

DEC 30 2019



Ministry of the Environment, Conservation and Parks  
Ministère de l'Environnement, de la Protection de la nature et des Parcs

**ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 4538-B8EMLT

Issue Date: December 13, 2019

Taggart Miller Environmental Services Inc.  
225 Metcalfe St, No. 708  
Ottawa, Ontario  
K2P 1P9

Site Location: Capital Region Resource Recovery Centre  
Lot 22-25, Concession XI, Township of Cumberland  
Ottawa City,

*You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:*

the use and operation of a 192 ha waste processing and disposal facility, known as the Capital Region Resource Recovery Centre including the following:

- i. a construction and demolition processing facility for receipt, processing, temporary storage, and transfer of solid, non-hazardous C & D waste;
- ii. a material recovery facility for receipt, processing, temporary storage, and transfer of solid, non-hazardous waste from IC&I stream;
- iii. an organic processing facility that includes an organics pre-processing building for receipt, pre-processing, and transfer of solid non-hazardous organic waste and pre-processed organic slurry, and a BioPower demonstration facility for treatment of organic waste from IC&I stream;
- iv. a compost processing and storage area for leaf and yard waste composting;
- v. a contaminated soil treatment area for receipt, treatment, and temporary storage of petroleum hydrocarbon contaminated soil; and
- vi. an 84 ha landfill for disposal of solid non-hazardous waste from the IC&I and C&D stream as well as residual waste from the above processes.

Note: Use of the site for any other type of waste is not approved under this environmental compliance approval, and requires obtaining a separate approval amending this environmental compliance approval.

*For the purpose of this environmental compliance approval, the following definitions apply:*

**"Approval"** or **"ECA"** means this entire Environmental Compliance Approval, issued in accordance with section 39 of the EPA, and includes all items, conditions and Schedules attached to and forming part of this Approval, as amended by the Director.

**"Biopile"** means the engineering cells constructed according to the "Petroleum Hydrocarbon Contaminated Soil Treatment Design and Operations" report included in Item 3 of Schedule "A", for the treatment of petroleum hydrocarbon contaminated soil under controlled conditions.

**"Compost"** means the material produced by an aerobic composting process, which can be used as a soil additive and/or for other similar uses that meet all requirements under the "Ontario Compost Quality Standards", dated July 25, 2012, as amended;

**"Composting Standards"** means Part II of the document entitled "Ontario Compost Quality Standards", dated July 25, 2012, as amended;

**"Contaminating Lifespan"** refers to the period of time, after closure until the Site finally produces contaminants at concentrations below levels which have unacceptable health or environmental effects;

**"C & D Waste"** means waste produced from the construction, renovation or demolition of an industrial, commercial, institutional or residential building.

**"Director"** means any Ministry employee appointed in writing by the Minister pursuant to section 5 of the Act as a Director for the purposes of Part II.1 and Part V of the Act;

**"District Manager"** refers to the District Manager in the Ministry of the Environment, Conservation and Parks' Ottawa District Office;

**"Dust Management Plan"** means the dust Best Management Practices Plan (BMPP) as approved by the District Manager, which describes measures to minimize dust emissions from the Site

**"District Office"** refers to the Ottawa District Office of Ministry of the Environment, Conservation and Parks;

**"EA Approval"** refers to the "Notice of Approval to Proceed With the Undertaking" EA File No. EA-03-08-02 issued under Environmental Assessment Act Section 9, by the Ministry on May 17, 2017;

**"EPA" or "Act"** means Environmental Protection Act, R.S.O. 1990, c. E. 19, as amended from time to time;

**"MECP" or "Ministry"** refers to the Ontario Ministry of the Environment, Conservation and Parks;

- "**MRF**" means the Material Recovery Facility approved in this ECA;
- "**Odour Management Plan**" means a document which describes the measures to minimize odour emissions from the Site;
- "**Operator**" has the same meaning as "operator" as defined in s.25 of the EPA;
- "**Owner**" means Taggart Miller Environmental Services Inc. and its successors and assigns;
- "**OWRA**" refers to the Ontario Water Resources Act, R.S.O. 1990, c. O.40;
- "**PA**" means the Pesticides Act, R.S.O. 1990, c. P-11, as amended from time to time;
- "**Provincial Officer**" means any person designated in writing by the Minister as a provincial officer pursuant to section 5 of the OWRA or section 5 of the EPA or section 17 of the PA;
- "**Qualified Person**" means a person who meets the qualifications as set out in Section 5 of O. Regulation 153/04 made under the EPA;
- "**Reg. 232**" means Ontario Regulation 232/98 Landfill Sites made under the EPA, as amended from time to time;
- "**Regulation 347**" or "**Reg. 347**" means Regulation 347, R.R.O. 1990, made under the EPA, as amended from time to time;
- "**Residual Waste**" means waste resulting from the processing facilities at the Site and destined for on-site landfilling or further management at an approved off-Site location;
- "**Site**" means the entire 192 ha waste processing and disposal site, described as Lots 22, 23, 24, and 25, Concession XI, Township of Cumberland that is approved by this ECA; and
- "**Trained Personnel**" means an employee trained in accordance with the requirements of Condition 12.3, as applicable, and knowledgeable through instruction and/or practice and able to carry out any necessary duties.
- You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:*

## TERMS AND CONDITIONS

### 1.0 GENERAL

#### Compliance

- 1.1 The Owner shall ensure that any person authorized to operate any aspect of the Site is notified of the ECA and the conditions herein and shall take all reasonable measures to ensure the person complies with the same.
- 1.2 Any person authorized to operate any aspect of the Site shall comply with the conditions of this ECA.

#### In Accordance

- 1.3 Except as otherwise provided for in this ECA, the Site shall be designed, developed, constructed, operated and maintained in accordance with the conditions in this ECA and the supporting documentation listed in Schedule "A".

#### Other Legal Obligations

- 1.4 The issuance of, and compliance with, this ECA does not:
- a. relieve any person of any obligation to comply with any provision of the EPA or any other applicable statute, regulation or other legal requirement; or
  - b. limit in any way the authority of the Ministry to require certain steps be taken or to request that any further information related to compliance with this ECA be provided to the Ministry ;

unless a provision of this ECA specifically refers to the other requirement or authority and clearly states that the other requirement or authority is to be replaced or limited by this ECA .

#### Furnish Information

- 1.5 Any information requested by the Director or a Provincial Officer concerning the Site and its operation under this ECA, including but not limited to any records required to be kept by this ECA shall be provided in a timely manner.
- 1.6 The receipt of any information by the Ministry or the failure of the Ministry to prosecute any person or to require any person to take any action, under this ECA or under any statute, regulation or subordinate legal instrument, in relation to the information, shall not be construed as:
- i. an approval, waiver, or justification by the Ministry of any act or omission of any

- person that contravenes any condition of this ECA or any statute, regulation or other subordinate legal requirement; or
- ii. acceptance by the Ministry of the information's completeness or accuracy.

1.7 Any information related to this ECA and contained in Ministry files may be made available to the public in accordance with the provisions of the Freedom of Information and Protection of Privacy Act, RSO 1990, CF-31.

### **Interpretation**

1.8 Where there is a conflict between a provision of any document, including the application, referred to in this ECA, and the conditions of this ECA, the conditions in this ECA shall take precedence.

1.9 Where there is a conflict between the application and a provision in any documents listed in Schedule "A", the application shall take precedence, unless it is clear that the purpose of the document was to amend the application and that the Ministry approved the amendment in writing.

1.10 Where there is a conflict between any two documents listed in Schedule "A", other than the application, the document bearing the most recent date shall take precedence.

1.11 The conditions of this ECA are severable. If any condition of this ECA, or the application of any condition of this ECA to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this ECA shall not be affected thereby.

### **Certificate of Requirement**

1.12 Pursuant to Section 197 of the EPA, no person having an interest in the Site shall deal with the Site in any way without first giving a copy of this ECA to each person acquiring an interest in the Site as a result of the dealing.

1.13 Within sixty (60) calendar days from the date of issuance of this Approval, the Owner shall submit to the Director:

- i. a plan of survey of the entire Site prepared, signed and sealed by an Ontario Land Surveyor for the Site
- ii. proof of ownership
- iii. a letter signed by a member of the Law Society of Upper Canada; or other qualified legal practitioner acceptable to the Director, verifying the legal description provided in the Certificate of Requirement,
- iv. the legal abstract of the property and
- v. a completed Certificate of Requirement; and its supporting documents, containing a registerable description of the Site.

- 1.14 Within fifteen (15) calendar days of receiving a Certificate of Requirement authorized by the Director, the Owner shall:
- i. register the Certificate of Requirement in the appropriate Land Registry Office on the title to the property and
  - ii. submit to the Director written verification that the Certificate of Requirement has been registered on title.

