Emterra Environmental USA Corp.

Response to

Request for Proposal #RFP 980
for
Interim Operation of Ann Arbor Material Recovery Facility (MRF) and Waste Transfer Station

City of Ann Arbor

Procurement Unit
C/O Customer Service
P.O. Box 8647
301 E. Huron Street
Ann Arbor, MI 48104

Deadline for Submission: Friday, October 28, 2016 at 2:00:00 Local Time

Contact: **Angelo Caramagno**
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A. LETTER OF TRANSMITTAL

October 28, 2016

Attention: City of Ann Arbor
Mr. Colin Spencer
Procurement Unit
C/O Customer Service
P.O. Box 8647
301 E. Huron Street
Ann Arbor, MI 48104

Dear Mr. Spencer,

Re: RFP NO. 980 Interim Operation of Ann Arbor Material Recovery Facility (MRF) and Waste Transfer Station

It is with great pleasure that Emterra Environmental USA Corp. ("Emterra") submits our proposal to the City of Ann Arbor ("the City") for the Request for Proposals **# RFP NO. 980 Interim Operation of Ann Arbor Material Recovery Facility (MRF) and Waste Transfer Station** ("RFP"), with acknowledgement of receipt of Addendums No. 1, No2, No.3 and No.4.

Specifically, we understand that the purpose and objectives of this RFP are:

- Operation of the Material Recovery Facility (MRF)
  - Option 1 Bale and Ship to Contractor MRF, Marketing and sale of Recyclables
  - Option 2, with 30 days' notice, should the City have the sorting equipment operational, Operate MRF facility with Sort Line. Marketing and sale of Recyclables
- Operation of Transfer Station Facility
  - Load and Haul Municipal Solid Waste to City's designated landfill

Since 1976, Emterra has grown to become a leading North American waste management organization that provides municipal plus industrial, commercial and institutional ("ICI") waste, recycling, yard waste, and organics collection and post-collection services in BC, Saskatchewan, Manitoba, Ontario, and the state of Michigan, USA. In the ongoing pursuit of Zero Waste, Emterra and its sister companies:

- Service over 80 communities representing over 10% of Canada's population through 40+ municipal solid waste, recycling, and organics collection contracts and recycling processing and marketing contracts;
- Collect and process over 500,000 tonnes of recyclables and 490,000 tonnes of household waste and organics each year;
- Own and operate 24 waste management facilities in Canada and in the United States, of which 14 are single stream and multi-stream material recovery facilities;
- Own and operate over 550 collection vehicles, of which 35% are powered by compressed natural gas ("CNG") and including one of Canada's largest compressed natural gas ("CNG") fleets, which is based in Mississauga, Ontario; and

- Employ over 1,000 people.

We look forward to creating a viable and successful partnership to assist the City in meeting its waste diversion and Triple Bottom Line goals by providing services at prices that reflect value, effectiveness, and efficiency.

Sincerely,
Emterra Environmental USA Corp.

Angelo Caramagno
General Manager
Emterra Environmental USA Corp.

B. EXECUTIVE SUMMARY

Emterra Environmental USA Corp("Emterra") fully understands the requirements of RFP No. 980 Interim Operation of Ann Arbor Material Recovery Facility (MRF) and Waste Transfer Station and submits a proposal for the operation of the MRF and Waste Transfer Station. Within this document, Emterra presents unique and creative approaches to ensure the City achieves continually improving waste diversion from landfill, exceptional customer service, and reliable services in a cost effective manner.

Four Decades of Successful Collections and Processing

Emterra has nearly four decades of expertise in solid waste, recyclables, and organics collections and processing and is abundantly qualified to design expert, heuristic routing and fleet utilization, select the most ideal collection vehicles with full consideration to weather, road width, traffic conditions, topography, terrain, and road bans, as well as container size, and address all City requirements for additional services including Large Item Pickup, Christmas tree collections, and special yard waste weeks. Emterra owns and operates 24 waste management facilities in Canada and the state of Michigan, including 14 single stream and multi stream MRFs, which process and market nearly 500,000 tonnes of materials each year.

C. ASSUMPTIONS

The following section outlines the assumptions Emterra has about the information or arrangemtns to be provided by the City. These assumptions inform and form part of this proposal.

1. **Glass Containers/Fines**
    a. It is expected that due to the existence of the Michigan Bottle Deposit Law, most glass containers collected through the recycling program will be non-deposit glass containers.
2. **Landfill Tip Fee/ Processing Fee Stabilization**
    a. Emterra does not have any control over the tip fee at the landfill for the disposal of contaminants and residue, which constitutes a major cost component of the unit price for the processing and marketing of recyclables.
3. **Key Definitions**
    a. Definition of Residuals: Residuals are made up of Contaminants and some Acceptable Recyclables that are not captured during processing.
    b. Definition of Contaminants: Any material that is not an Acceptable Recyclable.
    c. Definition of Acceptable Recyclables: Acceptable Recyclables include aluminum food or beverage cans including cans made primarily of aluminum, newsprint, mixed paper, magazines, telephone directories, polyethylene terephthalate (PET) bottles for food or beverages, high density polyethylene (HDPE) bottles used for food, beverages, toiletries or household cleaners; steel food or beverage cans (including cans made primarily of steel), aluminum foil

(including items made from aluminum foil), boxboard or paperboard, corrugated cardboard, glass bottles and jars for food or beverages, paper cups and plates, and polycoat paperboard containers being containers made primarily of paperboard and coated with low density polyethylene or aluminum and used for food or beverages (aseptic and gable top). The types of Acceptable Recyclables may change from time to time based on written agreement by both

4. **Quality specifications of recyclable materials sold to end markets/buyers**
    a. The quality of sorted recyclable materials is defined by/as per the Buyer's quality specifications, which may change from time to time, as determined by the Buyer.
5. **Equipment, Building, and Land owned by the City**
    a. We assume that all equipment, building, and land owned by the City will be in reasonable good working condition at start of contract.

D. PROOF OF ABILITY (SCHEDULES 2 THROUGH 11)

Schedule 2 – Technical Details Processing

1. Detailed List of Materials to be Processed at the Material Recovery Facility

Since 1976, one of Emterra's core operating principles is "Markets First, Collections Second". What this means is that collection does not equal real recovery and thus what we collect is more important than the actual collection of the material. Which materials are collected is highly important because only those materials that have viable, long-term, sustainable end markets should be collected in order to maintain the viability of the overall recycling program. Collecting materials that have no end markets due to their quality, condition, or composition (or any combination thereof) simply means that the materials are landfilled or stockpiled.

As such, the materials to be processed at the MRF and collected as part of the curbside recycling program include:

1. aluminum food or beverage cans including cans made primarily of aluminum;
2. newsprint;
3. mixed paper;
4. magazines;
5. telephone directories;
6. polyethylene terephthalate (PET) bottles for food or beverages;
7. high density polyethylene (HDPE) bottles used for food, beverages, toiletries or household cleaners;
8. steel food or beverage cans (including cans made primarily of steel);
9. aluminum foil (including items made from aluminum foil);
10. boxboard or paperboard; and
11. Corrugated cardboard.

2. Safety

A. Safety Policies & Procedures for Commercial Vehicle Drivers Offloading Materials on Tip Floor

- The drivers/helpers must obey all traffic control devices and directions given by the MRF staff, scale attendant at all times.
- Collection vehicles operators are required to weigh their vehicle at the weigh scale before proceeding to unload.
- Drivers shall travel at safe speeds at all times when entering or driving on the property. Excessive speed will not be tolerated. Adverse weather conditions will dictate safe speeds in the yard. Under no circumstances is the driver of a commercial motor vehicle to exceed 15 mi/hr in the yard.
- Drivers/helpers shall properly wear (laced) safety foot wear with steel toed protection at all times when outside the cab of his/her truck.
- Drivers/helpers shall properly wear a safety vest at all times when outside the vehicle. The safety vest must be in good condition so as to retain its high visibility standard.
- Drivers/helpers shall properly wear safety glasses at all times when outside the cab of his/her truck.
- Commercial Motor Vehicle Driver's must be alert to mobile equipment and pedestrian traffic at all times when on the Regina Recycling property. Drivers must make eye contact with pedestrians and mobile equipment operators before safely proceeding with there intended path of travel.
- The use of radio communication / cell phones and other distractive devices are strictly prohibited while operating a commercial vehicle on the premises. The driver must pay full attention to his/her surroundings at all times.

Unloading Procedures

- **Position your truck well back from the entrance of the bay door so that it is ready to back up. If the bay is vacant (no trucks inside bay) back your truck to the door but remain outside the building (approximately 5 feet from the entrance). Exit the cab of your truck, stand at the edge of the door and establish hand/eye communication with the loader operator that it is safe to back in. Sound your horn twice (two short blasts) before you make the final entry into the plant as a final warning. Never reverse your truck into the plant unloading area unless you have established communication with the loader operator.**

  Note: If the loader operator is not available, the driver or helper must exit the cab and make sure the bay is safe to back into, before reversing the truck. Always be aware of mobile equipment in the area. Once it is safe to back in, the driver can proceed at a very low rate of speed. Use of the air horn (two short blasts) is required as a final warning

prior to entry. At this point, the spotter must get back into the cab of the truck. Driver to back in slowly and with extreme caution.

- The vehicle shall not exceed 5mi/hr, while reversing into the tipping floor area.
- Once inside the Bay, properly secure your vehicle. Only the driver may exit the cab of the truck. Be aware of your surroundings at all times.
- NOTE: The driver must never be outside a one metre radius from his/her truck at any time when on the tipping floor. Do not wander out of this area. If there is a need for the driver to move outside the one metre radius, eye contact must first be made with mobile equipment operator(s) and hand signals must be used to communicate the intention. The driver is to return immediately back to the one metre radius.
- The driver shall ensure that all loose materials are removed from the collection vehicle prior to leaving the tipping floor area.
- The driver shall never enter or exit the tipping floor area with the vehicle box in the upward position.
- Upon completion of the unloading procedure, drive safely out of the Bay door stopping and honking your horn just before edging the nose of the truck out. Ensure there are no pedestrians or mobile equipment in your path of travel, before proceeding.
- Drive to the scale house to weigh out under a safe controlled speed.
- Loader operator will report drivers and helpers who do not comply with this procedure. Drivers/helpers who fail to comply with these policies and guidelines will not be permitted to access the facility.

B. Visitor's

1.1 VISITORS - DEFINITION

A visitor is any person who is admitted to the premises who is not directly providing a service for which Emterra Environmental pays them. This shall include but is not limited to sales representatives, consultants, properly sanctioned guided tours, customers or their representatives, and the general public. It also includes off-duty employees, their families and/or friends.

1.2 VISITORS

Visitors are not permitted on Emterra Environmental's premises without expressed authority of the area supervisor.

Only on-duty employees, inspectors and contractors shall be permitted in the building without having an escort and

without proper identification. This policy is intended to ensure that no harm comes to any visitor while on Emterra Environmental's premises and to ensure that Emterra Environmental suffers no loss or liability as a result of any action by a visitor while on Emterra Environmental's premises. Therefore, any visitor on Emterra Environmental premises is responsible for adhering to the health and safety rules and regulations while on the premises. Failure to comply will result in the removal of a visitor from Emterra Environmental premises.

Persons not employed by Emterra Environmental or on official business with Emterra Environmental are expressly forbidden to be in the Plant including the lunchroom area etc.

