory letter of invitation to participate. Members were given an opportunity to comment on the Terms of Reference at the first meeting.

The Terms of Reference, which outlined the objectives of the committee, are summarized as follows:

3.1 Purpose

Establish an Advisory Committee to provide the Saskatchewan Ministry of Environment with advice on funding instruments and program delivery models for a Multi-Material Recycling Program for Saskatchewan.

3.2 Roles and Responsibilities

The Advisory Committee will be established to provide insight and feedback. This Advisory Committee will be specifically tasked with reviewing and providing advice on potential funding instruments and program delivery models for a multi-material recycling program. The committee will be asked to provide the Saskatchewan Ministry of Environment with options for consideration as well as feedback on additional alternatives and proposals. The group, where possible, will attempt to reach consensus on the advice it provides. The Committee will also act as a resource for the ministry and report directly to the ministry team working on the development of a multi-material recycling program.

3.3 Objectives

The objectives of the Advisory Committee were as follows:

1. Advise on the principles that need to be considered when evaluating program delivery models for a MMRP.
2. Advise on options for the development of market instruments (i.e. environmental handling fees, municipal fees, etc.) for the collection of monies for the financing of a MMRP.
3. Advise on options regarding program delivery models for the development of a MMRP.

4.0 Summary of Process to Date

4.1 Advisory Committee

The Advisory Committee was created in response to the necessary stakeholder consultation for Saskatchewan Ministry of Environment's decision-making process. A committee of 12 members, representing municipalities, industry and non-profit organizations was solicited to provide feedback on a MMRP for the ministry's consultation process.

Representation was as follows:

Municipalities

- City of Regina
- City of Saskatoon
- Saskatchewan Association of Rural Municipalities (SARM)
- Saskatchewan Urban Municipalities Association (SUMA)

Industry

- Canadian Council of Grocery Distributors (CCGD)
- Corporations Supporting Recycling (CSR)
- Food and Consumer Products of Canada (FCPC)
- Retail Council of Canada (RCC)

Non Profit Organizations

- Association of Regional Waste Management Authorities of Saskatchewan (ARWMAS)
- SARCAN Recycling [recycling division of the Saskatchewan Association of Rehabilitation Centres (SARC)]
- Saskatchewan Waste Reduction Council (SWRC)
- Waste Advisory Council of Saskatchewan (WACS) (also an industry representative)

Provincial Government

- Saskatchewan Ministry of Environment

Subsequent to the final Advisory Committee meeting (held on June 21, 2006), a Technical Sub-Committee (comprised of one individual representing industry interests, one individual representing municipal interests and staff representing the Saskatchewan Ministry of Environment) was formed to try to address the outstanding issues upon which the Advisory Committee was unable to reach consensus.

4.2 Meeting Dates and Discussions

The following meetings were held:

November 8, 2005: The meeting was an introduction to the process proposed by the Saskatchewan Ministry of Environment and an introduction to the six models being researched by the ministry. Committee members were given an opportunity to discuss the Terms of Reference and to provide comments on the proposed process and the provided models.

December 9, 2005: The Committee held initial discussions regarding the principles that would be used to judge the six provided models for a MMRP.

January 16, 2006: The Committee reviewed the principles and discussed them as they related to each of the six models. Further discussions were held to confer on the “best fit” model and which of the models best satisfied the needs of the Advisory Committee.

February 10, 2006: The Committee reviewed and discussed the Saskatchewan Model as presented. Throughout discussions, the committee members kept in mind the principles and how they fit into the provided model.

March 10, 2006: The Committee received a presentation from Stantec Consulting regarding the contracted work they had completed for the Saskatchewan Ministry of Environment with respect to a MMRP and further discussions were held focusing on the draft Saskatchewan Model.

April 18, 2006: The Committee had an opportunity to meet the Minister of Environment and share some of their perspectives regarding a potential MMRP. The Saskatchewan Ministry of Environment made a presentation regarding where the committee was to date and provided some reasons for why the ministry was considering the possible implementation of a MMRP.

May 12, 2006: The Committee held further discussions around the summarized comments regarding the outstanding issues. Consensus was reached regarding some of the issues presented in the draft Saskatchewan Model.

June 21, 2006: The Committee discussed the outcomes to be presented in the Advisory Committee's Final Report. To facilitate further discussion regarding issues where the Advisory Committee was unable to reach consensus, the Advisory Committee appointed individuals to participate as members of a Technical Sub-Committee (i.e., one industry representative; one municipal representative and two ministry representatives) with the intent that the Sub-Committee would revise and finalize a draft model/framework for a potential MMRP that would be provided to the formal Advisory Committee for review and consideration.

July 31, August 1, August 16, Sept. 1 and Sept. 7, 2006: The industry and municipal representatives of the Technical Sub-Committee consulted regularly with their respective Advisory Committee members for input and feedback during this process. The Technical Sub-Committee revised the list of program principles (i.e., Program Principles for a Saskatchewan Multi-Material Recycling Program, see Appendix C) and the draft model/framework for a MMRP (i.e., Potential Saskatchewan Multi-Material Recycling Program - Draft Working Model, see Appendix D). In addition, the Technical Sub-Committee drafted a list of potential program elements for which they had consensus (i.e., Saskatchewan Multi-Material Recycling Program - Program Elements (Consensus Items), see Appendix E). The Program Principles for a Saskatchewan Multi-Material Recycling Program, the Potential Saskatchewan Multi-Material Recycling Program - Draft Working Model and the Saskatchewan Multi-Material Recycling Program - Program Elements (Consensus Items) were forwarded to all Advisory Committee members for comment on Oct. 30, 2006. By Nov. 15, 2006, the ministry had received comments from Advisory Committee members regarding the distributed material.

5.0 Developed Principles

The list of principles was created by first taking comments from the November 8, 2005 meeting, augmenting the resulting principles with internal principles and circulating the list for comment by the Advisory Committee. The comments received back were summarized into the provided list for discussion for the December 9, 2005, meeting. The principles were further revised following that meeting.

As previously provided to the Committee, the following definition was provided:

- Definition of principles: *A principle is a guide or a basis of reasoning that defines the common interests and expectations of stakeholders.*

Definitions for each of the principles are found in Appendix C. The principles were to be kept in mind while going forward with discussions regarding model choices. These principles were refined further by the Technical Sub-Committee and the revised principles have also been included in Appendix C.

5.1 Summary List of Principles for a Multi-Material Recycling Program

1. Harmonization
2. Environmental/Social/Economic Sustainability
3. Accountability and Transparency of Costs
4. Level Playing Field and Equity
5. Continual Improvement (as part of the program)
6. Accessibility
7. Partnerships
8. Governance and Shared Responsibility
9. Job Creation and Economic Development
10. Balanced Fee Collection – Equity/Simplicity/Flexibility
11. Cross-subsidization (no cross-subsidization is the intended goal)
12. Incentives/Disincentives
13. Cost Effectiveness and Operational Efficiency
14. Environmental Benefit
15. Other – No return to Vendor

6.0 Initial Models

Six models were originally identified for consideration when considering the feasibility of a MMRP. Three of the models were fashioned after existing programs and three of the models were theoretical, based on a concept of what could be implemented. The models were as follows:

6.1 Nova Scotia

In 1996, under the Environment Act and the Solid Waste Management Regulations the Province of Nova Scotia established the Resource Recovery Fund. The mandate of this fund is:

- to develop and implement industry stewardship programs;
- to fund municipal or regional diversion programs;
- to develop and operate a deposit-refund system for beverage containers;
- to develop education and awareness of source reduction, reuse, recycling and composting;
and
- to promote the development of value-added manufacturing in the province.

As required under this legislation and regulations, the Resource Recovery Fund Board, a non-profit statutory corporation, was created to administer and deliver the mandate of the Resource Recovery Fund.

To date, Nova Scotia has stewardship programs in place for beverage containers, used tires and waste paint. Nova Scotia's Beverage Container Recycling Program began in 1996 and is a deposit-refund program where consumers pay container deposits of ten cents or twenty cents on designated, non-refillable, beverage containers and receive deposit refunds of five cents and ten cents, respectively, when they return the containers to authorized Enviro-Depots. In 1997, Nova Scotia established its Tire Recycling Program. This program targets passenger vehicle tires, light truck tires and truck tires (with a rim size not exceeding 24.5 inches) for recycling and is funded by recycling fees (\$3.00 per passenger/light truck tire and \$9.00 per truck tire), which are levied at the point of sale when a new designated tire is purchased in Nova Scotia.

Members of the public can return their used tires to retail outlets where they are collected and later sent for recycling. In 2002 Nova Scotia implemented its Paint Recycling Program for designated paint products. This program is funded by recycling fees, which are levied on designated paint products. The revenue generated from these fees is used to fund the collection and recycling of designated waste paint products. Authorized Enviro-Depots accept designated waste paint products for recycling.

Although the revenue derived from these stewardship programs is used primarily to fund the operations of the respective program, it should be noted that surplus revenue from these programs is retained in the Resource Recovery Fund. A minimum of 50 per cent of the net revenues in the Resource Recovery Fund is directed to municipalities to assist with the funding of municipal recycling programs for designated post-consumer packaging and paper materials based on the amount of material that the municipality is diverting from landfill disposal. Most municipalities provide curbside collection for designated post-consumer packaging and paper materials.

The revenue from the Resource Recovery Fund is also used to fund education and awareness initiatives for municipal programs, municipal programs for household hazardous waste, municipal composting programs and a derelict automobile recovery program. For the fiscal year of 2005-06, the RRFB provided municipalities with nearly \$7.4 million in funding for municipal recycling and composting programs.

6.2 Ontario

In the mid 1980's, Ontario's residential curbside recycling program (i.e., Blue Box system) was introduced as an alternative to the mandating of a deposit-refund system for refillable and non-refillable beverage containers. Operation of the Blue Box system was funded indirectly by municipal and provincial taxpayers through the tax base with some voluntary industry funding through the Ontario Multi-Material Recycling Incorporated (i.e., Ontario's first Blue Box industry funding organization) for the time period between 1986 and 1996. Thereafter, provincial funding was removed and the Blue Box system was funded primarily by municipalities.

In 2002, the Province of Ontario passed the Waste Diversion Act, 2002 and Ontario Regulation 273/02 which resulted in the creation of Waste Diversion Ontario, a non-profit, statutory corporation. Pursuant to the Waste Diversion Act, 2002, the primary function of Waste Diversion Ontario is to develop, implement and operate waste diversion programs for designated

wastes in accordance with the Act and to monitor the effectiveness and efficiency of the waste diversion programs. Waste Diversion Ontario was required by the Province to develop a waste diversion program for “blue box waste” (i.e., post consumer packaging and printed materials consisting of glass, metal, paper, plastic, textiles or any combination thereof and found in the residential waste stream) in co-operation with an industry funding organization (i.e., Stewardship Ontario, which is also a non-profit, statutory corporation). Waste Diversion Ontario is also responsible for conducting an annual municipal survey of Blue Box recycling program costs and tonnes of material marketed, to serve as the basis for determining system costs, recycling benchmarks and performance measures.

Under Ontario’s Blue Box Program municipalities are required to provide recycling services for designated post-consumer packaging and printed materials. Typically, municipalities in Ontario collect and recycle “blue box waste” via curbside collection systems. As part of the Blue Box Program municipalities are also required to provide funding for 50 per cent of the net program operating costs.

Stewards of designated packaging and printed materials are required to provide funding for 50 per cent of the net operating costs for the Blue Box Program. In its capacity as an industry funding organization, Stewardship Ontario is responsible for the collection of revenue from stewards to fund the Blue Box Program. Revenue for the Blue Box Program is derived from fees, which are levied on designated packaging and printed material. These fees are directly related to the cost of managing product categories of post-consumer packaging and printed materials. Stewardship Ontario is also responsible for reviewing and adjusting these fees for each fiscal year based on the recycling cost for each material. Distribution of funding to municipalities is also carried out by Stewardship Ontario. It should be noted that the newspaper industry in Ontario does not provide actual revenue to fund this program, but instead provides in-kind contributions in the form of advertising.

For 2005, the agreed to net cost for the Blue Box Program was \$117.5 million and industry’s share of these costs was \$58.77 million.

6.3 Québec

Bill 102 and its supporting regulation are the enabling legislation for Québec’s MMRP. Municipalities are required to provide recycling services for designated post-consumer packaging and printed materials. This program is very similar to Ontario’s Blue Box Program as municipalities in Québec are responsible for funding 50 per cent of the net program operating costs for curbside recycling of post-consumer packaging and printed materials. Stewards of designated packaging and printed materials are required to provide funding for 50 per cent of the net operating costs for Québec’s MMRP.

In its role as an industry funding organization, Éco Entreprises Québec is responsible for the collection of revenue from stewards to fund this program. Revenue for Québec’s MMRP is derived from fees, which are levied on designated packaging and printed material. The fees are directly related to the cost of managing product categories of post-consumer packaging and printed materials. Éco Entreprises Québec is also responsible for reviewing and adjusting the fees for each fiscal year based on the recycling cost for each material. It should be noted that

similar to the situation in Ontario, the newspaper industry in Quebec does not provide actual revenue to fund this program, but instead provides in-kind contributions in the form of advertising. In 2005, the total net program cost for Québec's program was \$74.2 million. Distribution of industry's share of funding to municipalities is carried out by Recyc-Québec.

Although Québec implemented its MMRP in 2005, the Province decided to retain its deposit-refund program for designated beverage containers. Québec's deposit-refund program for beverage containers is a return to retail system.

6.4 Flat Fee Model

The goals of this theoretical model are to encourage a decrease in the amount of packaging and printed material coming into Saskatchewan and to provide funding for the operation of a provincial MMRP. Under this premise, the province would collect a "fee" as the primary source of revenue to fund program operations and there would likely be extensive government involvement in the operation of the program. The proposed "fee" would be a percentage levy similar to the Provincial Sales Tax.

6.5 Extended Producer Responsibility Model

Based on a theoretical concept, the goals of this model are to decrease the amount of packaging and printed material coming into Saskatchewan through extended producer responsibility and to provide funding for a MMRP. A mandatory licensing fee would be imposed on products being sold in the province. The general premise is that the fees on packaging and printed materials would be based on the actual costs associated with the recycling of packaging and printed materials. The program would be operated by a non-government agency.

6.6 Stewardship Model

With the stewardship approach, as employed for product management programs such as those for used oil, scrap tires, etc., an industry or sector recognizes that there are waste issues associated with the manufacture, utility (use and consumption) and ultimately at the end of the product's life cycle. Through this type of approach, industry will typically create a product stewardship organization or an industry funding organization (IFO) that is responsible for the management and administration of the day-to-day operations of a product management program. The primary function of a product management program is to ensure that designated products and/or their associated packaging and printed materials are managed in an environmentally responsible manner at the end of their life cycle.

Generally under a stewardship model, a waste stream is narrowly defined and a willing and capable industry steward is identified. Under the principles of stewardship, no public monies are injected into stewardship programs to keep them functioning. Revenue generated from product consumers is expected to accurately reflect the actual costs associated with the management of the end-of-life products.

7.0 Jurisdictional Comparisons

Three of the six programs evaluated are program models that are currently being operated in other Canadian jurisdictions. The following is a brief overview of these existing programs,

taking into consideration the cost per capita, diversion rates, accessibility and other factors that the Saskatchewan Ministry of Environment is reviewing for consideration.

7.1 Nova Scotia

Nova Scotia operates a program that offers recycling of multi-materials to 99 per cent of the population and also provides organics recycling programs to 76 per cent of the population. The program is driven by mandated landfill bans on the disposal of multi-materials, retail containers, organic materials, tires, paint and car batteries. The province was divided into seven regions and by 2006 all but seven of the over 100 landfills had been closed.

The program is funded by revenue from a half back deposit-refund system on all beverage containers and a recycling program for scrap tires. There are 84 Enviro-Depots in the province that handle materials along with 18 composting facilities. It is estimated that the program operated at a cost of \$35 per capita in 2005.

The landfill bans also apply to the industrial, commercial and institutional waste (ICI) sectors and this requires that ICI entities participate in the programs. The program views waste as a resource and the program has assisted with the development of cottage industries which serve as markets for the recovered recyclables.

7.2 Ontario

In 2005 Ontario, at \$10 per capita, provided a Blue Box Program (i.e. curbside collection of designated materials from residential households) for 85 per cent of the province's population. Revenue for the system's net costs is derived from a stewardship program with manufacturers and first sellers of designated products providing 50 per cent of the funding and municipalities providing the remaining 50 per cent. This funding is directed to municipalities for the operation of their Blue Box Programs. The only ICI programs relate to reduction goals under an industrial audit and 3R legislative program with no indication of funding.

The diversion rate of the program is estimated at 53 per cent of the available residential post-consumer recyclable materials. Ontario, in 2004, upgraded its diversion goals from an existing province-wide 34 per cent diversion to a 60 per cent complete diversion of wastes from landfills by 2008. The program mainly targets residential post consumer packaging and printed materials. The ICI sectors are targeted through awareness programs under Ontario's 3R legislation. The ICI sectors reported a diversion rate of 17 per cent of the total waste stream.

7.3 Québec

Québec, at \$10 per capita, provides a province-wide curbside collection system with 50 per cent funding of the system's net costs coming from 14 large manufacturing, industrial and retail organizations. Funding goes to the municipalities to develop and operate their programs. In addition, a proposed levy of \$10 per tonne on disposal of materials at all landfills in Québec will be used to develop waste minimization initiatives.

Québec has set an objective of reaching a 65 per cent diversion rate by 2008 through this and other initiatives. Québec also operates the IFO as a crown utility which is different from Ontario's IFO, a non-profit, statutory corporation.

8.0 Draft Model for Discussion

It was determined that the Advisory Committee supported a stewardship approach, somewhat similar to other Saskatchewan stewardship programs. However, the complexities of a potential program, being multi-material and multi-faceted, has led to some alternate provisions from the typical stewardship program with comparisons made to Ontario's Blue Box Program.

The following model outline, entitled "Potential Saskatchewan Multi-Material Recycling Program - Draft Working Model", was developed based upon the Advisory Committee's initial discussions and comments regarding program principles and the six program models that were provided for consideration prior to June 21, 2006 (i.e. the final Advisory Committee meeting). This draft working model was further refined during the Technical Sub-Committee process with input from the Advisory Committee. Both versions of the draft model have been included in Appendix D.

After conferring with their respective members of Advisory Committee, the Technical Sub-Committee was able to draft a list of consensus items for program elements. This list of eleven consensus items [i.e. Saskatchewan Multi-Material Recycling Program - Program Elements (Consensus Items)] can be found in Appendix E.

8.1 Potential Saskatchewan Multi-Material Recycling Program - Draft Working Model

Description of Model:

The goal is a province-wide program that provides the public with access to municipal recycling services for designated, residential post-consumer packaging and printed materials through a cost-share approach between industry and municipalities. The waste products being considered as part of this program include designated post consumer packaging and printed materials (i.e. paper, plastic, tin and glass) generated through a residential setting and not currently being addressed in other existing Saskatchewan or national stewardship programs. An annual municipal survey of recycling program costs and tonnes of material marketed will serve as the basis for determining system costs, recycling benchmarks and performance measures.

Regulations for a MMRP would need to be developed under The Environmental Management Protection Act, 2002. These proposed regulations would define program "stewards" as brand owners and first importers of designated product packaging and printed materials that are distributed in Saskatchewan. "Stewards" of designated packaging and printed materials would be in a position to discharge their legal obligations under the regulation either through membership in an industry funding organization (IFO) approved by the Saskatchewan Ministry of Environment or by seeking approval from the Province to implement their own product management program plan. The regulations would require "stewards" to develop a product management program plan and to submit this plan to the Saskatchewan Ministry of Environment for review and approval prior to implementation of the plan.

The provincial government would ultimately be responsible for reviewing and approving the product management program plan, ongoing evaluation of the program and ensuring that it is in compliance with legislation and regulations.

Under this proposed model, industry participation in the MMRP would be mandatory. The IFO would be responsible for the preparation and implementation of a product management program plan on behalf of stewards for product packaging and printed materials that are designated under the regulation. The IFO would be responsible and accountable for the collection of fees from stewards and payment of funds to municipalities to support the delivery of this program within the province. In addition, the IFO would be responsible for submitting annual reports and other program related information to the Saskatchewan Ministry of Environment. It is anticipated that stewards would discharge their legal obligations under the developed regulation through membership in an IFO.

Municipal participation in this proposed program would be voluntary. Participating municipalities would be responsible for providing recycling services for designated post-consumer packaging and printed materials to their communities and submission of data regarding annual recycling costs and tonnes of material collected and recycled through their programs.

In this proposed model, consumers would be responsible for participating in their community recycling programs. Consumers' financial contributions would be paid through municipal levies and recycling fees levied on designated products that they purchase.

As indicated earlier, the scope of the proposed regulation and the program management plan would be for post-consumer packaging and printed materials and would include all designated, post-consumer packaging and printed materials that would be primarily destined for the residential waste stream. This program would not include materials currently being collected and recycled as part of existing recycling programs in Saskatchewan. The proposed MMRP would not include packaging and printed materials that are managed directly by industrial, commercial and institutional (ICI) generators as it is recognized that they are responsible for their own waste management functions. However, it is acknowledged that small communities may be unable to separate ICI materials from the residential post-consumer packaging and printed materials that they manage. The issue of ICI packaging and printed materials collected by small communities and the inclusion of this material in a MMRP would be addressed by the IFO in their product management program plan.

The governance structure for the proposed MMRP would incorporate the following characteristics:

- program would be operated by a not-for-profit association (i.e., IFO) based in Saskatchewan and all fees collected would be used to fund municipal multi-material recycling programs operating within the province; and
- a standing committee of the IFO would be established to serve as a joint Municipal-Industry Program Committee, whose mandate would be to:
 - oversee the annual data survey;
 - set priorities for an Effectiveness & Efficiency Fund;
 - establish performance measures/targets; and
 - this standing committee would be co-chaired by industry and municipal representatives. Consideration would be given to having a voting seat on the IFO board filled by the industry co-chair of this committee.

For this proposed MMRP, the board structure of the IFO would be established in the regulations. The following options would be considered and evaluated for the governance structure of a MMRP:

- IFO board with Saskatchewan representation from industry, municipalities, public and provincial government (i.e. ex-officio, non-voting). The make-up of this board would be very similar to existing provincial IFOs/industry stewardship organizations such as the Saskatchewan Association for Resource Recovery Corporation (for the Used Oil Materials Recycling Program) and the Saskatchewan Scrap Tire Corporation (for the Scrap Tire Management Program).
- An approach similar to that being undertaken in British Columbia where boards for IFOs are comprised of industry stewards only and input from other stakeholder groups is typically provided through committees that feed into the boards. An example of this type of board structure would be Encorp Pacific (Canada), which is the IFO for British Columbia's Beverage Container Recycling Program.
- An alternate governance structure, similar to the one established under Ontario's Waste Diversion Act, could be considered if it is determined that it would be in the province's interest to create an oversight organization similar to Waste Diversion Ontario, that may, in the future, oversee recycling programs for other materials such as organic waste or household hazardous waste where municipalities have a vested interest.

With respect to funding for the proposed MMRP, the IFO would describe in the product management program plan the methodology by which fees would be collected from obligated stewards. These fees would be directly related to the cost of managing product categories of post-consumer packaging and printed materials to achieve the objectives of the regulation. The methodology of calculating these fees would be similar to that implemented by industry funded programs in other provincial jurisdictions. The IFO would be responsible for consultation with its stewards regarding the fees. Revenue generated from these fees would be used to provide payments to municipalities, for direct program costs, for IFO start-up and administration costs, for annual data collection from industry stewards and participating municipalities and for a fund to promote municipal program effectiveness and efficiency.

Another funding area that the product management program plan would address would be market development. The IFO product management program plan would address market development with respect to sufficiency of markets and salvage revenues for collected materials. The objective would be to reduce overall system costs for both municipalities and industry.

Funding for the proposed program would be based on the verified and approved net provincial system cost for municipal recycling of designated post-consumer packaging and printed materials. Industry's share of the net provincial system cost for municipal recycling would be 50 per cent. The product management program plan would define the eligible municipal recycling costs and the rules for reporting and verifying those costs and for determining the total net provincial system cost to be used to establish industry's contributions. Eligible costs would include: collection, transportation and processing of materials; public awareness and education costs; amortized capital cost for collection vehicles and buildings, collection containers, fixed and mobile equipment; and indirect administrative costs such as human resources, finance, information technology, etc.

For the proposed MMRP, the share of total industry contributions allocated to each municipality would vary according to the effectiveness and efficiency of its program as determined by an agreed-to formula. The formula would account for factors beyond the control of the municipality which drive cost, such as geographic location, size and population density. It would also provide incentives and tools to promote continuous improvement and best practices.

These would include:

- holdback of a portion of the IFO contributions to fund projects to improve effectiveness and efficiency; and
- different funding levels which would provide greater funding for programs with better performance or representing best practices.

IFO funding (i.e., 50 per cent of the net provincial system cost for municipal recycling of designated post-consumer packaging and printed materials) would be allocated for the following:

- direct payments to municipal recycling programs; and
- to an effectiveness and efficiency fund to promote and enhance municipal program operating effectiveness and efficiency.

As stated previously, participation in the proposed MMRP would be voluntary for all communities. In addition, the materials collected in the programs would be at the municipalities' discretion. The municipality may determine the collection infrastructure that best suits its needs. However, eligible costs paid by the IFO would be defined to reflect best practices for different types of municipal and regional programs.

As well, it is proposed that 10 per cent of the municipal transfer payments be distributed through projects designed to encourage greater effectiveness and efficiency of the system (i.e. to reduce the net cost of municipal recycling and increase diversion of post-consumer packaging and printed materials). If the funds were not spent on effectiveness and efficiency projects this revenue would then be returned to the portion of funds available to the municipalities. Funding priorities are reviewed annually and funds are allocated to projects on the basis of applications received from municipalities and may include projects such as waste characterization studies, program optimization, communication and education, etc.

As part of the proposed MMRP, the IFO would consult with municipalities regarding the funding allocation process, the effectiveness and efficiency fund holdback percentage and the type of projects to be funded by an effectiveness and efficiency fund prior to the submission of their product management program plan.

Based on data from the annual municipal data survey and no sooner than one year following program implementation, it is proposed that performance measures (targets/goals) be set for the program. Continuous improvement and implementation of best practices would be program objectives. Performance measures would be established collaboratively between municipalities, provincial government and industry.

9.0 Committee Discussion Regarding Outstanding Program Issues

The discussions and input obtained through the Advisory Committee process and subsequently the Technical Sub-Committee enabled the development of the preceding draft model. However, there are a number of significant issues where the positions espoused by Advisory Committee members remain quite disparate. Consequently, the following issues contained in this section have been highlighted to identify specific challenges and the positions of members of the Advisory Committee that will need to be addressed before moving forward with the development of an operational MMRP.