### **No Transfer or Encumbrance**

- 1.15 No portion of this Site shall be transferred or encumbered prior to or after closing of the Site unless the Director is notified in advance and is satisfied with the arrangements made to ensure that all conditions of this ECA will be carried out and that sufficient financial assurance is deposited with the Ministry to ensure that these conditions will be carried out.

### **Change of Owner**

- 1.16 The Owner shall notify the Director, in writing, and forward a copy of the notification to the District Manager, within 30 days of the occurrence of any changes in the following information:
- i. the ownership of the Site ;
  - ii. the Operator of the Site ;
  - iii. the address of the Owner or Operator ;
  - iv. the partners, where the Owner or Operator is or at any time becomes a partnership and a copy of the most recent declaration filed under the Business Names Act , R. S. O. 1990, c. B.17, shall be included in the notification;
  - v. the name of the corporation where the Owner or Operator is or at any time becomes a corporation, other than a municipal corporation, and a copy of the most current information filed under the Corporations Information Act , R. S. O. 1990, c. C.39, shall be included in the notification.
- 1.17 In the event of any change in the ownership of the Site, the Owner shall notify in writing the succeeding owner of the existence of this ECA, and a copy of such notice shall be forwarded to the Director and District Manager.

### **Inspections**

- 1.18 No person shall hinder or obstruct a Provincial Officer from carrying out any and all inspections authorized by the OWRA, the EPA, or the PA, of any place to which this ECA relates, and without limiting the foregoing:
- i. to enter upon the premises where the approved works are located, or the location where the records required by the conditions of this ECA are kept;
  - ii. to have access to, inspect, and copy any records required to be kept by the conditions of this ECA ;

- iii. to inspect the Site, related equipment and appurtenances;
- iv. to inspect the practices, procedures, or operations required by the conditions of this ECA ; and
- v. to sample and monitor for the purposes of assessing compliance with the terms and conditions of this ECA or the EPA , the OWRA or the PA .

## 2.0 FINANCIAL ASSURANCE

### Overview

- 2.1 Financial assurance shall be provided as required by the Director, in an amount that is sufficient to pay for compliance with and performance of any action specified in this ECA, including site clean up, closure, post-closure monitoring of the Site, operation and maintenance of all required contaminant control systems including leachate management systems, landfill gas management system, and contaminant monitoring for the Contaminating Lifespan of the Site and contingency plans as per Reg. 232.
- 2.2 Financial assurance may be provided in one or more of the following forms: cash, irrevocable letter of credit, surety bond, or other forms that are acceptable to the Director.

### Payment Schedule

- 2.3. At least 30 days prior to the commencing of site operations, the Owner shall submit the first financial assurance payment in the amount of **\$978,334** to the Director.
- 2.4 The total amount of financial assurance shall be subsequently updated by the Owner as follows:
  - i. March 31, 2022 - **\$2,203,378**
  - ii. March 31, 2023 - **\$3,649,611**
  - iii. March 31, 2024 - **\$5,265,988**
- 2.5 If the commencement of site operations is delayed from that assumed as the basis of calculation of financial assurance in Item 11 of "Schedule A", the Owner shall recalculate the financial assurance payments and dates required by Conditions 2.3 and 2.4 and submit for review and approval by the Director at least 90 days before the first financial payment is required as set out in Condition 2.3.

### Updated Review Report

- 2.6 A Financial Assurance re-evaluation report shall be submitted to the Director by no later than **March 31, 2024** and then at an interval no greater than a period of every three (3) years thereafter. The report shall be prepared by a qualified professional engineer or equivalent and shall take into consideration the following:

- a. updates of the discount, interest and inflation rates associated with the requirements for financial assurance in this ECA;
- b. updated annual inspection, maintenance, and monitoring costs, including costs for leachate treatment and disposal and landfill gas management works;
- c. contingency costs based on actual amounts of waste landfilled;
- d. a recalculation of the Contaminating Life-span of the Site with respect to groundwater, surface water and landfill gas based on empirical and theoretical data;
- e. any measures that have been carried out or need to be carried out to prevent and ameliorate any adverse effect that relates to the Site; and
- f. the operations related to the waste processing facilities.

2.7 No waste shall be received, accepted, disposed or transferred at the Site unless appropriate financial assurance is received by the Ministry.

2.8 The amount of Financial Assurance is subject to review at any time by the Director and may be amended at his/her discretion by amendment to this ECA. If any financial assurance is scheduled to expire or notice is received, indicating financial assurance will not be renewed, and satisfactory methods have not been made to replace the financial assurance at least 60 days before the financial assurance terminates, the financial assurance shall forthwith be replaced by cash.

### **3.0 COMMUNITY LIAISON COMMITTEE (CLC)**

3.1 The Owner shall establish and use reasonable efforts to maintain a CLC for the Site to provide a forum for public concerns to be raised and for mitigation measures to be discussed where appropriate as related to the Site.

3.2 If there is no interest from the public in continuing the existing CLC or establishing and participating in a new CLC (once sufficient notice has been given) it may be discontinued. If discontinued the Owner shall publish a notice at least annually inviting expressions of interest in establishing or re-establishing the CLC.

3.3 If continued or re-established, the CLC shall serve as the focal point for dissemination, review and exchange of information and monitoring results relevant to the Site.

3.4 The Owner shall provide administrative support for the CLC including, at minimum:

- a) Providing CLC meeting space;
- b) Preparing and publishing meeting notes;
- c) Recording minutes of each meeting; and,
- d) Preparing an annual report to be submitted as part of Compliance Reporting as required by Condition 5 of the EA Approval.



#### **4.0 SERVICE AREA, WASTE STREAM, RATE AND STORAGE**

##### **Service Area**

- 4.1 The Site may accept waste that originates from within the City of Ottawa, and the Counties of Prescott-Russell, Stormont, Dundas and Glengarry, Lanark, Leeds & Grenville, Frontenac, Lennox and Addington, and Prince Edward.

##### **Waste Stream**

- 4.2 The Site may only accept the following types of solid non-hazardous waste and surplus soil, from the service area, approved by this ECA:
- a. Industrial, Commercial and Institutional waste;
  - b. C & D waste;
  - c. Source separated organics and mixed organics from the IC&I sector; and
  - d. Contaminated soil.

##### **Waste Quantities**

- 4.3
- a. The total amount of waste received at the Site shall not exceed 450,000 tonnes per year.
  - b. The amount of waste received at the Site shall not exceed 3,000 tonnes per day.
- 4.4 The Owner shall ensure that the following waste quantities are not exceeded:
- a. a maximum of 800 tonnes per day and 199,680 tonnes per year may be accepted at the C & D facility;
  - b. a maximum of 800 tonnes per day and 199,680 tonnes per year may be accepted at the Material Recovery Facility;
  - c. a maximum of 500 tonnes per day and 50,000 tonnes per year of source separated and mixed organic waste may be accepted at the organic processing facility;
  - d. a maximum of 400 tonnes per day and 20,000 tonnes per year of leaf & yard waste and wood waste may be accepted at the compost processing and storage area; and
  - e. a maximum of 25,000 tonnes per year of petroleum hydrocarbon contaminated soil may be accepted at the PHC contaminated soil treatment area.
- 4.5 The Owner shall ensure that the following storage capacities are not exceeded:
- a. a maximum of 2,200 tonnes of unprocessed waste and 2,890 tonnes of processed waste at the C & D facility;
  - b. a maximum of 850 tonnes of unprocessed waste and 1,680 tonnes of processed waste at the Material Recovery Facility;
  - c. a maximum of 1,800 tonnes of unprocessed waste, 600 tonnes of pre-processed organics and 1000 tonnes of processed organic slurry at the organic processing facility;

- d. a maximum of 400 tonnes of unprocessed leaf & yard waste and 20,000 tonnes of finished Compost product at compost processing area; and
- e. a maximum of 12,500 tonnes of petroleum hydrocarbon contaminated soil at the PHC contaminated soil treatment area.

- 4.6 The Owner shall ensure that at the C & D facility, Material Recovery Facility, and Organic Processing Facility, all waste is received, processed, and stored indoors until transferred to or disposed at another on-Site facility in accordance with the Operations Manual or transferred to an approved off-Site destination.
- 4.7 All waste storage shall be undertaken in a manner that does not cause an adverse effect and result in hazard to the environment and public health.
- 4.8 Processed Residual Waste shall be disposed of at the on-site landfill or other Ministry approved facilities that are licensed to accept such type of waste.

## **5.0 GENERAL SITE OPERATIONS**

### **Adverse Effects**

- 5.1 (1)The Site shall be constructed, operated and maintained in a manner which ensures the health and safety of all persons and prevents generation of negative environmental impacts including but not limited to dust, odours, vectors, pests, birds, litter, vibration, noise and any other negative environmental effects that may cause an adverse effect on the natural environment or on any person.
- (2)If at any time dust, odours, vectors, pests, birds, litter, vibration, noise or other such negative environmental effects are generated at the Site and cause an adverse effect, the Owner shall take such immediate and appropriate remedial action that may be necessary to alleviate the adverse effect, including suspension of all waste management activities and removal of waste from the Site, if necessary.
- (3)The Owner shall take steps to minimize and ameliorate any adverse effect on the natural environment or impairment of water quality resulting from the approved operations at the Site, including such steps as accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.