All authorized visitors (as defined above) must:

- Enter the facility through the front office.
- Only proceed past the entry after they have signed in the Visitor's Log Book. If you are a regular delivery vehicle, proceed to the scale house to weigh in. There is a visitor's sign in book there. You will either sign in there, or the scale house attendant will sign you in. If you are not a regular delivery vehicle, proceed with the procedure.
- Once you have signed in, open the door and exit the entryway. Wait in the main office reception area for an escort.
- Do not enter the plant without an escort
- Do not walk outside the designated walkways
- Abide by all general safety rules, which are displayed throughout the plant
- Wear any Personal Protective Equipment (PPE) as directed by the person they are visiting or based on any warning signs.
- PPE includes
    - Minimum 6'' ankle cuff high CSA approves steel toe work boots.
    - High visibility safety vest.
    - Approved safety Glasses.
    - Ear plugs.
    - Hard hats (Optional)
    - Dust masks(Optional)
- Not operate any equipment without the authorization of a senior manager or departmental supervisor
- Not remove any item without the authorization of a senior manager or departmental supervisor.
- Leave the facility by returning to the front office and signing out.

C. MRF Plant and Transfer Operations employees

Each region/facility has an Employee Health and Safety Orientation Handbook. A specific handbook will be created for the Ann Arbor facilities as part of the startup. Employees will go through the standard Emterra screening and orientation training. A sample of the handbook can be provided on request.

3. Work Plan Operation of Ann Arbor Material Recovery Facility (MRF) 3 Options

Proposals submitted by Emterra USA for processing of Ann Arbor Recyclables are as follows:

A. Option 1 : Bale and ship all recyclables to Emterra's Burlington MRF in Ontario
B. Alternate proposals :

1. Option 2: Sorted and separated the majority of the recyclable, eg Paper (OCC + Mixed Paper) at Ann Arbor Facility, with the balance (mostly containers) be baled and shipped to Emterra's Burlington MRF in Ontario
    - Assumption : that the equipment for sorting the fiber is fully functional
2. Option 3: Sorted all recyclables at Ann Arbor MRF, eg OCC, Mixed Paper, Al, Steel can, Plastics, Mixed Glass and Residue
    - Assumption : that the full processing line is fully functional

Process Narrative

a. Equipment to be utilized in all options:
    i. City Owned Loader
    ii. City Owned Fork lifts
    iii. City Owned Baler
    iv. City Owned Sort Equipment where applicable

b. As part of the Startup, Emterra will inspect all City owned Mobile equipment prior to use, to confirm the functionality and current condition for operations use.

A. Option 1 Bale and Ship

The following describes the step-by-step methodology of how residential single stream recyclables are processed at the MRF under **option one**. Option one assumes that the sorting systems do not operate but does assume that the baler and conveyor systems to the baler are operational.

1. Single stream recyclable materials (SSRM) are off-loaded onto the tip floor and inspected by the tip floor spotter who also extracts large contaminants, hazardous waste, etc. and places such materials into appropriate storage containers for later handling/disposal.
2. SSRM are loaded onto in-feed conveyor for direct baling.
3. All commodities are stored on tip floor and moved onto the in-ground pit conveyor leading to the baler for baling.
4. Bales are then transported by the forklift and stored in the designated areas before shipment to our Burlington MRF or similar facility.
5. A manifest system will be used to verify delivery of recyclables to the Emterra MRF.

Processing at Emterra Burlington Facility:

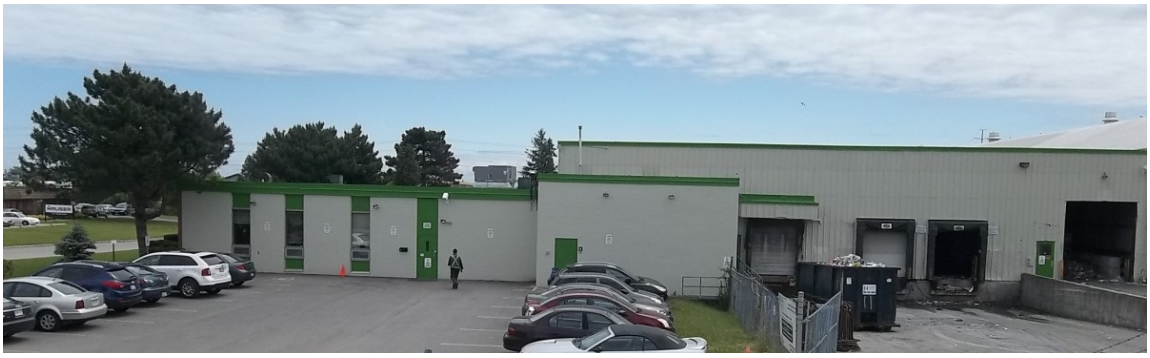
6. Emterra Burlington Single Stream and Multi Stream Material Recovery Facility

General Facility Description and Location

Emterra's Burlington SSRM MRF is located at 1122 Pioneer Road, Burlington, Ontario. The site is currently zoned as GE1, General Employment under Zoning By-law 2020, as amended. The site consists of a total of 3.756 hectares (9.28 acres) of which 1.966 hectares (4.86 acres) are fenced

and currently in use as a processing facility for municipal recyclable materials. This 55,000 square feet MRF is centrally located in Ontario and is close to major transportation arteries, which facilitate the collection and receiving of loose and baled recyclables and the shipment of baled products to end markets.

In 2013, this facility was upgraded again to incorporate additional optical sorting technology manufactured by TITECH and to also redesign the container processing line to incorporate the latest best practices in container processing, given the advances to optical sorting technology. During the retrofit, the facility continued to receive inbound recyclables on a daily basis without any interruption to curbside collection services. This facility now processes the full spectrum of rigid plastic containers #1-7, including clam shells and mixed plastics, spiral wound cardboard containers, polycoated and aseptic containers, ferrous and non-ferrous containers, glass containers, and all types and grades of printed paper. All materials are primarily mechanically and/or optically processed, with manual quality control performed after mechanical and optical separation to provide additional quality control.



a. Figure - Emterra Burlington Facility

Type and Degree of Emterra Involvement in the Facility

Emterra Environmental is directly responsible for arranging financing, managing all aspects of the design and build of the facility and all procurement, processing operations, maintenance, shipping/hauling of recovered products and marketing activities.

Facility Contact Information

Key Corporate Contacts

- Paulina Leung, VP Corporate Strategy and Business Development; 905-336-9084 Ext. 130; paulina.leung@emterra.ca
-

General Description of the Facility Including the Design of the Sorting Operations

This state of the art Single Stream MRF in Burlington, Ontario, Canada is equipped with a government-certified 80 feet electronic truck scale, three 16 foot by 24 foot bay doors in the unloading area, and tip floor area with a ceiling clearance of 32 feet and thus able to accommodate a variety of different collection and shipping fleet vehicles.

This MRF features TITECH optical sorting equipment. Nearly 100 per cent (by weight) of incoming materials are mechanically and optically separated by equipment and is complemented with manual quality control to identify and sort out contamination and to segregate each type and grade of recyclables so that each type and grade meets end market/buyer specifications.

Figure - Emterra Burlington MRF

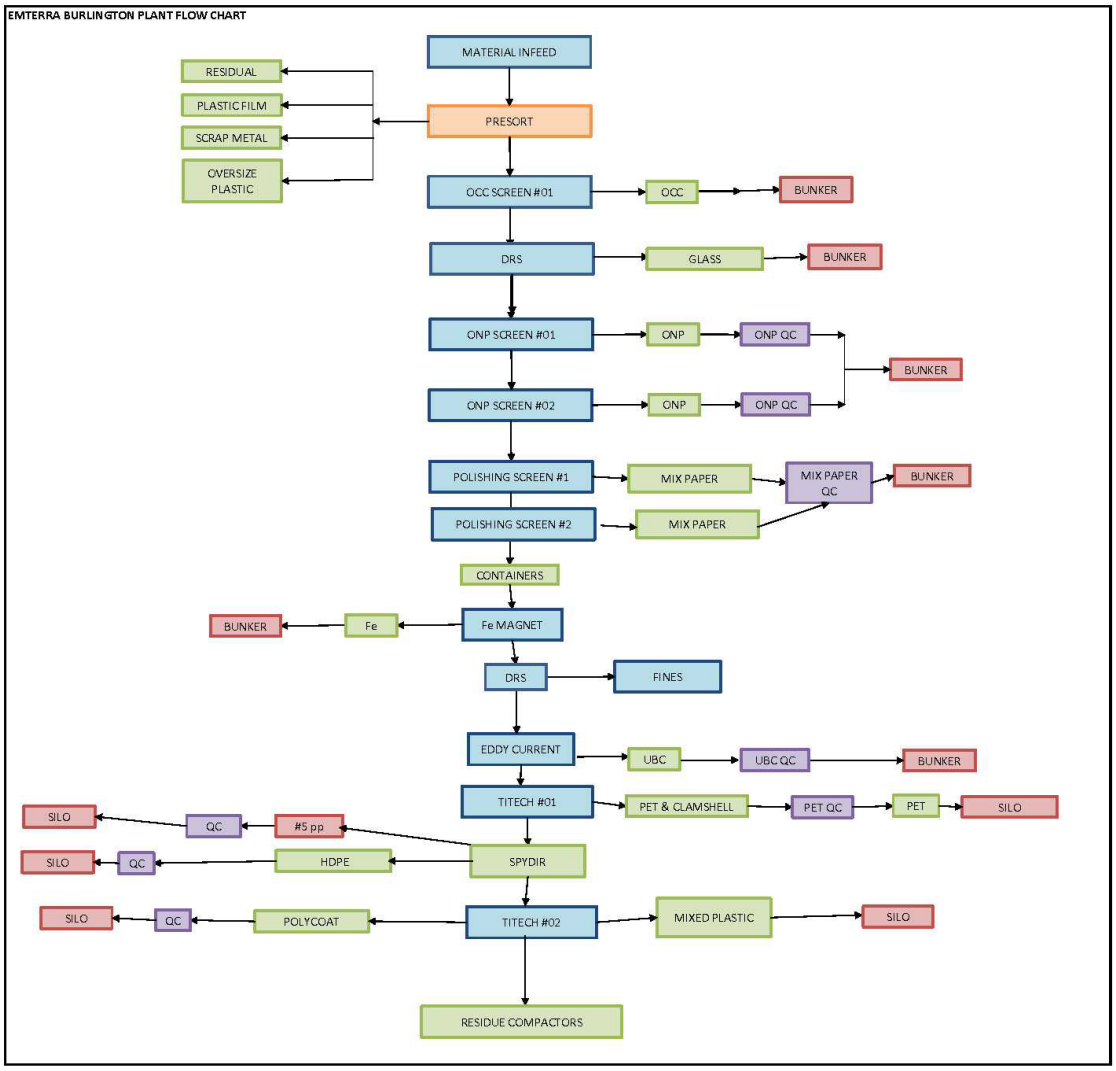
System Capability and Capacity

Emterra's Burlington facility recovers various types of products, including but not limited to OCC, hard pack, office pack, magazines, #8 ONP, PET #1 containers, pigmented and natural HDPE #2 containers, plastic tubs and lids #5, water jugs, aluminum, steel cans, spiral wound cardboard containers, mixed container glass, aseptic/polycoat containers, plastics #1-7, and residuals.

The system's design capability is 49.5 tons per hour; the system's design capacity is over 110,000 tons a year.