9.1 Program Funding

There were discussions regarding a 100 per cent industry funded stewardship program, similar to other regulated recycling programs operating in Saskatchewan. However, industry has indicated that there is little room to discuss a greater than 50 per cent net cost share as the precedent for the level of funding has already been established in other jurisdictions (i.e. Ontario and Québec). Industry presents the argument that in Saskatchewan the higher-end recyclables have been captured in an alternate program (i.e. Beverage Container Collection and Recycling Program) and that without these materials being included in a MMRP a greater share of the costs is not negotiable. CCGD, CSR, FCPC, RCC, SARC, SUMA and the WACS support the 50:50 net program cost share approach between industry and participating municipalities for the proposed MMRP.

ARWMAS, City of Regina, City of Saskatoon, and the SWRC advocate a funding approach for the MMRP whereby industry would provide 100 per cent of the funding for the net program costs. These Advisory Committee members feel that if there were 100 per cent funding from industry, the proposed MMRP would be more sustainable because the imposition of political pressures and the risk of cancellation due to changes within municipal governments would be mitigated.

Although the work (i.e. List of Program Principles, Potential Saskatchewan Multi-Material Recycling Program - Draft Working Model, and Saskatchewan Multi-Material Recycling Program - Program Elements (Consensus Items)) completed by the Technical Sub-Committee supports a 50:50 net cost share approach between industry and participating municipalities, members of the Advisory Committee remain divided on this issue. The province is committed to continuing to work with the stakeholders in order to resolve the funding issue.

9.2 Governance

In the latest version of the “Potential Saskatchewan Multi-Material Recycling Program – Draft Working Model,” the following three governance structures for a MMRP were presented to the Advisory Committee members for consideration and comment:

- IFO board with Saskatchewan representation from industry, municipalities, public and provincial government (i.e., ex-officio, non-voting). The make-up of this board would be very similar to existing provincial IFOs/industry stewardship organizations such as the Saskatchewan Association for Resource Recovery Corporation (for the Used Oil Materials Recycling Program) and the Saskatchewan Scrap Tire Corporation (for the Scrap Tire Management Program).

- An approach similar to that being undertaken in British Columbia where boards for IFOs are comprised of industry stewards only and input from other stakeholder groups is typically provided through committees that feed into the boards. An example of this type of board structure would be Encorp Pacific (Canada), which is the IFO for British Columbia's Beverage Container Recycling Program.
- An approach similar to the one established under Ontario's Waste Diversion Act was also presented to the committee. . Under this approach, the oversight organization would have a board of directors comprised of members representing municipalities, industry, non-government organizations (NGOs), and the provincial government. The IFO for the MMRP would report to this oversight body and the board for the IFO would be composed of representatives from industry alone.

Industry stakeholders have indicated that they would be supportive of an IFO governance structure similar to the approach being undertaken in British Columbia. However, municipal and NGO stakeholders have indicated that their preference would be that municipalities would have representation on an IFO board that would be commensurate with the level of financial contribution that they will be committed to providing to the proposed MMRP (i.e., if municipalities are expected to provide 50 per cent of the program funding, then municipalities would be allocated 50 per cent of the seats on the IFO board). Given the lack of consensus by the Advisory Committee, the provincial government will have to consider the input that it has received to date when considering which governance structure would be in the best interests of Saskatchewan.

9.3 Newspaper Sector Contribution to a MMRP

The newspaper sector in Saskatchewan did not participate in the Advisory Committee consultation process however, given that old newspaper comprises a significant portion of the waste paper material that municipalities are currently collecting and recycling it is important that the comments provided by Advisory Committee members regarding this issue are articulated.

All Advisory Committee members support the premise that the newspaper sector should provide actual funding to support their share of a MMRP. Furthermore, committee members have indicated that the newspaper sector should not be exempted from participating in a MMRP nor should the newspaper sector be allowed to provide in-kind contributions to a MMRP in lieu of actual operational funding.

In October of 2006 and April of 2007, Saskatchewan newspaper representatives met with the ministry to discuss the work of the MMRP Advisory Committee and the implications that a potential program would have for their sector. Comments received, to date, from the newspaper sector in Saskatchewan have indicated that in their opinion the support (i.e. in-kind contributions in the form of advertising) that they are currently providing to municipal paper recycling programs operated in Regina and Saskatoon is more than adequate and that if a provincial MMRP is implemented, Saskatchewan would risk losing the gains that have been achieved with respect to newspaper recycling. Furthermore, the Saskatchewan newspaper sector has indicated that it would not be receptive to an in-kind contribution approach similar to what is occurring in Ontario's Blue Box Program.

9.4 Inclusion of ICI Waste in a MMRP/Inclusion of ICI Waste from Small Communities in a MMRP

The development of an ICI recycling program should be considered but not as part of this program. The Advisory Committee does not have agreement on inclusion versus exclusion of ICI materials from the program. There are different industry players for residential post-consumer packaging and printed materials versus ICI waste. Bringing the ICI sectors to the table at this point in the process would only result in further delay. Municipalities want ICI materials in the program, as there are more recyclable materials generated in the ICI stream than in the residential stream. Industry is not supportive of ICI waste being included in a potential MMRP. Their primary rationale for this position is that the ICI sectors, in particular those which are located in larger municipalities, already pay to manage their own waste through the use of private waste haulers. No other provincial programs currently handle ICI outside of regulated landfill bans. Landfill bans are already an option for municipalities and a province-wide landfill ban has been suggested by some members of the Committee as a way to include ICI waste and implement a level playing field. For now, this proposed program will focus on residential recycling streams with some thought being given to small towns of a certain size that cannot separate the residential and ICI waste streams.

Subsequent to the work completed by the Technical Sub-Committee, it was agreed that the proposed MMRP would not include packaging and printed materials that are managed directly by ICI generators as it is recognized that they are responsible for their own waste management functions. However, it is acknowledged that small communities may be unable to separate ICI materials from the residential post-consumer packaging and printed materials that they manage.

The issue of ICI packaging and printed materials collected by small communities and the inclusion of this material in a multi-material recycling program will be addressed by the IFO in the product management program plan.

9.5 Data Collection

Some members of the Advisory Committee have requested that the provincial government provide funding to support the collection of municipal recycling data (i.e. tonnes of materials being recycled, operational costs associated with municipal recycling programs, etc.) in anticipation of the implementation of a MMRP.

The draft working model revised by the Technical Sub-Committee acknowledges that an annual municipal survey of recycling program costs and tonnes of material marketed will be necessary as the basis for determining system costs, recycling benchmarks and performance measures for any proposed MMRP. As a consequence, fees collected by the IFO would be used to fund annual data collection from participating municipalities and industry stewards as well as to provide operational payments to municipalities for direct program costs and for IFO start-up and administration costs.

9.6 Bridge Funding

Various members of the Advisory Committee have requested that the provincial government provide interim funding to sustain municipal recycling programs until a MMRP is in place and operational. The province recognizes the financial sustainability concerns associated with many

of the recycling programs currently being operated by municipalities and regional waste management authorities. This request will be given separate consideration by government.

9.7 Capital Funding

Municipalities have made a request to the province to provide ongoing capital funding to municipalities for the purchase of infrastructure and equipment to support their recycling programs. Not all members of the Advisory Committee support this type of approach. If the provincial government is unable to address this request, it should be noted that in the Potential Saskatchewan Multi-Material Recycling Program - Draft Working Model, there are provisions for the amortization of capital costs for collection vehicles and buildings, collection containers, and fixed and mobile equipment. These are considered eligible costs under the proposed MMRP.

9.8 Public Awareness/Education Program

All members of the Advisory Committee recognize the need for public awareness/education; consequently this program component is identified as being an eligible cost under the draft model for a MMRP. However, there were suggestions that the province should organize its own province-wide campaign regarding this proposed program. This suggestion was also made with the understanding that each individual municipality or region would have to run its own promotional campaign in order to ensure program success. Ultimately, it is acknowledged that the IFO will be responsible for developing and disseminating the bulk of public awareness/education material regarding a potential MMRP. The province and participating municipalities could develop and distribute supplemental program informational material where appropriate.

9.9 Research Funding

Municipalities have requested that funding be provided to municipalities and regional waste management authorities to support waste characterization studies, program optimization, etc. Under the proposed draft working model, these types of projects could be eligible for funding through the MMRP's Effectiveness and Efficiency Fund.

9.10 Market Development

There was a request that provincial funding be provided to support local recycling technologies in order to ensure that they are sustainable. In the final version of the draft working model for a MMRP, *market development* is a funding area that has been identified as needing to be addressed by the IFO product management program plan. The IFO product management program plan would address market development with respect to sufficiency of markets and salvage revenues for collected materials with the objective of reducing overall system costs for both municipalities and industry.

9.11 Other Issues

Advisory Committee members have agreed that industry participation in a potential MMRP will be mandatory while municipal participation in a proposed program will be voluntary. In addition to the participation issue, committee members have also discussed the premise of providing participating municipalities with the discretion to determine which designated residential post-consumer packaging and printed materials that they will collect and recycle. Municipal

representatives have indicated a preference for this type of an approach whereas some of the industry representatives have indicated that participating municipalities should collect and recycle all residential post-consumer packaging and printed materials which are subject to the proposed MMRP's recycling fees or alternatively collect and recycle a designated minimum number of packaging and printed materials. Programs will need to meet the needs of communities with respect to access and the premise of voluntary participation by municipalities could impact public access to recycling services depending on the approach taken with a MMRP. Government is committed to working with the stakeholders in order to resolve the issue.

There is a need to address the added costs that remote communities are faced with when they operate recycling programs. This issue will need to be addressed by the industry funding allocation formula which would be developed by the IFO through consultation with municipalities. The intent is that the formula will account for factors beyond the control of the municipality which increase program costs, such as geographic location, physical size of the municipality and population density.

Appendix A

List of Acronyms and Definitions

The following acronyms are used throughout the document:

- ARWMAS – Association of Regional Waste Management Authorities of Saskatchewan
- CCGD – Canadian Council of Grocery Distributors
- CSR – Corporations Supporting Recycling
- FCPC – Food and Consumer Products Canada
- ICI – industrial, commercial and institutional wastes
- IFO – industry funding organization
- MMRP – multi-material recycling program
- MSW – municipal solid waste (i.e., more specifically residential post-consumer packaging and printed materials)
- RCC – Retail Council of Canada
- SARC – SARCAN Recycling, recycling division of Sask. Assoc. of Rehabilitation Centres
- SARM – Saskatchewan Association of Rural Municipalities
- SUMA – Saskatchewan Urban Municipalities Association
- SWRC – Saskatchewan Waste Reduction Council
- WACS – Waste Advisory Council of Saskatchewan

Appendix B

Advisory Committee Terms of Reference

TERMS OF REFERENCE

Multi-Material Recycling Program - Advisory Committee

Purpose

To establish an advisory committee to provide the Saskatchewan Ministry of Environment with advice on funding instruments and program delivery models for a multi-material recycling program for Saskatchewan.

Background

The Government of Saskatchewan has set out a framework for a working model of sustainability in action. One of the key outcomes is sustainable waste management that takes into consideration the efficient use of resources by producing less waste, utilizing waste as a resource, increasing recycling, and ensuring effective waste management. In moving forward with achieving the key outcome of sustainable waste management, the province is working towards the development of a solid waste management plan including a multi-material recycling program.

While reduction of waste and re-use of objects and material continue to be encouraged as the preferred methods to reduce the amount of waste disposed in landfills, recycling is considered to be an important component of waste minimization. Stakeholders in Saskatchewan, including municipalities and other groups, have raised the issue of using product stewardship programs as a means of providing financial stability to recycling programs; which, in some areas, are not sustainable with salvage revenue as the sole source of funding for these programs. Paper products typically account for approximately 30 per cent of the total municipal solid waste stream. While existing operations in Saskatchewan are recycling significant amounts of paper products in some areas, paper continues to be an issue at many landfills in the province. Diverting paper products from landfills through reduction, re-use and recycling will be integral to moving the ministry forward on its key outcomes for sustainable waste management.

Saskatchewan has mandated other product management programs or set environmental handling charges for waste materials such as used oil, scrap tires and beverage containers. The Saskatchewan Ministry of Environment has committed to lead an initiative to review delivery models and develop a multi-material recycling program proposal for paper, plastic, tin and glass. The initial focus will be on developing a recycling program for paper/fibre from household waste and other residential packaging waste streams not currently being captured in provincial stewardship programs.

Roles and Responsibilities

Advisory Committee

An advisory committee will be established to provide insight and feedback. This advisory committee will be specifically tasked with reviewing and providing advice on potential funding

instruments and program delivery models for a multi-material recycling program. The committee will be asked to provide the branch with options for consideration as well as feedback on additional alternatives and proposals. The group, where possible, will attempt to reach consensus on the advice it provides. The committee will also act as a resource for the ministry and report directly to the ministry team working on the development of a multi-material recycling program.

The implementation of a multi-material recycling program crosses interests for a variety of stakeholders. To obtain additional technical expertise in addition to the policy expertise provided by stakeholders, an informal technical group will work with the ministry as needed to achieve the agreed upon objectives of this consultative process.

The advisory committee will consist of:

Advisory Committee Members	Representative	Area of Expertise
Saskatchewan Urban Municipalities Association	Fred Clipsham, SUMA Environmental Representative	Urban municipalities
Saskatchewan Association of Rural Municipalities	Don Taylor, SARM and board member of the Sask. Scrap Tire Corp.	Rural municipalities, stewardship organizations
Retail Council of Canada	Rachel Kagan, Government Relations	Retail distribution
Food and Consumer Products of Canada	Gemma Zecchini and Catherine Abel, Government Relations	Industry manufacturers
Canadian Council of Grocery Distributors	Justin Sherwood	Large distribution, stewardship boards (in Ontario, Quebec, etc.)
Association of Regional Waste Management Authorities of Saskatchewan	Wally Lorenz and Anne Mathewson	Regional waste authorities
Waste Advisory Council of Saskatchewan	Keith Perkins and Aaron Beres	Private recyclers and waste haulers
Saskatchewan Waste Reduction Council	Bert Weichel	Public environmental organization
City of Regina	John Harrison and Dwight Mercer	Municipal waste management
City of Saskatoon	Sheri Praski	Municipal waste management
SARCAN Recycling	Ken Homenick, SARCAN Operations	SARCAN, salvage markets, transportation and collection
Corporations Supporting Recycling	Ken Friesen, Western Representative and Gordon Day, Member Services	Industry, stewardship organizations, funding instruments, other jurisdictional issues
Saskatchewan Ministry of Environment	Dave Phillips	Advisory Committee Chair

Saskatchewan Ministry of Environment

A team of ministry staff will work with the advisory committee and will be charged with the responsibility of leading the process. The ministry team will facilitate the meetings, provide any necessary information the group requires for discussion and prepare materials for all meetings, correspondence and conference calls.

Environmental Protection Branch (EPB)

Dave Phillips, Joe Muldoon and/or Blaine Ganong - Senior Advisors

Kyla Clincke – Committee Organizer and EPB Team Leader

EPB Team (Tracy Roy, Kim Yee, Michele Arscott, Miguel Morrissette, Ed Gee, Victor Chang)

All meeting minutes and correspondence will be considered part of the consultation process for a multi-material recycling program.

Objectives

The objectives of the advisory committee are as follows:

1. Advise on the principles that need to be considered when evaluating program delivery models for a multi-material recycling program.
2. Advise on options for the development of market instruments (i.e., environmental handling fees, municipal tax, etc.) for the collection of monies for the financing of a multi-material recycling program.
3. Advise on options regarding program delivery models for the development of a multi-material recycling program.

Funding of Activities

Participation will be on a voluntary basis. Apart from the expenses associated with communications and meetings (room rentals, teleconference charges and meals during meetings) which will be coordinated by the ministry, no funding will be available to the individual advisory committee members.

Stakeholder Liaison

Through a series of meetings the advisory committee, technical group and Environmental Protection Branch will discuss the issues and options. Outcomes from the meetings will be recorded and considered in the decision making process.

The advisory committee, technical group and Environmental Protection Branch will convene through meetings, conference calls and/or correspondence approximately three times throughout November – January. Those not able to attend meetings will participate through conference call or correspondence. It is important to engage industry in this process as it is anticipated that they will be the one of the stewards for a multi-material program. EPB will engage the technical group as required.

Advice by the advisory committee will be provided verbally at meetings or teleconference and/or through correspondence as required.

Advisory Committee Meeting Schedule:

November 8, 2005

- Location: Regina from 1:00 p.m. – 4:00 p.m. (CST)

December 6, 2005 (Now changed to December 5 with possible other dates being considered.)

- Location: Regina from 12:00 p.m. – 4:00 p.m. (CST)

January 16, 2006 – Location: Regina

- Additional information to be sent to Advisory Committee January 13, 2006

Early to mid February – last meeting - Advisory Committee

Appendix C

Program Principles for a Saskatchewan Multi-Material Recycling Program

(Note: This is the final version of program principles that was distributed to the Advisory Committee for review and comments were received by Nov. 15, 2006)

1. Harmonization

- Industry and stewards support the harmonization of provincial regulations and requirements related to the stewardship of packaging and printed materials to the greatest extent possible where desirable and feasible for the benefit of Saskatchewan to achieve both administrative and cost efficiencies across jurisdictions and consistency for the consumer and efficiency for industry.

2. Environmental/Social/Economic Sustainability

- Sustainability is the program's ability to meet realistic environmental targets in a cost efficient manner, where the consumer is aware of their role and the cost associated with diversion/disposal of their product choices.

3. Accountability and Transparency of Costs

- The program must be accountable and transparent. All aspects of the development and running of a multi-material recycling program are visible to stakeholders and the public for scrutiny.
- Fees should be clear and visible to the consumers who pay them.

4. Level Playing Field and Equity

- Programs should seek to create a level-playing field with all stewards paying their fair share of the cost of managing their post-consumer waste.
- Costs must accrue proportionately to all stewards in direct relation to the costs associated with managing their packaging and printed material waste.
- Free-riding and in-kind contributions to programs should be discouraged or prohibited.

5. Continual Improvement as part of the program

- The program should encourage efforts for improvements in efficiency and economy.
- The program should set up benchmarking for municipalities, diversion rates, cost drivers, efficiency, etc.
- Empirically based, progressive performance standards should prevail over arbitrary targets.
- In the long term, make less waste, less environmental impacts, end result of waste minimization.
- Cross-subsidization: necessary to a limited degree to allow for administrative simplicity and overall efficiencies of the program will be tolerated.

6. Accessibility

- The program should have province-wide accessibility that will maximize the recycling of the prescribed packaging and printed materials.
- Urban/rural/remote differences need to be considered - What is feasible and practical in urban communities may not work in rural areas due to lack of infrastructure, transportation cost, lack of end markets, etc.
- The program should provide a mechanism that will minimize the discrepancies between urban/rural/remote and close/distant recyclers.

7. Partnerships

- Should be recognized that the program is a partnership between product stewards and program operators - this ensures that both service providers and funders are accountable, obligated and responsible.

8. Governance and Shared Responsibility

- The program should be administered by a not-for-profit agency independent of the Government of Saskatchewan and led by a (non-government) Board of Directors with appropriate representation from key stakeholder groups.
- Stakeholders should have a legitimate pecuniary interest in the program but should never be in a position to influence commercial transactions within the program for their own financial benefit.
- The industry managed recycling program should consist of steward-only management boards with appropriate representation from key stakeholder groups.
- Everyone has a role: municipalities, provincial government, stewards, manufacturers, distributors, retailers and the public.

9. Job Creation and Economic Development

- Waste management/waste diversion should be conducted in pursuit of environmental goals only. This should not be viewed as an opportunity for Saskatchewan to develop jobs or pursue social objectives.
- The program may result in job creation and economic benefit for Saskatchewan as a secondary outcome.

10. Balanced Fee Collection – Equity/Simplicity/Flexibility

- Simplicity in a program - does not require stewards of materials to spend significant time and resources on an ongoing basis to either register or to comply with the stewardship obligations.
- Operational simplicity and economies of scale should be relentlessly pursued.
- Stewards' participation and contributions should be based on fair and transparent criteria that do not discriminate for or against particular categories, including material or size of company.
- The industry-managed organization (i.e. the industry funding organization (IFO)) should retain the flexibility to design programs that meet government targets while also achieving cost effectiveness/efficiencies.

- **Sustainability:** The Program should ensure long-term sustainability by setting up a reserve structure, whereby any surpluses created by increased efficiencies and high salvage pricing could be held to offset the future inflation of costs or the crash of any salvage markets. Note: Not to deliberately over collect.

11. Cross-subsidization

- No cross subsidization of fees per material should be the goal.
- No cross-subsidization – An issue of significant importance to manufacturers and municipalities.
- Program funding and accounts should be dedicated to program operations (no cross-subsidizing of other programs).

12. Incentives/Disincentives

- Equalized incentives and shared responsibility help ensure that program costs remain reasonable and proportionate to the desired outcomes.
- The program should be permissive rather than prescriptive with respect to material usage. (Packaging or printed material that is not recyclable or difficult to recycle should have a higher recycling levy than those materials which are recyclable) Mechanisms to encourage or discourage the use of specific packaging or printed materials should be based on market instruments (e.g., salvage value of material) rather than regulated restrictions.

13. Cost Effectiveness and Operational Efficiency

- The program should be designed to achieve defined environmental objectives at the lowest possible cost.
- Program operators (i.e. municipalities or other service providers) should be free to operate on a business basis, according to their best judgment and capabilities, i.e. not prescribed by regulation or blanket policy.
- Existing infrastructure should be used wherever possible and efforts made to build on capacity and develop efficiencies and economies. If existing infrastructure is inefficient and costly, stewards/consumers should not be expected to pay if cheaper, more efficient methods can be created.
- The operations of municipal or private recyclers should be done on a business-like basis with full-cost accounting for facilities, wages, expenses and asset replacement.
- The program should seek to regulate all materials at once.
- Where possible, waste management should be integrated to minimize the inefficiencies and costs associated with managing several separate waste streams.
- Job creation: developing markets for secondary materials is crucial for the success of any recycling program.

14. Environmental Benefit

- Target those wastes that are deemed to be hazardous in nature.

15. Other

- Cost: no return to store/retail - waste materials should not be returned to point of sale due to inefficient, unsanitary and public health and food safety concerns.

Appendix D

Potential Saskatchewan Multi-Material Recycling Program Draft Working Model

(Note: The following MMRP draft model was developed through the Advisory Committee process prior to June 21, 2006 and has been replaced by the final version of the draft model that is on pages 38 to 42)

Brief Description:

A province-wide program that provides the public with access to municipal recycling services for designated household waste under the Saskatchewan Multi-Material Recycling Program (MMRP).

Essentially, funding for the system would be based on a 50:50 cost- share between industry and municipalities. The MMRP would designate and define "Stewards" as brand owners and first importers of the materials outlined by the MMRP.

Monies would be collected by a not-for-profit IFO and used to fund municipal recycling operations to sustain the municipal recycling services for designated household waste under the MMRP.

Purpose:

This program is to promote the reduction, reuse and recycling of waste through industry stewardship.

The purpose of this program is to provide funding to municipalities to support their waste management function for recycling designated materials. This does not include any funding support for capital costs of implementation or start-up costs above administration.

NOTE: Recognizing that the ICI sectors are responsible for their waste management functions, this program does not provide for incentives or funding for recycling activities undertaken by the ICI sectors. It is suggested that municipalities encourage ICI diversion from their landfills by considering increasing landfill fees applicable to the ICI sectors or instigate landfill bans.

Program Products:

This will be a province-wide program for multi-materials classified in the waste categories of paper, plastic, tin and glass. These waste categories are further defined as *post-consumer* paper, plastic, tin and glass associated with waste material generated by households. Although this definition is broad in scope the intent of the program is to address residential post-consumer packaging and printed materials and not the obsolete or unwanted consumer products themselves.

Accepted Wastes:

The waste categories (paper, plastic, tin, and glass) to be captured by the Saskatchewan Multi-Material Recycling Program are further defined, in draft, as follows:

Waste Category	Examples of Commodities to be Included
Paper	newspaper (ONP), corrugated cardboard (OCC), office or fine paper, boxboard and mixed paper
Plastic	Plastic grades: 1, 2, 4, 5 and 7 Example: #2 plastic - HDPE (usually associated with laundry containers)
Tin	food containers
Glass	food containers

Funding Mechanism:

Funding for the system would be based on a 50:50 cost-share-between industry and municipalities. The program would define rules for calculating the total agreed upon net costs incurred by municipalities and industry's 50 per cent share of these costs.

NOTE: Funding mechanism would include a funding formula to be used for determining payments by industry to municipalities and outline funding provisions to support product and market research and development, public education and awareness and incentives to encourage municipal program efficiency and effectiveness.

The stewardship program would provide payments to municipalities that are equal to 50 per cent of the total agreed upon net costs incurred by those municipalities as a result of their recycling programs. Municipalities would be responsible for at least 50 per cent of the total costs incurred by their recycling programs.

NOTE: Specific municipal funding mechanisms would be based on diversion targets and efficiency objectives and reflect northern, rural and urban program costs.

It is acknowledged that the public is requesting access to recycling services. Based on feedback from municipalities and stakeholders, it is imperative that Saskatchewan demographics and the need to provide cost-effective recycling programs for the public, be taken into consideration when providing access to recycling services. Therefore it is suggested that the following municipal systems be considered for funding:

1. City of Saskatoon and City of Regina: 50:50 cost-sharing of recycling services by the municipality and industry for bulk (drop-off bins) or curbside recycling to achieve a diversion target yet to be determined but suggested at 50 per cent of the total amount of recyclable material.
2. Urban Centres greater than or equal to 10,000 population. (This figure has been suggested in order that cities such as Estevan, Melfort, Lloydminster, Melville and Weyburn which have populations less than 15,000 can access the program): 50:50 cost-sharing of recycling services by the municipality and industry for bulk recycling to achieve a diversion target yet to be determined but suggested at 40 per cent of the total amount of recyclable material.

3. Regional Recycling Associations greater than or equal to 4,000 – 5,000 population: 50:50 cost-sharing of recycling services by the municipality and industry for bulk recycling to achieve a diversion target yet to be determined but suggested at 40 per cent of the total amount of recyclable material.

NOTE: Participation in recycling activities would be voluntary for all communities.

NOTE: Regional Recycling Associations would be set up similar to Regional Waste Management Associations in the province. Municipalities would not be required to set up regional landfills however, small populated municipalities would be required to set up regional recycling services to receive funding for recycling programs.

Collection Mechanism for Materials

The collection mechanisms are varied as different product related sectors are involved in the program. Municipalities and industry both recognize that Saskatchewan demographics have challenges to provide for economies of scale that are more readily achievable in other provincial jurisdictions.