### **Signs**

- 5.2 Prior to receipt of waste at the Site, the Owner shall ensure that a sign is posted at the main entrance to the Site. The sign shall be visible from the main road leading to the Site. The following information shall be included on the sign:
- (a) name of the Owner;

- (b) this ECA number;
- (c) hours during which the Site is open;
- (d) waste types that are approved to be accepted at the Site;
- (e) Owner's telephone number to which complaints may be directed;
- (f) Owner's twenty-four hour emergency telephone number (if different from above);
- (g) a warning against unauthorized access;
- (h) a warning against dumping at the Site.

5.3 The Owner shall ensure that appropriate signs are posted at the Site clearly identifying the waste and stating warnings about the nature of the waste and any possible hazards.

5.4 The Owner shall install and maintain signs to direct vehicles to the appropriate landfill working face and processing facilities.

### **Site Security**

5.5 All unloading and loading of waste shall be monitored by Trained Personnel and all waste processing activities at the Site shall at all times be undertaken by Trained Personnel.

5.6 The Owner shall ensure that access to the Site is regulated and that all entrances are secured by lockable gates to restrict access only to authorized personnel when the Site is not open.

5.7 The Owner shall ensure that the Site is operated in a safe and secure manner, and that all waste is properly handled, packaged or contained and stored so as not to pose any threat to the general public and the Site personnel.

5.8 The Owner shall ensure that all entrances and storage areas are adequately lit.

### **Operation Hours**

5.9 The Site is approved to operate within the following hours, subject to limitations of the municipal by-law:

- a. The Site may receive waste and transfer material between 6:00 am and 7:00 pm, Monday through Saturday;
- b. The MRF and C&D facility may operate between 7:00 am and 11:00 pm, Monday through Saturday;
- c. Activities associated with landfill operations, organics processing, composting and petroleum hydrocarbon contaminated soil treatment may be carried out between 6:00 am and 7:00 pm, Monday through Saturday;
- d. Placement of pre-processed organic material and cover material within the primary reactor cells and removal of digestate from the primary reactor cells of the BioPower Demonstration Facility may be carried out between 7:00 am and 7:00 pm, Monday through Saturday.

## **Waste Acceptance**

- 5.10 The Owner shall ensure that a qualified site attendant with adequate training is present at the weigh scales anytime when the Site is open to accept waste.
- 5.11 The Owner shall ensure the Waste Acceptance Procedures included in the Design and Operations Report (Item 3 of Schedule A) and the Waste Diversion Protocol included as Attachment 1 in Attachment 5 to the Environmental Compliance Approval Application (Item 1 of Schedule A) are followed by the site attendant for incoming waste inspection, registration, and direction to the appropriate facility/area at the Site.
- 5.12 (1) The Owner shall ensure only waste types that are approved by this ECA are accepted at this Site.
- (2) Waste unloading in the designated unloading area and tipping floor shall be supervised by Trained Personnel who shall visually inspect the waste to ensure that only approved waste type is accepted at the Site and the waste is accepted at the appropriate facility/area.
- 5.13 Rejected waste handling:
- (1) In the event that waste not approved under this ECA is inadvertently accepted at the Site, the Owner shall ensure that all rejected waste:
- a. is stored in a way that ensures that no adverse effects result from such storage;
  - b. is segregated from all other waste;
  - c. is handled and removed from the Site in accordance with O.Reg. 347 and the EPA;
  - d. is removed from the Site within three (3) days of its receipt or as acceptable to the District Manager.
- (2) In the event that unacceptable waste is inadvertently accepted at the Site, a record shall be made in the daily log book or in an electronic file that includes the following:
- a. the reason why the waste was rejected
  - b. quantity and type of the rejected waste;
  - c. source of the rejected waste, if known;
  - d. final destination of the rejected waste; and
  - e. date and time of receipt and date of removal from the Site.

## **Nuisance Control and Housekeeping**

- 5.14 (1) The Owner shall ensure that all vehicles and equipment leaving the Site have their exteriors and tires cleared of debris and shall take all practical steps so that such vehicles and equipment do not drag waste, dirt, compost or wood chips onto municipal roadways. Any necessary truck tire washing shall occur only in the dedicated truck tire wash area. Vehicles shall be inspected by the Owner for leaking or dripping waste or wastewater prior to leaving the Site.

- (2) Should the Owner become aware that the truck(s) delivering waste to the Site have leaked wastewater on the municipal roadways, the Owner shall immediately notify the owner of the leaking vehicle(s) and the District Manager about the leak problem.
- (3) The Owner shall take all practical steps to ensure that there is no queuing or parking of vehicles that are waiting to enter the Site on any roadway that is not a distinct part of the Site.

5.15 The Owner shall:

- a take all practical steps to prevent the escape of litter from the Site;
- b pick up litter around the Site on a daily basis, or more frequently if necessary; and
- c if necessary, erect litter fences around the areas causing a litter problem.

5.16 Prior to the receipt of any waste at the Site, the Owner shall:

- a implement necessary housekeeping procedures to minimize sources of attraction for vermin and vectors; and
- b hire a qualified, licensed pest control professional to design and implement a pest control plan for the Site. The pest control plan shall remain in place, and be updated from time to time as necessary, until the Site has been closed.

5.17 The Owner shall control fugitive dust emission from on Site sources including but not limited to on-site roads, stockpiled cover material, surplus soil, compost product, closed landfill area prior to being vegetated in accordance with the Dust Management Plan included as Attachment 3 in Attachment 5 to the ECA application (Item 1 of Schedule "A").

5.18. The Owner shall ensure that noise from landfill operation, material processing, and other site operations is in compliance with the Ministry's noise guideline.

5.19 The Owner shall regularly clean and disinfect, as necessary, all equipment and storage areas that are used to handle and process waste at the Site.

#### **Odour Management Plan**

5.20 (1) The Owner shall submit to the District Manager, no less than ninety (90) days prior to commencement of operation of the Site, an updated Odour Management Plan that includes measures to minimize off-Site odour impacts, and triggers and contingency plan which shall include trigger conditions for upset mode of operation for the BioPower Demonstration Facility that will require cessation of receipt of any new waste into the BioPower Demonstration Facility and covering the primary reactors with geomembrane. The updated Odour Management Plan shall be approved by the District Manager prior to commencement of the Site operations.

(2) The Odour Management Plan shall be reviewed on an annual basis and updated if

necessary.

### **Site and Equipment Inspection and Maintenance**

5.21 Prior to commencement of Site operations, the Owner shall prepare a comprehensive written inspection program which includes procedures for inspections of all aspects of the Site's operations including the following:

- a loading/unloading/storage area for incoming waste and processed material;
- b condition of the air pollution control equipment;
- c condition of all major pieces of waste processing equipment, including but not limited to dozers, mixer, loaders, crushers, turners, screeners;
- d condition of the BioPower Demonstration Facility, including but not limited to the primary reactor cells and its geomembrane cover, secondary digester;
- e condition of all instruments including but not limited to the instruments for monitoring the organic processing building environment pressure, parameters for primary reactor, secondary digester, and composting/curing process;
- f Site security features;
- g on-Site roads for presence of leaks and drips from the waste delivery trucks;
- h presence of excessive fugitive dust emissions from the on-Site roads;
- i presence of contaminated surface runoff from waste processing/treatment/storage areas;
- j on and off-Site litter;
- k presence of vector and vermin in the diversion facilities portion of the Site; and
- l presence of off-Site odours.

5.22 The inspections listed in Condition 5.21 are to be undertaken daily by Trained Personnel in accordance with the inspection program to ensure that all equipment and facilities at the Site are maintained in good working order at all times and that no off-Site adverse impacts are occurring. Any deficiencies detected during these regular inspections must be remedied promptly, including temporarily ceasing operations at the Site if needed.

5.23 (1) The Owner shall prepare a list of critical spare parts, update this list annually or more frequently, if necessary, to ensure that this list is maintained up-to-date and shall be available for inspection by a Provincial Officer upon request.

(2) The Owner shall ensure that the critical spare parts are at the Site at all times or available promptly from an off-Site supplier.

5.24 The Owner shall develop and implement a preventative maintenance program for all on-Site equipment associated with the processing and managing of waste and control of odour and dust emissions. The preventative maintenance program shall be maintained up-to-date and shall be available for inspection by a Provincial Officer upon request.