Process Flow Diagram

The following process flow diagram (PFD) illustrates how all inbound materials are mechanically and optically separated, and undergo multiple manual quality control stages in the recovery of each type and grade of commodity. The various types and grades of commodities are then stored in bins, bunkers, and silos prior to baling and shipment to end markets.



b. Figure - Emterra Burlington Facility PFD

Process Descriptions

The following narrative describes the process description.

Infeed

Upon unloading on the dedicated tipping building, a loader feeds incoming material into a 60 cubic yard drum feeder so that an even and consistent flow of material is presented to all following screens, mechanical apparatus and optical sort equipment.

Pre-sort

The materials will proceed through a pre-sort area where up to six sorters are stationed. These sorters remove the plastic film, scrap metals, electronics, hazardous materials, oversized plastics and obvious residues. The plastic film, metals, oversized plastics and residues will be placed into bunkers under the sorting line. The electronics and hazardous materials are placed into holding containers on the sorting platform and will be shipped to a properly licensed facility for downstream processing. The hazardous materials will be properly segregated and stored by class and arrangements will be made for their safe management. Sorters also open bags containing recyclable materials to release the recyclables.

OCC Screen

A 2-deck OCC Separator Screen with in-line tri-discs combined with a double deck design sort large cardboard from the incoming stream. Sorted large cardboard is conveyed to a storage bunker to await baling. This clean and homogenous cardboard is #11 OCC, meeting buyer quality specifications and is ready for the market after it is baled. The remaining fibres and containers fall through discs for further downstream sorting.

Glass Removal (DRS) Screen

A 2-deck Debris Roll Screen (DRS) with steel in-line disc screens break glass bottles and jars and screen such material from the rest of the incoming stream to prevent any glass contamination.

Fibre and containers (aka "overs") (e.g. flattened PET bottles) are also separated from glass and other smaller materials (aka "unders"; e.g. lids, fine paper, etc.) by the DRS. Overs are sent to a second DRS to eliminate any remaining glass. Unders (e.g. glass, bottle caps, etc.) from both screens are conveyed to the glass bunker to await shipment to downstream processing facilities.

Since all of our buyers consider glass as prohibitive material (i.e. contaminant) as it will damage their manufacturing equipment, the design of Emterra's MRF ensures that these materials are removed at the outset to prevent any cross contamination of other commodities and to prevent any damage to downstream processing equipment.

ONP Screens

Overs from the two previous DRSs are split 50-50 onto two separate conveyor belts. Each belt leads to two parallel sorting systems, each consisting News Sorters Tri-Disc Sorter Screens. The purpose and main benefit of this duality/redundancy is to ensure that materials can continue to be processed even if one processing line is down. Therefore, the plant is rarely entirely "down". ONP is pulled up and over the screens while mixed fibre and containers pass through the screens or roll off the back.

Small and Mixed Paper and Containers Separation – Polishing Screens

Small mixed fibres and containers (i.e. unders from the previous ONP screens) are collected by a belt conveyor and sent to one of two parallel Polishing Screens where remaining fibres are sorted from containers. Mixed fibre goes over the top of the polishing screens, fine materials such as lids, pieces of plastic and broken glass pass through the screen, and containers roll off the back. Mixed fibres are then conveyed to fibre QC sort stations for the removal of any remaining newspaper and for the removal of contaminants.

ONP and Mixed Paper Quality Control

There are 3 fibre QA/QC sort lines to further upgrade the newspaper from the 2 newspaper screens and to further upgrade the mixed fibres from the 2 polishing screens. On the newspaper QC sort lines, newspaper undergo quality control as workers manually remove cardboard, other fibres, contamination, and any remaining containers. The resulting end product is #8 ONP, Special Deink News, which is a grade of ONP in ISRI. On the mixed fibres QC sort line, contaminants and containers are removed and any remaining newspapers are directed to the newspaper bunkers using various chutes. The resulting end product is #1 Residential Mixed Paper, which again, is a grade of ONP in ISRI. These materials are stored in separate bunkers and each bunker has a reversible walking floor to mechanize the baler feed process, and when in reverse mode, allow bunkers to more fully loaded. A return conveyor on the QC sort lines allows containers to be recombined with the container stream. Once a bunker is full, a sensor is triggered to alert the baler operator, who would then proceed to bale the material. Once baled, these materials are ready for shipment to markets.

Fine Paper Removal from Container Stream

The two parallel containers streams from the parallel Polishing Screens are combined onto one conveyor system and sent through an air classification system to remove fine papers.

Steel Removal – Cross-belt Magnet

A cross-belt magnet quickly and effectively removes all ferrous metal products from the remaining container stream. Such ferrous metals are then transferred to the ferrous bunker.

Fines Removal from Container Stream

The container stream goes through second DRS to further remove remaining fines such as lids, caps, fine glass, neck rings, etc.

Aluminum Recovery

The remaining materials not sorted continue onto the Eddy Current Separator. An Eddy Current Separator uses a reverse polarity magnet that acts to "flip" the aluminum food and beverage containers, aluminum foil and pie plates forward with these materials being blown into a bunker ready for baling. A QA/QC sorter is positioned after the Eddy Current Separated to remove any contamination from the aluminum stream to produce a high quality grade of aluminum that is sold at an additional premium.

Mixed Plastic Container Sorting – Multiple Optical Sorting

The remaining container stream is then conveyed to the first single eject TITECH Autosort NIRI optical sorter. PET #1 containers and clamshells are ejected by compressed air nozzles to a conveyor that takes the materials to the main container QA/QC sort platform.

The remaining stream is then conveyed to the second dual eject NRT Spydir optical sorter, which recovers HDPE #2 container and plastic tubs and lids #5 and ejects these materials into separate overhead silos. The remaining container stream is conveyed on a high speed belt to the third dual eject TITECH Autosort NIRI optical sorter for the recovery of polycoated and aseptic containers, including laminated hot and cold beverage cups, and mixed plastic containers #1-7. These recovered commodities are then ejected by compressed air nozzles and conveyed via the pneumatic air transfer system to overhead silos. Any remaining materials are conveyed to the residual compactor for later disposal.

Product Baling

Once sorted, each of the materials is stored in bins, bunkers or silos (based on type of material). With the exception of glass and steel, which are taken to market in transport trailers and roll-off containers respectively, all materials are baled for storage and shipment to market. Once sufficient material has been sorted to form at least one bale, it is sent by conveyer to one of two Excel balers. Combined, these balers can bale materials at a much faster rate than the plant can sort materials. Therefore, there is no issue with waiting for balers should a bunker or silo fill, before being able to continue sorting.

Processing Schedule

On average 100% of inbound materials are processed within 24 hours of receipt and subsequently shipped to end markets within a further 24 to 48 hours. All scheduled downtime occurs during the night shift Monday to Friday with any required major equipment repairs or overhauls scheduled to be performed on Saturdays and Sundays where possible.

Information on Quality of Products Produced

All marketing functions are centrally managed and carried out by our centralized commodities marketing department. Changes in end market specifications and buyer feedback are communicated by the marketing department back to the plant to ensure that operations are in line with end market demands.

Maintenance Plan

Maintenance Team

Led by the Senior Maintenance Supervisor, the maintenance team performs predictive and preventative maintenance and unscheduled repairs with the aim of minimizing down time and maximizing productivity of plant production. Activities include inspections, repairs, general maintenance duties to plant and equipment as appropriate.

Maintenance staff conduct regular daily monitoring of the system to ensure each element of the plant is performing to throughput and product recovery and quality expectations. Any issues identified are documented and inspected and repaired if necessary. All maintenance tasks and repairs are recorded and from these records, measures are taken to prevent and/or minimize future breakdowns and non-conformance issues.

Dust Control, Housekeeping and Vermin Control Plan

Given the high potential for negative off-site impacts from a MRF (e.g. noise, blowing debris, dust, materials falling out of delivery trucks onto roadways, vermin, etc.), this MRF has well established and written site maintenance and inspection procedures to mitigate negative effects from affecting our neighbours. Emterra's site maintenance program minimizes and controls the occurrence of vectors, rodents, pests, and vermin, dust, litter, odour, noise, and other nuisances.

Plant staff are trained to perform work space clean-up prior to all breaks and at the end of each shift. In the evening while the processing line is not operating, staff are designated to perform housekeeping and clean up. At least once each shift, a litter control patrol (formed of General Labour personnel) inspect the surrounding neighbourhood to collect any recyclables that may have blown astray. Depending on the amount of windblown debris, the litter control patrol team may be assigned to this task for a longer period of time, as necessary.

Emterra contracts vermin and vector protection services from a third party vendor that sets traps and maintain such traps on a regular schedule to maintain a safe and healthy work environmental for all workers and guests.

ii. Scheduling and Recording Inspections and Repairs

Inspections and repairs are scheduled and performed on a planned and ad hoc basis. Maintenance performed on each piece of equipment (fixed and mobile) meet manufacturers'

guidelines. Inspections on building, structures and site infrastructure are performed on a regular basis and repairs performed as needed.

Recurring maintenance activities are scheduled based on a time, meter and/or tons processed.

Work requisitions are reviewed for approval by the Plant Manager and recorded. The priority of each submitted work order request is determined by the Plant Manager in conjunction with the Senior Plant Maintenance Supervisor and assigned and executed accordingly. Costs related to each work order are tracked for items such as parts, labor, or miscellaneous charges.

Inventories of spare parts, tools, supplies and equipment are tracked through a combination of inventory records, reorder lists, parts receiving processes and reports. As part of inventory control, the Senior Plant Maintenance Supervisor regularly review records of inventories, parts consumption and live inventories. For certain parts and tools that are critical to the operations of the MRF, such as replacement discs for the OCC and ONP screen, certain motors, pumps, etc., Emterra maintains minimum inventory levels as appropriate.

B. Option 2 Sort OCC and Fiber with existing sort line, Bale and Ship remainder

The following describes the step-by-step methodology of how residential single stream recyclables are processed at the MRF. Option Two assumes the City of Ann Arbor gets the front end of the sorting system is operational and capable to sort Fiber from SSRM. In principle, the first pass through the Manual Sort Station for separating fibres from containers. The Fiber will be separated and marketed directly from the Ann Arbor MRF. The remaining containers will be baled and shipped to our Burlington MRF or similar facility for processing.

Single stream recyclable materials (SSRM) are off-loaded onto the tip floor and inspected by the tip floor spotter who also extracts large contaminants, hazardous waste, etc. and places such materials into appropriate storage containers for later handling/disposal.

1) SSRM are loaded onto in-feed conveyor (1 Full time 1 spare person).
2) Station ID's PS-1 to PS-4 will Pre-sort with 4 Sorters
3) Station ID's FS-5-8 will sort Fiber operated by 2 sorters
4) Station ID's FS 9-12 will sort Fiber operated by 2 sorters
    a) Remaining SSRM (minus fiber) goes directly to the baler for baling.

b) Fibres conveyed to a bunker for later baling.

5) Fiber Recyclable Material will be stored in individual bunkers/silos to be later emptied onto the in-ground pit conveyor leading to the baler for baling.
6) Bales are then transported by the forklift and stored in the designated areas before shipment to end markets or the Emterra MRF for further processing (see Emterra Burlington Work Plan in Option 1). A Manifest system will be used to verify delivery of recyclables to the Emterra MRF.
7) Residuals under this option are sent to the City of Ann Arbor Transfer at no cost.

C. Option 3 Operation of existing sort Line

The following describes the step-by-step methodology of how residential single stream recyclables are processed at the MRF. Option Three assumes the City of Ann Arbor is able to get the whole sorting system functioning and capable to separate SSRM and market it accordingly.