Therefore it is suggested that municipal governments and industry reach agreement on the approach that will allow for the provision of municipal recycling services that will achieve diversion rates set by the Province of Saskatchewan as outlined below:

1. City of Saskatoon and City of Regina: diversion target yet to be determined but suggested at 50 per cent of the total amount of recyclable materials. (suggested approach bulk/curbside recycling)
2. Urban Centres greater than or equal to 10,000 population: diversion target yet to be determined but suggested at 40 per cent of the total amount of recyclable materials. (suggested approach bulk recycling)
3. Regional Recycling Associations greater than or equal to 10,000 population: diversion target yet to be determined but suggested at 40 per cent of the total amount of recyclable materials. (suggested approach bulk recycling)

Distribution of Funding into Programs:

The Municipal Funding Allocation Model

The “Steward” or IFO will be responsible for distributing payments to individual municipalities. This model will be similar to that being used in Ontario and may use the following approach.

Calculation:

The total annual gross municipal recycling costs for the province will be determined by inputting an average per tonne cost multiplied by the total number of tonnes recycled/salvaged by all municipal programs reporting. Total annual revenue will be determined by multiplying the average material revenue over the timeframe by the tonnage for each material stream. The total gross cost, less the total revenue, gives the net costs to municipalities.

Effectiveness and Efficiency:

Further consideration will be given to a hold back of funding to ensure effectiveness and efficiency. The following example is similar to the Ontario program:

For the Base Year of the program, the total net cost number will be multiplied by 50 per cent to get the total direct funding allocation. Consideration will be given that the number will be multiplied by 45 per cent (with the same allowance as noted above) to get the total direct funding allocation with the balance retained for the Effectiveness and Efficiency Program after the program has been up and running for a period of two years.

Populations Density and Distance to Market:

In the interest of fairness, the model should recognize that by the nature of size, population density and the types of materials handled, some recycling programs are and will be inherently more costly to operate than others. The funding formula will be established to account for these differences. The following example is similar to the Ontario program:

The scale of the program is also a factor that determines operational efficiency. Smaller programs are inherently more costly than larger programs. A scale factor within the funding formula discounts the revenue stream for smaller programs. The maximum discount is applied to revenue for communities with lowest total tonnes. The discount is proportional to total tonnes, with the community with the largest tonnes discounted at zero. The maximum discount rate, currently set at 10 per cent, is adjustable in the future. Discounting the revenue in the funding formula would increase the funding allocation.

Weight/Volume Distribution Considerations

The model will consider cost variations based on weight and volume, not just a per tonne rate. The following example is similar to the Ontario program:

The model distributes 40 percent of the total funding allocation among all of the material based on weight of materials recycled. 60 per cent of the total allocation is distributed based on the volume of the material recycled. The use of the 40 per cent/60 per cent split by weight/volume allocates more funding towards lighter weight materials such as boxboard and plastic and less for more dense materials such as glass and newspaper. This approximates amount of effort and expense required by the handlers and processors of these materials.

Visible Fees:

Consideration of having funding visibility on the consumer retail receipt is a possibility. It will be the determination of the IFO as to how the fee is administered and displayed for the consumer. For example, recycling fees could be charged on individual items.

Governance Structure:

A program would incorporate the following characteristics:

- A program would be operated by a not-for-profit organization whereby there would be province-wide accessibility for the public to recycle designated post-consumer materials through a municipal collection system.
- The organization would be based in Saskatchewan and all fees collected would be used to fund recycling activities occurring within the province.
- The management board of the program would be comprised of municipal, public and industry interest based representatives with a focus on Saskatchewan representation.
- The primary program activities would include fee collection for program funding and disbursement of funds to municipalities for program eligible recycling services.

Board Structure: the structure of the board would have Saskatchewan representation and may look at having representation as follows:

- urban and rural municipalities (2);
- public (1);
- industry – retailer, distributors (5),
- other; ex officio – government (2).

Regulations:

The Saskatchewan Multi-Material Recycling Program Regulations would need to be developed and would designate and define program “stewards” as brand owners and first importers of designated products into Saskatchewan. This would require that the “stewards” participate in a program that provides consumers with accessibility to recycling services for a designated scope of post consumer materials.

“Stewards” of the designated waste materials would be in a position to discharge their legal obligations under the developed regulation either through membership in an industry funding organization (IFO) approved by Saskatchewan Ministry of Environment or by seeking approval from the province to implement an industry stewardship plan (ISP).

The regulations would require the “steward” or IFO to operate and/or participate in a product management program that would provide provincial recycling accessibility to the public for a defined scope of post consumer materials.

Regulations may be more prescriptive than existing regulations for product stewardship programs as they may clearly define certain program requirements that have not traditionally been defined by the province. An example of this may be regarding what recycling activities would be funded as it pertains to the defined scope of materials targeted by the program.

Roles & Responsibilities:

Arms Length Oversight Body or Industry Funding Organization

Responsibility: Economic, liability, informational, operational.

Role: Industry funding organization is responsible for developing the stewardship program for designated wastes and monitoring the effectiveness and efficiency of the programs. This stewardship organization/IFO will be responsible for collecting fees from its members in order to fund the Saskatchewan Multi-Material Recycling Program. The IFO would be responsible and accountable for the collection and payment of funds that support the delivery of this program within the province. In addition, the IFO would be responsible for submitting annual reports to Saskatchewan Ministry of Environment.

Brand Owner

Responsibility: Economic.

Role: Any party that has a commercial connection with the designated waste or the product from which the designated waste is derived, is potentially responsible for remitting recycling fees to the industry funding organization for the implementation and operation of the program. A company, which decides to run its own stewardship program to recover its waste, must have that program approved by the Saskatchewan Ministry of Environment. Any regulation supporting this program would require that a stewardship program supporting the Saskatchewan Multi-Material Recycling Program would provide payments to eligible municipalities, equal to 50 per cent of the total net costs incurred by those municipalities.

Distributor

Responsibility: Economic.

Role: See brand owner.

Retailer

Responsibility: Economic depending on their role within the product supply chain, informational.

Role: May be part of consumer education/awareness, additional involvement if recycling fees are identified on consumer retail receipts.

Consumer

Responsibility: Physical.

Role: Consumers are responsible for separating their waste by material and either delivering to the curb for pickup or to the closest recycling facility.

Provincial Government

Responsibility: Liability, informational.

Role: The provincial government is ultimately responsible for monitoring and ensuring that the program is in compliance with legislation and regulations.

Municipal Government

Responsibility: Physical, economic, informational, voluntary participation.

Role: Municipalities are responsible for providing recycling services for materials designated under the Saskatchewan Multi-Material Recycling Program, making the consumers aware of its collection system and to provide funding for at least half of the net costs of their recycling program.

Cost per Capita for program:

Range of numbers start from bare bones (transportation subsidies and central marketing only) to curb side collection for a province wide program (based on figures provided by the Ontario Blue Box Program Plan for 2004).

Population	995,400 (2004)
Possible Range for Total Annual Operational Program Costs	≈ \$1,960,000 to \$9,712,000
Possible Annual Per Capita Costs (Calculated)	≈ \$1.96 to \$9.76

Potential Saskatchewan Multi-Material Recycling Program Draft Working Model

(Note: This is the final version of the MMRP draft model that was distributed to the Advisory Committee for review and comments were received by Nov. 15, 2006)

1. Purpose

The intent of the proposed Saskatchewan Multi-Material Recycling Program is to promote the reduction, reuse and recycling of waste through a cost share model between industry and municipalities.

The purpose of this program is to provide dedicated funding to municipalities to support their waste management function for recycling of designated post-consumer packaging and printed materials.

The Saskatchewan Multi-Material Recycling Program will create a province-wide program that enables municipalities to provide the public with access to municipal recycling services for designated post consumer packaging and printed materials generated from households.

An annual municipal survey of recycling program costs and tonnes of material marketed will serve as the basis for determining system costs, recycling benchmarks and performance measures.

2. Regulatory Framework

Regulations for a multi-material recycling program would need to be developed under the Environmental Management Protection Act, 2002. These regulations would define program “stewards” as brand owners and first importers of designated product packaging and printed materials that are distributed in Saskatchewan.

“Stewards” of designated packaging and printed materials would be in a position to discharge their legal obligations under the developed regulations either through membership in an industry funding organization approved by the Saskatchewan Ministry of Environment or by seeking approval from the province to implement their own product management program plan.

The regulations would require “stewards” to develop a product management program plan and to submit this plan to the Saskatchewan Ministry of Environment for review and approval prior to implementation of the plan.

3. Roles & Responsibilities

Provincial Government

Responsibility: Regulatory, informational.

Role: The provincial government is ultimately responsible for reviewing and approving the product management program plan, ongoing evaluation of the program and ensuring that it is in compliance with legislation and regulations.

Industry Funding Organization (“Stewards”)

Responsibility: Economic, liability, informational, operational, mandatory participation.

Role: The industry funding organization (IFO) is responsible for preparation and implementation of a product management program plan on behalf of stewards for product packaging and printed materials that are designated under the regulation. The IFO would be responsible and accountable for the collection of fees from stewards and payment of funds to municipalities to support the delivery of this program within the province. In addition, the IFO would be responsible for submitting annual reports and other program related information to the Saskatchewan Ministry of Environment. It is anticipated that stewards will discharge their legal obligations under the developed regulation through membership in an IFO.

Municipal Government

Responsibility: Physical, economic, operational, informational, voluntary participation.

Role: Participating municipalities are responsible for providing recycling services for designated post-consumer packaging and printed materials to their communities and submission of data regarding annual recycling costs and tonnes of material collected and recycled through their programs.

Consumer

Responsibility: Physical, financial.

Role: Consumers are responsible for participating in their community-recycling program. Consumers’ financial contributions will be paid through municipal levies and recycling fees levied on designated products that they purchase.

4. Scope of Program

The scope of the regulation and the program management plan will be for post-consumer packaging and printed materials and includes all designated, post-consumer packaging and printed materials that are primarily destined for the residential waste stream. This program will not include materials currently being collected and recycled as part of existing regulated recycling programs in Saskatchewan (Beverage Container Collection and Recycling Program, Used Oil Materials Recycling Program, Scrap Tire Management Program, Saskatchewan Paint Stewardship Program, etc.).

Note: The product management program plan will not include packaging and printed materials that are managed directly by industrial, commercial and institutional (ICI) generators, as it is recognized that they are responsible for their own waste management functions. However, it is acknowledged that small communities may be unable to separate ICI materials from the residential post-consumer packaging and printed materials that they manage. The issue of ICI packaging and printed materials collected by small communities and the inclusion of this material in a multi-material recycling program will be addressed by the IFO in their product management program plan.

5. Governance Structure

A program would incorporate the following characteristics:

- A program would be operated by a not-for-profit association (IFO) based in Saskatchewan and all fees collected would be used to fund municipal multi-material recycling programs operating within the province.
- The primary program activities of the IFO would include determination of the stewards' material fees, fee collection for program funding and disbursement of funds to municipalities for program eligible recycling services.

A standing committee of the IFO will serve as a joint Municipal-Industry Program Committee, whose mandate will be:

- Oversight of the annual data survey;
- Priorities for the Effectiveness & Efficiency Fund;
- Performance measures/targets;
- This standing committee will be co-chaired by industry and municipal representatives. Consideration will be given to having a voting seat on the IFO board filled by the industry co-chair of this committee.

The board structure of the IFO will be established in the regulations for a MMRP. The following options will be considered and evaluated for the governance structure of a MMRP:

- IFO board with Saskatchewan representation from industry, municipalities, public and provincial government (ex-officio, non-voting). The make-up of this board would be similar to existing provincial IFOs/industry stewardship organizations such as the Saskatchewan Association for Resource Recovery Corporation (the Used Oil Materials Recycling Program) and the Saskatchewan Scrap Tire Corporation (the Scrap Tire Management Program).
- An approach similar to that being undertaken in British Columbia where boards for IFOs are comprised of industry stewards only and input from other stakeholder groups is typically provided through committees that feed into the boards. An example of this type of board structure would be Encorp Pacific (Canada) which is the IFO for British Columbia's Beverage Container Recycling Program.
- An alternate governance structure, similar to the one established under Ontario's Waste Diversion Act, could be considered if it is determined that it would be in the province's interest to create an oversight organization, similar to Waste Diversion Ontario, that may, in the future, oversee recycling programs for other materials such as organic waste or household hazardous waste, where municipalities have a vested interest. Under this approach, the oversight organization would have a board of directors comprised of members representing municipalities, industry, non-government organizations (NGOs) and the provincial government. The IFO for the MMRP would report to this oversight body and the board for the IFO would be composed of representatives from industry alone.

6. Program Funding

The IFO will describe in the product management program plan the methodology by which fees will be collected from obligated stewards. These fees will be directly related to the cost of managing product categories of post-consumer packaging and printed materials to achieve the objectives of the regulation. The methodology of calculating these fees will be similar to that implemented by industry funded programs in other provincial jurisdictions. The IFO will be

responsible for consultation with its stewards on the fees. Revenue generated from these fees will be used to provide payments to municipalities, for direct program costs, for IFO start-up and administration costs, for annual data collection from industry stewards and participating municipalities and a fund to promote municipal program effectiveness and efficiency. Other funding areas to be addressed by the product management program plan will include:

- **Market Development:** The IFO product management program plan will address market development with respect to sufficiency of markets and salvage revenues for collected materials. The objective is to reduce overall system costs for both municipalities and industry.

Total IFO Contributions

Funding for the system will be based on the verified and approved net provincial system cost for municipal recycling of designated post consumer packaging and printed materials. Industry's share of the net provincial system cost for municipal recycling will be 50 per cent.

The product management program plan will define the eligible municipal recycling costs and the rules for reporting and verifying those costs and for determining the total net provincial system cost to be used to establish industry's contributions. Eligible costs will include: collection, transportation and processing materials; public awareness and education costs; amortized capital cost for collection vehicles and buildings, collection containers, fixed and mobile equipment and indirect administrative costs such as human resources, finance, information technology, etc.

Distribution of Funding to Municipalities:

The share of total industry contributions allocated to each municipality will vary according to the effectiveness and efficiency of its program as determined by an agreed-to formula.

The formula will account for factors beyond the control of the municipality which drive cost, such as geographic location, size and population density. It also will provide incentives and tools to promote continuous improvement and best practices. These will include:

- holdback of a portion of the IFO contributions to fund projects to improve effectiveness and efficiency; and
- different funding levels which will provide greater funding for programs with better performance or representing best practices.

IFO funding (i.e. 50 per cent of the net provincial system cost for municipal recycling of designated post-consumer packaging and printed materials) will be allocated for the following:

- direct payments to municipal recycling programs; and
- to an effectiveness and efficiency fund to promote and enhance municipal program operating effectiveness and efficiency.

Participation in recycling activities would be voluntary for all communities and the materials collected in the programs would be at the municipalities' discretion. The municipality may determine the collection infrastructure that best suits its needs. However, eligible costs paid by the IFO will be defined to reflect best practices for different types of municipal and regional programs.

Funding will be distributed to municipal recycling programs in the form of quarterly cheques.

Effectiveness and Efficiency

It is proposed that 10 per cent of the municipal transfer payments are distributed through projects designed to encourage greater effectiveness and efficiency of the system (i.e. to reduce the net cost of municipal recycling and increase diversion of post-consumer packaging and printed materials). If the funds are not spent on effectiveness and efficiency projects, this revenue will be returned to the portion of funds available to the municipalities. Funding priorities are reviewed annually and funds are allocated to projects on the basis of applications received from municipalities and may include projects such as waste characterization studies, program optimization, communication and education, etc.

Consultation

The IFO will consult with municipalities on the funding allocation process, the effectiveness and efficiency fund holdback percentage and the type of projects to be funded by an effectiveness and efficiency fund prior to submission of their product management program plan.

7. Performance Measures

Based on the annual municipal data survey and no sooner than one year following program implementation, performance measures (targets/goals) will be set for the program. Continuous improvement and implementation of best practices are program objectives. Performance measures will be established collaboratively between municipalities, the provincial government and industry.

8. Program Cost

To date, the only information available is from the province's first municipal data call (2004). It has been suggested that a mini-survey of 2005 programs representing 80 per cent of the province's recycling programs may be prudent to determine the validity of existing data and trends.

Based on the 2004 municipal data call information, it is estimated that the net provincial system cost for municipal recycling of designated post-consumer packaging and printed materials will be approximately \$4.8 million annually. The actual net provincial system cost may be higher or lower depending on public participation rates, potential expansion of eligible municipal recycling programs, salvage revenue received for recyclable materials, etc.

Appendix E

Saskatchewan Multi-Material Recycling Program - Program Elements (Consensus Items)

1. All designated, post-consumer packaging and printed materials that are primarily destined for the residential waste stream and associated recycling fees to be collected at the onset of the program. (Need to determine specifically which residential, post-consumer materials will be included. Take into consideration materials that are currently accepted in the Ontario Blue Box Program and what materials will be accepted in Quebec's pending program).

In general terms, these materials would be defined as residential, post-consumer packaging and printed materials which are not currently being collected and recycled as part of existing provincial stewardship programs in Saskatchewan.

2. Program participation – mandatory for industry; voluntary for municipalities.
3. One-year baseline will be used before performance measures (targets/goals) are set for the program.
4. Central marketing desk – may be part of a program plan to enhance the efficiency and effectiveness of a MMRP by potentially increasing salvage revenues and thereby reducing overall operating costs.
5. Provincial government will not be involved with the handling of revenue for this program. There will be no direct government funding for this program (program must be financially self sustainable).
6. Provincial government will have a regulatory role in the capacity of compliance and enforcement as well as a role in the evaluation and approval of the program.
7. Municipalities will be able to use accepted accounting practices to amortize operational costs to offset some of the infrastructure costs. The technical sub-committee discussed the potential use of an Efficiency & Effectiveness Fund for capital funding for municipalities.
8. Education/promotion to be funded directly by the program. Details to be determined by the program operator and will be described in the program plan that is provided to the province for approval. Education and promotion activities for this program will be a partnership between industry and municipalities.

9. There will be a need for the ongoing collection of verifiable data (i.e. volumes of material collected and recycled, associated collection and transportation costs, etc.). Costs associated with the collecting and analyses of this data will be funded by the program.
10. No cross subsidization of materials being recycled should be the goal.
11. Program plan needs to have a consultation process whereby industry consults with municipalities regarding the operational details of a MMRP, prior to the plan being approved and implemented.

APPENDIX I

**SERVICES AGREEMENT FOR
SUPPLY AND OPERATION OF MATERIAL RECOVERY FACILITY**

THIS AGREEMENT is dated for reference this _____ day of _____, 2012.

BETWEEN:

THE CITY OF REGINA, a city continued pursuant to *The Cities Act* of Saskatchewan (**the “City”**)

-and -

[**INSERT OPERATOR’S NAME**], a body corporate incorporated under the laws of _____ and registered to carry on business in the Province of Saskatchewan (**the “Operator”**)

WHEREAS:

- A. The City wishes to establish the Co-mingled Recycling Collection Program for certain residents of the City;
- B. As part of the Co-mingled Recycling Collection Program, the City will require access to and the services of the Material Recovery Facility in order to transport, process, market and dispose of the Collected Materials;
- C. The City issued request for proposals #1959, which is attached to this Agreement as Schedule A (the “RFP”) and wishes to retain the services of a third party to provide the Services;
- D. The Operator has responded to the RFP and has been identified as the successful proponent pursuant to the terms and conditions of the RFP to provide the Services to the City; and
- E. The City wishes to have the Operator provide the Services and the Operator has agreed to do so, all in accordance with the terms and conditions of this Agreement.

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the mutual covenants and promises hereinafter contained, and for other good and valuable consideration now paid and delivered by each Party to the other, the receipt and sufficiency of which is hereby acknowledged by each of the Parties hereto, the City and the Operator each agree with the other as follows:

DEFINITIONS

1. In this Agreement, the following terms shall have the following meanings:
 - (a) **Applicable Laws** includes the common law and any and all statutes, by-laws; regulations, permits, approvals, certificates of approval, licenses, judgments, orders, injunctions, authorizations, directives, whether federal, provincial or municipal;
 - (b) **Aseptic Containers** means any multi-layered beverage box container.
 - (d) **Award Letter** means the award letter issued to the Operator dated **[Insert date]**;
 - (e) **Bad Weather** means weather unsuitable for outdoor activities, and or operational duties.
 - (f) **Bags** mean the semi-transparent bags that are provided to certain Designated Residences for the storage of Designated Materials.
 - (g) **Big Blue Bin Vehicles** means the vehicles used to collect the Paper placed in blue collection bins located throughout the City.
 - (h) **Boxboard** means a lightweight paperboard used in making packaging boxes or cartons such as for cereals or shoes.
 - (i) **Business Day** means a day other than a Saturday, Sunday or a statutory holiday in the Province of Saskatchewan.
 - (j) **Cart** means the 360 litre cart that is provided to certain Residences for the storage of Designated Materials.
 - (k) **Change in Law** means the coming into effect or repeal (without re-enactment or consolidation) in Saskatchewan of any Applicable Law, or any amendment or variation of any Applicable Law, including any judgment of a relevant court of law which changes binding precedent in Saskatchewan, in each case after the Effective Date of this Agreement;
 - (l) **City Landfill** means the landfill site and related waste disposal assets located at West ½ Section 3, Range 19, Township 18, West of 2nd Meridian in the Province of Saskatchewan.
 - (m) **City Representative(s)** has the meaning ascribed to it in section 179 hereto;
 - (n) **Claim or Claims** means claims, actions, suits, executions and demands and all loss, liability, judgements, costs, charges, damages, liens and expenses.

- (o) **Coloured High Density Polyethylene (CHDPE Plastic)** shall mean opaque plastic containers labelled with the #2 code.
- (p) **Collected Materials** collectively means Designated Materials and Contaminants that are collected as part of the Co-Mingled Recycling Collection Program.
- (q) **Collected Material Processed** shall be calculated as the sum of:
 - (i) the Tonnes of Marketed Materials shipped to an End Market;
 - (ii) the Tonnes of Residue shipped for disposal; and
 - (iii) the Tonnes of Marketed Materials awaiting delivery to End Markets but which are still at the MRF or a remote material recovery facility.
- (r) **Collection Vehicles** means all vehicle used by the City or its designate to collect Collected Materials and includes Big Blue Bin Vehicles.
- (s) **Commencement Date** means the date specified in the Proponent's Proposal for the commencement of the Services, which date cannot be later than July 1, 2013.
- (t) **Co-Mingled Recycling Collection Program** means the City program for collection from Designated Residences of Designated Materials for transportation to the Designated Facility.
- (u) **Confidential Information** has the meaning ascribed to it in section 255 hereto.
- (v) **Consumer Price Index (CPI)** means the Consumer Price Index for All Items – Regina published by Statistics Canada or a comparable successor to such price index should Consumer Price Index for All Items – Regina be discontinued in its present form.
- (w) **Contaminants** shall mean any materials that are not Designated Materials that are collected as part of the Collected Materials.
- (x) **Contamination Rate** means the monthly percentage, by weight, of Contaminants in the Collected Material that are delivered to the Designated Facility as part of the Co-Mingled Recycling Collection Program, as calculated in the Monthly Composition Audit.
- (y) **Control** of a corporation or other entity is held by a person where securities of the corporation or other entity to which are attached more than 50% of the votes that may be cast to elect directors or persons acting in a similar capacity of the corporation or other entity are held, other than by way of security only, by or for the benefit of such Person.
- (z) **Council** means the City Council of The City of Regina.

- (aa) **Designated Facility** means the location that has been designated by the City to receive Collected Materials from time to time, being either a temporary Transfer Station or the MRF that is located within the City boundary or within a radius of 10 kilometres from the centroid of the City. For greater certainty, the Global Transportation Hub is located entirely within the City's boundary.
- (bb) **Designated Materials** means Paper, Glass, Tin, UCB, Polycoat Containers, PET Plastic, CHDPE Plastic, NHDPE Plastic, HDPE Plastic, and Aseptic Containers and such other materials that may be designated by the City from time to time.
- (cc) **Designated Residences** means all residences approved by the City to be part of the Co-Mingled Recycling Collection Program from time to time.
- (dd) **Effective Date** means the date first written above.
- (ee) **End Market** collectively, means corporations, organizations or partnerships willing to accept or purchase Marketable Materials and includes brokers. For greater certainty, End Markets includes the SARCAN program, but does not include a landfill, transfer station or any disposal facility.
- (ff) **Environmental Laws** means any and all statutes, by-laws, regulations, permits, approvals, certificates of approval, licenses, judgments, orders, judicial decisions, injunctions, and authorizations related to environmental matters which are applicable to the Services.
- (gg) **Equipment** means the vehicles and any other equipment or materials used by the Operator in the provision of the Services;
- (hh) **Force Majeure** means an event beyond the reasonable control, and not attributable to the negligence or wilful misconduct of the Party affected, including but not limited to the following: flood, earthquake, storm, lightning, fire, drought, flood, explosion, war, riot, civil disturbance, sabotage or electrical outage, provided, however, that Force Majeure shall not include any equipment failure due to normal wear and tear or due to neglected maintenance or repair.
- (ii) **Glass** means glass jars, bottles and containers used as food packaging.
- (jj) **Good Industry Practice** means that degree of skill, care, prudence, foresight and operating practice which would reasonably be expected from a skilled and experienced Operator engaged in the same type of undertaking as the Operator under the same or similar circumstances.
- (kk) **Health and Safety Obligation(s)** means any obligation imposed on the Operator by the Applicable Laws or compliance with Good Industry Practice or the Agreement in respect of health and safety at work, including all applicable

requirements of the *Occupational Health and Safety Act* (Saskatchewan), and regulations, as may be amended from time to time.

- (ll) **High Density Polyethylene (HDPE Plastic)** means recyclable plastic, used for items such as milk containers, detergent containers and base cups of plastic soft drink bottles.
- (mm) **Indemnitees** means the City, its elected officials, officers, directors, employees, agents, representatives, successors
- (nn) **Inspector** means the person or persons appointed by the City to monitor and assess the quality and performance of the Operator in providing the Services.
- (oo) **Intellectual Property Rights** means any right in respect of any copyright, trademark, patent, registered design, design right, topography right, service mark, application to register any of the aforementioned rights, trade secret, rights in unpatented know-how, right of confidence and any other intellectual or industrial property rights of any nature whatsoever in any part of the world.
- (pp) **Letter of Credit** has the meaning ascribed to it in clause 214(a) hereto.
- (qq) **Marketable Materials** means the end products produced by the Operator from processing the Designated Materials at the MRF or such other facility as may be required.
- (rr) **Mixed Paper** collectively means recovered paper that is not sorted into specific categories and includes, but is not limited to, Newsprint, Old Corrugated Containers, Boxboard, and Aseptic Containers.
- (ss) **Material Recovery Facility (MRF)** is a specialized facility that receives, separates and prepares Collected Materials for marketing to End Markets and includes all contiguous land and structures and improvements on such land used for the storage and processing of Collected Material.
- (tt) **Natural High Density Polyethylene (NHDPE Plastic)** means translucent plastic containers labelled with the #2 code.
- (uu) **Net Revenue (Net Loss)** means the total value of the invoices that the Operator has received from End Markets for the sale of the Marketable Material to the End Market less direct transportation costs (if any) incurred by the Operator in transporting the Marketable Materials to the End Markets.
- (vv) **Newsprint** shall include newspaper and advertising supplements and other paper grades.