**6.0 OPERATION OF CONSTRUCTION AND DEMOLITION (C&D) PROCESSING FACILITY AND MATERIAL RECOVERY FACILITY (MRF)**

- 6.1 The Owner shall ensure that only C&D waste and all C&D waste suitable for processing screened by Trained Personnel shall be processed at the C&D Facility.
- 6.2 The Owner shall ensure that incoming loads of mixed IC&I waste determined to have over 50% recoverable materials according to the "Waste Diversion Protocol" included as Attachment 1 in Attachment 5 to Item 1 of Schedule "A" are processed at the MRF.
- 6.3 The Owner shall ensure that the daily and annual tonnage limit for the C&D Processing Facility and MRF specified in Condition 4.4 and the maximum storage capacity specified in Condition 4.5 are not exceeded.
- 6.4 All incoming waste shall be processed within seven days from the time of receipt at the C&D Facility and the MRF.
- 6.5 The C&D Facility and MRF shall only be operated after approval under Section 9 of the EPA is obtained.
- 6.6 All wastewater from the C&D Facility and MRF shall be collected and stored in holding tanks. The collected wastewater shall either be conveyed to the on-Site leachate pre-treatment facility or sent off-Site to a licensed wastewater treatment facility.

**7.0 OPERATION OF THE ORGANICS PROCESSING FACILITY**

- 7.1 A final detailed design for the Organics Processing Facility, including the organic pre-processing building, and the BioPower Demonstration Facility shall be submitted to the Director for approval at least six months prior to the construction. The final detailed design shall include at least the following:
- a description of the engineering components of the facilities;
  - detailed design drawing;
  - QA/QC plan;
  - details on operation, monitoring and maintenance of the facilities;
  - Standard Operating Procedures (SOPs) to prevent cross-contamination between various phases of the process via equipment use; and
  - the odour control measures according to the Odour Management Plan as required in Condition 5.20.

**Organics Pre-processing Building**

- 7.2 The Owner shall ensure that a system designed to maintain adequate negative pressure relative to the ambient atmospheric pressure, as more fully described in Items 11 and 12 in Schedule "A", is maintained and monitored for the organics pre-processing building all the time when the facility is in operation or there is organic waste storage inside, to prevent an occurrence of off-Site adverse effects. Monitoring of the system shall be logged in the operational record as per Condition 15.1.

- 7.3 The Owner shall ensure that, at all times, the air from the organic pre-processing building is exhausted through an appropriate biofilter with Section 9 EPA approval.
- 7.4 The Owner shall ensure that the daily and annual tonnage limit for the organics processing facility specified in Condition 4.4 and the maximum storage capacity specified in Condition 4.5 are not exceeded.
- 7.5 The Owner shall ensure that equipment and storage containers handling organic waste are washed as required to prevent adverse impacts from odours.
- 7.6 The Owner shall ensure that organic wastes received at the organics pre-processing building be processed, and mixed IC&I destined for the BioPower primary reactor be blended with bulking materials within 24 hours of receipt if practical. The blended material shall be placed in the primary reactor on the next day appropriate to load the primary reactor. In any event, the pre-processed material destined for the BioPower facility shall be placed within the primary reactor within three days of receipt.
- 7.7 The organics pre-processing building shall be equipped with automatic overhead doors for vehicular traffic which shall be kept closed at all times except for entry and exit of vehicles. Interlocks shall be included in the control system as described in Item 11 of Schedule "A" to control the opening of doors together with the exhaust and supply air rates. Under non-emergency the overhead doors shall not open unless the exhaust system is operational.
- 7.8 The organic processing equipment and receiving floor shall be washed at the end of each operating day if practical.
- 7.9 Any leachate generated from the organics pre-processing building that is not used in the BioPower system or in the organics slurry destined for approved off-Site digesters shall be collected, pre-treated on-Site and sent to a licensed wastewater treatment facility.

### **BioPower Demonstration Facility**

- 7.10 (1) The demonstration scale BioPower Facility may be operated for a maximum of 36 months from the date waste is first loaded into the primary reactor cells. Any extension shall be first approved by the Director on application submitted by the Owner, and the extension period shall not exceed 12 months.
- (2) For full scale operation, the Owner shall submit an application for the Director's approval at least 6 months prior to the intended full scale operation. The application shall include an evaluation report on the performance of the demonstration operation, problems encountered and mitigation measures implemented.
- 7.11 (1) Four primary reactor cells may be constructed in sequence in accordance with Item 9 of Schedule "A".



- (2) To prevent off-site odour impact, all practical steps shall be taken to ensure that loading of primary reactor cells is carried out under favourable weather conditions taking into account humidity, rainfall, and wind speed is forecast. The weather conditions shall be recorded when loading the primary reactor cells.
- 7.12 (1) At the end of each operational day, the primary reactor cells shall be covered with clean soil or other suitable materials such as wood chips, compost covers and geomembrane panel in accordance with Item 11 of Schedule "A". The geomembrane panel shall be adequately overlapped and secured to prevent wind lift.
- (2) Trials for alternative daily cover, including geomembrane alone or soil cover or other suitable materials alone, may be conducted by the Owner provided that a plan with details of the proposed alternative cover, and contingency measures to control odour is submitted to and approved by the Ministry prior to the trial. Trials shall be conducted in consultation with the Provincial Officer.
- (3) If the alternative daily cover is demonstrated to be adequate to control odour from the primary reactor cells, the Owner may submit an application that includes the updated Odour Management Plan to the Director for approval of the use of alternative daily cover.
- 7.13 (1) Each primary cell shall be covered with geomembrane once it is filled to designed capacity. The geomembrane cover shall remain in place until the aerobic curing is completed within the cell.
- (2) Biogas shall be extracted from the primary reactor cells that are filled to the designed capacity until the process of conversion of the primary reactor cells to aerobic operation is initiated to control odour release.
- (3) Biogas generated within the primary reactor cells shall be collected and flared. Under no circumstance other than emergency situations shall the biogas be allowed to discharge to the atmosphere. In the event of emergency discharge of biogas, the Owner shall notify the District Manager forthwith.
- (4) The digested and stabilized product removed from the primary reactor shall be transported to the composting and storage area for further curing.
- (5) If any part of the primary reactor is found during removal of digestate to be not sufficiently digested and odourous, the material shall be immediately be placed in the active primary cell or adequately covered to prevent odour impact.
- 7.14 (1) If there is any odour complaint, or significant odour is detected during daily inspection, and the odour is confirmed to originate from the operation of the BioPower demonstration facility, mitigation measures shall be implemented immediately in accordance with the Odour Management Plan approved by the District Manager.
- (2) If odour causes adverse off-site impacts that are not mitigated through implementation of odour control measures according to the Odour Management Plan, the Owner shall, upon written

notification from the District Manager, conduct an investigation into the cause and submit to the District Manager within the time frame identified in the notice, an assessment of the issues and the need for implementation of contingency actions in accordance with the Odour Management Plan.

## **8.0 OPERATION OF THE COMPOST PROCESSING AND STORAGE AREA**

- 8.1 Only leaf and yard waste, clean wood from the C&D Facility, and cured digested product from the BioPower Facility may be processed at the compost processing pad.
- 8.2 The Owner shall ensure that the daily and annual tonnage limit for the Compost Processing and Storage Area specified in Condition 4.4 and the maximum storage capacity specified in Condition 4.5 are not exceeded.
- 8.3 All run-off and leachate generated from the composting pad shall be collected and used in the composting process or for on-Site irrigation if determined to be of acceptable quality in consultation with the Provincial Officer and, shall not be discharged to the environment unless the discharge is in accordance with an approval under Section 53 of the Ontario Water Resources Act.
- 8.4 (1) The Owner shall only accept for composting or for any other waste processing operation within the compost processing area, any waste, leachate, wastewater, additive, bulking agent or inoculant that meets the feedstock requirements as set out in Section 3.3 of Part II in the Composting Standards; and
- (2) The Owner shall sample and analyze on an ongoing basis representative samples of all feedstock material to characterize the feedstock and to demonstrate that the end product is likely to meet the criteria set out in Section 3.3 of Part II in the Composting Standards.
- 8.5 By-products from the compost processing operations that are not finished compost, such as wood by-products (eg., mulch and bio-mass), can be sent off-Site to markets available for these processed materials.
- 8.6 All waste unacceptable for composting and residual waste that results from the operation of the composting area, shall be disposed at the on-site landfill or an approved waste disposal Site.
- 8.7 The Owner shall demonstrate the stability of the Compost material. If no determination of stability acceptable to the Ministry is made, the Compost must be cured for a minimum of six (6) months.
- 8.8 The temperature, as measured at any point one (1) metre inside the composting mass, shall be 55 degrees Celsius or higher for at least fifteen (15) 24 hour periods to inactivate pathogens in leaf and yard waste at the composting pad. The temperature must be monitored daily at points sufficient to provide a temperature profile of this composting material. If temperature monitoring shows that the above has not been achieved, the material from the composting process must be used as a Non-Agricultural Source Material if appropriate or disposed at a licensed facility or re-processed.