Single stream recyclable materials (SSRM) are off-loaded onto the tip floor and inspected by the tip floor spotter who also extracts large contaminants, hazardous waste, etc. and places such materials into appropriate storage containers for later handling/disposal.

1) SSRM are loaded onto in-feed conveyor (1 Full time 1 spare person).
2) Station ID's PS-1 to PS-4 will Pre-sort with 4 Sorters
3) Station ID's FS-5-8 will sort Fiber operated by 2 sorters
4) Station ID's FS 9-12 will sort Fiber operated by 2 sorters
   a) Fibres conveyed to a bunker for later baling.
5) Fiber Recyclable Material will be stored in individual bunkers/silos to be later emptied onto the in-ground pit conveyor leading to the baler for baling
6) Emterra will Install a Plastic Removal System
   a) All Plastics (PET 13,14 HDPEN-15,16, etc) will be removed by the system, baled and sent to either Emterra- Burlington facility or to REVital Polymers Inc at 1271 Lougar Ave, Sarnia (an Emterra related company) (1 Sorter).
7) Bales are then transported by the forklift and stored in the designated areas before shipment to end markets.
8) Residuals under this option are sent to the City of Ann Arbor Transfer at no cost.

Staffing comparison of MRF operations options:

	Option 1 **bale & ship**	**Option 2** **sort all Fiber out**	**Option 3** **sort all fibre +glass + metal +residual**
QC at Tip floor + traffic- liter control	1	1	1
2nd QC + traffic- tipping- Sat+PT	0.5	0.5	0.5
loader operator	1	1	1
baler and Forklift operator	1	1.5	1.5
sub total manpower	**3.5**	**4.0**	**4.0**
equip operator - rotation for albove incl Sat	0.5	0.5	0.5

sorter	1	8	10
sub total sorter	**1.5**	**8.5**	**10.5**
millwright/mechanic	1	1	1
Maintenance help		1	2
sub total maintenance staff	**1.0**	**2**	**3**
burden >>>			
total	**6.0**	**14.5**	**17.5**

4. **Work Plan Operation of Municipal Solid Waste Transfer**

The following describes an overview methodology of how MSW is loaded at the Transfer for final disposal at Woodland Meadow Landfill.

1. Trucks will be weighed at the scale house. MSW is off-loaded onto the tip floor and inspected by the operators for off spec material.
2. Loader operator will move material to the excavator.
3. The excavator will load into 120 yd walking floor trailers.
4. Trailers are then transported to Woodland Meadows Landfill.
5. Housekeeping will be a focus with general cleaning and pest control to minimize risk.

Transportation of Garbage to Disposal Facility

Emterra's transportation plan for Garbage to Woodland Meadow Landfill will be developed after taking into consideration a variety of variables:

- Projected garbage volumes over the term of the Contract
- Seasonality
- Travel distances
- On-road peak traffic hours
- Allowable inventories at Transfer Station
- Trailer capacity
- Operating hours of Transfer Stations
- Operating hours of Disposal Facilities
- Maximum allowable loads per hour at Disposal Facility
- Minimizing traffic impact at Disposal Facility
- Spare capacity

Through this detailed analysis, Emterra will determine the most effective methodology for the transportation of garbage.

Emterra plans to subcontract to Custom Ecology of Ohio Inc. (CEI), 3793 Silica Road, Sylvania, Ohio, the current subcontractor for operation and transportation of the Transfer Station. CEI will provide Emterra with:

1) All required Tractors, Drivers, Trailers for transport
2) Equipment operators
3) Switch Truck
4) Fuel

City of Ann Arbor Loader & Excavator will be utilized and maintained by Emterra. As part of the Startup, Emterra will inspect all City owned Mobile equipment prior to use, to confirm the functionality and current condition for operations use.

5. **Scale House operation support**
    a. **Emterra will provide Material Manager software and computer that will produce scale tickets with the existing Toledo Scale.**

6. **Provide the Estimated Tonnage the MRF will be able to Process in One Year**

The City Projects:

- Residential 14,400 Tons

Schedule 3 – Marketing Plan

Since 1976, Emterra has been a recognized leader in the recycling industry for our marketing expertise and ability to produce high quality products that meet all of our buyers' specifications. Collapse of local and international commodity markets for products, such as news, metals and various types of plastic, has occurred many times over the last four decades. Our ability to maintain purchase orders during these periods of major economic contraction stems from:

- Our ability to work together with collections operators to collect the highest quality of recycled commodities possible;
- Our ability to consistently find stable and reliable buyers for all of our end products;
- Our understanding of buyers' quality expectations and translating this knowledge to the frontlines of collection and plant operations to ensure recyclables are collected and processed in a manner that would result in the highest quality of recyclables produced; and

Most importantly, Emterra has built a reputation as a high quality, reliable, trustworthy and long-term supplier to its customers.

Our depth of expertise and accomplishments in the Canadian recycling and waste diversion industry, particularly during the recession in 2008-2009, has earned us a reputation as leaders in providing innovative, practical, and effective material recovery and waste management services that provide the greatest possible value to our clients. Despite the collapse of the entire local and international commodity market during the great recession, no recyclables were landfilled during this period.

Current and future expected global economic conditions will render the task of marketing and selling the City's commodities increasingly difficult and at a higher level of uncertain demand. As such, the City must ensure that its waste diversion partner not only has demonstrated experience and expertise to market commodities in a protracted global economy, but it also has the reputation and know-how for producing high quality commodities and has access to reliable end markets that will consume its supply.

Marketing Team Personnel

The Marketing Team will be responsible for coordinating the sale and shipment of all recycled commodities generated from the MRF. The Marketing Team will be led by Doris Wong, Vice President of Materials Marketing.

As the VP of Materials Marketing for Emterra, Doris and her team markets 205,000 tonnes of packaging and printed paper (PPP) annually. She also holds the same role for Green By Nature EPR (GBN), which is the firm that was awarded all post-collection services for the entire province of British Columbia by Multi-Material BC (MMBC). GBN processes and markets 100% off all residential PPP collected under the MMBC program in the province of BC. As such, Doris is responsible for marketing over 186,000 tonnes of PPP generated by 1.7 million BC households in 151 communities in 2015.

The VP of Materials Marketing is further supported by a team of Marketing and Logistics Coordinators and administrative staff who ensure that sales and shipments are executed properly and in a timely manner. The team's objective is to ensure that Commodities are marketed according to the Company's strategies to environmentally responsible end markets while ensuring that commodity inventories at the MRF are within appropriate levels.

Additionally, both our Vice President of Materials Marketing and CEO, Emmie Leung, are actively involved in high-level marketing functions. They develop and search for new markets and buyers around the world for currently marketed and new products by leveraging market intelligence and staying abreast of trends/developments in the industry. They also personally visit end market operations to ensure our commodities meet buyers' needs and also, for Emterra to ensure the commodities are being used in operations that meet our standards for labor, environment, and business practices.

Leveraging Market Volumes

One of Emterra's most significant strengths is the ability to coordinate marketing for all the MRF's commodities together with commodities produced across all of Emterra's MRFs in Canada. This volume of material is substantial and will allow Emterra to secure buyers and negotiate terms and pricing, unlike other small recyclers. Emterra will use this power to leverage the best prices and terms.

Schedule 4 – Insurance Requirements

All of our current carriers have an AM Best rating of A+ XIV or higher. Our Auto Liability and Workers Compensation carriers are admitted. Our Liability and Environmental carriers are not admitted.

Schedule 5 – Proponent's Experience in Similar Work

General Overview

With 40 years' experience as a provider of residential (single unit and multi-unit) solid waste, yard waste, organics and recyclables collection and processing services across Canada, Emterra Environmental has a recognized track record of providing value-oriented, effective, and innovative recycling, waste to resource, and waste diversion services. We take great pride in undertaking the work with a customer service minded approach for the municipality and its residents.

Emterra services over 10% of Canada's population through 40+ municipal recycling, compostable and refuse collection, and recyclables processing and marketing programs in British Columbia, Saskatchewan, Manitoba, and Ontario. We also provide recycling collection and processing services to the industrial, commercial, and institutional (ICI) sector, which further allows us to provide sustainable waste diversion services nationwide.

With a combined fleet size of over 550 trucks across Canada and the USA, of which 35% are CNG trucks, and a network of over 24 offices and material recovery facilities, Emterra has extensive know-how in operating and managing an extensive network of MRFs as well as a large, reliable national fleet and collecting and processing an extensive range of materials which include but are not limited to; single stream recycling, two stream recycling, source separated organics, waste, leaf and yard waste, brush, Christmas trees, bulk waste, white goods.

A family owned and operated company spanning four decades, Emterra comprises four divisions that provide a fully integrated approach to collecting, processing, and marketing waste, recyclables, organic waste, used tires, waste liquids and more. Emterra annually ships approximately 500,000 tonnes of recyclables to end-markets for re-manufacture into new products via its operations in British Columbia, Manitoba, Ontario, Saskatchewan and Michigan, USA. While Emterra provides comprehensive waste management services, we are truly recyclers at heart.

History: Four Decades of Service

Emterra counts among our greatest achievements our exceptional growth over nearly 40 years - *from a fledgling BC paper recycler in 1976 to a leading full-service Canadian and US waste- and resource-management company today*.

Figure 5: History of Emterra

Year	Emterra Milestone
1976	• Emmie Leung starts International Paper Industries Ltd (IPI), collecting cardboard and newspaper in a panel truck in Vancouver, BC.
1982	• Emterra's first material recovery facility opens in Surrey, BC. This facility is still in operation today. • Emterra's first curbside collection serving 3 municipalities: District of North Vancouver, District of West Vancouver, and City of North Vancouver. This is the first municipal curbside program in BC.
1995	• Ontario operations begin under the name of Halton Recycling Ltd. (HRL)
2003	• IPI expands into Manitoba and installs the province's first single stream recycling processing system in its Winnipeg facility providing the curbside collection of recyclables and processing the same for the City of Winnipeg.
2004	• Canadian Liquids Processors Limited joins HRL, specializing in product destruction for sugar- and alcohol-based liquids, converting these into ethanol and producing windshield washer fluid for sale to commercial fleets.
2005	• HRL opens a tire recycling plant, and starts collecting and processing used and scrap tires from across Ontario.
2008	• A new name and brand for IPI and HRL, Emterra Group is established, consisting of sister companies Emterra Environmental, Emterra Tire Recycling, and Canadian Liquids Processors Limited. • Emterra Environmental installs new single stream recycling processing system at the Burlington, ON, plant.
2009	• Emterra installs a new single stream recycling processing system at the Surrey, BC plant – the first of its kind in the province. Emterra becomes the only waste management company in Canada with 3 single stream MRFs.
2011	• Emterra's Niagara Region new fleet of 65 trucks starts operating on biodiesel. • Emterra first compressed natural gas (CNG) truck is added to its Surrey, BC fleet.
2012	• Emterra launches the first large-scale CNG fleet in Winnipeg - the largest cold weather CNG fleet in the world with 60 collection vehicles. • Emterra expands and upgrades the Winnipeg single stream recycling facility with the latest European sorting and optical technologies. • Emterra Environmental USA and sister company Huron Landfill are born when Emterra expands into Michigan, USA
2013	• Emterra opens its most advanced single stream recycling facility in Regina, SK.
2014	• Emterra adds 14 new CNG trucks to its recycling and garbage fleet in Metro Vancouver, BC.