- (ww) **Non-City Material** means material other than the Collected Material received and processes at the MRF.
- (xx) **Old Corrugated Containers** shall mean corrugated containers having liners of either test liner, jute or kraft.
- (yy) **Operating Year** means the twelve month period immediately following the Commencement Date and each subsequent anniversary of the Commencement Date.
- (zz) **Operator Personnel** means all employees, agents, and sub-Operators of the Operator, including all employees and agents of any sub-Operators of the Operator, engaged to provide the Services.
- (aaa) **Operator Representative(s)** means the person or persons designated by the Operator to act as a representative of the Operator under this Agreement.
- (bbb) **Operator Supervisor(s)** mean those individuals engaged by the Operator to supervise the Operator Personnel in the delivery of the Services. Operator Supervisor(s) must be dedicated to the supervision of the Operator Personnel and when acting as an Operator Supervisor.
- (ccc) **Paper** means paper products such as Boxboard, Mixed Paper, Newsprint, Old Corrugated Containers and Sorted Office Paper.
- (ddd) **Performance Security** means the Letter of Credit or certified cheque delivered by the Operator to the City as more particularly described in section 214 of this Agreement.
- (eee) **Polyethylene Terephthalate (PET Plastic)** means plastic resin used to make packaging, particularly soft drink bottles.
- (fff) **Polycoat Containers** means any paper-based carton packaging for beverage and food products that are made of bleached paperboard and polyethylene and some varieties that have a micro-thin layer of aluminum foil in the middle.
- (ggg) **Processing Fee** is the fee payable pursuant to sections 90 and 91 herein.
- (hhh) **Prohibited Act** means:
- i) offering, giving or agreeing to give any employee and/or any elected representative of the City any gift or consideration of any kind for any reason, including as an inducement or reward:

- A) for doing or not doing (or for having done or not having done) any act in relation to the performance of the terms of this Agreement or any other contract with the City; or
- B) for showing or not showing favour or disfavour to any person in relation to this Agreement or any other contract with the City;
- ii) entering into this Agreement or any other contract with the City in connection with which commission has been paid or has been agreed to be paid by the Operator or on its behalf, or to its knowledge, unless before the relevant contract is entered into particulars of any such commission and of the terms and conditions of any such contract for the payment thereof have been disclosed in writing to the City; or
- iii) committing any offence under:
 - A) the Criminal Code of Canada; or
 - B) any legislation creating an offence in respect of fraudulent acts; or
- (iii) at common law in respect of fraudulent acts in relation to this Agreement or any other contract with the City;
- iv) committing any material offence under any Applicable Laws; and
- v) defrauding or attempting to defraud or conspiring to defraud the City.
- (iii) **Proposal** means the Operator's proposal submitted to the City in response to the RFP, dated _____. The Proposal is attached hereto and marked as Schedule "B" to this Agreement.
- (jjj) **PST** means all provincial sales taxes, including any harmonized sales taxes that may be payable on account of or as a result of this Agreement.
- (kkk) **Recovery Rate** has the meaning set out in section 46 herein.
- (lll) **Recycling Collection Schedule** means Monday through Friday between the hours of 7:30 a.m. and 3:30 p.m. including Statutory Holidays with the exception of Christmas Day. In the event that a regularly scheduled day falls on Christmas Day, the City's collection contractor shall provide the collection services scheduled for Christmas Day on the next following Saturday following Christmas Day.
- (mmm) **RFP** has the meaning ascribed in Recital C hereto;

- (nnn) **Required Recovery Rate** means a Recovery Rate of ninety (90%) percent or greater.
- (ooo) **Residue** means the Contaminants and the Designated Materials not captured during the MRF processing operations.
- (ppp) **SARCAN Materials** mean Used Beverage Containers, PET Plastic, HDPE Plastic, beer bottles, Tin, mixed plastic, Polycoat Containers, used paint, and used electronics.
- (qqq) **Services** collectively means all labour, materials, services, transportation, supplies, tools, equipment, apparatus and incidentals required to:
- (i) transport Collected Materials from a temporary Transfer Station to a material recovery facility if the Operator's MRF is not yet in operation;
 - (ii) process the Collected Materials into Marketable Materials, including but is not limited to, receiving, inspecting, sorting, baling, storing, weighing, loading, marketing and transporting;
 - (iii) marketing Marketable Materials to End Markets;
 - (v) Revenue Sharing; and
 - (iv) disposing of the Residue.

For greater certainty, Services include all of these services even where such services are performed by a MRF that is not owned by the Operator.

- (rrr) **Sorted Office Paper** means high grade paper from offices such as computer paper, sorted white ledger, copier paper and office stationary.
- (sss) **Statutory Holiday** means any of the following days which, from time to time may be added or removed by legislation:
- (i) New Year's Day
 - (ii) Family Day
 - (iii) Good Friday
 - (iv) Easter Monday
 - (v) Victoria Day
 - (vi) Canada Day
 - (vii) Saskatchewan Civic Holiday
 - (viii) Labour Day
 - (ix) Thanksgiving Day
 - (x) Christmas Day
 - (xi) Boxing Day.
- (ttt) **Tin** means tin-coated steel containers, such as cans for food packaging. This includes food cans, Used Beverage Containers, aerosol cans and metal lids from bottles and jars.

- (uuu) **Tipping Area** means the space located within the Transfer Station or MRF where the Collection Vehicles tip and unload the Collected Materials.
- (vvv) **Tonne** means metric ton equal to 2205 lbs.
- (www) **Transfer Station** means a place where Collected Materials are transferred from smaller Collection Vehicles into larger transport vehicles for movement to a MRF.
- (xxx) **Unit Processing Fee** means unit charge specified in Schedule "C" which is attached hereto and forms part of this Agreement.
- (yyy) **Used Beverage Containers (UBC)** means beverage, food and non-food cans made of aluminum material.

REFERENCES

2. Any reference made in this Agreement to:

- (a) "this Agreement" means this agreement, including the Schedules hereto, as it may from time to time be supplemented or amended and in effect;
- (b) "herein", "hereof", "hereby", "hereto", "hereunder" and similar expressions refer to this Agreement and not to any particular article, section or other provision hereof, and include any and every amendment, restatement, replacement, variation, supplement or novation hereof;
- (c) this Agreement, including without limitation, any agreement collateral or ancillary to this Agreement and any agreement contained in a Schedule hereto, shall, unless otherwise indicated, be construed as a reference to such agreement as it may have been, or may from time to time be, amended, restated, replaced, varied, extended, renewed, supplemented or novated;
- (d) Sections, articles or Schedules, unless otherwise indicated, shall be construed as references to the sections and articles of and Schedules to this Agreement, as the case may be. The provisions of each Schedule shall constitute provisions of this Agreement as though repeated at length herein;
- (e) any reference to a corporate entity includes and is also a reference to any corporate entity that is a successor to such entity; and
- (f) except where otherwise specified, any reference to a statute includes a reference to such statute and to its regulations, with all amendments in force from time to time, and to any statute or regulation that may be passed which has the effect of supplementing or superseding the statute or regulation.

INTERPRETATION

3. For all purposes of this Agreement, except as otherwise expressly provided, or unless the context otherwise requires:
- (a) the headings are for convenience of reference and do not form a part of this Agreement nor are they intended to interpret, define or limit the scope, extent or intent of this Agreement or any of its provisions;
 - (b) all accounting terms not otherwise defined have the meanings ordinarily assigned to them at the date hereof pursuant to International Financial Reporting Standards ("IFRS") and all computations made pursuant to this Agreement must be made in accordance with IFRS applicable from time to time;
 - (c) any reference to a currency is a reference to Canadian currency;
 - (d) "in writing" or "written" includes printing and typewriting, which may be communicated by facsimile;
 - (e) the word "including", when following any general statement, term or matter, is not to be construed to limit such general statement, term or matter to the specific items or matters set forth immediately following such word or to similar items or matters, whether or not non-limiting language (such as "without limitation" or "but not limited to" or words of similar import) is used with reference thereto, but rather is to be construed to refer to all other items or matters that could reasonably fall within the broadest possible scope of such general statement, term or matter; and
 - (f) words importing the masculine gender include the feminine or neuter gender and words importing the feminine gender include the masculine or neuter gender and words in the singular include the plural, and words importing the neuter gender include the masculine or feminine gender and words in the plural include the singular.

Invalidity of Provisions; Severability

4. If any covenant, obligation or agreement of this Agreement, or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Agreement or the application of such covenant, obligation or agreement to persons, or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby and each covenant, obligation and agreement of this Agreement shall be separately valid and enforceable to the fullest extent permitted by law.

Waiver

5. No failure or delay on the part of any Party in exercising any right, remedy, recourse, power or privilege (for the purposes of this section 5, collectively, a "Right") under this Agreement will operate as a waiver thereof, nor will any single or partial exercise of any

Right preclude any other or further exercise thereof or the exercise of any other Right. Except as may be limited herein, any Party may, in its sole discretion, exercise any and all Rights available to it under this Agreement or any other remedy available to it at law or in equity and such Rights may be exercised concurrently or individually without the necessity of making any election.

Governing Law, Attornment

6. This Agreement shall be governed by and construed in accordance with the laws of the Province of Saskatchewan and the laws of Canada applicable therein and the Parties hereto hereby irrevocably attorn to the jurisdiction of the courts of Saskatchewan.

Interpretation Not Affected by Party Drafting

7. Each Party hereto acknowledges that he, she or it and his, her or its legal counsel have reviewed and participated in settling the terms of this Agreement, and the Parties hereby agree that any rule of construction to the effect that any ambiguity is to be resolved against the drafting Party shall not be applicable in the interpretation of this Agreement.

Enurement

8. This Agreement shall enure to the benefit of be binding upon the Parties hereto and their respective successors and permitted assigns.

Schedules

9. The following are the schedules attached to and incorporated in this Agreement by reference and deemed to be part hereof:

Schedule A	the RFP
Schedule B	the Proposal
Schedule C	Unit Processing Fee
Schedule D	Monthly Audit Protocol
Schedule E	Recovery Rate Protocol
Schedule F	Operator's Marketing Plan

Inconsistency and Paramountcy

9. In the event of any inconsistency, ambiguity or conflict among the provisions or documents constituting this Agreement, the provisions or documents shall take precedence and govern in the following order to the extent necessary to eliminate such inconsistency or ambiguity:

- (a) this Agreement;
- (b) Schedule C;
- (c) Schedule D;
- (d) Schedule A;
- (e) Schedule E;
- (f) Schedule F and
- (g) Schedule B.

CONDITIONS PRECEDENT

10. Notwithstanding anything else herein contained, this Agreement shall be subject to the following conditions:

- a) within seven (7) Business Days of the date that the Operator and the City have each executed this Agreement, the Operator shall provide the City with the Performance Security as required under section 214 herein
- (b) on or before December 1, 2012, the Operator shall submit to the City:
 - (i) copy of title, or other document providing confirmation that the Operator has secured the land to be used for the MRF or Transfer Station or both, if both are required; and
 - (ii) a Saskatchewan Registry Corporate Profile Report showing that the Operator is licensed to do business in the Province of Saskatchewan.
- (c) within seven (7) Business Days of the date of the Award Letter issued to the Operator, the Operator shall submit to the City:
 - (i) Certificates of Insurance for all insurances required under section 218 hereto; and
 - (ii) a current Workers' Compensation Board (Saskatchewan) clearance certificate.
- (d) on or before June 1, 2013, the Operator shall submit to the City:
 - (i) a copy of its contingency plan;
 - (ii) a copy of its strike contingency plan;
 - (iii) a copy of its emergency response plan; and
 - (iv) a copy of safety management practices plan.

(collectively the "Conditions Precedent")

11. All of the Conditions Precedent in section 10 are for the exclusive benefit of the City. In the event that any of the Conditions Precedent are not satisfied, fulfilled or performed on or before the dates specified in section 10 then this Agreement shall be null and void unless the City waives in writing, the satisfaction, fulfillment or performance of any such Conditions Precedent. In the event this Agreement becomes null and void, each of the City and the Operator shall be released from all of their respective obligations under this Agreement.

TERM

12. This Agreement shall come into force on the Effective Date and shall continue in force for ten (10) years concluding on _____, unless terminated earlier in accordance with section 243 of this Agreement (the "Term").

13. The City shall have the option to extend the Term of this Agreement for two (2) consecutive periods of one (1) years each (the “**First Extension**” and the “**Second Extension**”). Each extension period shall be on the same terms and conditions as provided in this Agreement, except that:
- (a) following the Second Extension there shall be no further rights to extend the term of this Agreement; and
 - (b) the Processing Fee shall be as specified in sections 90, 91 and 92 herein. The City may exercise each extension right by written notice given to the Operator not less than six (6) months before the date of expiry of the Term or First Extension.
14. The City and the Operator agree that the Processing Fee for the First Extension and the Second Extension shall be calculated in the same manner and in accordance with the section 90,91 and 92 herein and be as follows:
- (a) the Processing Fee for the First Extension shall be equal to the Processing Fee charged for the last year of the Term multiplied by the Escalation Factor; and
 - (b) the Processing Fee for the Second Extension shall be equal to the Processing Fee charged for the First Extension multiplied by the Escalation Factor.
15. In the case of any dispute between the City and the Operator as to the calculation of the Processing Fee during the First Extension or the Second Extension, the Parties agree to resolve any such dispute in accordance with the dispute resolution provisions in section 279 of this Agreement.

OWNERSHIP OF COLLECTED MATERIAL

16. The Operator acknowledges and agrees that:
- (a) ownership of and title to the Collected Materials; and
 - (b) all risk, loss and liability relating to the Collected Materials,
- shall pass to the Operator once the Collected Material has been delivered to the Transfer Station or the MRF.

COMMENCEMENT

17. In the event that:
- (a) the Operator cannot receive the Collected Materials on July 1, 2013; and
 - (b) the City is required to implement contingency measures to manage the Collected Materials for which the Operator is not able to provide the Services

the Operator acknowledges that the City will suffer damages and loss (“Loss 1”) on account of the following:

- (i) the processing costs incurred by the City in order to implement contingency measures relating to the processing or storage of Collected Materials; and
- (ii) the loss of revenue from the sale of Marketable Materials.

18. The Operator acknowledges and agrees that \$5,000.00 per day is a genuine pre-estimate of the City’s Loss 1 resulting from the Operator’s failure receive the Collected Materials on July 1, 2013 and any day or portion of a day thereafter.

19. In the event that:

- (a) the Operator’s own MRF cannot perform all of the Services required in this Agreement on July 1, 2014; and
- (b) the Operator is operating a Transfer Station which requires the City to implement contingency measures to manage the Services at a temporary Transfer Station or at a remote material recovery facility

the Operator acknowledges that the City will suffer loss (the “Loss 2”) in the amount of the additional expenses the City will incur as a result of supervising this Agreement at a remote MRF:

20. The Operator acknowledges and agrees that \$2,000.00 per day is a genuine pre-estimate of the City’s Loss 2 resulting from the Operator’s failure to perform the Services on the Commencement Date and any day or portion of a day thereafter.

21. In the event the Operator cannot perform all of the Services required in this Agreement at the Operator’s MRF on or before July 1, 2015, the City shall be entitled to terminate, in its sole discretion, this Agreement, immediately.

SERVICES

Engagement

22. The City engages the Operator to provide the Services and to undertake all necessary activities to perform the Services in accordance with the terms and conditions of this Agreement.

Priority

23. The Operator acknowledges and agrees that receiving, sorting and processing the Collected Materials from the City and the Services provided to the City pursuant to this Agreement shall be the first priority of the Operator at the MRF or the Transfer Station.

Weighing

24. The MRF or any Transfer Station shall have weigh scales capable of weighing the Collection Vehicles. All scales used in performing the Services must be certified for trade by Consumer and Corporate Affairs Canada and be recertified every six months at the Operator's expense. All certification reports shall be provided to the City within thirty (30) days of the date that such reports are issued.
25. The Collection Vehicles shall be weighed coming in and going out of the Designated Facility. The difference between the incoming and outgoing weights of each Collection Vehicle shall be the weight for that load of Collected Materials (the "Collected Material Tonnes").
26. All scales must be capable of printing a scale ticket that shows the following information:
 - (a) Collection Vehicle's Driver's Name;
 - (b) Collection Vehicle's Number;
 - (c) Collection Vehicle's Corporation;
 - (d) Collection Vehicle's route number;
 - (e) gross and tare Collection Vehicle weights;
 - (f) load weight of each Collection Vehicle entering the Designated Facility;
 - (g) the Collected Material Tonnes of each Collection Vehicle;
 - (h) individual load weight of each Collection Vehicle exiting the Designated Facility;
 - (i) calculated density of each load of Collected Materials;
 - (j) date and time of load entering the Designated Facility; and
 - (k) date and time of loading exiting the Designated Facility.
27. In the event a scale is temporarily out of order, the Operator shall notify the City immediately and the Operator shall make alternate arrangements, as may be satisfactory to the City, in its sole discretion, acting reasonably, to record weights of the Collection Vehicles, at the Operator's cost.
28. The Operator shall provide the driver of each Collection Vehicle with a scale ticket for each load of Collected Material that is tipped at the Designated Facility.

Receiving Collected Material

29. The Designated Facility shall be designed and operated by the Operator in such a way as to aid in the efficient receiving and unloading of Collection Vehicles. In particular, the Operator acknowledges and agrees that:
- (a) the Operator shall coordinate all incoming Collection Vehicles and other vehicles at the Designated Facility to ensure efficient and timely unloading and processing;
 - (b) the Collection Vehicles that are part of the Co-Mingled Recycling Collection Program shall have unloading priority at the Designated Facility over all other customer vehicles and the Operator's vehicles;
 - (c) the Designated Facility shall have a Tipping Area that can handle receiving twelve (12) Collection Vehicles daily making an average of two (2) loads per Business Day (24 loads total per Business Day);
 - (d) the Designated Facility shall be able to accommodate the unloading of a minimum of two (2) Collection Vehicles at the same time;
 - (e) the Designated Facility shall be able to safely accommodate each Collection Vehicle and the unloading of all Collected Material;
 - (f) the Designated Facility shall have sufficient space for three (3) Collection Vehicles to queue on the Designated Facility site without such queuing adversely affecting vehicular or pedestrian traffic in the vicinity of the Designated Facility;
 - (g) the Operator will coordinate and operate the Designated Facility such that no Collection Vehicle waits to enter the Designated Facility for a period of time that is longer than fifteen (15) minutes; and
 - (h) the Designated Facility shall have a dedicated receiving area with two or more truck doors of sufficient height and width to provide safe ingress and egress for all Collection Vehicles.
30. The Operator acknowledges and agrees that the Inspector that is present at the Designated Facility as well as the drivers of each Collection Vehicle will monitor and record waiting times of Collection Vehicles at the Designated Facility. In the event that the Inspector or any Collection Vehicle driver advises the City that the requirements of section 29 are not met, then the City shall report such items or matters to the Operator. The Operator agrees that upon receipt of such information from the City, that it shall then immediately modify its operations to ensure that Collection Vehicles are unloaded in accordance with section 29 of this Agreement.
31. In the event the Operator fails to meet the time requirement in subsection 29(g) more than three (3) times per month then such failure shall be deemed a Non-Performance and dealt with in accordance with sections 235 and 236 herein

Sorting of Collected Material

32. Following the receipt of the Collected Materials pursuant to section 29 herein, the Operator shall sort the Collected Material at the MRF or temporarily at a remote material recovery facility in accordance with the process outlined in the Proposal
33. The Operator acknowledges and agrees that even though Carts will be used for collecting most Designated Materials, some Collected Material may come in Bags and some may come in unsolicited plastic bags. As part of the Services, the Operator shall open all Bags and unsolicited plastic bags and sort the Collected Material contained therein regardless of whether the bag is clear or opaque, open or tied, shut or sealed.
34. The Operator's trained employees shall inspect the Collected Material in the Tipping Area.

Contamination

35. The Operator acknowledges and agrees the Collected Materials will contain Contaminants, some of which may be hazardous, and that the City makes no representations or warranties as to the tonnage of Collected Materials or to the percentage of Contaminants that may be contained in the Collected Materials.
36. The Operator shall receive all Collected Materials regardless of the levels of Contaminants and process all Collected Materials in accordance with the terms and conditions of this Agreement.
37. It will be the Operator's responsibility, at its sole cost, risk and expense to dispose of all Contaminants, including any hazardous materials contained in the Contaminants in accordance with Applicable Law.
38. In addition to the indemnity in sections 224 to 227 herein, the Operator agrees to indemnify and save the City harmless from any risk, loss, or Claim of any kind arising out of the Operator's contact with the Collected Materials and any Contaminants contained therein.
39. If the Operator determines that a load of Collected Material, in whole or in part, contains high levels of Contaminants then the Operator shall isolate the load from other Collected Material and immediately notify the City. The City shall then have the Inspector or his or her designate inspect such loads of Collected Material for Contaminants. If the City is unable to send the Inspector or his or her designate to inspect the load the Operator shall take photos of such load and shall provide those photos to the City via email within two (2) hours of such load being dumped in the Tipping Area. The photographs shall show the overall load, Contaminants and the Collection Vehicle identification number.

Storage of Collected Material and Marketable Material

40. The Operator shall provide for a reserve indoor storage capacity at the Designated Facility of such a size that it can, at any time, accommodate a minimum of three (3) days worth of Collected Material (except Glass and Tin which may be stored outdoors) in the

event of an unscheduled equipment breakdown or unscheduled maintenance at the Designated Facility.

41. Any alternate facility that is used by the Operator for reserve storage capacity must be as close to the City's collection routes for the Co-Mingled Recycling Collection Program as possible, with minimal impact to traffic and residential areas. The Operator shall be responsible for transporting the Collected Materials to such reserve storage facility.
42. The Operator shall maintain a storage and inventory management system at its MRF and at any temporary remote material recovery facility, for tonnage of Collected Material waiting processing, Marketable Materials awaiting delivery to End Markets, and of Residue awaiting disposal. The Operator shall be responsible for weighing and storing of such Marketable Materials and reporting the tonnage of each Marketable Material stored and awaiting sale as part of its Monthly, Quarterly and Annual Reports.

Processing Designated Material into Marketable Material

43. The Operator acknowledges and agrees that following the completion of the sorting of the Collected Materials as specified in sections 32 and 33 herein, the MRF shall be capable of processing any and all of the Designated Materials received throughout the Term and any renewals thereof into Marketable Material regardless of the tonnage, composition or condition of such Designated Materials.
44. The Operator represents, warrants and covenants that when it is processing the Designated Material into the Marketable Material that the Operator shall:
 - (a) use and ensure that the Operator's Equipment is capable of producing a variety of Marketable Material in order to respond to market demands and to optimize revenue;
 - (b) operate the MRF and all of the Operator's Equipment such that the Operator achieves or exceeds the Required Recovery Rate;
 - (c) operate the MRF and all of the Operator's Equipment such that the Operator is capable of processing all tonnages and compositions of Designated Materials that may be received from time to time at no additional cost to the City, the Operator acknowledging and agreeing that the tonnage and composition of Designated Materials will fluctuate over the Term and that the City is not representing, warranting or guaranteeing the tonnage or composition of Designated Materials that may be received by the Operator;
 - (d) perform the Services in such a manner that accommodates the Recycling Collection Schedule, as may be amended from time to time;
 - (e) ensure the total throughput capacity for the MRF is as stated in the Proposal; and

(f) process the Designated Materials in an environmentally and ethically responsible way.

45. In the event the Operator's MRF is unable to process all of the Collected Material and it is necessary for the Operator to transport the Collected Materials to a remote material recovery facility for performance of the Services, then such circumstance shall be deemed a Non-Performance and dealt with in accordance with sections 235 and 236 herein.

Recovery Rate

46. The Recovery Rate is calculated as the ratio of the tonnage of Marketable Material produced at the Designated Facility quarterly to the tonnages of Collected Material Processed for the quarter at the Designated Facility, expressed as a percentage. For the purpose of calculating the Recovery Rate the tonnages of Marketable Material for the quarter as stated in the Quarterly Report for that quarter shall be used.

47. The Operator represents, warrants and guarantees to the City that it shall operate the Designated Facility and carry out the Services in such a fashion that will meet or exceed the Required Recovery Rate at all times.

48. The Operator's Recovery Rate will be determined on a quarterly basis based on the average of the three Monthly Recovery Rate Audits reported in the Quarterly Report for that quarter.

49. Beginning in the second quarter of the first Operating Year, and thereafter for the remainder of the term of the Agreement or any extensions thereof, if the Operator's Recovery Rate for the quarter is less than the Required Recovery Rate then such failure shall be deemed to be Non-Performance and dealt with in accordance with sections 235 and 236 herein.

Monthly Composition Audit

50. The Operator shall, at its own cost and expense, conduct at least one (1) inbound composition audit of the Collected Materials per month for the Term of this Agreement or any extension thereof (the "Monthly Composition Audit") in accordance with the protocol in Schedule "D" to this Agreement.

51. Each Monthly Composition Audit shall be performed by the Operator's suitably trained staff with a City employee entitled to be present and shall identify the following:

- (a) the total Collected Material Tonnes per month,
- (b) proportions of each Designated Material in the Collected Materials;
- (c) proportion of Contaminants in the Collected Materials;
- (d) the Contamination Rate; and

- (e) calculated density of Collected Material.

Independent Audit

52. For the first two Operating Years of this Agreement the Operator shall, at its own cost and expense, arrange for an independent party to conduct one (1) day of in-bound composition audits of the Collected Materials that are received at the Designated Facility per month (the Independent Audit”) in accordance with the protocol in Schedule “D”.
53. Each Independent Audit shall be performed by the Operator’s suitably trained staff with a City employee entitled to be present and shall identify the following:
- (a) the total Collected Materials Tonnes per month,
 - (b) proportions of each Designated Material in the Collected Materials;
 - (c) proportion of Contaminants in the Collected Materials;
 - (d) the Contamination Rate; and
 - (e) calculated density of Collected Material.

Recovery Rate Audit

54. The Operator shall, at its own cost and expense, conduct at least one (1) Recovery Rate audit per month during the Term of this Agreement (the “Monthly Recovery Rate Audit”) in accordance with the Operator’s protocol which formed part of its Proposal and is attached as Schedule “E” to this Agreement.
55. The Parties acknowledge and agree that the Monthly Recovery Rate Audit may be done in conjunction with the Monthly Composition Audit.
56. Each Monthly Recovery Rate Audit shall be performed by the Operator’s suitably trained staff with a City employee entitled to be present and shall identify the Recovery Rate for the Operator’s MRF or any temporary remote material recovery facility that the Operator may be using to provide the Services.