- 8.9 The Owner shall ensure that oxygen levels in the compost mass are monitored at least weekly. The Owner shall measure and record oxygen levels inside the mass to provide additional information to manage the composting process to avoid anaerobic conditions and thereby mitigate the potential for off-Site odour impacts. If the data shows that the composting process is being operated such that the oxygen levels are consistent and not causing adverse off-Site odour impacts, the Owner may apply to the District Manager for approval to reduce the frequency of oxygen measurements.
- 8.10 The compost undergoing curing shall be turned at least once per month or as frequently as necessary to maintain aerobic conditions in the curing compost, unless the Owner demonstrates that the Compost has been cured.
- 8.11 The Compost shall neither leave the Site nor be used on Site other than for landfill daily cover or for cover of BioPower primary reactor cells until it has been sampled and analyzed. The Compost product, in the form it leaves the Site, shall meet the requirements of Section 3.0 of Part II in the Composting Standards. Compost that fails to meet the criteria set out in this section of the Composting Standards is considered to be a waste and shall be used as a NASM if appropriate or disposed at an approved landfill.
- 8.12 The Owner shall operate the compost processing and storage area in a manner that reduces the potential for adverse off-Site odour effects by incorporating the following suggestions from the Guideline for the Production of Compost in Ontario dated July 25, 2012:
- a. Exercise care during processing and screening of organic waste, particularly during windy days.
  - b. Minimize activities during periods of unfavourable wind conditions.
  - c. Windrow turning shall be avoided during unfavourable meteorological conditions that minimize natural dispersion.
  - d. Record process operating information, such as temperature and retention times required under Part II of the Composting Standards.
- 8.13 In the event of operational upset or other condition likely to cause off-Site adverse effect during composting, the Owner shall notify the District Manager immediately and landfill the affected material immediately unless otherwise determined in consultation with the Provincial Officer.

**9.0 OPERATION OF THE PETROLEUM HYDROCARBON CONTAMINATED SOIL TREATMENT FACILITY (PHC FACILITY)**

- 9.1 The Owner shall ensure that only contaminated soil that is tested to be solid non-hazardous as per Regulation 347 shall be accepted at the Site and/or for processing at the PHC Facility.
- 9.2 The Owner shall ensure that the annual tonnage limit for the petroleum hydrocarbon contaminated soil specified in Condition 4.4 and the maximum storage capacity specified in Condition 4.5 are not exceeded.

- 9.3 The Owner shall ensure that all contaminated soil, the Residual Waste, the rejected waste and the processed soil management activities at the Site are carried out in designated areas as shown on the site plan included in Item 3 of Schedule "A", at all times.
- 9.4 All activities approved under this Approval shall only be carried out by Trained Personnel as set out in Condition 12.3.
- 9.5 The PHC soil Biopile cells shall be lined with geomembrane liner, with a maximum height of 2.5 metres for hydrocarbon contaminated soil to be treated, in accordance with the Design and Operations Plan included in Item 3 of Schedule "A".
- 9.6 The PHC contaminated soil treatment area shall be segregated from the surplus soil stockpile area.
- 9.7 (1) The Owner shall ensure that no contaminated soil handling activities, including screening, Biopile formation activities or transfer to storage locations or into vehicles are undertaken during high wind events that may cause fugitive dust emission according to the Dust Management Plan included in Item 1 of Schedule "A".
- (2) All Biopiles and storage stock piles shall be managed in a manner that minimizes dust emissions in accordance with the Dust Management Plan included as Attachment 3 in Attachment 5 to Item 1 of Schedule "A".
- 9.8 The Owner shall segregate the processed soil stock piles of different quality and destined for different types of receiving sites to ensure that the outbound processed soil is sent to appropriate receiving sites confirmed by a Qualified Person.
- 9.9 The Owner shall ensure that all wastewater resulting from the waste handling activities at the PHC Facility is collected and is either used in the Biopiles or sent off-site to licensed treatment facilities.
- 9.10 (1) Subject to Condition 9.10(3) below, the Owner shall test the quality of incoming contaminated soil. Sampling and analysis shall be undertaken in compliance with the "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act", dated July 1, 2011, as amended
- (2) The Owner shall submit the samples to an accredited laboratory for the required analysis and shall ensure that the following parameters are tested for:
- (a) parameters required to confirm that the incoming soil is a solid and non-hazardous waste, including relevant parameters set out in Schedule 4 entitled "Leachate Quality Criteria" of Regulation 347;
- (b) petroleum hydrocarbon fractions: F1 (C6-C10), F2 (>C10-C16), F3 (>C16-C34), and

F4 (>C34) based on the source site uses and history;

- (c) BTEX and any other VOCs as applicable based on the source site uses and history;
- (d) SVOCs as applicable based on the source site uses and history;
- (e) heavy metals as applicable based on the source site uses and history; and
- (f) any other contaminants as applicable based on the source site uses and history.

(3) Alternatively, the Owner shall review the results of testing as described in clauses (1) and (2) above conducted by the generator of the incoming soil to ensure that it can be accepted at the Site.

9.11 The processed soil may be deposited at or used as daily cover for the on-Site landfill as provided for in Condition 10.22.

9.12 No processed soil may leave the Site unless the following requirements are met:

- (1) The processed soil is analysed to comply with the quality standards as set out in appropriate Table of the Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act. The analysis shall be undertaken in compliance with the "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act", dated July 1, 2011, as amended, at an accredited laboratory and in accordance with the industry standards.
- (2) Before shipping any processed soil from the Site, the Owner shall, unless permission is otherwise granted by the Provincial Officer obtain from the receiving site's owner a written confirmation certified by a Qualified Person, that the processed soil quality and quantity is appropriate for the receiving site and that the receiving site's owner agrees to accept the processed soil and the deposition of the processed soil at the receiving site will not cause an adverse effect to human health or the environment.

## **10.0 LANDFILL DESIGN AND OPERATIONS**

### **Major Works**

10.1 For the purposes of this ECA the following are Major Works:

- a. gas management system;
- b. leachate collection and management system;
- c. storm water management system; and
- d. final cover system

- 10.2 A final detailed design shall be prepared for each Major Works to be constructed at the Site consistent with the conceptual design of the Site as presented in the supporting documentation included in Schedule "A".
- 10.3 At least six (6) months prior to construction, the final detailed design of each Major Work shall be submitted to the Director, copied to the District Manager, and shall include the following:
- a. design drawings and specifications;
  - b. a detailed quality assurance / quality control (QA/QC) program for construction of the Major Works, including necessary precautions to avoid disturbance to the underlying soils; and
  - c. details on the monitoring, maintenance, repair and replacement of the engineered components of the Major Works, if any.
- 10.4 Any design optimization or modification that is inconsistent with the conceptual design shall be clearly identified, along with an explanation of the reasons for the change.
- 10.5 No construction of a Major Works shall commence prior to the Director approving, in writing, the final detailed design of that Major Works. Each Major Work shall be constructed in accordance with the approved final detailed design and the QA/QC procedures shall be implemented as approved by the Director.
- 10.6 No person shall deposit any waste at the Site until a written Preparation Report has been submitted to the Director and District Manager documenting that:
- a. all construction;
  - b. QA/QC activities;
  - c. Site conditions; and
  - d. all details of the construction of the Site.

are in accordance with the approved design plans and specifications.

- 10.7 As-built drawings for all Major Works shall be retained on Site and made available to Ministry staff for inspection.

### **Subsequent Stage**

- 10.8 The final detailed design for the subsequent Stage 2 of the landfill, consisting of Phases 6 to 8, shall be submitted to the Director for approval prior to landfilling in Stage 2.
- 10.9 Approval to proceed with landfilling in Stage 2 shall be dependent on monitoring results acceptable to the Director. If monitoring results are not acceptable to the Director then remedial action must be taken and completed before landfilling may proceed in the Stage 2.

## **Landfill Operations**

- 10.10 Except as otherwise provided by these conditions, the landfilling operations at the Site shall be conducted in accordance with the Landfill Design and Operations report included as Appendix I of Item 3 in Schedule "A".

## **Capacity**

- 10.11 The total landfill capacity including waste and daily waste cover shall not exceed **10,170,000 cubic metres**, and the landfill shall not exceed the final contours as shown on Figure 2 of the Landfill Design and Operations report (Appendix I of Item 3 in Schedule "A").

## **Annual Waste Limit**

- 10.12 The landfill can receive up to a maximum of 450,000 tonnes per year of waste, including waste materials that the Owner is paid to accept that are used for alternative daily cover.

## **Waste Types**

- 10.13 The Owner shall ensure that only solid non-hazardous residual waste from the C&D Facility, Material Recovery Facility, Organic Processing Facility; processed soil from the PHC Facility; and incoming waste and contaminated soil that is deemed unsuitable to be processed at on-Site facilities is disposed of at the landfill.