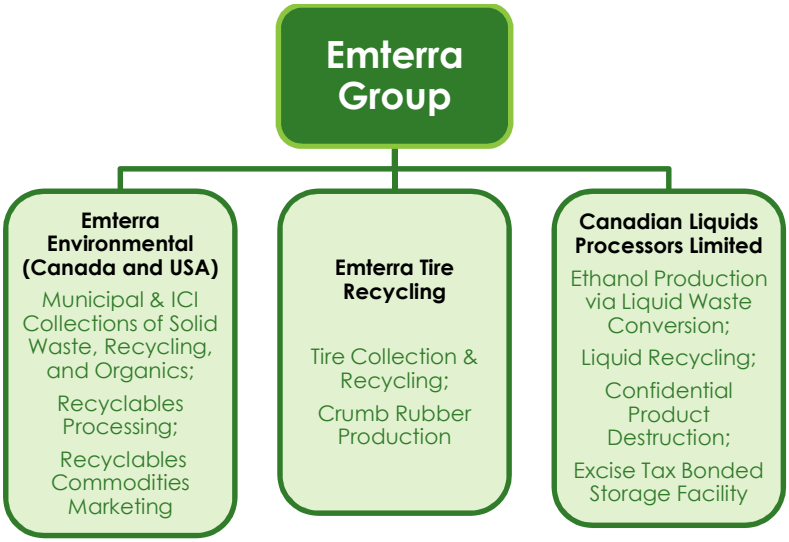
2015	• Emterra begins collections service for Saskatoon, SK in the city's first recycling multi-family program. • Emterra acquires reFUSE Resource Recovery, expanding its food waste and organics collections services in BC. • Emterra expands its Chilliwack CNG fleet and opens Chilliwack's first and only CNG truck fuelling station. • Emterra and its partners finalize investments of nearly $50 million in Ontario's largest public CNG fueling station and CNG-certified truck maintenance facility in the City of Mississauga, ON, as well as a new 100+ vehicle CNG fleet. • Emterra prepares to unveil both a new fleet of environmentally-friendly CNG trucks to collect Capital Regional District recyclables and a CNG fuelling station.

Corporate Structure – Emterra Group

Emterra Group employs over 1,000 staff in our operations across North America. In addition to Emterra Environmental, our sister companies include:

- **Emterra Tire Recycling**, which collects tires and recycles them by using ambient shredding and grinding processes to release and separate the core components of the tire; and
- **Canadian Liquids Processors Limited**, which provides confidential product destruction services and treats liquid waste with a high sugar and/or alcohol content by converting it into ethanol.

Figure 6: Corporate Organizational Structure



Corporate Direction

Emterra continues to strive to achieve its goal of Zero Waste and to continually reduce its carbon footprint. With that end in mind, Emterra will continue to create and operate state-of-the-art material recovery facilities ("MRFs") in North America, which most effectively and efficiently separate single stream recyclables into their most valuable component categories. Emterra will continue to initiate programs that will increase individual's recycling behaviours, increase the quality of recyclables for end-market buyers, and decreasing Green House Gas (GHG) emissions through optimized collection programs, the expanded deployment of cleaner running CNG trucks, and the implementation of the latest MRF technologies.

Extended Producer Responsibility (EPR) and Stewardship Program Related Experience

As one of Multi Material British Columbia's (MMBC) largest collection and post collection service providers for printed paper and packaging (PPP), Emterra is well versed and experienced in working with stewardship organizations and municipalities on the implementation of new stewardship programs and the operations of such programs. Since May 19, 2014, the launch date of the new MMBC Program, Emterra has been providing recyclables collection, processing, and marketing services throughout BC under an EPR regime. In Ontario, Emterra has been providing recycling collection, processing, and marketing services to municipalities under a 50-50 producer-municipality funding model. In Manitoba, Emterra has been providing recycling collection, processing, and marketing services under the Multi-Material Stewardship Manitoba (MMSM) Program on behalf of municipalities under an 80-20 producer-municipality funding model. As such, our firm is one of Canada's most capable and experienced service providers that have taken part in delivered services throughout major stewardship and legislative changes while helping both stewards and municipalities comply under such new programs and legislation.

Experience in Recovery of Items Covered by Product Stewardship Programs

As Emterra has extensive experience in operating under a variety of Product Stewardship Programs, the City will have a knowledgeable partner to navigate the unique environments and requirements presented by Extended Producer Responsibility (EPR).

We are very proud of our multiple industry acknowledgements, listed as follows.

Year	Awarded to Emterra
2016	• Canada's Greenest Employers 2016 awarded by Canada's Top 100 Employers
	• Greater Victoria Chamber of Commerce Business Leadership Award 2016

2015	• Synergy Sustainability Institute's EcoStar Awards (2015) in the Climate Action Category, recognizing Emterra's commitment and actions in embracing green technologies and helping local communities divert more resources away from the landfill
	• Surrey Board of Trade's 2015 Environment and Business Awards in the Large Business Category, recognizing Emterra's demonstrated exceptional dedication to environmental leadership and innovation
	• Recycling Council of Ontario's Gold Award in a Special Municipal Program for Waste Minimization (2015), recognizing Emterra's Community Care™ program, Make Your Contribution at the Curb!™ with the Region of Niagara
2014	• Recycling Council of Ontario's Silver Waste Minimization Award for "*Make Your Contribution at the Curb*™" challenge in Niagara Region, ON. Emterra donates $1 per tonne for every tonne of collected recyclables, every tonne of used batteries, and $1 for every used tire. To date, over $160,000 has been donated to the Walker Family Cancer Centre at the Niagara Health System St. Catharine's Site.
2013	• Recycling Council of Ontario's Platinum Award in Sustainable Product or Services category for its windshield washer fluid, Transformations
2013	• Top 10 finalist in the Grant Thornton, LLP and Canadian Chamber of Commerce Private Business Growth Award
2013	• Employer of the Year Award by the Manitoba Filipino Business Council
2013	• Winnipeg Chamber of Commerce's Spirit of Winnipeg Award for Innovation – Large Business Category
2012 & 2013	• Recycling Council of Ontario's Platinum Award in a Special Municipal Program for Waste Minimization, recognizing Emterra's Community Care™ program: Make Your Contribution at the Curb!™
2005 & 2006	• Twice recipient of Catalyst Paper's Supplier of the Year for consistent paper quality, reliability in terms of meeting supplier expectations, safe truck loading, bale integrity and consistently high service performance.
1992 & 1993	• Twice recipient of Financial Post's "Canada's 50 Best Managed Companies"

Emterra founder Emmie Leung also has numerous prestigious accolades earned over a remarkable career that has spanned an impressive four decades, listed as follows.

Year	Awarded to Emmie Leung
2016	• University of Manitoba, Distinguished Alumni Award for Professional Achievement, 2016
2015	• *PROFIT* and *Chatelaine* ranking as #15 in the 17th annual W100 list of Canada's Top Female Entrepreneurs
2014	• Ernst & Young Entrepreneur of the Year National Special Citation for Industry Pioneer
2014	• Ernst & Young Entrepreneur Of The Year Ontario award in the Energy and Cleantech category
2013	• Canadian Waste Sector Executive of the Year in the large private business category by the Ontario Waste Management Association
2013	• Entrepreneur of the Year Award by the Association of Chinese Canadian Entrepreneurs
2012	• Recycle Council of British Columbia's "Environmental Award – Personal Achievement"
2012	• Waste and Recycling News "Rosie Award" for recognition of women in business.
2003	• Queen Elizabeth II Golden Jubilee Medal in recognition of outstanding and exemplary contributions to the community and to Canada as a whole
1999	• McGill Management Achievement Award for Outstanding Success in Personal Endeavours Promoting and Advancing Canadian Business and Significant Contribution to Community Affairs
1996	• Winner of "Canada Award for Excellence" by Industry Canada and National Quality Institute in Entrepreneurship
1996	• Canadian delegate to the United Nation's Fourth World Conference on Women, Beijing
1993	• The Commemorative Medal for the 125th Anniversary of the Confederation of Canada Award in Recognition of Significant Contribution to Compatriots, Community and to Canada by the Governor General of Canada

1993	• Honour Role by McLean's Magazine
1992 & 1993	• Twice recipient of Financial Post's "Canada's 50 Best Managed Companies" for IPI
1992	• Canadian Woman Entrepreneur Award - Impact On Local Economy

Experience and Capability in Material Recovery Facilities

Emterra is one of Canada's largest recycling firms specializing in the finance, design, build, ownership, operations, and maintenance of material recovery facilities (MRF) and is the country's leader in single stream recycling expertise. In total, Emterra owns and operates 14 MRFs, five of which are capable of processing Single Stream Recyclable Materials (SSRM) using the latest in European optical sorting technology. Since starting business in 1976 and during the last 10 years in particular, our Company has continued to amass significant in-house expertise in the finance, design, build, ownership, operations, and maintenance of efficient and effective SSRM processing facilities. Emterra has managed all aspects of the design and build of all of our MRFs and the design, installation, commissioning, operations and maintenance of our SSRM processing systems, in addition to directly arranging and/or providing financing for these facilities. Emterra continues to manage all aspects of procurement, processing operations, maintenance, shipping/hauling of recovered products, and all marketing activities of all 14 facilities.

Not only is Emterra one of Canada's leaders in MRF operations and maintenance by the sheer number of MRFs, but also by the amount of recyclables, especially SSRM, processed and marketed. Emterra is the *only* company with four SSRM processing facilities in Canada, averaging more than 50,000 MT of SSRM per year per plant. Emterra is truly second to none in terms of resource recovery and marketing, especially in the realm of SSRM.

Our newest SSRM MRF in Regina, Saskatchewan, was designed, built, and commissioned by Emterra and is also owned, operated, and maintained by Emterra for the City of Regina's inaugural curbside municipal single stream recycling program. This facility was designed specifically to meet the material recovery needs of the city and neighbouring municipalities and commenced operations on July 1, 2013. With a design capacity of 50,000 MT, this MRF processes SSRM from the City of Regina and neighbouring municipalities. All marketing and transportation logistics of commodities are performed by Emterra on behalf of the City of Regina.

The table below summarizes Emterra's SSRM processing product marketing achievements over the last four years.

		2012	2013	2014	2015

Burlington MRF	Total Inbound Materials	50,797	52,624	54,500	55,000
	SSRM	50,642	52,103	53,955	54,450
	SSRM%	**99.69%**	**99.01%**	**99.00%**	**99.00%**
Winnipeg MRF	Total Inbound Materials	52,237	57,869	57,052	59,248
	SSRM	52,010	57,584	56,445	58,336
	SSRM%	**99.57%**	**99.51%**	**98.9%**	**98.4%**
Surrey MRF	Total Inbound Materials	56,605	50,837	61,736	68,910
	SSRM	41,304	31,514	44,959	56,075
	SSRM%	**72.97%**	**61.99%**	**72.8%**	**81.4%**
Cumberland MRF	Total Inbound Materials	-	-	10,412	10,203
	SSRM	-	-	6,067	5,662
	SSRM%			**58.3%**	**55.5%**
Regina MRF	Total Inbound Materials	-	-	10,829	10,856
	SSRM	-	-	10,800	10,856
	SSRM%			**99.7%**	**100%**

**Surrey SSRM tonnages declined with the end of the City of Surrey processing activities in October 2012.*

Please note that the table above does not include the multi stream recyclable tonnage that has been received, processed, and marketed by Emterra's other MRFs across Canada

Guided by our Zero Waste corporate philosophy, our business model is based on transforming waste to resources using innovative, cost effective, sustainable, and environmentally responsible methods. Given the above, Emterra has a proven track record of successfully conducting Work of a similar scope and size and the requisite expertise, resources, and knowhow to meet the City's MRF operations and maintenance requirements.