Audit Right of the City

57. In addition to the Monthly Composition Audits, the Independent Audits, or the Recovery Rate Audits, the City shall have the right to perform periodic audits at random and at any time throughout the Term for the purpose of verifying that the Operator is performing all of the Services in compliance with the requirements and obligations set out in this Agreement (the “City Audits”).

58. The Operator will, at no additional cost to the City:
- (a) provide a suitable space for the City or its agent to conduct the City Audits;
 - (b) assist the City or its agent with the City Audits by retrieving and transporting audit samples to a suitable audit space available at the MRF;
 - (c) provide any documents or procure the provision of documents relating to the Agreement and the Operator's performance of the Services as may be reasonably required by the City; and
 - (d) co-operate fully and in a timely manner with any reasonable request by the City (whether made by an internal or external auditor), and provide any other assistance as required.
59. In the event that the City Audit determines that the Operator has not complied with any requirement or obligation under this Agreement, the Operator shall immediately remedy such non-compliance and shall reimburse the City for the cost of conducting such City Audit. The City shall also be entitled to recover the cost of such City Audit from the Monthly Invoices submitted by the Operator in accordance with sections 98, 99 and 100 herein.
60. In the event that the City Audit determines that the Operator has complied with all of the requirements under the Agreement, then the cost of conducting such City Audit shall be borne by the City.

Marketing Marketable Material

61. The Operator shall carry out its marketing plan for the sale of Marketable Materials in accordance with the Operator's plan which formed part of its Proposal and is attached as Schedule "F" to this Agreement.
62. The Operator shall, at its own cost and expense, be responsible for weighing, transporting and marketing all Marketable Material to reliable and ethical End Markets while optimizing revenue. The Operator shall be responsible for marketing all of all Marketable Materials and shall at minimum undertake the following:
- (a) manage the proposed grade of Marketable Material(s) that is intended to be produced for each of those items with a goal of maximizing revenue;
 - (b) obtain access to markets for the Marketable Materials;
 - (c) sustain suitable markets for the Marketable Materials;
 - (d) enter into contracts with End Markets for the sale of Marketable Materials;
 - (e) transport the Marketable Material to the End Market;

- (f) arrange all inventory controls for the Marketable Material;
 - (g) track all Marketable Material sent to End Markets; and
 - (h) collect, in a timely manner, all revenue for the Marketable Material from End Markets.
63. The Operator shall provide to the City, if requested by the City, copies of any and all current marketing agreements relating to the sale of all Marketable Materials to primary and secondary markets for each commodity within thirty (30) days of the date that such request is made by the City. As such agreements change, expire and are renegotiated current and revised the Operator shall provide copies of all such agreements to the City.
64. If the Operator determines, after using and exhausting its best efforts at marketing and after documenting and reporting the potential markets' responses to the Marketable Material, that a particular Marketable Material has no market (at that particular time), the Operator and the City shall meet jointly to determine an appropriate course of action and resolution to the any issues that may occur. Parties agree to resolve any such dispute in accordance with the dispute resolution provisions in section 279 of this Agreement
65. In the event the Province of Saskatchewan develops the Multi-Material Recycling Program ("MMRP"), or a similar program that requires the City to sell recyclable materials collected through the Co-Mingled Recycling Collection Program to designated buyers, the Operator acknowledges and agrees that it will be required to sell the Marketable Materials to such designated buyer and to comply with the requirements of MMRP.
66. In the event that the Operator wishes to sell the Marketable Material to itself or to an entity or person under the Control of the Operator then the Operator shall satisfy the City that the sale price of the Marketable Material to the Operator or the entity or person under the Control of the Operator was equal to or exceeded the sale price of the Marketable Materials to an arms-length End Market. Upon receipt of such information the City may, at its sole discretion consent to the sale of the Marketable Material to the Operator or the entity or person under the Control of the Operator.

Disposing of Residue

67. The Operator shall, at its own cost and expense be responsible for the weighing, reporting, transporting and disposing of all Residue to a licensed waste management facility, in accordance with Applicable Laws.

APPLICABLE LAWS

68. The Operator shall provide the Service in accordance with *The Regina Waste Management Bylaw* No. 8942. Should this Bylaw be amended during the Term of this Agreement or should a new Bylaw be passed by City Council during the Term of this Agreement, the Operator shall make changes necessary to comply with these Bylaw

revisions and shall not be entitled to any addition to or deletion from the Processing Fee unless the City Representative determines that the changes require substantial changes in the Operator's service procedure.

OPERATOR REPRESENTATIONS AND WARRANTIES

69. The Operator represents, warrants and covenants that it shall at its own cost and expense:

- (a) provide all labour, equipment and materials required to perform the Services;
- (b) obtain and maintain all licenses, approvals and permits required by any government department, ministry or agency, including the City, for the delivery of the Services, and shall provide, at the request of the City, proof of such licenses, approvals and/or permits
- (c) not, except in accordance with this Agreement, receive monies or favour for the delivery of the Services, and shall ensure compliance by all Operator Personnel;
- (d) not sell, rent, lease, promote or donate any Collected Materials except in accordance with the terms of this Agreement;
- (e) in the event that the work of another contractor retained by the City (such as snow removal, parking, construction, etc.) prevents the Operator from performing the Services, make appropriate arrangements to ensure that there is no disruption of Services;
- (f) provide the Services in accordance with Good Industry Practice; and
- (g) comply with all Applicable Laws in delivering the Services.

Variability

70. The Operator acknowledges and agrees that:

- (a) there may be considerable variation in the amount of Collected Materials to be collected in a given Business Day and over the Term of this Agreement; and
- (b) the City makes no guarantee as to the volume or composition of Collected Materials.

71. The City makes no representation or warranty that historical data or information relating to recycling volumes and/or tonnages represents an accurate forecast of future volumes and/or tonnages. In particular, the Operator acknowledges that:

- (a) the Operator is solely responsible and assumes the risk for determining or predicting volumes and/or tonnages of Collected Material to be collected over the Term of the Agreement;

(b) there may be seasonal and yearly fluctuations in the volumes and/or tonnages of Collected Material which may be experienced. These are conditions over which the City has no control and the Operator shall be prepared to overcome any problems arising from any variations in quantities whatsoever;

(c) the City is actively encouraging customers and other persons to divert waste to recycling wherever possible. Such efforts by the City are likely to change the volumes and/or tonnages of Collected Material to be collected over the Term of the Agreement.

72. The Operator represents that it has factored the above volume/tonnage fluctuations into its determination of the Processing Fee under this Agreement. The Operator hereby waives, releases and discharges the City from any and all claims that may arise at any time in the event the actual volumes and/or tonnages of Collected Material differ from those determined or predicted by the Operator.

73. The Operator agrees that notwithstanding any variation, it is required to meet any and all variation in demand by using extra Equipment, Operator Personnel or overtime if required, in order that Collected Materials shall be processed in accordance with the requirements of this Agreement.

CHANGE MANAGEMENT

Changes to Services

74. The Parties each agree that they will use commercially reasonable efforts to ensure continuous improvement in the way that the Services are performed having regard to a combination of economy, efficiency and effectiveness, sustainability and achieving the best value in the manner in which the Services are performed. In order to ensure continuous improvement in the Services, the Parties agree that either Party may make changes to the Services in accordance with process outlined sections 76 to 89 herein.

Changes to Designated Material

75. The Operator acknowledges and agrees that the City is committed to maximizing the diversion of Designated Material from the Landfill and changes to the Services, including but not limited to the expansion or reduction of what constitutes Designated Materials, the addition or subtraction of Designated Residences or the utilization or new procedures or technologies may be required in order to increase and support the City's diversion goals. The Operator acknowledges that the City may expand or reduce what constitutes Designated Materials in accordance with the process outlined in sections 76 to 89 herein.

Changes Initiated by the City

76. The City shall be entitled to make changes to the Services and/or the Agreement in accordance with sections 76 to 83 herein. If the City requires a change, the City shall notify the Operator, in writing, describing the required change in sufficient detail so as to enable the Operator to calculate and provide an estimate of the increase or decrease in its costs (the "Estimate"), if any.

77. As soon as practicable, and in any event within fifteen (15) Business Days after having received notification from the City, the Operator shall deliver the Estimate to the City. The Estimate shall state:
- (a) the impact, if any, which the proposed change will have on the provision of the Services;
 - (b) any amendment which may be required to be made to the Agreement as a result of the proposed change;
 - (c) any change in Operator costs that may result from the proposed change;
 - (d) any loss of revenue that may result from the proposed change;
 - (e) any gain in revenue that may result from the proposed change; and
 - (f) any adjustment to the Processing Fee which the Operator intends to propose.
78. The Operator shall provide, with the Estimate, objective evidence that it has used best efforts to minimize any increase in costs and maximize any reduction in costs, demonstrating that any costs to be incurred or avoided have been measured in a cost-effective manner.
79. If the Operator shall comply with Good Industry Practice with the objective of ensuring that it obtains best value for money when procuring any work, services, supplies, materials or equipment required in relation to the change in the Services.
80. As soon as practicable after the City receives the Estimate, the Parties shall discuss and use reasonable commercial efforts to reach agreement on the issues set out in the Estimate.
81. If the Parties cannot agree on the Estimate then, unless the City withdraws the proposed change, the dispute will be determined in accordance with section 279 herein.
82. As soon as practicable after the Estimate has been agreed upon or otherwise determined pursuant to section 80 herein the City shall:
- (a) confirm in writing the Estimate (as such may have been modified), subject to Council approval; or
 - (b) withdraw the proposed change.
83. If the City does not provide the written confirmation referred to in section 80 herein within twenty (20) Business Days of the contents of the Estimate having been agreed or determined, then, the City's proposed change shall be deemed to have been withdrawn.

Changes Initiated by the Operator

84. If the Operator wishes to propose a change in the Services and/or the Agreement, it must notify the City. The Operator shall:
- (a) set out in writing the proposed change in sufficient detail to enable the City to evaluate it in full;
 - (b) specify the Operator's reasons for proposing the change;
 - (c) consult with the City with a view to determining whether the City is prepared to agree to the change and, if so, what resulting changes to the Services and/or the Agreement that the City may require;
 - (d) describe the implications of the change, including any anticipated change in the costs of providing the Services and any gain or loss in revenue to the Operator potentially associated with the proposed change;
 - (e) indicate, in particular, whether a variation to the Processing Fee is proposed (and, if so, provide a detailed cost breakdown of such proposed change); and
 - (f) identify any timeframe, if applicable, by which a decision by the City is critical, explaining the reasons why.
85. The City shall evaluate the Operator's proposed change, taking into account all relevant issues, including:
- (a) whether a change in the Processing Fee is proposed or will occur;
 - (b) whether the proposed change affects the quality of the Services or the likelihood of successful delivery of the changed Services;
 - (c) whether the proposed change will interfere with the City's relationship with third parties;
 - (d) whether the Operator has sufficient financial strength to perform the proposed changed Services; and
 - (e) whether the proposed change materially affects the risks or costs to which the City is exposed.
86. As soon as practicable after the City receives full details of the Operator's proposed change, the Parties shall discuss and use reasonable commercial efforts to reach agreement on the proposed change. During such discussions, the City, in its sole discretion, may propose modifications or may reject or, subject to Council approval, may accept the Operator's proposed change.

87. If the Operator's proposed change (with or without modification) is approved by Council, the relevant change in the Services shall be implemented within fifteen (15) Business Days of such approval, unless the Parties agree to a different implementation timeframe.
88. Unless the City, following approval by Council, agrees in writing to an increase in the Processing Fee there shall be no increase in the Processing Fee as a result of a change in the Services and/or the Agreement proposed by the Operator.
89. Where the Operator proposes a change in the Services and/or the Agreement which is accepted by the City and which results in a reduction of the cost to the Operator to provide Services, with the result that the Processing Fee is reduced by an amount equal to the cost reduction, the City agrees to make a one-time payment to the Operator in the Operating Year next following the implementation of the change in the amount of 50% of the cost reduction achieved for that year.

PAYMENTS

Processing Fee

90. The City shall, upon receipt of the relevant Monthly Invoice and Monthly Report, pay the Processing Fee to the Operator for the Services rendered during each month during the term of this Agreement or any extension thereof, such Processing Fee shall be calculated as follows:

$$\begin{array}{l} \text{applicable Unit Processing Fee prescribed in Schedule "C"} \\ \times \\ \text{number of Tonnes of Collected Material Processed in the month} \\ \hline \text{Processing Fee} \end{array}$$

91. For further certainty, the Parties agree that the steps to calculating the Processing Fee are as follows:
- (a) determine the Contamination Rate used to determine which row in Schedule "C" by using the average Contamination Rate from the Monthly Composition Audit and each monthly Independent Audit during the first two Operating Years, and thereafter, based on the Contamination Rate in each Monthly Composition Audit;
 - (b) determine the Collected Material Tonnes per Operating Year to determine which column in Schedule "C" by multiplying the Collected Material Tonnes for the respective month by 12;
 - (c) using the information from subsections (a) and (b) determine the applicable Unit Processing Fee in Schedule "C";
 - (d) determine the number of Tonnes of Collected Material Processed for the month in question based on the Monthly Report;

- (e) multiply the applicable Unit Processing Fee (determined in subsection (c)) by the number of Tonnes of Collected Material Processed (determined in subsection (d)); and
- (f) the result of the calculation completed in accordance with subsection (e) will be equal to the Processing Fee for the month in question.

92. The Parties acknowledge and agree that following the first Operating Year, the Unit Processing Fees identified in Schedule "C" to this Agreement shall be adjusted and recalculated to account for increases in the CPI. The Unit Processing Fees shall be adjusted, beginning in the second Operating Year, as follows:

Unit Processing Fee for previous Operating Year

x

100% of the percentage change in the CPI over the previous Operating Year

Revenue Sharing

93. The Operator shall share the Net Revenue (Net Loss) with the City in the following proportions (the "Revenue Sharing"):

- (a) 75% of the Net Revenue (Net Loss) belonging to the Operator; and
- (b) 25% of the Net Revenue (Net Loss) payable to the City from the Operator

94. The Operator acknowledges and agrees that any uncollected invoices or bad debt incurred, experienced or accrued through the marketing of Marketable Materials will not reduce the value of the portion of Revenue Sharing that the City receives.

95. If during the Term, the MRF or any temporary, remote material recovery facility, or any portion thereof is damaged or destroyed by fire or by other casualty such that the Operator cannot provide the Services in accordance with the terms and conditions of this Agreement for a period of thirty (30) consecutive days or longer (the "Downtime") then the City's Revenue Sharing portion for such Downtime shall be equal to an average of the Revenue Share payment for the previous three (3) quarters prior to such fire or other casualty occurred.

96. The City shall have the right to review all of the Operator's documentation relating to the sale of Marketable Materials.

INVOICES

97. During the term of the Agreement and any extensions thereof, the Operator shall provide an invoice to the City within fifteen (15) days after the end of the applicable month with sufficient detail of the Processing Fee and the monthly calculation together with the supporting weigh scale records and details for that month (the "Monthly Invoice").

98. The Monthly Invoice must show the calculation and amount of:
- (a) payment due to Operator (Processing Fee payment);
 - (b) payment due to the City (Revenue Sharing payment); and
 - (c) all applicable taxes.
99. The Monthly Invoice shall specify the calculated net payment due to the Operator or City after set-off.
100. In addition to the payment items listed as part of the Monthly Invoice above, the following payments must be subtracted from the quarterly invoices:
- (a) Payments Due to the City, including:
 - (i) Liquidated Damages for Loss 1 where the Operator fails to or is unable to accept Collected Materials at a temporary Transfer Station or at the Operator's MRF as specified in sections 17 and 18 herein ;
 - (ii) Liquidated Damages for Loss 2 where the Operator fails to have a permanent MRF operational and providing all of the Services set out in this RFP on or before July 1, 2014 as specified in sections 19 and 20 herein;
 - (iii) Liquidated Damages for Operator's delay in unloading Collection Vehicles as specified in section 31 herein;
 - (iv) Liquidated Damages for Operator's failure to meet the Required Recovery Rate in the Recovery Rate Audits for the 4th, 7th and 10th calendar month for each Operating Year or the 1st calendar month of the following Operating Year, as may be applicable for that quarterly invoice as specified in section 49 herein;
 - (v) Liquidated Damages for the Operator's failure to be able to process all of the Collected Materials at the Designated Facility as specified ins section 45 herein; and
 - (vi) the City's costs for the City's Audits, as shown on the Monthly Invoice from the City to the Operator as permitted by section 59.
101. The Operator's quarterly invoice shall specify the calculated net payment due to the Operator or City after set-off taking into account less any applicable Liquidated Damages for Non-Performance and the costs for the City's Audits.
102. The City shall make payment to the Operator within thirty (30) days of receipt and acceptance by the City of the invoice. Where the date for payment falls on Saturday, Sunday or a Statutory Holiday, the last day for payment shall be deemed to be the next Business Day following the thirtieth day.

103. In the event the payment due to the City exceeds the payment due to the Operator then the Operator shall pay to the City the City's proportion of the Revenue Sharing by certified cheque, electronic transfer or bank draft issued and delivered to the City no later than thirty (30) days after the last day of the month in which the Marketable Material was loaded and transported to a buyer. Such payment shall be accompanied by the Monthly Report for that Month.
104. The Operator acknowledges and agrees that payment to the Operator will be made by the City out of the funds under the control of the City in its public capacity, and no member of Council or officer or employee of the City may be held personally liable or responsible to the Operator for payment under any circumstances whatsoever.
105. In the event that the City wishes to dispute any invoice received from the Operator, the City shall notify the Operator in writing within fifteen (15) days of the date that the City received the invoice, stating the reasons why the invoice is disputed. For the avoidance of doubt, the City may withhold payment of any disputed amount until any dispute is settled directly between the Parties or in accordance with section 279 herein.
106. Within five (5) Business Days of the Operator's receipt of any notice served by the City pursuant to section 105 herein, the Operator shall respond by notifying the City as to whether or not it agrees with the statements made or with the supporting evidence supplied with the notice. If the Operator indicates that it does agree, or if the Operator fails to make such a response within that time limit, the City shall be entitled to retain on a permanent basis any amounts withheld by the City and to reclaim from the Operator the amount of any over-payment which may have been made to the Operator.
107. In the event that the Operator responds to the City's notice sent pursuant to section 105 herein that the Operator does not agree with all or any of the statements made in any notice served by the City, then the Parties agree that matter or matters in question shall be determined pursuant to section 279 herein.

Set-off and Moneys Due to the City

108. Notwithstanding any other provision in this Agreement, the City shall have the right to set-off and retain out of any monies due to the Operator such sum or sums as the City may deem necessary to protect the City from any claims against it by third parties arising out of the Operator's performance or non-performance of this Agreement and any payment to the City of Liquidated Damages which may have been, or may in the future be payable by the Operator under any provision of this Agreement.
109. The Operator agrees that should the amount retained in accordance with section 108 herein prove insufficient to meet the Operator's financial obligations, the City may enforce its claim for any deficiency against the Operator or the Performance Security. Should the amount retained exceed the total of any claims and associated legal costs, the excess will be paid to the Operator without interest within thirty (30) days of a final determination of the amount properly owing.

TAXES

110. The Operator warrants that it:

- (a) is a registrant for the purposes of the Goods and Services Tax (Canada) (GST) with the following registration # _____ <insert GST #>; and
- (b) will remit the GST and the PST payable on the fees in section 90 and 93 as required by Applicable Law.

111. The Operator agrees that all Canadian G.S.T. and any taxes or duties imposed by the *Excise Tax Act* or the Customs Tariff and tax or duty rate decreases or exemptions resulting from amendments, re-classifications, remissions, or clarifications thereof on tax or duty-included goods and materials, whether recognized or not at the time of award, will be passed on to the City.

112. G.S.T. not submitted in accordance with the requested status will be adjusted accordingly for the purpose of Proposal evaluation. If pricing offered does not list applied G.S.T. as a separate item, the City will assume the Proposer has omitted such tax and the Proposal offer will be adjusted accordingly to include the appropriate tax, and the City will consider the Proposal so amended.

113. If the Operator manufactures or purchases any goods with respect to the Services from outside of Canada, the Operator must ensure that its agent or representative is the importer of record, unless otherwise expressly stipulated.

114. The Operator agrees that the City will not be liable for and the Operator shall indemnify the City with respect to any special or dumping duties which may be levied by the Canada Border Services Agency (CBSA), Anti-Dumping and Countervailing Directorate under the provisions of the *Special Import Measures Act* (SIMA), upon any imported goods required in the supply of materials in any order or in the performance of this Agreement awarded as a result of its RFP.

REPORTING**Monthly Report**

115. Every Monthly Invoice shall be accompanied by the Operator's monthly report (the "Monthly Report"), which, at minimum, shall include:

- (a) dates that Collected Materials were deposited at the MRF or temporary Transfer Station;
- (b) scale tickets for all Collection Vehicles that deposited Collected Materials at the MRF or temporary Transfer Station during that month;
- (c) monthly total tonnage of Designated Material by type and collection route number;

- (d) monthly tonnage of Collected Material Processed;
- (e) monthly tonnage of Marketed Materials shipped to market;
- (f) monthly tonnage of Marketed Materials awaiting delivery to End Markets but which are still at the MRF;
- (g) the monthly tonnage of Residue generated from the Collected Material;
- (h) the monthly tonnage of Residue shipped for disposal;
- (i) the name and location of the licensed waste management facility where the Residue were disposed of;
- (j) monthly Net Revenue (Net Loss) the Operator received from the sale of Marketable Materials by each Marketable Material and identification of the City's portion thereof;
- (k) names and location each End Market for the Marketable Materials sold that month;
- (l) the Processing Fee due to the Operator from the City;
- (m) the Monthly Composition Audit report;
- (n) the Monthly Independent Audit (for the first two Operating Years of this Agreement);
- (o) the Monthly Recovery Rate Audit report;
- (p) the overall Recovery Rate of the MRF for the month; and
- (q) such other material and information as the City may request from time to time.

116. Monthly reports of the previous month's activities will be due to the City by the last day of each month. Following termination or expiration of this Agreement, the final Monthly Report is due on the 15th of the month following the final month of the term or from the date of termination.

Quarterly Report

117. The Operator shall provide the City with quarterly reports which shall be due to the City on the 15th day of the 4th, 7th and 10th calendar month for each Operating Year and the 15th day of the 1st calendar month of the following Operating Year (the "Quarterly Report").

118. At minimum, the Quarterly Report shall include:
- (a) dates that Collected Materials were deposited at the MRF or temporary Transfer Station;
 - (b) scale tickets for all Collection Vehicles that deposited Collected Materials at the MRF or temporary Transfer Station during that month;
 - (c) quarterly total tonnage of Designated Material by type and collection route number;
 - (d) quarterly tonnage of Collected Material Processed;
 - (e) quarterly tonnage of Marketed Materials shipped to market;
 - (f) quarterly tonnage of Marketed Materials awaiting delivery to End Markets but which are still at the MRF;
 - (g) quarterly tonnage of Residue generated from the Collected Material;
 - (h) quarterly tonnage of Residue shipped for disposal;
 - (i) name and location of the licensed waste management facility where the Residue were disposed of;
 - (j) monthly Net Revenue (Net Loss) the Operator received from the sale of Marketable Materials by each Marketable Material and identification of the City's portion thereof;
 - (k) names and location each End Market for the Marketable Materials sold that quarter;
 - (l) the Processing Fee due to the Operator from the City;
 - (m) the Monthly Composition Audit report;
 - (n) the Monthly Independent Audit (for the first two Operating Years of this Agreement);
 - (o) the Monthly Recovery Rate Audit report;
 - (p) the overall Recovery Rate of the MRF for the quarter; and
 - (q) such other material and information as the City may request from time to time.

119. Following termination or expiration of this Agreement, the final Quarterly Report is due on the 15th of the month following the final month of the term or from the date of termination.

Annual Report

120. Annual reports shall be due by October 31st of each year of the term of this Agreement between the City and the Operator (the "Annual Report").
121. At minimum, the Annual Report shall include:
- (a) annual total tonnage of Designated Material by type and collection route number;
 - (b) annual tonnage of Marketed Materials shipped to market;
 - (c) annual tonnage of Marketed Materials awaiting delivery to End Markets but which are still at the MRF;
 - (d) annual tonnage of Collected Material Processed;
 - (e) annual tonnage of Residue generated from the Collected Material;
 - (f) annual tonnage of Residue shipped for disposal;
 - (g) annual Net Revenue (Net Loss) the Operator received from the sale of Marketable Materials by each Marketable Material and identification of the City's portion thereof;
 - (h) the Processing Fee due to the Operator from the City;
 - (i) the Operator's cost per Tonne to process Designated Material;
 - (j) the Operator's cost per Tonne for Residual disposal (including hauling cost);
 - (k) net revenue/Tonne for each Marketed Material;
 - (l) average revenue per Tonne for all Marketed Material;
 - (m) the Monthly Independent Audit (for the first two Operating Years of this Agreement);
 - (n) the Monthly Recovery Rate Audit report;
 - (o) the overall Recovery Rate of the MRF for the Operating Year; and
 - (p) such other material and information as the City may request from time to time.

122. Following termination or expiration of this Agreement, the final Annual Report is due on the 15th of the month following the final month of the term or from the date of termination.

DATA SHARING

123. The Operator shall keep records and data on a daily and cumulative basis regarding the City's Co-Mingled Recycling Processing Program which shall be available to the City upon request.

124. All data sharing provided to the City must be provided in the following forms:

- (a) batch files must be in a format acceptable to the City (CSV type); and
- (b) must be provided through a secure FTP site .

125. The Operator shall provide the Monthly, Quarterly and Annual Reports in a written format as well as electronically in a form the City can use in subsequent reporting and analysis.
126. The Operator shall maintain records for the Services for the term of this Agreement and any extensions thereof plus a period of two (2) years following the termination of this Agreement.
127. The City may at any time request the Operator to produce for inspection any records and reports relating to the provision of the Services. The City may photocopy such records and reports as it deems appropriate.

CONTRACT MANAGEMENT

128. During the first year of the Term the Operator Representative will attend monthly meetings with the City Representative on the first Business Day of every month at a time and place to be agreed, to discuss the quality, performance and other matters related to the Services.
129. Following the first year of the Term, the City Representative and the Operator Representative shall attend at least two (2) meetings during each subsequent year of the Term of this Agreement at such place and time as may be agreed to by the Parties, acting reasonably, to discuss the quality, performance and other matters related to the Services.
130. The Operator shall have procedures for reporting incidents to the City and other appropriate officials as required by Applicable Laws.

COMMUNICATION WITH COLLECTION CONTRACTOR

131. The Operator shall maintain a cordial and collegial working relationship with the Co-Mingled Recycling Collection Program collector to ensure an efficient operation of the Co-Mingled Recycling Collection Program using the methods and communication tools the Operator identified in its Proposal.