## **First Waste Acceptance**

- 10.14 Within one week of the planned opening of the Landfill, the Owner shall notify the District Manager in writing of the date on which waste is to be first received at the Site.

## **Burning of Waste**

- 10.15 Burning of waste is not permitted at the Site.

## **Asbestos Waste**

- 10.16 Any waste that is considered asbestos waste shall be handled in accordance with Section 17 of O. Reg. 347, as amended from time to time.
- 10.17 The Owner shall ensure that asbestos waste is only handled by staff that is a certified asbestos abatement worker.
- 10.18 A suitable sized excavation for the asbestos waste shall be made in a location away from the active landfilling face, or the active face of the landfill shall be shut down during this procedure to bury the asbestos containing waste.

10.19 All asbestos waste shall be deposited to a level no higher than 1.25 metres below the general elevation of the disposal area to ensure that daily cover material removal in the future does not encounter the asbestos waste.

### **Landfilling of C&D Waste**

10.20 C&D waste with drywall content shall be disposed in a manner that minimizes the potential of hydrogen sulphide gas generation due to drywall disposal.

### **Cover Material**

10.21 (1) Daily Cover - By the end of each working day, the entire working face shall be covered with a minimum thickness of 150 mm of clean soil cover or an approved thickness of alternative cover material.

(2) Intermediate Cover - In areas where landfilling is anticipated to be temporarily discontinued for six (6) months or more, a minimum thickness of 300 mm of soil cover material shall be placed.

(3) Daily and intermediate cover soil or similar material may be removed from an area and saved for re-use immediately prior to continuing landfilling above the area of removed cover provided potential odour impacts are properly managed.

(4) Final Cover - In areas where landfilling has reached designed final waste contours, a final cover that consists of, from bottom to top, minimum 0.15 m of bedding sand, a geomembrane or geosynthetic clay liner (GCL), followed by a geocomposite drain, covered with minimum 0.45 m of soil cover, and minimum 0.15 m of topsoil that is hydroseeded to establish a vegetative cover.

10.22 (1) Contaminated soil, processed soil at the PHC Facility, fines from the diversion operations, and completed compost may be used as alternative daily cover (minimum 150 mm in thickness) provided that the application of alternative daily cover material does not result in any nuisance including odour, dust, and litter.

(2) Wood chips, tarpaulins and spray foams may also be used as alternative daily cover.

10.23 Only native clean soil or soil that meets Table 3 of the "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" shall be used for intermediate and final cover.

### **Temporary Containment Berm**

10.24 (1) Temporary containment berms shall be constructed at the limits of active landfill phases for leachate containment and storm water diversion.



- (2) The Owner shall ensure that waste is not filled up to the temporary berm, and a gap shall be maintained between the toe of the waste and the temporary berm.
- (3) In case there is leachate build-up in the gap between the toe of the waste and the temporary berm, it shall be pumped out immediately to prevent leachate seeping through the temporary berm.

### **Landfill Gas**

- 10.25 The Owner shall ensure all structures to be built on the landfill portion of the Site be situated and constructed in a manner which minimizes the potential for accumulation of landfill gas. The concentration of methane gas must be less than 1.0 per cent by volume in any on-site building or enclosed structure at all times as per Section 14.(2) of Reg 232.
- 10.26 The Owner shall install and maintain in good working order, methane detection and alarm equipment, with active venting or an effective passive venting system to relieve any possible landfill gas accumulation in all enclosed buildings on the landfill portion of the Site which at times are occupied by people.

### **Surface Water Management**

- 10.27 Surface water runoff from the landfilling area shall be collected and directed to the on-site stormwater management ponds, and shall not be directly discharged off-Site.
- 10.28 Clean runoff from non-operating areas shall be diverted from the landfilling area and prevented from entering the landfilled areas.

### **Air Space Survey**

- 10.29 The Owner shall undertake semi-annual air space surveys of the bottom and top waste contours to determine the estimated air space used for waste disposal in the prior six months. The air space survey shall include daily cover material and shall take into account settlement.
- 10.30 Each air space survey shall be conducted by an Ontario Land Surveyor or other qualified consultant and such air space survey shall be included in the Annual Report to be submitted to the District Manager. The Owner shall keep a copy of each air space survey on-Site and make them available to Ministry personnel upon request.

### **Landfill Inspections**

- 10.31 The Owner shall inspect the landfill site area daily for the following items:
  - a. adequacy of cover material;
  - b. evidence of unacceptable wastes or illegal dumping;
  - c. need for dust control on working areas or access roads according to the approved Dust

Management Plan;

- d. unacceptable levels of odours that would cause a person to attempt to avoid it after a period of exposure as determined by Trained Personnel; and
- e. evidence of leachate discharge to surface in the immediate vicinity of the working face, and in the space between toe of waste slope and temporary berms.

10.32 The owner shall inspect the landfill site area weekly for the following items:

- a. presence of litter at the Site's perimeter and litter fences;
- b. presence of vector, vermin, scavenging birds and animals;
- c. amount of cover material to ensure that sufficient daily cover is available at all times that the landfill is in operation; and,
- d. general landfill site appearance.

10.33 The owner shall inspect the landfill site area monthly for the following items:

- a. the condition of the active disposal area;
- b. condition of the surface water drainage works;
- c. presence of any ponded water on the landfill;
- d. condition of the on-site landfill roads for evidence of excessive erosion;
- e. condition of intermediate cover and of the final cover;
- f. condition of the on-site landfill related facilities;
- g. accuracy of the landfill weigh scale;
- h. waste handling and placement practices;
- i. evidence of leachate seeps over the entire landfill area;
- j. the landfill cap for evidence of vegetative stress; and
- k. side slopes of the landfill.

10.34 The drainage ditches shall be inspected on an annual basis during the fall prior to snowfall to identify any clean out requirements. If clean out is required, it shall be completed promptly. Weed removal on the ditch network shall be conducted as required.

## 11.0 SITE MONITORING

### Monitoring Programs

- 11.1 Monitoring programs for surface water, groundwater and leachate shall be carried out in accordance with the Environmental Monitoring Plan included in Attachment 10 to Attachment 5 in the ECA Application (Item 1 in Schedule "A").
- 11.2 Surface water sampling shall be conducted in spring, summer, fall and after a significant rainfall event in accordance with Item 3 of Schedule "A".
- 11.3 (1) Prior to commencing operations of the CRRRC, the Owner shall install landfill gas probes in

the Surficial Silty Sand layer along the property boundary of the landfill component of the CRRRC to monitor the subsurface migration of landfill gas and ensure that it meets the criteria set out in Section 14 of Reg. 232.

- (2) If the position of the high groundwater level in the Surficial Silty Sand layer, or other physical constraints, do not allow the installation of a gas probe in the unsaturated zone such that landfill gas in the subsurface can be monitored, the Owner shall prepare and submit a report to the District Manager in regard to the inability to conduct this monitoring at the CRRRC site, for approval by the District Manager. Approval by the District Manager will remove the requirement for monitoring described in Condition 11.3 (1).
  - (3) If landfill gas probes can be installed such that landfill gas can be monitored in the subsurface, the Owner shall submit a proposed monitoring plan to the District Manager for approval prior to commencement of the landfill operations. Upon approval of the plan, the Owner shall undertake the monitoring described in Condition 11.3 (1).
- 11.4 Monitoring for landfill gas collection system shall be conducted at least once a month in accordance with Section 6 of the Landfill Design and Operations report (Appendix I of Items 3 in Schedule "A").
- 11.5 The Owner shall conduct biological, geotechnical, traffic, and seismic monitoring as outlined in the Environmental Monitoring Plan included in Attachment 10 to Attachment 5 in the ECA Application (Item 1 in Schedule "A").
- 11.6 Within six months prior to the projected commencement of the Site operation, the Owner shall submit for the Director's approval, an Odour Monitoring Plan that includes details for odour inspection and qualification for odour inspector, identification of odour sources, procedure for odour testing, complaint response, and record keeping for odours.
- 11.7 Within sixty (60) days of issuance of this ECA, the Owner shall submit for the Director's approval, a landfill gas monitoring plan that includes details for the proposed gas probes network, sampling frequency, reporting, triggers and contingency plan for subsurface landfill gas migration.
- 11.8 For any changes to the monitoring programs, the Owner shall first obtain written approval by the District Manager, and then submit a letter identifying the proposed changes and a copy of the correspondences from the District Manager, to the Director requesting the ECA be amended to approve the proposed changes prior to implementation.

#### **Trigger Mechanism and Contingency Plan**

- 11.9 The Owner shall follow the trigger mechanisms for groundwater and surface water as detailed in Section 13.7 of the Geology, Hydrogeology and Geotechnical Report (Item 2 of Schedule "A").
- 11.10 The trigger values for groundwater and surface water shall be evaluated and updated as required

in each annual report.