Emterra's Material Recovery Facility Profiles

A. Regina Single and Multi-Stream MRF

General Facility Description and Location

Emterra's Regina Single Stream MRF is located at 12214 Rotary Avenue, Regina, Saskatchewan, Canada. The site consists of a total of 13 acres and a 45,000 sq. ft. processing facility for municipal and commercial recyclable materials. This MRF is located in the newly developed Global Transportation Hub, an inland port authority designed to connect intermodal transfer and logistics across Canada. Importantly, this strategic location links Emterra's recyclables to end

markets domestically and overseas.

This facility was opened in 2013 and is Emterra's latest facility designed and built from the ground up. The plant is designed to use less energy, water and natural resources in its initial construction and ongoing operations. Benefits include lower energy and water costs, reduced greenhouse gas emissions and a healthier environment for workers. Following LEED's best practices for the design, construction and operation of high performance green buildings, Emterra incorporated:

- more than 275 tons of recycled asphalt in the site development;
- advanced, energy saving windows and doors that incorporate recycled materials;
- over 150 tons of recycled steel in the structure and panelling;
- water conserving washroom facilities; and
- processing equipment that features industry-leading, energy efficient technology.

The MRF was built to start the City of Regina's first ever curbside recycling program for its residents. As a result, Emterra worked closely and consulted extensively with the City during the design phase to ensure the facility would enhance the effectiveness of the recycling program and suit the needs of first-time recyclers.

Figure 7 - Emterra Regina Facility

Type and Degree of Emterra Involvement in the Facility

Emterra Environmental is directly responsible for arranging financing, managing all aspects of the design and build of the facility and all procurement, processing operations, maintenance, shipping/hauling of recovered products and marketing activities.

Date on which Operations Began and Ceased Operating

Emterra's Regina MRF began operation in July 2013 and has not ceased operations.

General Description of the Facility Including the Design of the Sorting Operations

This state of the art Single Stream MRF is equipped with a government-certified 80-foot electronic truck scale and tip floor area that can accommodate a variety of different collection and shipping fleet vehicles up to two at a time. There are also two loading bays to move materials out of the facility.

This MRF features TITECH optical sorting equipment. Nearly 100 percent (by weight) of incoming materials are mechanically and optically separated by equipment and is complemented with manual quality control to identify and sort out contamination and to segregate each type and grade of recyclables so that each type and grade meets end market/buyer specifications.

Figure 8 - Emterra Regina MRF

System Capability and Capacity

Emterra's Regina facility recovers various types of products, including but not limited to OCC, hard pack, office pack, magazines, #8 ONP, PET #1 bottles and clamshells, colored and natural HDPE #2 containers, plastic tubs and lids #5, water jugs, aluminum, steel cans, spiral wound cardboard containers, mixed container glass, aseptic/poly-coat containers, hot and cold beverage cups, plastics #1-7, and residuals.

B. Surrey Single and Multi-Stream MRF

General Facility Description and Location

Emterra's Surrey facility receives, processes, and markets municipal residential and commercial single and multi-stream recyclables from municipalities across the province of British Columbia and has been in operation for since 1982 as a material recovery facility. Located at 6362 148 Street, Surrey, British Columbia, Canada, it is centrally located in Metro Vancouver and close to major arterial roadways including Trans-Canada Highway 1, King George Highway, and Highway 99. This ideal location provides timely delivery of recyclables to the MRF and shipments of products to end markets. This site is on 3.5 acres and has 48,000 square feet in two large

buildings plus a new 20,000 square foot addition that was completed in 2008. All required zoning, licenses, and approvals are in place.

Figure 9 - Emterra Surrey Facility

Type and Degree of Emterra Involvement in the Facility

Emterra Environmental is directly responsible for arranging financing, managing all aspects of the design and build of the facility and all procurement, processing operations, maintenance, shipping/hauling of recovered products and marketing activities.

Date on which Operations Began and Ceased Operating

Emterra's Surrey MRF began operation in 1982 and has not ceased operations.

General Description of the Facility Including the Design of the Sorting Operations

This state of the art Single Stream MRF in Surrey, British Columbia, Canada, is equipped with all necessary equipment and special features to receive and process recyclable materials, including two government-certified 44-ton, 80-foot in-ground electronic truck scales for in and outbound traffic; two entrances/exits off of 148 Street for smooth one way traffic flow, and eight loading docks for fast loading of baled commodities leaving the facility.

Our single stream processing system consists of manual, mechanical, and optical sorting technology to identify and sort out contamination and to segregate each type and grade of recyclables so that each type and grade meets end market specifications.

Figure 10 – Emterra Surrey Facility

System Capability and Capacity

Emterra's Surrey facility is capable of recovering various types of products including but not limited to ONP, OCC, magazines, flyers and inserts, writing and printing paper, envelopes, hard and soft cover books, clean pizza boxes, hot beverage cups, mixed containers (i.e., aluminum, steel, polycoated and aseptic containers, cold beverage cups, glass bottles and jars, PET #1 plastic, HDPE #2 natural and pigmented, mixed plastics #3-7, and spiral wound cardboard containers). Polystyrene and film plastic are not currently accepted in the aforementioned municipalities' recycling programs; however, film plastic is recovered for recycling.

Close to 200 tons of recyclables are processed at this facility each day or 62,000 tons a year. The Surrey MRF is designed with a throughput capacity of approximately 22 tons per hour.

C. Burlington Single and Multi-Stream MRF (see work plan for description)

Overview of Emterra MRFs

The following figure summarizes the capabilities of each of Emterra's MRFs:

General Facility Description									
START DATE	**LOCATION**	**DESCRIPTION**	**MATERIAL PROCESSING DESCRIPTION**						
			3 Stream	**2 Stream**	**Single Stream**	**Municipal Sector**	**ICI Sector**	**Tire Recycling**	**Liquid Waste**
British Columbia									
1982	Surrey	Single- and Multi-Stream Recyclables MRF	x	x	x	x	x		
1983	North Vancouver	Multi Stream Recyclables MRF	x	x		x	x		
1992	Vancouver	Multi Stream Recyclables MRF & SSRM Transfer Station	x	x		x	x		
1994	Nanaimo	Multi Stream Recyclables MRF & SSRM Transfer Station	x	x		x	x		
1998	Chilliwack	Multi Stream Recyclables MRF & SSRM Transfer Station	x	x		x	x		
2002	Kamloops	Multi Stream Recyclables MRF & SSRM Transfer Station	x	x		x	x		
2005	Cumberland	Single- and Multi-Stream Recyclables MRF & Transfer Station	x	x		x	x		
2005	Victoria	Multi Stream Recyclables MRF; SSRM & Food Scraps/Organics Transfer Station	x	x		x	x		
2015	Vernon	Multi Stream Recyclables MRF & SSRM Transfer Station	x	x		x	x		
Ontario									
1995	Burlington	Single- and Multi-Stream Recyclables MRF	x	x	x	x	x		
1999	London	Multi Stream Recyclables MRF	x	x		x	x		
2003	Hamilton	Liquid waste processing facility	x				x		x

General Facility Description									
START DATE	**LOCATION**	**DESCRIPTION**	**MATERIAL PROCESSING DESCRIPTION**						
			3 Stream	**2 Stream**	**Single Stream**	**Municipal Sector**	**ICI Sector**	**Tire Recycling**	**Liquid Waste**
2005	Brampton	Scrap tire recycling facility				x	x	x	
Manitoba									
2004	Winnipeg	Single- and Multi-Stream Recyclables MRF	x	x	x	x	x		
Saskatchewan									
2013	Regina	Single- and Multi-Stream Recyclables MRF	x	x	X	x	x		

Figure13: Emterra MRF Locations

Experience in Similar Work

EXPERIENCE IN SIMILAR WORK			
Years Operated	**Description of Contract**	**Contact Name and Phone Number**	**Value of Contract (annual)**
SASKATCHEWAN			
2013 to 2023	Processing and marketing of Single Stream recyclables	**City of Regina** Ms. Janet Aird P: 306-539-9644 *Manager of Waste Diversion Services*	$1.75 million
2013 to 2018	Collection, processing, and marketing of residential cart curb side recycling service	**Town of Fort Qu'Appelle** Ms. Kelly Chill P:306-332-5266 *Administrator*	$37k
2014 to 2019	Collection and Processing residential single stream recycling and commercial FE bins	**Town of Indian Head** Mr. Cam Thauberger P:306-695-3329 *CAO*	$57k
2016 to 2020	Collection and Processing residential single stream recycling and garbage	**Town of Chaplin** Mr. Perry Avinou P:306-395-2221 *Administrator*	$25k
2015 to 2020	Collection and Processing residential single stream recycling and commercial FE bins	**Town of Morse** Ms. Tamara Knight P:306-629-3300 *Administrator*	$12k
2015 to 2018	Collection and Processing residential single stream recycling and commercial FE bins	**Town of Rosetown** Ms. Michele Schmidt P:306-882-2214 *Town Administrator*	$72k
2015 to 2018	Collection and Processing residential single stream recycling	**Town of Luseland** Mr. Karyl Richardson P:306-372-4218 *Administrator*	$23k
2016 to 2020	Collection and Processing residential single stream and commercial FE bins	**Town of Denzil** Ms. Kathy Reschny P:306-358-2118 *Administrator*	$4k
2014 to 2017	Front end single stream multi-family collection	**City of Saskatoon (Cosmopolitan Industries)** Ms. Sharlene Duquette P:306-664-3158 *Executive Director, Cosmopolitan Industries*	$300k
MANITOBA			
2003 to	A) Processing and marketing of Single	**City of Winnipeg**	$8.3 million

EXPERIENCE IN SIMILAR WORK			
Years Operated	**Description of Contract**	**Contact Name and Phone Number**	**Value of Contract (annual)**
2017	Stream recyclables B) Collection of Single Stream Recyclables, garbage, and yard waste.	Mr. Randy Park P:204-986-6806 *Supervisor of Waste Diversion*	
ONTARIO			
2008 to 2018	Processing and marketing of residential and ICI Single Stream recyclables and ICI OCC and collection of ICI waste and recyclables	**Region of Halton** Mr. David Miles P:905-825-6000 Ext. 8288 *Manager, Waste Planning and Collections*	$3.0 million
2007 to 2017	Collection, processing and marketing of two (from 2007 to 2009) and single stream recyclables (from 2010 to current)	**County of Brant** Mr. Matt D'Hondt P:519-449-2451 Ext. 2204 *Solid Waste/Wastewater Operations Manager*	$1.5 million
2014 to 2021	Dual stream recycling collection weekly and weekly waste collection	**Corporation of Municipality of Southwest Middlesex** Mr. Jamie Francisco P:519-287-2015 *Superintendent of Environmental Services*	$241k
2005 to 2010 2012 to 2019	**Contract 1:** Collection, processing and marketing of Two Stream recyclables **Contract 2:** Collection of recyclables, leaf/yard waste, bulky items and ICI waste	**City of Sarnia** Mr. Frank Velle P:519-332-0330 *Solid Waste and Accounting Supervisor*	**Contract 1**: $1.1 million **Contract 2:** $1.2 million
2007 to 2012 2012 to 2019	Collection of recyclables, garbage, leaf and yard waste	**Municipality of Central Elgin** Mr. Lloyd Perrin P:519-631-4860 Ext. 277 *Director of Physical Services*	**Contract 1**: $311k **Contract 2:** $362k
2011 to 2021	Weekly collection of two stream recyclables, garbage, bulky garbage, green bin organics, leaf and yard and white goods	**Region of Niagara** Ms. Catherine Habermebl P:905-685-4225 *Director of Waste Management*	$19 million
BRITISH COLUMBIA			
2009 to 2017	A) Collection of single stream recyclables and garbage from single family units; subscription recyclables	**City of Chilliwack** Ms. Tara Friesen P:604-793-2701	$3.2 million