TEMPORARY TRANSFER STATION

132. The Operator acknowledges and agrees that it is essential to the successful operation of the City Co-Mingled Recycling Collection Program that the Operator be able to receive Collected Material beginning on July 1, 2013.
133. The Operator shall endeavour, using its best efforts to have its MRF operational and capable of performing all of the Services on or before July 1, 2013.
134. In the event the Operator, despite its best efforts, is unable to have its MRF operational and capable of performing all of the Services on or before July 1, 2013 then the Operator shall construct its Transfer Station at a location within the City boundary or within a radius of 10 kilometres from the centroid of the City at the site identified in the Operator's Proposal. This Transfer Station shall be capable of receiving the Collected Material, in the manner required in this Agreement, on or before July 1, 2013.
135. If the Operator fails to have its temporary Transfer Station capable of receiving Collected Material, in the manner required in this Agreement, on or before July 1, 2013 then such failure shall be deemed an event of Non-Performance and dealt with in accordance with section ____.
136. The Operator shall construct its temporary Transfer Station in accordance with the plans that it provided to the City in its Proposal and shall be capable of receiving all Collected Material.
137. The Operator shall have a scale weigh in and out process at the Transfer Station to ensure that all Collected Materials are weighed at the Transfer Station. The scale at the Transfer Station shall meet the requirements in sections 24 to 28 herein.
138. The Operator acknowledges and agrees that once the Collected Material has been weighed and tipped at the Transfer Station then the Operator shall make arrangements for all of the Services required to be provided in this Agreement in relation to that Collected Material to be done at a material recycling facility, until such time as the Operator's MRF is fully operational and capable of carrying out all of the Services.
139. The Operator acknowledges that any contract that an Operator enters into with a material recovery facility to take Collected Materials until the Operator's own MRF is fully operational and providing all of the Services shall ensure that the Operator is still providing all of the Services of the this Agreement.
140. If the Operator is unable to make contractual arrangements with the material recovery facility to allow participation by the City in the Monthly Composition Audits then the Operator shall conduct Monthly Composition Audits prior to transporting the Collected Material to a remote material recovery facility.

141. The Operator shall provide vehicles in sufficient number and frequency to transfer the Collected Materials from the temporary Transfer Station to a material recycling facility.
142. The Operator agrees and acknowledges that a Transfer Station may only be in operation until July 1, 2014.
143. In the event the Operator is still using its temporary Transfer Station on July 1, 2015 the City shall be entitled, in its sole discretion to terminate this Agreement immediately.

HOURS OF OPERATION

144. The Operator shall operate the Transfer Station and its MRF to accommodate the Co-Mingled Recycling Collection Program's Recycling Collection Schedule.
145. The Operator acknowledges that should the Recycling Collection Schedule fall on a Statutory Holiday, the City's collection contractor shall not alter the Recycling Collection Schedule or its services and will be responsible for providing the collection service, in accordance with the established collection route(s) and the Recycling Collection Schedule. The Operator shall adjust its hours of operation of the Designated Facility to be able to accept Collected Material on Statutory Holidays with the exception of Christmas Day.
146. The exception to the Statutory Holiday Recycling Collection Schedule shall be Christmas Day. In the event that a regularly scheduled collection day falls on Christmas Day, the City's collection contractor shall provide the collection services scheduled for Christmas Day on the next following Saturday following Christmas Day and the Operator shall operate the Designated Facility on such a Saturday.
147. If the Co-Mingled Recycling Collection Program does not operate or does not operate for a full day due to Bad Weather or for such other reasons as the City may, in its sole discretion determine, then the City shall notify the Operator of the work stoppage and communicate the City's initial anticipated plan to return to the Recycle Collection Schedule
148. The Recycling Collection Schedule are subject to by the City change during the Term of this Agreement or any extensions thereof, and the Operator is required to accommodate its schedule to ensure that matches the Recycling Collection Schedule. The Operator acknowledges and agrees that it shall perform the Services on whatever days or portion of days the City operates its Co-Mingled Recycling Collection Program and remain open to accepting Collection Vehicles until the last Collection Vehicle has tipped its contents at the Designated Facility for that day.
149. The City shall provide the Operator with 7 days notice of any change in the Recycling Collection Schedule.

PLANS**Management Plan**

150. The Operator shall maintain, update and carry out its project management plan in the manner provided for in its Proposal

Contingency Plan

151. The Operator shall maintain throughout the term of this Agreement and any renewals thereof a written contingency plan for the Services that provides for the Operator being able to perform all Services, comply with all terms and conditions of this Agreement, and addresses alternative arrangements for the performance of the Services in the event of, but not limited to, ice storms, spill of materials, extreme snow storms, floods, fire, natural disasters that would require deviation from normal operating procedures, equipment breakdown at the MRF or Transfer Station, the Operator unable to process all Collected Materials, the Operator unable to store all the Collected Materials, a strike by the Operator's employees, Bad Weather, emergencies, other service disruptions at the MRF or Transfer Station, a situation where the MRF or Transfer Station be unable to accept and process Collected Materials from the City for longer than three (3) days of time, or where the Operator is unable to find or deliver Marketable Materials to End Markets.

152. The contingency plan shall be updated annually by the Operator and a copy provided to the City within one (1) month of the updating of such a plan.

Strike Plan

153. The Operators acknowledges and agrees that its strike contingency plan will address alternative methods for the collection of Collected Material so as to maintain the Services in the event of a labour dispute between the Operator and Operator Personnel. The Operator shall maintain the Services in the event of such a labour dispute.

154. The Operator shall regularly monitor and update its strike contingency plan and shall notify the City within 24 hours of any changes to the contingency plan.

155. The Operator shall implement its strike contingency plan where necessary or at the direction of the City.

Emergency Plan

156. The Operators acknowledges and agrees that its emergency plan will detail those actions which the Operator will take to ensure the Services are maintained during emergency situations would require deviation from normal operating procedures.

157. The City has authority in an emergency to stop the progress of the Services whenever, in its opinion, such stoppage may be necessary to ensure the safety of life, or the Services, or neighbouring property. This includes authority to make changes in the Services, and to order, assess and award the cost of such work, extra to this Agreement or otherwise, as may in its opinion be necessary. The City will immediately confirm in writing any such instructions to the Operator. The Operator shall take such measures as may be specified

by the City that the City considers necessary for the purposes of removing any source of danger or to protect any person, property and the Services from danger.

158. The emergency plan shall be updated annually by the Operator and a copy provided to the City within one (1) month of the updating of such a plan.

Safety Management Practices Plan

159. The Operator acknowledges and agrees that it has and will follow its written health and safety plan. The Operator's health and safety plan shall have a written accident prevention plan, loss prevention plan, and safety management system plan.
160. The Operator's health and safety plan shall be updated annually by the Operator and a copy provided to the City within one (1) month of the updating of such a plan.

OPERATOR PERSONNEL

161. In providing the Services the Operator shall:
- (a) provide all labour required to perform the Services;
 - (b) ensure that all Operator Personnel have sufficient abilities, skills, knowledge, training, qualifications and experience to safely provide the Services;
 - (c) ensure that sufficient reserve personnel are available to provide the Services at all times; and
 - (d) ensure that all Operator Personnel charged with the operation of vehicles possess a the required class of license.
162. The Operator shall ensure that all Operator Personnel shall be at all times properly and sufficiently trained and instructed in the task or tasks that must be performed, and the need to maintain the highest standards of courtesy and consideration to the public to protect and promote the image and/or reputation of the City.
163. The Operator shall ensure all Operator Personnel have and wear all applicable safety equipment to be worn while performing the Services. The Operator must ensure that all Operator Personnel have and wear protective footwear, gloves, safety vests, eye protection and, upon request, noise protection and dust masks and any other safety equipment required by Applicable Laws or as a result of the operations proposed.
164. The Operator must ensure that a high standard of service, courtesy and consideration is exhibited in all Operator Personnel dealings with citizens, visitors, the general public, as well as other City employees, and that the Operator conducts all of its operations, including its administrative functions, with the utmost regard for enhancing public relations and in recognition of the need to uphold and maintain the positive public image of the City.

165. The Operator shall comply with fair wage practices and the Operator shall comply with Applicable Laws so as to not unlawfully discriminate within the meaning and scope of all legislation which may be in force from time to time, including on the basis of gender, race, religion, marital status, sexual orientation, age and disability.
166. The Operator shall do all such things as may be reasonably required by the City from time to time to facilitate compliance by the City having regard to the need to eliminate unlawful discrimination and to positively promote equality of opportunity and good relations between persons of different backgrounds.
167. The Operator shall take all reasonable steps to ensure that Operator Personnel comply with sections 161 to 166 herein.

MEDIA RELATIONS

168. The Operator shall notify City Representative or his or her designate of all requests for media interviews related to providing services to the City within one (1) hour of request. Before responding to any inquiries involving controversial issues, the Operator will discuss proposed response with the City Representative or his or her designate.
169. Copies of draft news releases or proposed trade journal articles shall be submitted to the City Representative or his or her designate for review and approval at least five (5) working days in advance of release.
170. Copies of articles resulting from media interviews or news releases shall be provided to the City Representative or his or her designate within five (5) days after publication.

TOURS OF THE MATERIALS RECOVERY FACILITY

171. The Operator, with reasonable advanced notice to the Operator, may allow the City to conduct tours of the MRF with the assistance and supervision of designated Operator Personnel during normal operating hours of the MRF.
172. The City shall, whenever possible, provide twenty-four hour notice to the Operator of any upcoming tour. The City shall provide appropriate personal protective equipment for all tour participants and shall take all steps reasonably necessary during the tour to not interfere with the Services and to observe all safety rules and procedure for the Materials Recovery Facility.
173. Tour participants shall not be required to sign confidentiality agreements to have access to the Materials Recovery Facility.

OPERATOR OFFICE

174. The Operator shall maintain an office in Regina, Saskatchewan that will be staffed by a competent person during all times that the Services are being performed. At a minimum, the office hours shall be 7:30 a.m. to 5:00 p.m. on Business Days, including Statutory Holidays, except Christmas Day. The Operator agrees that the telephone number for such office shall be established such that no long distance fees shall apply.

ACCESS TO DESIGNATED FACILITY

175. The Operator shall allow the Inspector and any other City employees invited by the Inspector access to the Designated Facility at any time during normal operating hours of the MRF.
176. The Operator shall allow the Inspector and other City employees invited by the Inspector access to the Designated Facility outside of normal operating hours when reasonable notice is provided to the Operator.
177. The Inspector and invited City employees shall take all steps reasonably necessary in the exercise of access to not interfere with the Services and to observe all safety rules and procedures for the Designated Facility. The Inspector and the invited City employees shall not be required to sign confidentiality agreements to have access to the Designated Facility.

CITY REPRESENTATIVES**Chief Administrative Officer**

178. The Deputy City Manager of Operations shall oversee the performance of this Agreement on behalf of the City.
179. The City may designate by notice in writing to the Operator a person or persons to act in place of the Deputy City Manager of Operations under this Agreement (the “**City Representative(s)**”), and any representative so designated shall have the full power to oversee the performance of this Agreement, and the Operator shall comply with all instructions of the person(s) so designated.
180. The City may, at any time during the Term, change the appointed City Representative on written notice to the Operator.

Inspectors

181. The City may from time to time appoint one or more Inspectors to monitor and assist in the management of the Services and this Agreement. The City may, at any time during the Term, change the appointed Inspectors by written notice to the Operator.
182. The Operator acknowledges and agrees that the Inspector may make corrective orders or request that the Operator to stop performing any portion of the Services if the Services are not being executed in accordance with the provisions of the Agreement. The Operator acknowledges and agrees that the Inspector shall monitor waiting times of Collection Vehicles.
183. The Operator agrees to immediately comply with any orders or directions provided by the Inspectors, and shall cause the Operator Personnel to immediately comply with all orders issued by Inspectors.

184. The City may request that Inspectors be permitted to take photographs or video recording of the MRF, the Temporary Transfer Station, or at any material recovery facility not owned by the Operator, other property, Equipment, Collected Materials, Marketable Materials, and Residue for the purpose of monitoring the Services.

OFFICE SPACE FOR CITY

185. The MRF shall have a suitably furnished office with a desk, chair, shelving and climate controlled office available for the sole use of Inspectors, City employees, or designates. Such an office must be a minimum of 10 feet x 10 feet and be equipped with one telephone line, one computer line that has access to a high speed broadband connection. The office must have a lockable door.
186. The Operator shall permit Inspectors, City employees, or designates to be stationed periodically at the MRF for monitoring of daily operation, as well full visitation during working hours on a regular basis. Inspectors, City employees, or designates must have access to washroom facilities at the MRF. The MRF must also have one parking spot designated for the sole and exclusive use of an Inspector, City employee, or designate.

HEALTH AND SAFETY REQUIREMENTS

General

187. The Operator acknowledges that it will, at all times, ensure compliance with all Federal, Provincial and Municipal occupational health and safety regulations. The Operator accepts the responsibility for the health and safety of its employees by ensuring its employees have and wear appropriate protective equipment as required and taking all reasonable precautions for the protection of its employees.
188. The Operator acknowledges that it will, at all times, comply with its obligations under *The Occupational Health and Safety Act* (Saskatchewan) and the Regulations made thereunder. In keeping with its obligations as an “employer” under such legislation, the Operator acknowledges that it is responsible for the health and safety of Operator Personnel and for ensuring they comply with their respective obligations under *The Occupational Health and Safety Act* (Saskatchewan).
189. The Operator acknowledges and agrees that it shall provide training for all employees, which will include health and safety and training on how to properly operate Equipment and vehicles and conduct emergency response measures. Upon request, the Operator shall submit its training plan to the City Representative for review.
190. The Operator acknowledges and agrees that it shall take all reasonable precautions to prevent damage to property or injury and to establish, maintain and enforce safety procedures for the protection of all workers and other persons involved with its operations. Further the Operator agrees that it shall ensure that adequate levels of supervision are provided to ensure all safety aspects. There shall be regular monitoring by the Operator’s Supervisor(s) of the employees and the Services under this Agreement.

191. The Operator acknowledges and agrees that the City retains the right to require greater levels of supervision, if in the view of the City, the levels of supervision are not adequate.

Public Safety

192. The Operator acknowledges and at agrees that it shall perform the Services so as to cause the public, including other City Operators and employees, the least inconvenience possible and in particular, ensure that the Operator Personnel will not obstruct any street, thoroughfare or pedestrian walkway longer or to a greater extent than necessary to perform the Services unless instructed to do so by the City.
193. The Operator acknowledges and agrees that it must take all reasonable precautions necessary to ensure the safety of the general public.

Policies and Records

194. The Operator acknowledges and at agrees that it shall at all times have an adequate, thorough and enforced health and safety policy which meets or exceeds legal requirements, industry standards and any standard as may be set by Ministry of Labour Relations and Workplace Safety from time to time.
195. The Operator shall ensure its policies conform to the reasonable requirements of the City and shall provide the City.
196. All required Ministry of Labour Relations and Workplace Safety documentation shall be obtained and filed by the Operator and kept in good standing during the term of this Agreement. Copies of same shall be provided to the City as they become available.
197. The Operator shall provide the City, upon request, with an account of safety activities as required or requested, which shall include medical aids/lost time accidents, records of incidences and accidents, minutes of safety meetings, records of instruction and training, and equipment inspections
198. The Operator shall maintain applicable records with respect to all health and safety instruction and training, which will include frequency and course content, and shall supply the City with such records, as required or requested.

Workers' Compensation Coverage

199. The Operator understands and agrees that it is not, nor is any of the Operator Personnel, covered by the City under *The Workers' Compensation Act, 1979* (Saskatchewan).. The Operator acknowledges and at agrees that it shall be solely responsible for and shall pay all dues and assessments payable under *The Workers' Compensation Act, 1979* (Saskatchewan) in respect of itself and/or the Operator Personnel.
200. The Operator agrees to indemnify and save the City harmless if the City is required to pay any Workers' Compensation charges arising from the Operator's provision of the Services, the provision of the Services by a subcontractor of the Operator or if the City is

held liable for any damages or injury to any employee, partner, or subcontractor of the Operator while on City-controlled or City-owned property.

201. If the City is required to pay any amount to the Workers' Compensation Board on behalf of the Operator, or any sub-operator, or by reason of any act of omission of the Operator or any sub-operator, the Operator acknowledges and agrees that the City may deduct the amount from any amount owing to the Operator under its or under any other Agreement, or may demand a reimbursement by the Operator to the City for the amount so paid by the City. For further certainty, any right granted to the City pursuant to this section shall be in addition to and not in substitution for any other right at law or in equity which the City has by reason of the failure of the Operator to comply with the provisions of *The Workers' Compensation Act, 1979* (Saskatchewan).

VEHICLES AND EQUIPMENT

Number of Vehicles

202. The Operator must, at all times, provide, maintain and operate a sufficient number of vehicles, drivers and other personnel to perform the Services required under this Agreement, and to comply with Applicable Laws throughout the Term.
203. The Operator shall keep sufficient spare Equipment, including vehicles, to ensure that, in the event of Equipment breakdown, Services are continued in accordance with the terms of this Agreement.

Licensing and Maintenance of Vehicles

204. The Operator is responsible for the maintenance of all vehicles and for all licensing, permits, inspections and insurance as may be required to operate the vehicles and carry out the Services.
205. All vehicles used in the Services must be capable of operating reliably under fully loaded conditions and must be kept in excellent running order at all times. All such vehicles must be capable of transferring Collected Materials without adversely impacting the Collected Material's usability or increasing processing time at the MRF.

Excess Loading of Vehicles

206. The Operator shall not cause or permit vehicles to be loaded beyond the legal limit specified in *The Traffic Safety Act* (Saskatchewan) or *The Regina Traffic Bylaw 1997*, No. 9900 or any other Applicable Laws.
207. Where, in the opinion of the City, vehicles used by the Operator are causing or are likely to cause damage to any private or public roadway, the City may direct the Operator at the Operator's own expense to make changes in or substitutions for such vehicles, to use alternate routes for hauling, to alter loading, or to remove the cause of such damage in some other manner. The Operator will be responsible for all costs resulting from the overloading of vehicles.

208. All measures taken to comply with sections 202 to 207 herein shall be at the Operator's expense.

SPILLAGE AND LOOSE MATERIALS

209. The Operator shall promptly clean up any spillage or loose material resulting from its performance of the Services or make all other arrangements as may be required for the immediate clean up a spill. In the event of any spill, the Operator shall at its expense restore the affected areas back to original condition and shall comply with all Applicable Laws when reporting or cleaning up any spill.
210. The Operator shall report all spills or discharges of Collected Materials, pollutants or contaminants to the City.
211. Any vehicle or Equipment suffering oil spills, gasoline spills, antifreeze spills or the release of other known contaminants will cease operations until the Operator Supervisor arrives on site. Absorbent will be laid down immediately on any spill and as soon as the absorbent has had the desired effect, it is to be scraped from the road or affected property. If residue still remains following the use of absorbent, the Operator shall apply another layer of absorbent and will leave the site in a clean and tidy condition. In the event that the Operator fails to respond immediately to a mechanical or oil spill such that asphalt or other damage occurs, the Operator shall be responsible and liable for all costs and expenses to restore the road or property affected to its original condition.

ENVIRONMENTAL COMPLIANCE

212. The Operator shall, in the performance of the Services, comply with environmental legislation and other environmental requirements of those federal, provincial, municipal or other governmental bodies, including without limitation *The Environmental Management and Protection Act, 2002* (Saskatchewan) and the regulations and amendments thereto.
213. The Operator acknowledges and agrees there may be additional reporting requirements in relation to any spill, release or discovery of any substance of any amount that has caused, is causing or may cause an adverse effect on the environment. The Operator represents and warrants that it is familiar with these requirements and agrees to report any spill, release or discovery of any substance of any amount that has caused, is causing or may cause an adverse effect on the environment as may be required by Applicable Laws.

PERFORMANCE SECURITY

214. To secure performance by the Operator of all of its obligations under this Agreement, the Operator shall deliver, as a Condition Precedent of this Agreement, the performance security detailed in this section (the "**Performance Security**"). In order to satisfy its obligation to provide Performance Security, the Operator shall deliver to the City one of the following by the date specified in section 10 herein:
- (a) an irrevocable letter of credit in the amount of three million dollars (\$3,000,000) ("**Letter of Credit**"). The Letter of Credit shall be renewed from time to time by

- the Operator so as to remain in effect until six (6) months after the expiry or termination of this Agreement; or
- (b) a certified cheque in the amount of three million dollars (\$3,000,000), payable to "The City of Regina" such cheque to be renewed from time to time by the Operator so as to remain in effect until six (6) months after the expiry or termination of the Agreement.
215. The Operator acknowledges and agrees that the Performance Security may be realized upon by the City where the Operator is in breach of its obligations under the Agreement and where the City must incur or has incurred, without limitation, any Non-Performance, indebtedness, liabilities, obligations, costs, fees or expense whatsoever (the "Liabilities"), including any Liabilities incurred to facilitate the Services for Collected Materials and any legal costs or costs in relation to legal proceedings resulting from the Operator's breach of its obligations under the Agreement. Where required by the terms of the Performance Security, the Operator will be given notice of the City's intention to realize on the Performance Security. Otherwise, the City may realize on the Performance Security without prior notice to the Operator.
216. Where the Performance Security is drawn upon, and provided that the Agreement has not been terminated by the City, such Performance Security shall be renewed or replaced so that it meets the then applicable threshold set out in section 214 herein.
217. Any Letter of Credit provided as Performance Security shall incorporate the following conditions:
- (a) it must be issued by a Canadian Chartered Bank listed in Schedule 1, 2 or 3 of the Bank Act (Canada) and the place of cashing must be named and be within the City of Regina;
 - (b) the letter of credit must indicate that it is issued subject to the Uniform Customs and Practice for Documentary Credits, ICC Publication No. 600 (UPC 600);
 - (c) it must be irrevocable;
 - (d) it must be unconditional;
 - (e) the documents required for cashing must be indicated precisely; and
 - (f) it must be payable to "The City of Regina" as the beneficiary and may require payment upon demand.

INSURANCE

218. During the term of its Agreement, the Operator shall maintain and shall ensure that its sub-contractors maintain the following insurance coverages:

- (a) maintain comprehensive general liability insurance in the amount of \$5,000,000 dollars per occurrence for bodily injury, death and property damage, including loss of use thereof, arising for any one accident or occurrence. The form of insurance shall include but is not limited to the following:
 - (i) cross-liability or severability of interest clause;
 - (ii) blanket contractual coverage;
 - (iii) owner's protective liability coverage;
 - (iv) completed operations coverage.
- (b) maintain automobile accident liability in the amount of no less than \$2,000,000.00 dollars per occurrence. The form of insurance shall include, but is not limited to the following:
 - (i) Operator owned vehicles;
 - (ii) non-owned vehicles and;
 - (iii) non-owned automobile liability extension;
 - (iv) operation of attached machinery.
- (c) maintain equipment insurance covering all Equipment used for the performance of the Services.
- (d) maintain environmental impairment liability insurance to cover all operations of the Operator, including but not limited to third party bodily injury, death and property damage arising out of sudden and accidental pollution, including but not limited to unexpected and unintentional spills, discharges, emissions, dispersal, leakage, migration, release or escape of pollutants subject to a single pollution incident limit of not less than \$1,000,000.
- (e) maintain Property and Business Interruption insurance on all property, Equipment and production machinery, including stock and stored Marketable Materials, used in the performance of the Services. Business Interruption Insurance shall be based on a 24 month indemnity period based upon a completed Business Interruption worksheet.

219. Insurance obtained and provided under this Agreement shall:

- (a) be written by an insurer licensed to underwrite insurance in the Province of Saskatchewan, and holding an A.M. Best rating of A- or better;
- (b) contain a statement whereby the insurer waives all rights of subrogation against any party named or contemplated as an insured party in the required policies;

- (c) contain an endorsement by the insurer that states that the policies and coverage thereunder shall neither be amended nor cancelled until thirty (30) calendar days after written notice to such effect has been given to all named insureds; and
- (d) shall name the City as an additional insured on all policies of insurance with respect to the Operator's activities as they relate to this Agreement.

220. The Operator is solely responsible for full payment of any deductible amount which may be due in the event of any and all claims under policies required by this Agreement and shall provide the City with proof of the insurance required pursuant to this Agreement annually in a form satisfactory to the City's Risk Manager.

221. Failure to maintain insurance as required by this section 218 herein may result in placement by the City of the required insurance at the expense of the Operator.

222. Loss or damage shall not affect the rights of either Party under this Agreement.

REPORTING AN INCIDENT

223. The Operator shall:

- (a) immediately report all incidents involving Persons, private property, Intellectual Property Claims, or any Claims to the Inspector and provide copies of all Claims and reported damages to the Inspector in written form for each occurrence; and
- (b) in the event of a motor vehicle collision, immediately report the incident to the Regina Police Service.

INDEMNITY AND LIMITATION ON LIABILITY

Operator's Indemnity

224. Notwithstanding anything to the contrary in this Agreement, the Operator shall accept full responsibility for and shall indemnify and save harmless the City, its respective employees, contract employees, agents and elected representatives prior to, during, and after the Term, from and against all liability for:

- (a) all actions, claims, demands, costs, charges, losses and expenses (including legal costs on a full indemnity basis), which may arise out of or in consequence of the performance or non performance by the Operator (including the Operator Personnel) of its obligations under this Agreement, or the presence of the Operator (including the Operator Personnel) in any premises or property belonging to the City.
- (b) all actions, claims, demands, costs, charges, losses and expenses (including legal costs on a full indemnity basis), which are related to or are caused by the negligence or wilful misconduct of the Operator and which, for certainty, shall

include all actions, claims, demands, costs, charges, losses and expenses related to bodily injury, death and loss or damage to property.

225. The Operator agrees that there shall be no limitation of liability in favour of the Operator to the City for any direct, special, indirect, incidental or consequential damages, including, but not limited to, lost profits, lost business revenue, failure to realise expected savings, or other commercial or economic losses of any kind.
226. The Operator and the City agree that the City has no liability for the Operator's use of the Collected Material delivered to the Designated Facility, including, but not limited to any and all claims arising from claims from third parties who have purchased or otherwise obtained Marketable Material, Residue or other products produced by the Operator or its agents.
227. The Operator shall defend, indemnify and save harmless the City from and against any and all Claims arising from the Operator's receiving, sorting, processing and Marketing the Collected Material and Marketable Material and for the Operator's subsequent sale of Marketable Material or disposal of Residue, or any other product produced from the Collected Material.

City's Indemnity

228. The City shall defend, indemnify and save harmless the Operator from and against any and all Claims, arising from:
- (a) the City's breach, violation or non-performance of this Agreement; and
 - (b) any negligent acts or omissions or wrongful acts of the City, its elected officials, employees, agents or others for whom it is responsible at law except to the extent that such liability arises from the negligence or wrongful act of SHEC or its officers, employees, or others for whom SHEC is responsible at law.