11.11 In the event of a confirmed exceedance of a site-specific trigger levels for groundwater, surface water or landfill gas if applicable, the Owner shall complete the following:

- i. immediately notify the District Manager; and
- ii. conduct an investigation into the cause and the need for implementation of remedial or contingency actions.

11.12 If monitoring results, investigative activities and/or trigger mechanisms indicate the need to implement contingency measures, the Owner shall ensure that the following steps are taken:

- a. The Owner shall notify the Director and District Manager, in writing, of the need to implement contingency measures, no later than 30 days after confirmation of the exceedances;
- b. Detailed plans, specifications and descriptions for the design, operation and maintenance of the contingency measures shall be prepared and submitted by the Owner to the Director and District Manager for approval within 90 days after confirmation of the exceedances; and
- c. The contingency measures shall be implemented by the Owner upon approval by the Director.

11.13 The Owner shall ensure that any proposed changes to the site-specific trigger levels for leachate impacts to surface water or groundwater, shall be approved in advance by the Director prior to implementation.

## **12.0 OPERATIONS MANUAL AND STAFF TRAINING**

12.1 At least 30 days prior to commencement of Site operations, the Owner shall prepare an Operations Manual for use by the Site personnel. As a minimum, the Operations Manual shall contain the following:

- a. outline of the responsibilities of the Site personnel;
- b. Site Operating Procedures including but not limited to waste receiving and screening procedures, unloading, handling and storage procedures and waste processing procedures for organic waste, C&D waste, and PHC soil; material loading and daily covering for BioPower demonstration facility, landfilling operation, landfill leachate collection system and gas collection system operations, etc.;
- c. sampling, testing, monitoring and recording procedures as required by this Approval;
- d. Site inspections and recording procedures;
- e. emergency response procedures including an outline of the responsibilities of Site

personnel including roles and responsibilities during emergency situations, exit locations and evacuation routing, and locations of relevant equipment available for handling of the emergency situations;

- f. the contingency plans for the Site;
- g. equipment and Site inspection procedures, as required by this Approval;
- h. nuisance impact control & housekeeping procedures, as required by this Approval; and
- i. the procedures for handling and recording complaints as described in this Approval.

12.2 A copy of this Operations Manual shall be kept at the Site, be accessible to trained personnel at all times and shall be updated, as required.

12.3 Site employees shall be trained as applicable with respect to the following:

- a. operation and management of the Site, or areas within the Site, as per the specific job requirements of each individual employee in accordance with the Operations Manual required by Condition 12.1, above;
- b. terms and conditions of this Approval, relevant to the specific job requirements of each individual employee in accordance with the Operations Manual;
- c. environmental, and occupational health and safety concerns pertaining to the wastes to be handled;
- d. emergency first-aid information and the use of the equipment and materials outlined in the Emergency Response and Contingency Plan;
- e. relevant waste management legislation and regulations, including the EPA and Regulation 347;
- f. waste diversion protocol;
- g. Best Management Practices for odour, dust, and noise control; and
- h. sampling/testing protocols required for the characterization of the incoming contaminated soil and the outgoing processed soil.

12.4 The Owner shall ensure that all employees at the Site are trained in the requirements of this Approval relevant to the employee's position:

- a. upon commencing employment at the Site in a particular position; and
- b. whenever items listed in Condition 12.3 are changed or during the planned three (3)-year refresher training.

### **13.0 EMERGENCY RESPONSE AND CONTINGENCY PLAN**

13.1 At least 30 days prior to the commencement of Site operations, the Owner shall submit to the District Manager an Emergency Response and Contingency Plan. The Emergency Response and Contingency Plan shall be prepared in consultation with the District Manager, the local Municipality and the Fire Department and as a minimum it shall include the following information:

- a. emergency response procedures to be undertaken in the event of a spill, process upset, power failure, fire or any other emergency situation, including specific clean up methods for wastes expected to be generated from the emergency situation;
  - b. a list of equipment and clean up materials available for dealing with the emergency situations and their locations on the Site plan;
  - c. notification protocol with names and telephone numbers of persons to be contacted, including persons responsible for the Site, the Ministry's District Office and Spills Action Centre, the local Fire Department, the local Municipality, the local Medical Officer of Health, and the Ministry of Labour, and the names and telephone numbers of waste management companies available for emergency response;
  - d. procedures and actions to be taken should the incoming waste not meet the criteria set out in this Approval;
  - e. procedures and actions to be taken should the processing and storage of waste at the Site result in occurrence of complaints as per the approved Odour Management Plan; and
  - f. procedures and actions to be taken in case of waste processing equipment break-down and components of landfill gas collection and flaring system failure.
- 13.2 (1) An up-to-date version of the Emergency Response and Contingency Plan shall be kept at the Site at all times, in a central location available to all staff, and a copy shall be submitted to the District Manager, the local Municipality and the Fire Department.
- (2) The Emergency Response and Contingency Plan shall be reviewed on an annual basis and updated, if necessary. The revised version of the Emergency Response and Contingency Plan shall be submitted to the District Manager, the local Municipality and the Fire Department for comments and concurrence.
- 13.3 The Owner shall immediately take all necessary measures, as set out in the Emergency Response and Contingency Plan, to handle the emergency situations occurring at the Site.
- 13.4 The Owner shall ensure that the equipment and materials outlined in the Emergency Response and Contingency Plan are immediately available at the Site at all times and are in a good state of repair and fully operational.
- 13.5 The Owner shall ensure that all Site personnel are fully trained in the use of the equipment and materials outlined in the Emergency Response and Contingency Plan, and in the procedures to be employed in the event of an emergency.

- 13.6 All Spills, as defined in the EPA, shall be immediately reported to the **Ministry's Spills Action Centre at 1-800-268-6060** and shall be recorded in the log book as to the nature and cause of the spill, and the action taken for clean-up, correction and prevention of similar future occurrences.
- 13.7 Should a Spill, as defined in the EPA, occur at the Site, in addition to fulfilling the requirements from the EPA, the Owner shall submit to the District Manager a written report within three (3) calendar days or as soon thereafter as practical outlining the nature of the Spill, remedial measure taken and the measures taken to prevent future occurrences at the Site.

#### **14.0 COMPLAINT RESPONSE PROCEDURE**

- 14.1 The Owner shall designate a person to receive public complaints caused by the operations at the Site twenty-four (24) hours per day, seven (7) days per week.
- 14.2 If at any time, the Owner or the Ministry receives an environmental complaint from the public regarding the Site, the Owner shall respond to the complaint as follows:

(1) Record of Complaint or Detection

- (a) The Owner shall record each complaint in a written or digital tracking system. The information to be recorded shall include the following:
- (i) name, address and the telephone number of the complainant, if known;
  - (ii) time and date of the complaint; and
  - (iii) details of the complaint.

(2) Investigation and Handling of Complaints

- (b) Within two (2) business days after the complaint is received, the Owner shall notify the District Manager of the Complaint. The Owner shall attempt to verify if the complaint relates to operations at the Site. If the complaint is verified, the Owner shall then immediately initiate investigation of the cause of the complaint. The investigation shall include, as a minimum, the following:
- (i) determination of the activities being undertaken at the Site at the time of the complaint;
  - (ii) meteorological conditions including, but not limited to the ambient temperature, approximate wind speed and its direction;
  - (iii) determination if the complaint is attributed to activities being undertaken at the Site and if so, the possible causes of the complaint;

- (iv) determination of the remedial actions to address the causes of the complaint, and the schedule for the implementation of the necessary remedial actions.
- (c) The Owner shall document the complaint investigation and shall make the document available for inspection by staff of the Ministry upon request.
- (d) The Owner shall respond to the complainant, if known, and the response shall include the results of the investigation of the complaint, the actions taken or planned to be taken to address the causes of the complaint, and if any follow-up responses would be provided.
- (e) Upon successful resolution of the complaint, the Owner shall, within three (3) business days, submit a report to the District Manager on that complaint, and all proposed actions to prevent recurrence of the complaint in the future.

14.3 If, in the opinion of the District Manager, failure of the air pollution control equipment and/or any other process or equipment upset or malfunction results in off-Site adverse odours impacts as confirmed by the Owner or a Provincial Officer of the Ministry, the Owner shall, immediately upon notification from the District Manager, implement any necessary additional odour control measures, including, but not necessarily limited to, those in their Odour Management Plan and Emergency Response and Contingency Plan.

14.4 If the Ministry deems the additional odour control measures taken as per condition 14.3 to be unsuitable, insufficient or ineffective, the District Manager may direct the Owner, in writing, to propose further measures to address the noted failure, upset or malfunction, which may include requiring a reduction in the receipt of waste, cessation of the receipt of waste, removal and disposal of waste from the Organics Processing Facility, composting area, curing area, PHC treatment pad or any other area of the processing buildings, as well as making repairs or modifications to equipment or processes. Such measures shall be implemented by the Owner upon approval by the District Manager.