EXPERIENCE IN SIMILAR WORK			
Years Operated	**Description of Contract**	**Contact Name and Phone Number**	**Value of Contract (annual)**
	collection services from multi-family units; and subscription yard waste collection services. B) Processing and marketing of single stream recyclables. C) Front end and cart collection of garbage & recycling from municipal facilities. D) Streetscape collection from downtown. E) Special events collection.	*Manager of Environmental Services*	
2005 to 2019	Collection of single family two stream recyclables Consolidation and hauling of single family organic waste	**Capital Regional District** Mr. Tom Watkins P: 250-360-3197 *Manager of Solid Waste Operations*	$151k
2008 to 2022	A) Provision of processing and marketing services of collected single stream recyclables (curbside and depot) B) Curbside collection of residential organics, yard-waste, waste and single stream recyclables C) Commercial Front End, Roll Off and Toter collection of single stream recyclables and garbage for ICI customers, and City of Langley Municipal and Multi Family sites	**City of Langley** Mr. Rick Bomhoff P:604-514-2825 *Director of Engineering, Parks and Environment*	$2.9 million
2013 to 2019	A) Provision of processing and marketing services for collected single stream recyclables (curbside and depot) B) Curbside collection of residential waste, yard-waste, and single stream recyclables	**City of Abbotsford** Ms. Monique Lieuwen P:604-864-5502 *Recycling and Solid Waste Coordinator*	$1.5 million
2008 to 2012	A) Collection of single family and multi-family single stream recyclables, garbage, yard waste, and bulky items. B) Front end and cart collection of garbage & recycling from municipal facilities. C) Processing and marketing of	**City of Surrey** Mr. Rob Costanzo P:604-590-7287 *Deputy Manager, Operations*	$10 million

EXPERIENCE IN SIMILAR WORK			
Years Operated	**Description of Contract**	**Contact Name and Phone Number**	**Value of Contract (annual)**
	single stream recyclables		

Schedule 6 – Proponent's Senior Staff and Staffing Levels

Listed below are the well experienced individuals who will bring their capability and high degree of experience and skill to the Senior Management team:

- Emmie Leung, Founder, President and CEO
- Angelo Caramagno, GM of Emterra Environmental USA Corp.
- Doris Wong, VP of Materials Marketing
- Paulina Leung, VP of Corporate Strategy and Business Development
- Frank Nelson P. Eng., Director of Engineering / Interim Plant Manager
- Nevil Davies, Director of Special Projects and Process Improvement
- Deborah Pikula, Corporate Director of Human Resources
- Perry Boudreau, Corporate Director of Health and Safety
- Larry Varga, Director of Information Technology

Emmie Leung - Founder, Director and CEO

Responsibilities: As CEO, Emmie ensures Emterra Group's financial soundness, develops the corporate strategy, and oversees the overall growth and performance of the group of companies. As part of her management style and personal interest, she is intimately involved with ensuring the Company performs to the satisfaction of its municipal clients. Emmie will oversee the implementation of this Contract and its overall performance, working closely with the City's representatives.

Experience: Emmie has a BA in Commerce and has been a pioneer in the recycling and waste diversion industry in Canada for over 40 years. As a true believer of Zero Waste, her group of companies collectively provides single and multi-stream recyclables processing, ethanol production, responsible product destruction of sugar and alcohol based products, and tire recycling throughout Canada. As testament to her hard work, she has been honoured with the following awards:

- University of Manitoba, Distinguished Alumni Award for Professional Achievement, 2016
- PROFIT and Chatelaine ranking as #15 in the 17th annual W100 list of Canada's Top Female Entrepreneurs, 2015
- Ernst & Young EY Entrepreneur Of The Year™ 2014 Ontario award in the Energy and Cleantech category
- Ernst & Young EY Entrepreneur Of The Year™ National Special Citation for Industry Pioneer, 2014

- Top 10 Women in Sustainability in Canada named by Corporate Knights, 2013
- Executive of the Year in the large, private business category from the Canadian Waste Sector at Waste Expo in Montreal, 2013
- Entrepreneur of the Year Award from the Association of Chinese Canadian Entrepreneurs, 2013
- Recycle Council of British Columbia's "Environmental Award – Personal Achievement", 2012
- Waste and Recycling News "Rosie Award", 2012
- McGill Management Achievement Award for Outstanding Success in Personal Endeavours Promoting and Advancing Canadian Business and Significant Contribution to Community Affairs, 1999
- Winner of "Canada Award for Excellence" by Industry Canada and National Quality Institute in Entrepreneurship, 1996
- Canadian delegate to the United Nation's Fourth World Conference on Women in Beijing, 1996
- The Commemorative Medal for the 125th Anniversary of the Confederation of Canada Award in Recognition of Significant Contribution to Compatriots, Community and to Canada by the Governor General of Canada, 1993'
- Honour Role by McLean's Magazine, 1993
- Twice recipient of Financial Post's "Canada's 50 Best Managed Companies" for IPI, 1992 and 1993
- Canadian Woman Entrepreneur Award - Impact On Local Economy, 1992

Angelo Caramagno, General Manager

Responsibilities: The General Manager (GM) is responsible for business development, implementing new contracts, setting policies and procedures, the overall fleet and landfill operations of Emterra Environmental USA, including personnel, equipment maintenance and procurement, customer service, and health and safety to ensure the safe, timely and reliable completion of services. A key area of responsibility is ensuring municipal contracts are serviced according to contract specifications and all applicable regulations particular for this RFP, maintaining that the work performed is to contract specifications, and all applicable regulations, are to the satisfaction of the City and Emterra.

His position is an integral one in which the he is responsible for the overall strategic planning, implementation, and operations of Emterra's City of Ann Arbor contract. He has the authority/responsibility to ensure Contract requirements and actions represent Emterra on issues pertaining to this Contract while reporting directly to Emmie Leung, CEO.

Doris Wong - VP of Materials Marketing

Responsibilities: Doris is charged with developing and maintaining long term, reliable markets throughout North America and the Pacific Rim and ensuring all commodities are marketed at the greatest end use and price. In order to do this, Doris maintains an excellent understanding of both municipal clients' and buyers' requirements and translates this knowledge to the local plants. Doris oversees the corporate commodities marketing and logistics group, which is based out of the Surrey, BC western Canada regional head office. Doris will be charged with marketing all commodities.

Experience: Doris Wong started at Emterra in 1987 as Operations Manager of the North Vancouver MRF, which served the North Shore Recycling Program contract. Having held various management positions throughout the organization, she was promoted to Vice President of Materials Marketing in 1995. The knowledge and experience Doris gained from operating a curbside collection program and running a plant has allowed her to work closely with all of Emterra's facilities to maximize the recovery of recyclables. Doris is also currently the VP of Materials Marketing for Green By Nature EPR, a joint venture between Emterra, Cascades, and Merlin Plastics.

Paulina Leung - VP of Corporate Strategy and Business Development

Responsibilities: As Vice President of Corporate Strategy and Business Development, Paulina is responsible for initiatives that grow and develop the all companies within Emterra Group, including the of bidding new municipal contracts, the implementation new contracts, and undertaking special projects, especially those related to business process improvements, customer service delivery, and operational efficiency. From a broader level, she is also oversees corporate communications, information technology, human resources, and the execution of major projects. Paulina will be a lead on the implementation team of this Contract.

Experience: Paulina has a degree in Honours Business Administration from the Richard Ivey School of Business of the University of Western Ontario. Prior to joining Emterra in 2005, she was employed in various administrative, public promotion and education, operations and project management roles at each of Emterra's facilities. To gain actual hands-on experience, Paulina has performed all varieties of front line work, ranging from manually sorting recyclables on sort lines to loading recyclables into panel trucks at the curb. Since joining the industry full-time, her role has grown from operations support to management trainee to new business development to most recently corporate strategy and business development. She is now a key member of the executive team, participating in the bidding and implementation of major municipal contracts across Canada, and overseeing all external communications and marketing, government relations, corporate services, and corporate strategy. Leung is on the Board of Directors of the Recycling Council of Ontario and Ontario Waste Management Association.

Frank Nelson, P. Eng – Director of Engineering

Responsibilities: Responsible for overseeing capital intensive projects for the organization, including facility and equipment upgrades and facility construction. Frank is also charged with General Project Management for the construction, and commissioning of Emterra's Compressed Natural Gas Fuelling Stations and Material Recovery Facilities throughout Canada, engineering design for plant layout and process improvements, contract costing, contractor management, approvals, implementation and system commissioning. Upon the completion of these projects, Frank ensures such facilities' operations are optimized through operations and maintenance improvement initiatives. Frank is responsible for the project management, construction and upgrading of the proposed MRF.

Experience: With a degree in Engineering and over 35 years of project and plant production management, Frank has an extensive background in the efficient operation of the mechanics, hydraulics, plant maintenance, safety, operations, logistics and staffing required to manage high volume, efficient, and effective material recovery facilities. Having worked for Emterra Group for over 10 years in various management roles in each type of recycling and recovery operation, Frank has extensive knowledge and experience in developing, constructing, commissioning, implementing, and managing the operations of Emterra's various facilities. Frank was responsible for General Project Management for construction of Emterra's Winnipeg and Mississauga Compressed Natural Gas Truck Fuelling Stations, expansion of Emterra's Ontario Used Tire Recycling Plant, and construction and expansion of Recyclable Material Recovery Facilities throughout Saskatchewan, Manitoba, and Ontario. His expertise lies in the engineering design for plant layout and process improvements; contract costing, project management, approvals, implementation and system commissioning.

Joe O'Connor, CMA, MBA, Controller

Experience: Joe has over 23 years of senior financial management experience in a diverse range of industries including internally managed trucking and logistics, automotive and consumer packaged goods. Further rounding out his experience, Joe has extensive experience in turnaround operation, was a faculty member of the University of Phoenix, West Michigan Campus, and was the principal of his own consulting firm. A Certified Management Accountant, Joe holds a Bachelor of Business Administration in Accounting from Saginaw Valley State University and a Master of Business Administration from Wayne State University.

Responsibilities: Joe is responsible for providing financial leadership, streamlining accounting processes, and overseeing Emterra Environmental USA's financial and operational reporting, budgeting, and performance reporting and working hand in hand with the managers to drive their business. Joe currently oversees all municipal billings, including those pertaining to this Contract, and internal external reporting. He is responsible for ensuring accounting reports and billings are accurate and provided in a timely manner and works closely with Emterra's municipal clients and senior management team to resolve any billing or reporting issues. Joe will

monitor matters related to data management and transmittal, billing, and financial reporting related to this Contract.

Nevil Davies - Director of Special Projects and Process Improvement

Responsibilities: Nevil is responsible for overseeing capital intensive and major process improvement projects across the organization, including facility and equipment upgrades; fleet and fleet equipment purchases; and facility construction. With particular expertise in MRF operations, Nevil is responsible for the design, installation and commissioning of the MRF's single stream processing system and identify areas of continuous process improvement through technological, process and/or design enhancement. Throughout the term of the contract, Nevil will review plant operations to ensure optimal performance and efficiency.