Survival

229. The indemnities provided in sections 38, 114, 200, 224 to 228, 245, 265 and 270 shall survive the termination or expiration of this Agreement and continue in full force and effect without time limit.

Limitation of Liability

230. Notwithstanding anything contained in this Agreement to the contrary, neither Party shall be liable to the other under this Agreement or under any cause of action relating to the subject matter of this Agreement, whether in contract, tort, strict liability, indemnity, contribution or any other cause of action for or in relation to:
- (a) business interruption, loss of actual or anticipated revenue, income or profits or any other form of economic loss;

- (b) exemplary or punitive damages; or
- (c) any other loss, liability or damage that can be considered consequential.

231. The Operator acknowledges and agrees that the City, its respective employees, contractors, agents and elected representatives shall not be liable for, except in the case of gross negligence or wilful misconduct, any property damage, bodily injury, death or personal injury to the Operator, Operator Personnel, or their respective directors or officers, or for any proceeding by any third party against the Operator, Operator Personnel, or their respective directors or officers, arising in the course of the performance of the Operator’s obligations under this Agreement or arising otherwise in connection with this Agreement for any reason.

Legal Counsel:

232. Notwithstanding the Operator’s duty to defend the City in sections 227 and 265 the City reserves the right to appoint its own legal counsel to represent it, at the cost of the Operator, in respect of any Claim.

Cooperation:

233. The City and the Operator shall keep each other reasonably informed of any matters and any Claims to which sections 38, 114, 200, 224 to 228, 245, 265 and 270 of this Agreement apply.

Beneficiaries of Indemnification Provisions:

234. The indemnification and hold harmless provisions in this Agreement are for the sole and exclusive benefit and protection of the Parties and their respective councillors, directors, officers, contractors, subcontractors, officials, agents, employees, and representatives ("**Representatives**") and are not intended, nor shall they be construed, to confer any rights on or liabilities to any person or persons other than the Parties and their respective Representatives, and for the purposes of this Agreement, the Parties hereto are entering into this Agreement as trustee and agent for the benefit of their respective Representatives, as the case may be.

LIQUIDATED DAMAGES FOR NON-PERFORMANCE

235. In the event the Operator fails to perform the Services in accordance with its obligations and the standards specified in this Agreement the such failure shall be considered non-performance of the Services ("**Non-Performance**") will result in the City assessing liquidated damages (collectively, the "**Liquidated Damages**") for the Non-Performances identified as follows:

Acts of Non-Performance	Liquidated Damages Resulting from Non-Performance
Loss 1 where the Operator fails to or is unable to accept Collected Materials at a temporary Transfer Station or at the	\$5000 per day until the Operator can accept the Collected Material at a temporary Transfer Station or at its MRF

Operator's MRF as specified in sections 17 and 18 herein	
Loss 2 where the Operator fails to have a permanent MRF operational and providing all of the Services set out in this RFP on or before July 1, 2014 as specified in sections 19 and 20 herein.	\$500 per day until the permanent MRF is fully operational and providing all of the Services
Collection Vehicle delayed at the Designated Facility as specified in section 31 herein	\$200 per occurrence;
Failure to meet the Required Recovery Rate as specified in section 49	\$500 for each Tonne that constitutes the difference between the Operator's Recovery Rate and the Required Recovery Rate in that quarter
Failure to process all of the Collected Materials as specified in section 45	\$5000 per day until the operator can process the Collected Material at its own MRF

236. If the Operator committed a Non-Performance and the City provided notice, in writing to the Operator, of such Non-Performance, then, the Operator acknowledges and agrees that the City shall be entitled to recover from the Operator the applicable Liquidated Damages.
237. The Parties agree that, since it would be difficult to ascertain precisely the losses to the City in the event of Operator's Non-Performance of its obligations under this Agreement, the Parties agree that such Liquidated Damages in section 235 herein, represent a reasonable pre-estimate of the loss and damage which the City will suffer through the Non-Performance of the Operator. The Parties further agree that the City is entitled to recover such Liquidated Damages from the Operator in accordance with section 235 and 236 herein, and that such recovery shall not limit the other remedies available to the City pursuant to this Agreement, including the assessment and recovery of Liquidated Damages.
238. Where the City assesses Liquidated Damages for a month for which the Processing Fee has already been paid, the City shall be entitled to deduct such Liquidated Damages against the following month's Processing Fee and/or to recover such Liquidated Damages by way of a claim against any Performance Security maintained by the Operator.
239. The Operator acknowledges that where Liquidated Damages exceed \$50,000 in the twelve (12) months following the Commencement Date of this Agreement or any subsequent twelve (12) month period, the City shall be entitled to terminate this Agreement. As of the beginning of each fresh twelve (12) month period, any Liquidated Damages will be assessed as though the Operator had no prior Non-Performance events for which the City is entitled to assess and deduct Liquidated Damages.

240. For greater certainty, the rights and remedies referred to in sections 235 to 239 herein shall be considered without prejudice to any other right or remedy the City may have under this Agreement or in law, nor shall they relieve the Operator of any obligations under the Agreement in respect of the Services.

REMEDIES

241. The rights and remedies of the City as set forth in any provision of the Agreement shall not be exclusive and are in addition to any other rights or remedies provided by law or in equity or pursuant to the provisions of the Agreement.

242. The City's exercise of any remedy provided under the Agreement does not relieve the Operator from any liability remaining under the Agreement.

TERMINATION

243. Without prejudice to the exercise of any alternative or additional remedy or of any accrued rights of the City, the City shall be entitled upon the occurrence of any of the following events to immediately terminate the Agreement:

- a) the Operator commits a material breach of this Agreement;
- b) the Operator becomes bankrupt, or makes a composition or arrangement with its creditors, or has a proposal in respect of its company for voluntary arrangement for a composition of debts or a scheme of arrangement approved in accordance with the *Bankruptcy and Insolvency Act* (R.S., 1985, c. B-3);
- c) the Operator having a winding-up order made or a resolution for voluntary winding-up passed;
- d) the Operator having a provisional liquidator, or receiver or manager of its business or undertaking duly appointed;
- e) the Operator being in circumstances which entitle a creditor to appoint, or have appointed a receiver, a manager or administrative receiver, or which would entitle the court to make a winding-up order;
- f) the Operator persistently violates its health and safety obligations under sections 187 to 201 of this Agreement;
- g) the Operator commits any Prohibited Act;
- h) the Operator undergoes a change of Control; or
- i) the Operator is unable to complete or has discontinued the Services.

Consequences of Termination

244. Upon termination of this Agreement:

- a) the Operator shall cease to perform the Services;
- b) the Operator shall be liable to compensate the City for any loss or damages it has sustained as a consequence of any breaches of Agreement by the Operator;
- c) if the Agreement is terminated under section 243 herein the Operator shall fully and promptly indemnify and compensate the City in respect of the cost of causing to be performed the Services as would have been performed by the Operator during the remainder of the Term to the extent that such costs exceed such sums as would have been lawfully payable to the Operator for performing the Services (such costs to include all costs of closing up this Agreement and entering into a new contract with a replacement operator). The City shall be free to have the Services performed by any person (whether or not employees of the City) as the City may within its sole discretion determine; and
- d) the City shall be under no obligation to make any further payments to the Operator and shall be entitled to retain any payment which may have fallen due to the Operator before termination until the Operator has paid in full to the City all sums due under or arising from the Agreement, or to deduct therefrom any sum due under the Agreement.

245. If the Services should be stopped or otherwise delayed for a period of 45 days or more under an order of any court or other public authority, and providing that such order was not issued as the result of any act or fault of the Operator may, without prejudice to any other right or remedy the Operator may have, terminate this Agreement by giving the City written notice.
246. If the City should within 90 days, fail to pay any sum approved by the City or awarded by the referee or arbitrator to the Operator, then the Operator may upon seven days written notice to the City, stop work or terminate this Contract and recover from the City payment for all Services executed.
247. Upon termination or expiration of this Agreement, the Operator shall cooperate with the City to assist with the orderly transfer of the Service area functions and operations provided by the Operator hereunder to another Operator or to the City as determined by the City in its sole discretion.
248. Prior to termination or expiration of this Agreement, the City may require the Operator to perform and if so required, the Operator shall perform certain transition services necessary to shift the support work of the Operator to another Operator or to the City itself as described below (the "Transition Services") and the City shall pay for such service at the rates set forth in this Agreement.

249. Transition Services may include but shall not be limited to the following:

- (a) working with the City to jointly develop a mutually agreed upon Transition Services Plan to facilitate the termination of Services;
- (b) notifying all affected Operators and sub operators of the Operator;
- (c) performing the Transition Service Plan activities;
- (d) answering questions regarding the Services on an as-needed basis;
- (e) process all Collected Material to clear the Tipping Area and all processing lines;
- (f) remove and dispose of all Residue at the City Landfill;
- (g) empty all Marketable Materials from storage areas;
- (h) prepare all Marketable Materials for delivery to End Markets;
- (i) load all Marketable Materials onto vehicles intended for End Markets;
- (j) ship all Marketable Materials to End Markets;
- (k) pay any outstanding payments owed to the City;
- (l) submit any final Monthly Invoice; and
- (m) submit final Monthly, Quarterly and Annual Reports.
- (n) providing such other reasonable services needed to effectuate an orderly transition to a new Operator.

250. Upon termination of this Agreement, it is hereby agreed that section 97 (Money Due to the City), sections 230 to 231 (Limitation on Liability), sections 255 to 259 (Confidentiality and Privacy), sections and sections 261 to 266 (Intellectual Property Rights) of this Agreement shall continue in full force and effect and be enforceable by the City. For greater certainty, the rights of the City under this section are in addition to any other rights or remedies that the City may have pursuant to the Performance Security.

BOOKS, PAYROLLS, ACCOUNTS AND RECORDS

251. The Operator will preserve all original books, payrolls, accounts, and records relating to the performance of the Agreement or to claims arising therefrom for a period of three (3) years after the expiration of the Term or the final settlement of all Claims whichever is the longer.

252. At the City's request, the Operator will provide the City with detailed information related to the collection of Collected Material, the performance of the Services or other such information in the custody of the Operator, including the information set out in section 252 herein, which will assist the City in recording and monitoring the effectiveness of the Operator's performance, reporting to Council, and providing statistics and information related to recycling activities and waste collection generally.
253. The City shall be entitled to change the record keeping requirements set out in this Agreement upon reasonable notice, and the Operator shall continue to provide information to the City related to the Services.

CONFIDENTIALITY AND PRIVACY

254. Except as otherwise provided herein, each Party shall keep confidential the terms of this Agreement and all personal or confidential business information supplied to it or its representatives or advisors under this Agreement (the "Confidential Information"). The Parties shall not disclose any such Confidential Information to any third party or to any Operator Personnel except as required for the performance of the Services. The City may require that the Operator enter into a confidentiality agreement prior to the Services Commencement Date.
255. The Operator acknowledges and agrees that the City is subject to *The Cities Act* (Saskatchewan) and *The Local Authority Freedom of Information and Protection of Privacy Act* (LAFOIP) (Saskatchewan) and that the City's obligations under this Article 19 of this Agreement are limited by its public disclosure obligations under such legislation.
256. The obligation to maintain the confidentiality of Confidential Information shall not relate to any information which:
- (a) comes into the public domain or is subsequently disclosed to the public (other than through the default of either Party);
 - (b) was already in possession of the Party (without restrictions as to its use) on the date of receipt; or
 - (c) is required to be disclosed by the City under LAFOIP or by either Party by virtue of an order of a court or tribunal, pursuant to a legal proceeding, or as otherwise required by Applicable Laws.
257. The Operator hereby confirms that in performance of this Agreement it will protect personal information as defined in and in accordance with the *Personal Protection and Electronic Documents Act* (PIPEDA) and shall comply with its obligations under PIPEDA, and all statutory re-enactments or modifications thereof, any regulations, rules, orders and codes of practice made pursuant thereto, and any guidelines issued by the Privacy Commissioner.

258. The Operator shall not by itself or through Operator Personnel communicate with representatives of the press, television, radio or other communications media on any matter concerning the Agreement, and shall not otherwise make any representation orally or in writing in respect of any aspect of the Agreement, without the prior written approval of the City.

GREENHOUSE GAS CREDITS

259. All rights, benefits, title and interest related in whole or in part to any greenhouse gas emission reduction created by Co-Mingled Recycling Collection Program, diversion of Collected Materials from the City Landfill, any processing of Collected Materials at a Designated Facility and any right to claim for its benefit any credit, allowance acknowledgement or offset with respect to such greenhouse gas emission reduction that may arise through the creation of a national program, provincial program or other government regulatory structure shall accrue to and be owned by the City.

INTELLECTUAL PROPERTY RIGHTS

260. All Intellectual Property Rights, documents, records, data, or other information produced by the Operator as part of the Services shall belong exclusively to the City. All Intellectual Property Rights belonging to the City shall, at all times, remain the property of the City.
261. The Operator shall not in connection with the performance of the Services use, manufacture, supply or deliver any process, article, matter or thing, the use, manufacture, supply or delivery of which would be an infringement of any Intellectual Property Right.
262. Any and all Intellectual Property Rights developed under this Agreement or arising from the provision of the Services by the Operator shall belong to the City and the Operator agrees that it shall execute or cause to be executed all deeds, documents and acts required to vest such Intellectual Property Rights in the City.
263. The Operator will pay all royalties and patent license fees or other fees in respect of any Intellectual Property Right required to perform the Services.
264. The Operator shall, at its own expense, defend all suits and proceedings instituted against the City and fully indemnify the City against any award of damages, demands, losses, charges or costs made against the City if such suits or proceedings are based on any claim that any of the products, documentation, parts or equipment, as supplied by the Operator, constitutes an infringement, or an alleged infringement, of any patent or other intellectual property right by the Operator or anyone for whose acts it is liable.
265. If any of the products, documentation, parts or equipment supplied by the Operator constitute an infringement of patent or other Intellectual Property Right and its use is enjoined, the Operator will, at its own expense, procure for the City the right to continue its prior use, replace or modify the supplied item so it becomes non-infringing and meets the City's requirements, or pay the City for its loss of use of the item and for consequential damages or losses which occur as a result of the actual or alleged

infringement of any patent or other Intellectual Property Right by the Operator or anyone for whose acts it is liable.

ASSIGNMENT AND SUB-CONTRACTING

266. The neither Party may not assign, transfer, convey, or otherwise dispose of this Agreement or its right, title or interest in the Agreement without the prior written consent of the other Party, which consent may be unreasonably withheld.
267. The Operator may only sub-contract the performance of this Agreement or any part thereof with the prior written consent of the City, and shall cease to so sub-contract if the City withdraws its consent. Such consent (if given) shall not relieve the Operator from any liability or obligation under the Agreement and the Operator shall be responsible for the acts, defaults or neglect of any sub-Operator or its agents or employees in all respects as if they were the acts, defaults or neglect of the Operator, notwithstanding that the City may require as a condition of giving any consent to sub-contract a direct warranty and undertaking from the sub-Operator concerning the provision of the Services and compliance with the Agreement in all respects.
268. The City reserves the right to impose such conditions as it sees fit in giving any consent pursuant to sections 267 to 268. Such conditions may include payment to the City of such reasonable administrative and legal costs as may be incurred by the City and/or the posting of such additional security as the City, acting reasonably, may consider appropriate.
269. In particular, the Operator shall indemnify the City and hold the City harmless from and against any claims, demands, suits, causes of action, losses, damages, liabilities and costs relating to, arising out of, or connected to, directly or indirectly, with the Operator's Services performed by a sub-consultant, including _____ (insert names of known subcontractors if applicable) under the Agreement whether founded in negligence, any other tort, criminal law, breach of contract or the failure to comply with any statute, regulation, bylaw, rule or order made by an authority having jurisdiction including, without limitation and no matter when asserted, claims relating to:
- (a) the injury (physical, psychological or both) or death of any person; and
 - (b) damages to or loss of any property.
270. The indemnity in section 270 herein does not apply to the extent that any claim results from an act or omission amounting to the City's negligence, breach of contract, legal or wilful misconduct or non-compliance with a statute, rule or regulation.
271. The Operator shall not sub-consult or give honouraria for the performance of any part of the Services without the City's prior written consent.

CONFLICT OF INTEREST

272. The Operator will not undertake other work that creates or might create a conflict of interest with the provision of the Services without the City's prior written consent.
273. The Operator will not serve as a member of any of the City's advisory committees or subcommittees during the term of this Agreement.

RELATIONSHIP OF THE PARTIES

274. This Agreement is not intended to create a partnership, joint venture or employment relationship between the City and the Operator and no Party will have, nor represent itself to have, any authority or power to enter into any contract, assume any obligations, or make warranties or representations on behalf of the other or to act for or to undertake any obligation or responsibility on behalf of the other Party, except as may be expressly provided in this Agreement.
275. The Operator recognizes, acknowledges and agrees that Operator Personnel are employees, agents, or sub-Operators of the Operator and are not entitled to any of the benefits provided by the City to its employees. The Operator shall be solely and exclusively responsible for the payment of wages, governmental obligations and deductions, including, without limitation, provincial and federal income tax deductions, Canada Pension Plan, Employment Insurance, Ontario Health Premiums, vacation pay and all other matters arising out of the normal relationship of employer/employee, with respect to the Operator Personnel.

NOTICES

276. Any notice permitted or required to be given by one Party to the other in respect of the Agreement shall be deemed to have been given to and received by the addressee on the date of delivery if delivered by hand or by facsimile and on the 5th day after the date of mailing if sent by pre-paid registered mail. Any notice to the Operator shall be sufficiently given if handed to the Operator, a Operator Representative, a Operator Supervisor, the Operator's clerks or agents, or delivered to the Operator's last known address, and such notice shall be deemed to have been received on the date so delivered. Any notice to the City pertaining to this Agreement shall be delivered to the City Clerk with a copy to the City Representative. Notice shall be sent as directed below:

To City:

The City of Regina
Queen Elizabeth II Court
2476 Victoria Avenue
P.O. Box 1790
Regina, Saskatchewan
Canada S4P 3C8

Attention: •

Fax: •

To Operator: **[Insert contact information]**

277. Notwithstanding the foregoing provisions with respect to mailing, in the event that it may be reasonably anticipated that due to any strike, lockout, or similar event involving an interruption in postal service, any notice will not be received by the addressee by no later than the fifth (5) Business Day following the mailing thereof, then the mailing of any such notice as aforesaid shall not be an effective means of sending the same but rather any notice must then be sent by an alternative means of delivery as may reasonably be anticipated will cause the notice to be received reasonably expeditiously by the addressee.

DISPUTE RESOLUTION

278. The Parties agree that in the event that a dispute or conflict arises in any way relating to the Agreement or the Services, the following dispute resolution process shall be followed:
- (a) the dispute shall be referred to the City' Deputy City Manager of Operations and the **[Senior Executive of the Operator]** who shall, acting in good faith, seek to resolve the dispute or conflict in an amicable and constructive manner;
 - (b) if the Deputy City Manager of Operations and the **[Senior Executive of the Operator]** are unable to successfully resolve the dispute or conflict within twenty (20) days of reference to them, either Party to the dispute may at any time thereafter prior to the dispute being referred to arbitration, request that a mediator be retained to assist the Parties in resolving the dispute. In the event a request for mediation is made, the Parties shall, within no more than five (5) Business Days, make reasonable attempts to agree on a mediator. If the Parties are unable to agree on a mediator, the Parties agree to accept the mediator appointed by Saskatchewan Justice Dispute Resolution Office (the "**Neutral Appointing Authority**");
 - (c) any negotiated or mediated settlement reached pursuant to subsection 279(a) or subsection 279(b) above may be subject to approval by Council;
 - (d) if a dispute is not resolved within forty-five (45) days of reference to the Deputy City Manager of Operations and the **[Senior Executive of the Operator]**, or within thirty (30) days of a request for mediation, whichever is the later, either Party to the dispute may at any time thereafter refer the dispute to arbitration, in which event the Parties shall be bound to arbitrate the dispute;
 - (e) any dispute that is submitted to arbitration shall be dealt with in accordance with the following requirements:

- (i) the Party seeking to initiate arbitration shall give written notice thereof to the other Party and shall set forth a brief description of the matter submitted for arbitration;
 - (ii) within ten (10) days of receipt of the notice of arbitration, the Parties acting in good faith shall attempt to agree upon a single arbitrator for the purpose of conducting the arbitration;
 - (iii) in the event that the Parties cannot agree upon a single arbitrator within the period set forth above, then, a single arbitrator shall be appointed by the Neutral Appointing Authority;
 - (iv) any arbitration conducted pursuant to this Agreement shall take place in the City of Regina, and the Parties shall meet with the arbitrator in order to establish procedures which shall govern the conduct of the arbitration and the rendering of an award by the arbitrator. The Parties shall request that the arbitrator provide its decision on the matter in issue within ninety (90) days of the appointment of the arbitrator;
 - (v) the decision of the arbitrator in respect of all matters of procedure shall be final and binding upon the Parties;
 - (vi) the costs of the arbitrator shall be borne between the Parties in the manner specified in the arbitrator's decision or, in the absence of any direction by the arbitrator, such costs shall be borne equally; and
 - (vii) except as modified by this Agreement the provisions of *The Arbitration Act*, (Saskatchewan), as amended from time to time, shall govern the arbitration process.
- (f) The Operator shall continue to perform all of its obligations under the Agreement during the resolution of any dispute or disagreement, including during any period of negotiation, mediation, arbitration or litigation.

GENERAL PROVISIONS

279. If either Party shall be unable to carry out any obligation under this Agreement due to Force Majeure, this Agreement shall remain in effect, but such obligation shall be suspended for the period necessary as a result of the Force Majeure, provided that:

- (a) the non-performing Party gives the other Party written notice not later than forty-eight (48) hours after the occurrence of the Force Majeure describing the particulars of the Force Majeure, including but not limited to the nature of the occurrence and the expected duration of this disability, and continues to furnish timely regular reports with respect thereto during the period of Force Majeure and the disability;

- (b) the suspension of performance is of no greater scope and of no longer duration than is reasonably required by the Force Majeure; and
- (c) the non-performing Party uses its best efforts to remedy its inability to perform.

280. For clarity, it is hereby expressly agreed that a strike or other labour disruption, change of law, change in currency, and failure to provide adequate premises, equipment, materials, consumables and/or staff, or other similar matters, are not to be considered as events of force majeure or acts of God.

281. The Operator represents and warrants that the Operator has full corporate power and authority to execute and deliver this Agreement and has the full corporate power and authority to perform the terms and conditions hereof; and has entered into this Agreement with full knowledge respecting the nature and extent of the Services to be provided and the terms of this Agreement.

282. This Agreement, including all referenced Schedules and Appendices, represents the entire and exclusive agreement between the Parties and supersedes all prior contracts, undertakings, representations and understandings, written or oral, between the Parties. Any amendments to this agreement must be written and formally executed by the Parties.

283. This Agreement may be executed by the Parties in separate counterparts, each of which when so executed and delivered to all of the Parties shall be deemed to be and shall be read as a single agreement among the Parties.

284. Execution of this Agreement by any of the Parties may be evidenced by way of a facsimile transmission of such Party's signature (which signature may be by separate counterpart), or photocopy of such faxed transmission, and such faxed signature, or photocopy of such faxed signature, shall be deemed to constitute the original signature of such Party of this Agreement. Any Party delivering an executed counterpart of this Agreement by facsimile shall also deliver a manually executed counterpart of this Agreement, but the failure to do so does not affect the validity, enforceability or binding effect of this Agreement.

The City has executed this Agreement on the _____ day of _____, 2012.

THE CITY OF REGINA

(seal)

Per: _____
City Clerk

The Operator has executed this Agreement on the _____ day of _____, 2012

corporate seal)*

(affix

Per:

Signature of Corporate Signing Authority

Print Name and Position

* If the Operator does not have a Corporate Seal or the Corporate Signing Authority does not have access to the Operator's Corporate Seal then the Corporate Signing Authority who executes this Agreement must complete and swear/affirm an Affidavit of Corporate Signing Authority in the form attached to the back of this Agreement.

AFFIDAVIT OF CORPORATE SIGNING AUTHORITY

Canada
SASKATCHEWAN

I, _____ of _____, _____,
Print Full Name of Signing Authority

MAKE OATH/AFFIRM AS FOLLOWS:

I am a Director or Officer of _____. (the "Operator") named in the SERVICES AGREEMENT FOR SUPPLY AND OPERATION OF MATERIAL RECYCLING FACILITY (the "Agreement") to which this Affidavit is attached.

I am authorized by the Operator to execute the Agreement without affixing the Corporate Seal of the Operator

Sworn/Affirmed before me at _____,
Saskatchewan
on _____, 2012
Month Date

Notary Public in and for the Province of
Saskatchewan.
Being a lawyer —or—
My appointment
expires:

Signature of Signing Authority

Schedule "A"

RFP

Schedule "B"

PROPOSAL

SCHEDULE C

UNIT PROCESSING FEES

Contamination Rate (%)	Collected Material Tonnes for 0 to 15,000 Tonnes Per Operating Year (\$/Tonne)	Collected Material Tonnes for 15,001 to 20,000 Tonnes Per Operating Year (\$/Tonne)	Collected Material Tonne for 20,001 to 25,000 Tonnes Per Operating Year (\$/Tonne)	Collected Material Tonne for Greater than 25,001 Tonnes Per Operating Year (\$/Tonne)
0-5				
5.1-10.0				
10.1 to 15				
more than 15.1				

Schedule D

Composition Audit Protocol

Composition Audit Protocol

A. Overview

1. The purpose of the Monthly Composition Audit is to support the administration of the contract by producing estimates of the percentage of each Designated Material and Contaminants in the Collected Materials received at the Designated Facility and to measure the density of the Collected Material.
2. The Monthly Composition Audit involves collection of samples of Collected Materials, preparation of an audit sample, sorting the audit sample in Designated Materials (by each Designated Material) and Contaminants, verification of the sampling and audit procedures, recording the audit results in a spreadsheet and using the audit results to calculate the percentage of each Designated Material and Contaminants by weight in the audit sample.
3. A City employee must be present during the Monthly Composition Audit.
4. Completion of an audit requires from verification by:
 - (a) the City employee delegated by the City to supervise such audits (the "City Representative"); and
 - (b) the Operator's supervisor;that the sample collection, preparation, and sorting procedures were completed in accordance with this protocol and that the City has received the original audit sheet and an electronic spreadsheet showing the audit results and the calculation of the percentage of each Designated Material and Contaminants, by weight, in the audit sample.
5. The results of the Monthly Composition Audit must be reported in the Operator's Monthly and Quarterly Reports.

B. Frequency

1. The Operator shall conduct at least one (1) inbound composition audits of the Collected Materials per month for the Term of the contract. In addition to the one (1) minimum mandatory audit the Operator must complete, at the City's sole discretion, up to three (3) additional composition audits per year.
2. Scheduling the inbound composition audit will be at the sole discretion of the City. A minimum of one week's notice will be provided to the Operator.

3. Audits shall be conducted between the hours of 8:30 a.m. and 4:30 p.m. Monday to Friday (statutory holidays excluded) with no more than one inbound composition audit to be completed on any Business Day.

C. Material and Method

1. The Operator shall provide a secure, well-lit space of sufficient area within the Designated Facility for undertaking the audit work.
 2. The Operator shall supply all labour, supervision, materials and equipment required to complete the audit. The Operator's employees assigned to the audit work will be trained in the successful execution of this protocol and be familiar with the specifications of the Designated Material and Contaminants. The Operator shall provide its employees with the personal protective equipment appropriate for handling Collected Materials.
 3. The City Representative shall observe the audit process.
 4. Scales used for the inbound composition audit must be certified by Corporate and Consumer Affairs Weights and Measures Canada. The weigh scale shall be calibrated every six months at the Operator's expense. The City may request proof of scale accuracy at any time. Scales used for the Monthly Composition Audit must have a capacity rated from 0.01 kg and to at least 40 kg and must be capable of providing weight measurements within +/- 1% of true weight.
 5. All weights are to be recorded to two decimal places in kilograms.
 6. The weigh scales must be "zeroed out" before any weights are obtained.
 7. The Monthly Composition Audit shall, at minimum, identify the following:
 - (a) the total collected Tonnes per month of Collected Materials,
 - (b) proportions of each Designated Material in the Collected Materials;
 - (c) proportion of Contaminants in the Collected Materials;
 - (d) the Contamination Rate;
 - (e) composition of the City's Collected Materials for each Designated Material; and
 - (f) density of Collected Material.
 8. The MRF operator needs to know the volume of each truck entering his MRF – that would be entered into his scale software. Then knowing the net weight of the load, density is easy.
 9. The Monthly Composition Audits specified above are part of the Operator's Services and the cost of such audits shall be borne by the Operator.
- a) Sampling**
10. One sample must be collected from each of six randomly selected locations in the inventory of Collected Material on the Designated Facility's tipping floor. A loader or

similar equipment can be used to collect individual samples. The six random samples are then to be combined and thoroughly mixed. The weight of the combined samples must be greater than 500 kg.

11. Care must be taken to ensure the sampling, combining and mixing of the samples does not affect the characteristics of the Collected Material by way of tearing, breaking, crushing, or otherwise changing the condition of the items in the Collected Material.
 12. The combined sample is then further reduced by successive "cone and quartering" to produce an audit sample of a minimum of 250 kg.
 13. The City Representative may direct the Operator to discard a particular audit sample and to repeat the sampling procedure until a suitable audit sample is produced.
- b) Sorting**
14. The weight of the audit sample must be determined and recorded on the audit sheet prior to sorting.
 15. The designated sorting area must be clear of extraneous materials and swept clean prior to the start of the sorting.
 16. The sorting bins must be designed and assigned to a specific Designated Material category. The tare weights of the empty sorting bins are to be measured and recorded on the audit sheet.
 17. The audit sample must be manually sorted by the Operator's employees and each individual item of the audit sample must be assigned to a Designated Material category or to the Contaminant category.
 18. The sorting bins must be weighed and the gross weight must be recorded on the audit sheet and again the Designated Material category each time a bin becomes full and when the audit sample is completing sorted.
 19. Once sorting is finished the Collect Materials, excluding the Contaminants, are to be returned to the inventory of Collected Materials awaiting processing. Contaminants are to be dealt with in accordance with the requirements of the RFP and Applicable Laws.
- D. Quality Assurance / Quality Control**
1. The audit sheet must state the type of audit, the date and the time the sample was obtained, as well as the beginning and end times for the sorting portion of the audit. It must also record the names of the Operator's staff supervising, the City Representative observing the audit.
 2. The audit sheet is to be a record of the quantitative measurements and is not to include any written commentary regarding working conditions, weather, exceptions or other information.

3. Audit results will be verified and the completed audit sheet will be signed-off by the City Representative, and the Operator's supervisor. The document bearing the original signatures will be retained by the City. The Operator will make and retain a copy of the document. Audit data sheets that are not verified and signed by the City Representative and the Operator's supervisor will be considered invalid and will cause the audit to be deemed incomplete and will not contribute to the Operator's minimum audit frequency obligation.

E. Calculations and Results

1. The Operator will enter the verified audit results into an electronic spreadsheet, in a form acceptable to the City. The spreadsheet will calculate the net weight of Collected Material by subtracting the tare weight from gross weight. The sum of the net weights recorded against each Designated Material category will be the weight of that Designated Material in the audit sample.
2. The spreadsheet will present the weight of Designated Materials in each Designated Material category and will total the individual Designated Material weights for all Designated Materials categories and express the result as the total weight of sorted Collected Materials.
3. The spread sheet will calculate the ratio of the weight of Designated Material in each individual Designated Material Category to the total weight of sorted materials and express the result as a weight percentage. The sum of the weight percentages for all Designated Material categories must be 100 percent.
4. Results are to be provided to the City Representative by the end of the next Business Day following the sorting of the audit sample.

Schedule "E"

Recovery Rate Audit Protocol

(to be based on the Operator's Proposal)

Schedule "F"

Marketing Plan

(to be based on the Operator's Proposal)

APPENDIX K – COST OF SERVICES SUBMISSION FORM

Proponent Information (Please Print)

Company Name:	
Address:	Contact:
	Phone:
City: Province:	Fax:
Postal Code:	Email:

The proposed Prices herein shall be the total Price for all the Services in Canadian Funds, excluding all applicable taxes to be performed as per the Agreement Terms and Conditions of Proposal as outlined in the RFP. The submission of Prices shall be:

Unit Processing Fee

Contamination Rate (%)	Collected Material Tonnes for 0 to 15,000 Tonnes per Operating Year	Collected Material Tonnes for 15,001 to 20,000 Tonnes per Operating Year	Collected Material Tonnes for 20,001 to 25,000 Tonnes per Operating Year	Collected Material Tonnes for greater than 25,001 Tonnes per Operating Year
	(\$/Tonne)	(\$/Tonne)	(\$/Tonne)	(\$/Tonne)
0-5				
5.1-10.0				
10.1 to 15				
more than 15.1				

This Proposal is irrevocable, made for good consideration and acceptance thereof by the City of Regina, and shall be binding on the undersigned from the date of acceptance.

SIGNED, SEALED AND DELIVERED

this _____ day of _____ A.D., 20_____.

(Seal)

Signature of Proponent

Name and Title (Please Print)

OR, In the case of an individual or individuals:

Signature of Proponent

Signature of Witness

Name and Title (Please Print)

Name of Witness (Please Print)

Signature of Proponent

Signature of Witness

Name and Title (Please Print)

Name of Witness (Please Print)

**CITY OF REGINA
Request for Proposals #1959
Materials Recovery Facility (MRF) Services**

Addendum #1

Addendum shall be incorporated into the RFP and shall form a part of the Contract. Proponents must acknowledge receipt of all Addendums as instructed in RFP.

AMENDMENTS:

B. Background

B.7. RFP and Project Schedule

CHANGE:

Activity	Milestone Date
Release of RFP	December 16, 2011
Information Session	1:30 pm, C.S.T., on January 11, 2012
Deadline for Submission of Questions	February 17, 2012
Proposal Closing Date	2:00 pm, C.S.T., on March 1, 2012
Interviews (if required)	Week of March 19, 2012
Notice of Award to Preferred Proponent	Week of April 2, 2012
Confirmation of Secured Land	On or before December 1, 2012
MRF or Transfer Station in Operation	On July 1, 2013
Permanent MRF in Operation	On July 1, 2014

D. Instructions to Proponents

D.1 Submissions of Proposals

CHANGE: Submission deadline to read: 2:00 p.m., Central Standard Time on **March 1, 2012**.

D.7 Inquiries

CHANGE: All requests for information regarding this RFP should be addressed in writing and received by February 17, 2012

C. Definitions

C.12 Collected Material Processed

CHANGE:

Collected Material Processed shall be calculated as the sum of:

- (i) the Tonnes of Marketed Materials shipped to an End Market;
- (ii) the Tones of Residue shipped for disposal;
- (iii) the Tonnes of Residue awaiting disposal; and
- (iv) the Tonnes of Marketed Materials awaiting delivery to End Markets but which are still at the MRF or a remote material recovery facility.

H. Scope of Services Requirements, II. Financial Requirements

1. Required Recovery Rate

CHANGE:

The Recovery Rate is calculated as the ratio of the tonnage of Marketable Materials produced at the Designated Facility to the tonnage of Designated Materials delivered to the Designated Facility over the same period expressed as a percentage.

The Operator's Recovery Rate will be determined on a quarterly basis. For the purpose of calculating the Operator's Recovery Rate, Designated Materials shall be determined from the average of Monthly Recovery Rate Audits for the quarter and the tonnages of Marketable Materials as stated in the Quarterly Report for that quarter.

The Operator represents, warrants and guarantees to the City that it shall operate the Designated Facility and carry out the Services in such a fashion that will meet or exceed the Required Recovery Rate at all times.

Note: Refer to Regina MRF Terminology diagram on page 6 of this Addendum.

6. Monthly Report

CHANGE third bullet:

- monthly total tonnage of Collected Material by type and collection route number;

7. Quarterly Report

CHANGE third bullet:

- Quarterly total tonnage of Collected Material by type and collection route number;

8. Annual Report

CHANGE first bullet:

- annual total tonnage of Collected Material by type and collection route number

APPENDIX I - FORM OF AGREEMENT

Definitions 1. (q)

CHANGE: Collected Material Processed shall be calculated as the sum of:
(v) the Tonnes of Marketed Materials shipped to an End Market;
(vi) the Tones of Residue shipped for disposal;
(vii) the Tonnes of Residue awaiting disposal; and
(viii) the Tonnes of Marketed Materials awaiting delivery to End Markets but which are still at the MRF or a remote material recovery facility.

Conditions Precedent, 10. (c) and (d)

CHANGE: 10 (c) within seven (7) Business Days of the date of the Award Letter issued to the Operator, the Operator shall submit to the City:
(i) Certificates of Insurance for all insurances required under section 218 (except the insurance required in section 218 (c) hereto; and
(ii) A current Workers' Compensation Board (Saskatchewan) clearance certificate.

- 10 (d) on or before June 1, 2013, the Operator shall submit to the City:
- (i) a copy of its contingency plan;
 - (ii) a copy of its strike contingency plan;
 - (iii) a copy of its emergency response plan;
 - (iv) a copy of its safety management practices plan; and
 - (v) Certificate of Insurance for the items required in section 218 (c) of this Agreement.

Services, 46, 47 and 48

CHANGE:

- 46. The Recovery Rate is calculated as the ratio of the tonnage of Marketable Materials produced at the Designated Facility to the tonnage of Designated Materials delivered to the Designated Facility over the same period expressed as a percentage.
- 47. The Operator's Recovery Rate will be determined on a quarterly basis. For the purpose of calculating the Operator's Recovery Rate, Designated Materials shall be determined from the average of Monthly Recovery Rate Audits for the quarter and the tonnages of Marketable Materials as stated in the Quarterly Report for that quarter.
- 48. The Operator represents, warrants and guarantees to the City that it shall operate the Designated Facility and carry out the Services in such a fashion that will meet or exceed the Required Recovery Rate at all times.

Note: Refer to Regina MRF Terminology diagram on page 7 of this Addendum.

Reporting, Monthly Report 115. (c)

CHANGE: Monthly total tonnage of Collected Material by type and collection route number;

Reporting, Quarterly Report, 118 (c)

CHANGE: Quarterly total tonnage of Collected Material by type and collection route number

Reporting, Annual Report, 121 (a)

CHANGE: Annual total tonnage of Collected Material by type and collection route number

PLANS, Strike Plan, 153

CHANGE: The Operator acknowledges and agrees that its strike contingency plan will address alternative methods for the processing of Collected Material so as to maintain the Services in the event of a labour dispute between the Operator and Operator Personnel. The Operator shall maintain the Services in the event of such a labour dispute.

Clarifications:

Note: The following is a list of Proponent submitted questions and the associated City of Regina responses. Any reference to names have been removed, however, the wording of the questions is otherwise identical as received.

- Q1. The RFP asks for a Letter of Credit or Performance Bond or Certified Cheque or Money Order. In the contract, clause 214 states only a Letter of Credit or Certified Cheque. Please clarify what will be asked for in the contract.
- A1. The following types of performance security will be accepted: certified cheque, money order, irrevocable bank letter of credit, or a performance bond.
- The contract will be amended accordingly at time of award.
- Q2. In order to ensure proper size of tipping floor and shipping floor in the MRF, I need to know the capacity of a typical truck the collector will be asked to use when doing collections.
- A2. The trucks will be up to 31 cubic yards in capacity.
- Q3. Will city-wide collection begin July 2013 or will there be a ramping up period commencing July 2013?
- A3. Full implementation will occur July 1, 2013, there will not be any phase in.
- Q4. In the RFP the City is suggesting 60,000 single family homes and an expected 15,600 tonnes of material delivered to the MRF annually. Appendix A, Table 1 suggests 63,057 single family homes and 16,386 tonnes. Shall I be using the appendix numbers as a start up to the contract?
- A4. The numbers provided in the RFP should be used.
- Q5. Will the City allow stored tare weights per vehicle when arriving at MRF?
- A5. The requirement for the trucks to weigh in and weigh out will remain as stated in the RFP.
- Q6. Does the City intend to continue the Big Blue Bin program?
- A6. The City expects the Big Blue Bin program will continue and be utilized by multi-family residences.
- Q7. Has the City thought of putting material bans at the Landfill?
- A7. The City is not considering material bans at the Landfill.
- Q8. What is the purpose of the auditing process for sampling using the cone method?
- A8. This process will aid the City in conducting sampling of their loads only when there are loads from other sources also on the tipping floor.
- Q9. Is the 75% / 25% revenue sharing split a result of a bylaw?
- A9. Council approved the revenue sharing split.
- Q10. Who is responsible for education with the residents?
- A10. Education for the residents is the responsibility of the City.

- Q11. Is the amount of carts and bags known or is it yet to be determined?
- A11. 95% of the collection will be from carts. Bags are intended for the hard to service areas.
- Q12. Was bi-weekly service a result of a Council decision?
- A12. Yes.
- Q13. Is the Consumer Price Index (CPI) information for annual cost increases in the RFP?
- A13. Information regarding the CPI is in both the Definitions section and the Payments – Processing Fee section of the RFP.
- Q14. Is the recovery rate based on material before or after contaminants have been removed?
- A14. Refer to the Amendments section of this Addendum.
- Q15. Are the yellow areas of the Contract being non-negotiable set in stone?
- A15. The yellow areas in the Contract are non-negotiable, however, a Proponent may submit proposed amendments to these areas for the City to consider prior to the deadline for submission of questions on February 17, 2012.
- Q16. We are concerned about the City having means to stipulate the MRF's end markets when the RFP states the material dumped on the MRF's floor is owned by the MRF.
- A16. This is something the City feels is necessary and will remain as per the RFP.
- Q17. Will the City consider alternative proposals or value added options?
- A17. Alternative proposals will not be considered. Proponents may provide options they feel will add value to the stated requirements of the RFP.
- Q18. After submission of proposals, if a proponent's presentation is necessary how much notice would be given for them to prepare?
- A18. At least one (1) week's notice will be provided.
- Q19. Clause 52 Audits. I believe that the independent audit could be done in conjunction with the other audit requirements by having the independent auditor as over site. Agree or disagree?
- A19. Agree.
- Q20. Calculated density. This is mentioned throughout the document, what is the definition and what is the intended purpose of the information?
- A20. The City needs to know the density of the loads entering the MRF, expressed as kg/cubic meter. The collection RFP restricts the collector from over-compacting loads. This measurement (done at the MRF) will allow us to monitor the incoming loads.

When the operator of a truck enters the scale he will enter his unit number of his truck. The scale (based on the unit number) will have a pre-stored truck volume (ie: 20 cubic metres). The scale will know the net weight of the incoming load (ie: 1,000 kg). The scale software will then determine the kg/cubic metre for our reporting needs (as per example of 50 kg/cubic metre)

Q21. We assume that the City will develop a residential communication plan in conjunction and input with the operator prior to commencement. This will augment the City and the operator to maximize recovery rates and minimize contaminants?

A21. Yes.

Q22. Clause 153, the wording is vague. We read that the MRF is responsible for alternate collection methods if the hauler is on strike. Please clarify the wording.

A22. Refer to the Amendments section of this Addendum.

Q23. Clause 185. Will the City be responsible for ongoing usage charges for phone and data?

A23. Yes.

Q24. Clause 59. What is the mechanism that enacts 3rd party auditing by the City at the MRF expense?

A24. Section 59 of the Agreement provides that:

In the event that the City Audit determines that the Operator has not complied with any requirement or obligation under this Agreement, the Operator shall immediately remedy such non-compliance and shall reimburse the City for the cost of conducting such City Audit. The City shall also be entitled to recover the cost of such City Audit from the Monthly Invoices submitted by the Operator in accordance with sections 98, 99 and 100 herein.

Q25. Clause 232. What is the mechanism that enacts 3rd party counsel by the City at the MRF expense?

A25. Notwithstanding the Operator's duty to defend the City in sections 227 and 265 the City reserves the right to appoint its own legal counsel to represent it, at the cost of the Operator, in respect of any Claim.

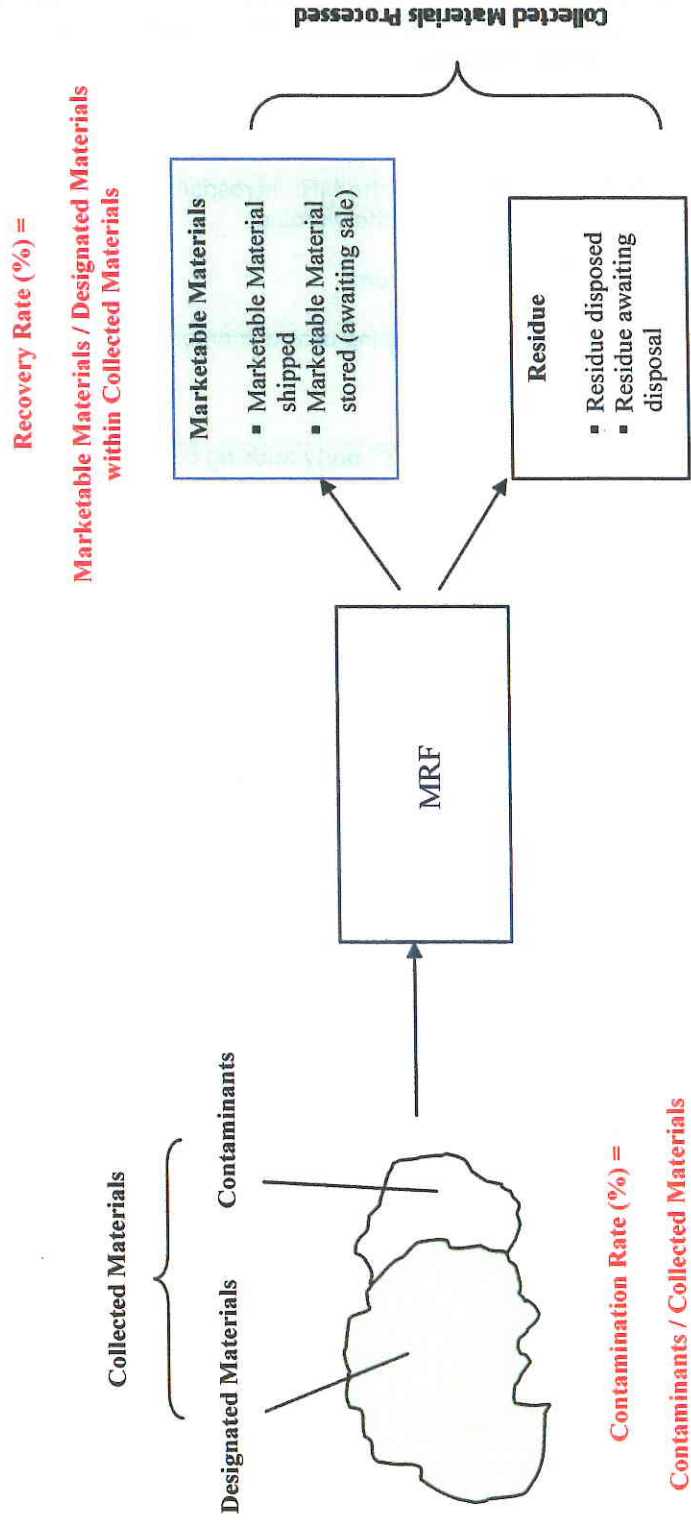
Q26. Clause 10.c. (i). We believe it's unreasonable to insure assets and equipment that are not constructed or purchase yet. I recommend proof of insurance be added to 10. D.

A26. Refer to the Amendments section of this Addendum.

Q27. Is it bylaw that there will be no additional options for extension of the contract beyond the 2 mentioned extensions?

A27. There will be no further extensions.

REGINA MRF TERMINOLOGY



**CITY OF REGINA
Request for Proposals #1959
Materials Recovery Facility (MRF) Services**

Addendum #2

Addendum shall be incorporated into the RFP and shall form a part of the Contract. Proponents must acknowledge receipt of all Addendums as instructed in RFP.

AMENDMENTS:

G. Contents of Proposal

2.2 Financial Capability

CHANGE:

The City considers proof of financial solvency as essential attributes in the selection process. Therefore, the following financial information shall be supplied as part of the Proponent's Proposal:

- name, address, telephone number, and contact person of bonding agencies providing bonding or surety on past or existing jobs;
- ratings on any outstanding corporate bonds;
- its most recent audited or appropriately certified financial statements for the past three (3) years to facilitate the City's evaluation of the Proponent's Proposal with respect to financial condition, strength and resources; and
- name, address, telephone number and contact person for the Proponent's corporate bank.

If the Proponent is a new company within the last year, the requirement for financial statements for the previous three years may be met by providing the most recent annual financial statements for its predecessor or parent company, with the understanding that further information may be requested in order to fully evaluate the financial capability and resources of the Proponent.

All financial statements submitted must be audited or contain a Review Engagement Report prepared by an accredited accountant.

4.8 Sustainability Plan

ADD:

The Proponent's Proposal should identify economic benefits to the City.

The Proponent's Proposal should include a copy of their training document in their proposal.

H. Scope of Services and Requirements II, Financial Requirements

12. Performance Security

CHANGE:

A Performance Security will be required from the Operator upon execution of an Agreement. Such Performance Security shall be \$3,000,000.00 in the form of a cheque certified by the bank upon which it is drawn, a bank cheque, a money order, an irrevocable bank letter of credit (no

interest shall be payable on such deposits), or a multi year performance bond with a three (3) year initial term and annual renewals for the duration of the term of the Agreement signed and sealed by the Operator's surety from a surety company authorized by law to carry out business in the Province of Saskatchewan and approved by the City, such multi-year performance bond to be in the form attached as Appendix L hereto. Such deposits will be retained until completion of the Contract to the satisfaction of the City.

Failure of an Operator to provide a Performance Security within seven (7) business days after the Operator and City have each executed the Agreement may be considered sufficient grounds for rejecting the Proposal and accepting the next most qualified Proposal or requesting new Proposals. The irrevocable letter of credit must either automatically renew or be valid for the term of the Agreement in the amount specified, such that continuous coverage is provided throughout the term of the Agreement. The performance bond shall be for an initial three (3) year term and must be renewed and maintained annually by the Operator for the duration of the term of the Agreement. No interest will be paid by the City.

APPENDIX I - FORM OF AGREEMENT

Definitions 1 (ddd)

CHANGE:

Performance Security means the performance security delivered by the Operator to the City as more particularly described in section 214 of this Agreement.

Performance Security, 214

CHANGE:

To secure performance by the Operator of all of its obligations under this Agreement, the Operator shall deliver, as a Condition Precedent of this Agreement, the performance security detailed in this section (the "**Performance Security**"). In order to satisfy its obligation to provide Performance Security, the Operator shall deliver to the City one of the following by the date specified in section 10 herein:

- (a) a three year renewable performance bond in the form as required by the City in the amount of \$3,000,000.00. If the Operator has proposed another form of performance bond which has been approved by the City, the Operator may fulfil its performance security obligation by delivering such alternative bond form provided always that it is in the amount of \$3,000,000.00 for a three (3) year initial term and must be renewed and maintained annually by the Operator for the duration of the term of the Agreement. Where required by the surety issuing the bond, the Operator will renew the bond from time to time so it remains in effect until six (6) months after the expiry or termination of this Agreement; or
- (b) an irrevocable letter of credit in the amount of three million dollars (\$3,000,000.00) ("**Letter of Credit**"). The Letter of Credit shall be renewed from time to time by the Operator so as to remain in effect until six (6) months after the expiry or termination of this Agreement; or
- (c) a certified cheque in the amount of three million dollars (\$3,000,000.00), payable to "The City of Regina".

Clarifications:

Note: The following is a list of Proponent submitted questions and the associated City of Regina responses. Any reference to names have been removed, however, the wording of the questions is otherwise identical as received.

Q1. As per Section 2.2 Financial Capability, Proponents are to provide proof of bondability. As such, we have obtained a letter from our surety demonstrating such. Please find it attached. Would the City please confirm that the letter meets the requirements as proof of our bondability.

A1. Refer to the Amendments section of this Addendum.

Q2. Would the City please clarify what is "rating on any outstanding corporate bonds"?, which is the third bullet point in Section 2.2.

A2. For the purpose of this RFP it is the grade given to bonds that the Proponent may have issued. The bond rating indicates the Proponent's credit quality. Private independent rating services such as Standard and Poor's, Moody's and Fitch provide these evaluations of a bond issuer's financial strength, or its ability to pay a bond's principal and interest in a timely fashion. If a Proponent has not issued bonds and does not have an applicable bond rating the Proponent should provide the City with its' credit rating.

Q3. Section 4.3 on page 24. Are the monthly composition audits to be conducted by an independent third party for the first two years in addition to or in lieu of the monthly composition audits to be conducted by the operator?

A3. In addition to the monthly composition audits conducted by the Operator.

Q4. Can an independent third party be used for all audit requirements (recovery audits, monthly composition audits beyond the two year requirement, etc). If yes, can the independent third party's monthly composition audit be conducted in lieu of the Operator's monthly composition audit during the first two years?

A4. Yes, an independent third party can be used for all audit requirements beyond the two year requirement.

No, the independent third party's monthly composition audit cannot be conducted in lieu of the operator's monthly composition audit during the first two years.

Q5. Do the recovery rate calculations need to account for designated materials in the residue stream and/or contamination in the marketable materials?

A5. Yes.