Experience: Since joining Emterra in 2007, Mr. Davies has been promoted from Surrey Facility Manager to General Manager of Metro Vancouver and, most recently, to Director of Special Projects & Process Improvement. Working closely with Frank, Nevil was part of the project management team involved in the construction of Emterra's Winnipeg Compressed Natural Gas Truck Fuelling Station and the construction and expansion of Emterra's Recyclable Material Recovery Facilities in Saskatchewan, Manitoba, and Ontario. His expertise lies in the engineering design for plant layout and process improvements and systems implementation and commissioning. His technical background has allowed him to play important roles in setting up several municipal waste and recycling collection and recyclables processing and marketing programs in municipalities across Canada. With a mechanical and electrical engineering degree rounded with "PMI" Production Management diplomas, Mr. Davies has over 20 years' experience in mechanical issues, hydraulics, plant maintenance and operations, logistics, and project management.

Deborah Pikula - Corporate Director of Human Resources

Responsibilities: In developing the organizational HR Strategy for Emterra, Deborah is accountable for guiding and managing the overall provision of HR services, policies and programs for the entire organization. In leading HR practices and objectives that will provide an employee-oriented, high performance culture, Deborah works with our management teams to emphasize empowerment, quality, productivity and standards, and goal attainment – all through the attraction, selection and development of a superior workforce. Deborah will work closely with the VP of Operations, VP of Corporate Strategy and Business Development, and the Contract/Operations Manager to provide direction to the HR Advisor assigned to this Contract for the development and execution of the staff recruitment, hiring, and training program.

Experience: Deborah joined Emterra Group as Corporate Human Resources Director in 2016, bringing over 19 years' experience in the field of Human Resources with her. With her Master's Degree in Industrial Relations from Queen's University her previous roles include:

- Managing Director for a leading HR marketing firm
- Leader/Vice-President, Human Resources for one of Canada's leading provider of services, products and information for the hearing impaired

- Country Manager, Human Resources for a leading fortune 500 company in Canada
- Director, Human Resources for a major Canadian airline
- Manager, Corporate Recruitment and Development for one of Canada's largest Ontario regions police force
- Human Resources Director for one of the world largest courier companies

Perry Boudreau - Corporate Director of Health and Safety

Responsibilities: Perry is responsible for corporate compliance to all National Safety Code and Ministry of Transportation regulations in all provinces in which Emterra have operations. In support of this, Perry develops corporate policy and procedures pertaining to fleet compliance, loss prevention, and risk management issues to create a safer working environment for all fleet staff. Perry provides support, guidance, and training to the operations teams with respect to compliance and risk management and safety issues.

Experience: With over 35 years of health and safety experience in both the private and public sectors in relevant industries including waste management/recycling, bulk transportation, energy, and public city vehicles, Perry has the leadership and hands on experience to support the growth of the Health & Safety function of Emterra Group. Perry is a member of the Canadian Transportation Safety Forum, a Canadian Society of Safety Engineering member, and has completed training/certification from the University of Alberta, University of Fredericton, Saskatchewan Construction Safety Association, Alberta Safety Council, Northern Alberta Institute of Technology, Edmonton Police Services, Canadian Traffic Education Centre, City of Edmonton, and Canadian Urban Transit Association.

Larry Varga - Corporate Director of Information Technology

Responsibilities: Larry is responsible for the overall planning and direction of the corporate IT Department, developing and implementing IT strategies and plans in support of the group of companies. Larry's role includes strategic partnering with the each of the Companies and Divisions in the Group of Companies to help them achieve their respective targets and goals, building organizational capability and efficiency through the use of information technology, and enabling the Business to leverage technology investments. Larry will work closely with the Implementation and Operations Team assigned to this Contract to facilitate the efficient and accurate transfer of data between Emterra and the City using current and new technologies. Once the City selects the maintenance and inventory management system software, Larry will assist the City with any commissioning and implementation activities.

Experience: For the past fifteen years Larry has provided leadership, management, and implementation of leading edge hardware and software for a variety of companies using multiple ERP systems, including the implementation of all information technology systems, business processes and infrastructure for a new company locating in Canada. He is skilled at both project and business management and, combined with his technical training and background in IT, he has proven himself a valuable team member at Emterra. Larry has worked with multi-site organizations and projects, and has a firm understanding of how to integrate and

upgrade hardware and software systems to streamline departmental and organizational communications and transactions

APPENDICES

END MARKET REFERENCE LETTERS

AMERICA CHUNG NAM, INC.
1163 FAIRWAY DRIVE, CITY OF INDUSTRY, CA 91789, U.S.A
TEL: (909) 839-8388 • FAX: (909) 839-8322 (909) 839-8341

September 22, 2016
Ms. Doris Wong
VP of Materials Marketing
Emterra Environmental
1122 Pioneer Road
Burlington, Ontario
L7M 1K4

To Whom It May Concern:

RE: Letter of Reference for Halton Recycling dba Emterra Environmental

America Chung Nam LLC has been purchasing recovered paper from Halton Recycling d/b/a Emterra Environmental (Emterra) for over two decades. During that time, we have formed a solid business relationship that is based on their dependability and their ability to provide us with a steady supply of high quality product.

Typically we purchase mixed paper, # 8 news, # 6 news and old corrugated cardboard from all of their material recovery facilities across Canada. Emterra has consistently provided us with recovered paper that meets our quality specifications. We are the sourcing arm for Nine Dragons Paper Industries, the largest paper mill in Asia, with over 12 million tonnes of production capacity. The recovered paper we purchased from Emterra is used in our production of recycled linerboard, corrugating medium, and duplex board. We have an increasing demand for such high quality recovered paper. It is our desire to continue to grow our business volume and strengthen our long term relationship with Emterra for the next decade and beyond.

Regards,

Ken Liu

Ken Liu, Vice Chairman
America Chung Nam

Emterra Environmental
1122 Pioneer Rd, Burlington On
L7M 1K4

Sept 28, 2016

Attn: Doris Wong

This letter is to certify that Ekman group, located in Wall NJ, has had a business relationship with Emterra for the past 12 years or more. Ekman purchases plastics materials from their various locations across Canada. During that time, Emterra has supplied Ekman with material of consistent quality. Ekman purchases PET, HDPE, mix plastics as well as other items as they are offered. Emterra has been a steady and reliable supplier, any issues are resolved promptly, and we look forward to a continued relationship for many years to come.

Please feel free to contact our office at the number below if there are further questions.

Thank you.

Sincerely,

Bill Renkema
Ekman group
Brockville On
613 345 4884

www.ekmanrecycling.com
1608 Rte. 88 West • Suite 301 • Brick, NJ 08724 • 732-202-9500 • Fax: 201-224-0440
84 King st w, Unit 205c • Brockville ON, Canada K6V 3P9 • 613-345-4884 • Fax: 613-345-4885

The Paper Tigers, Inc.
2201 Waukegan Road, Suite 180
Bannockburn, Illinois 60015
Phone (847) 919-6500
Fax (847) 919-6501

September 28, 2016

To whom this may concern:

Our company is one of the largest purchasers of poly coated containers in Canada. We have been receiving post-consumer cartons, including poly coated cup material from the Emterra's Burlington and Winnipeg location for the past five years. These materials are being re-pulped by the consuming mill(s) utilizing hydropulper technology that allows them to de-poly the cartons and cups and employ the bleached fiber in the manufacture of various grades of tissue products (bath tissue, paper towels, hand towels, napkins, etc.).

We find Emterra to be a very good, consistent supplier, and we look forward to future dealing with company for years to come.

Sincerely,

Nicholas J. Halper
President/Treasurer

TRIPLE M METAL LP

September 20, 2016

To: Whom it may concern

Re: Emterra Environmental - Quality of Post Consumer (Steel) Can material

Emterra Environmental is considered a premium supplier of Post Consumer (Steel) can material to Triple M Metal and has been a consistant supplier of this material for many years. We continue to regard Emterra's supply of this material from their Ontario and Western Canada facilities to be of superior quality, that meets and in most cases exceeds our quality guidelines. It is a pleasure to have a partnership with a company that strives to maintain a high quality standard.

If you have any question or concerns, please feel free to contact me.

Thanks;

Brad Masters
Manager, Post Consumer Materials
Triple M Metals LP

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MULTI MATERIAL BC

September 30, 2016

Re: Letter of Reference

To: Whom it may concern

I am pleased to provide a letter of reference for Emterra Environmental, on behalf of Multi-Material British Columbia (MMBC).

Emterra, following a competitive procurement process, was awarded the packaging and printed paper (PPP) curbside collection service for the communities of the Regional District of North Okanagan (effective May 19, 2014), the University Endowment Lands, the City of Quesnel and the City of Prince George (effective September 1, 2014) and the City of Langley (effective January 1, 2015).

Emterra has been excellent to work with for the launch of the MMBC program and the collection of PPP curbside in the communities which they were awarded. Emterra has met the terms and conditions of our contract and is providing responsible and responsive customer service to their communities on behalf of MMBC.

The annual value of the contracts with Emterra held by MMBC directly is $2.7 million.

In addition, Emterra is a partner in Green by Nature, the post-collection service provider for MMBC. GBN is an integral part of the MMBC program and Emterra provides many post-collection services within their partnership role in Green by Nature. They are a very experienced post-collection company.

If you have any questions or wish to discuss this letter of reference, please do not hesitate to be in touch.
Sincerely,

Tamara Burns
VP Supply Chain
tburns@multimaterialbc.ca 604-315-5417

230 – 171 ESPLANADE WEST, NORTH VANCOUVER, BC V7M 3J9
TEL: 778.588.9504 WWW.MULTIMATERIALBC.CA

Halton REGION

Public Works
Waste Management Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: 905-875-3010

September 19th, 2016

Dear Sir/Madam:

RE: Letter of Reference for Emterra Environmental

Emterra Environmental has performed a number of waste management services for the Regional Municipality of Halton over the past 20 years. These services have included the following:

- Processing and marketing of dual and single stream recyclable material (since 1995 to present)
- Residential curbside collection services for recyclable material (February 1998 to March 2008)
- Residential curbside collection of yard waste, garbage, bulk waste and metal (February 2002 to March 2008)
- ICI curbside collection of recyclable material and garbage (February 2002 to March 2016)
- Curbside public litter container collection (February 2002 to March 2016)
- Front end bin and semi-automated collection of recyclable material from all publicly funded schools in the Region of Halton (August 2003 to March 2008)
- Collection of recyclable material from municipal facilities including Front-End collection of OCC (February 2002 to March 2016)
- Collection of recyclable material and garbage from multi-residential complexes (February 2002 to March 2008)
- Residential source separated organic waste Demonstration Project collection (June 2005 to September 2007)

Emterra is currently under contract with the Region of Halton for the processing and marketing of residential single stream recyclable material. Emterra manages approximately 48,000 tonnes of recyclable material per year at an annual value of $6M (processing and revenue). The Region of Halton has benefited from the leading processing and marketing abilities of Emterra and as a result of their performance, the Region has extended our contract agreement with Emterra for this service.

Furthermore, their efforts, attention to detail and customer service when performing ICI recyclable and garbage collection services and collection of public litter containers achieved very good results (annual value of $1.4M). We are very pleased with their progress, service and our working relationship.

Sincerely,

David Miles
Manager, Waste Planning and Collection
905-825-6000 ext. 8288
david.miles@halton.ca