## 15.0 RECORD KEEPING

### Weekly Record for Daily Activities

- 15.1 The Owner shall maintain an on-Site written or digital record of activities undertaken at the Site. The record shall include, as a minimum, the following information:
- a. date, quantity, source and type of waste received at the Site;
  - b. date, quantity, and type of waste sent to each processing facility including the C&D Facility, MRF, Organic Processing Facility, PHC soil Facility, and composting area;
  - c. date, quantity, type and the destination of the following materials transferred off-Site:



- processed organic material
  - finished compost transferred
  - Rejected Waste
  - recyclable materials from the Material Recovery Facility
  - processed C & D Waste
- d. date, quantity, type of the total residual waste disposed of at the landfill;
  - e. waste processing activities undertaken at the Site, including processing of C&D waste; recyclables, organic waste, PHC soil, and composting;
  - f. amount of the waste loaded into primary reactor of the BioPower Facility;
  - g. amount of digested waste removed from the primary reactor to curing area;
  - h. loss of adequate negative pressure relative to ambient atmospheric pressure within the organics processing building as described in Items 11 and 12 of Schedule "A" and the activities undertaken to restore such conditions;
  - i. housecleaning activities; and
  - j. type and amount of daily, intermediate and final cover used for the landfill.

### **Emergency Situations**

15.2 The Owner shall maintain an on-Site written or digital record of the emergency situations. The record shall include, as a minimum, the following:

- a. the type of emergency situation;
- b. description of how the emergency situation was handled;
- c. the type and amount of material spilled, if applicable;
- d. a description of how the spilled material was cleaned up and waste stored, if generated; and
- e. the location and time of final disposal, if applicable.

### **Inspections**

15.3 The Owner shall maintain an on-Site written or digital record of inspections as required by this ECA. The record shall include, as a minimum, the following:

- a. the name and signature of person that conducted the inspection;
- b. the date and time of the inspection;
- c. the list of any deficiencies discovered;
- d. the recommendations for remedial action;
- e. the date, time and description of actions taken;

### **Training**

15.4 The Owner shall maintain an on-Site written or digital record of training as required by this ECA. The record shall include, as a minimum, the following:

- a. date of training;
- b. name and signature of person who has been trained; and
- c. description of the training provided.

### **Sampling & Testing Records**

15.5 The Owner shall establish and maintain a written or digital record of all sampling and testing activities at the Site. This record shall include, as a minimum, the following information:

- a. waste sampled, sample collection locations and volume collected;
- b. day and time of collection;
- c. sample handling procedures;
- d. name of the person undertaking the sampling;
- e. parameters tested for and the results;
- f. name of the laboratory facility conducting the testing, if applicable;
- g. conclusions drawn with respect to the results of the monitoring and testing.

### **Waste Processing Information**

15.6 The Owner shall establish and maintain a written or digital record of the operational information for the Organic Processing Facility and the PHC soil treatment area. This record shall be updated daily, as applicable and shall include, as a minimum, the following information:

- a. operational information on the system designed to maintain adequate negative pressure relative to the ambient atmospheric pressure within the confines of the organics pre-processing building, as described in Items 11 and 12 in Schedule "A";
- b. ammonia concentration within the confines of the processing building;
- c. BioPower Demonstration Facility primary reactor parameters including temperature, moisture content, nitrogen level, quantity and quality of biogas, liquor character;
- d. secondary reactor biogas quantity and quality, and effluent quality;
- e. temperature for composting and curing piles; and
- f. operational parameters for the PHC soil treatment pad

### **Complaints Response Records**

15.7 The Owner shall establish and maintain a written or digital record of all complaints and the responses as required by this ECA.

### **16.0 ANNUAL REPORT**

16.1 A written report on the development, operation, and monitoring of the Site, shall be completed annually. The Annual Report shall be submitted to the District Manager, the City of Ottawa, and the CLC, by **March 31st** of each year and shall cover the year ending the preceding December

31st.

16.2 The Annual Report shall include at least the following:

- (a) for the overall Site
- a monthly and annual mass balance of the waste and other materials received, processed and transferred from the Site, including the waste type, quantity, sources and/or disposal destinations;
  - a calculation of the waste diversion rate for the past year and recommendations on any measures proposed to achieve a higher waste diversion rate and reduce residual waste disposed of at the landfill;
  - a summary of the amount of wastes refused for processing and disposal at the Site, the reasons for refusal and the carrier who brought the waste to the Site;
  - a summary of the type and amount of processed waste and recyclables transported off-site;
  - a summary of any complaints received and the responses made;
  - site plans showing the processing facilities layout and existing contours of the landfill site;
  - a discussion of any spills, incidents, and material operational problems encountered at the Site and corrective action taken;
  - any changes to the Emergency Response and Contingency Plan and the Operations Manual;
  - an updated summary of the amount of financial assurance which has been provided to the Director;
  - updates to the Odour Management Plan and Dust Management Plan;
  - any other information with respect to the site which the District Manager may require from time to time;
  - a statement of compliance with all conditions of this ECA and other relevant Ministry groundwater and surface water requirements;
  - a confirmation that the site inspection program as required by this ECA has been complied with by the Owner.
- (b) for each facility (C&D, MRF, Organics Processing, Composting, and PHC Soil Treatment)
- a summary of the amount of wastes processed at each facility and disposed of at the landfill;
  - additions and/or modifications to facilities during the reporting period;
  - site preparation and/or additions and/or modifications to facilities planned for installation during the next reporting period;
  - an assessment of the operation and performance of all engineered facilities, the need to amend the design or operation of the Site, and the adequacy of and need to implement the contingency plans;
  - any changes in operations, equipment or procedures employed at the facility;
  - any proposed changes in operations of the facility;
  - recommendations to minimize environmental impacts from the operation of each facility

and to improve the facility operations.

- (c) for the landfill
- a summary of the maximum daily, weekly and total annual quantity (tonnes) of waste disposed of at the landfill;
  - site plans showing the existing contours of the landfill site;
  - calculations of the volume of waste, daily and intermediate cover, and final cover deposited or placed at the landfill during the reporting period, a calculation of the landfill capacity used during the reporting period and the remaining capacity;
  - the progress of final cover, vegetative cover, and any intermediate cover application for the landfill;
  - an assessment of the efficiency of the leachate management system at the Site;
  - a summary of the quantity of any pre-treated leachate removed from the Site during each operating week;
  - a summary of the leachate collection system cleaning and inspection activities;
  - a report on the status of all monitoring wells and a statement as to compliance with Ontario Regulation 903;
  - a summary of the sampling activities for leachate, groundwater, surface water and landfill gas if applicable and QA/QC procedure
  - the results and an interpretive analysis of the results of all leachate, groundwater, surface water and landfill gas monitoring, including an assessment of the need to amend the monitoring programs and the trigger mechanisms;
  - an assessment with regards to compliance of the groundwater quality at the property boundary and compliance point with regards to the Reasonable Use Concept;
  - total volume of landfill gases collected during the reporting year expressed in cubic metres and adjusted to standard 25<sup>o</sup>C, 101.3 kPa;
  - percentage of methane contained in the collected gases expressed as an average value of the total volume of gases collected over the reporting period;
  - any changes to the gas collection system implemented over the reporting period including any extensions of the collection system, installation of new gas collectors, replacement collectors, and any other collectors that have been decommissioned;
  - any other changes to the gas collection and flaring system implemented over the reporting period;
  - any updates to the inspection and maintenance plan as a result of changes made to the gas collection system during the reporting period; and
  - any updates to the Operations Manual.

## 17.0 CLOSURE PLAN

### Landfill Closure

- 17.1 At least 2 years prior to closure or when 90% of the estimated landfill capacity is reached, whichever comes first, the Owner shall submit to the Director, for approval, with copies to the District Manager and the CLC, a detailed closure plan pertaining to the termination of landfilling

operations at this Site, post-closure inspection, maintenance and monitoring, and end use. The plan shall include at least the following:

- i. a plan showing the landfill appearance after closure;
- ii. a description of the proposed end use of the landfill;
- iii. a description of the procedures for closure of the landfill, including:
  - advance notification of the public of the landfill closure;
  - posting of a sign at the Site entrance indicating the landfill is closed and identifying any alternative waste disposal arrangements;
  - completion, inspection and maintenance of the final cover and landscaping;
  - Site security;
  - removal of unnecessary landfill-related structures, buildings and facilities; and
  - final construction of any control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas;
- iv. a schedule indicating the time-period for implementing sub-conditions i) to iii) above.
- v. descriptions of the procedures for post-closure care of the Site, including:
  - operation, inspection and maintenance of the control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas;
  - record keeping and reporting; and
  - complaint contact and response procedures;
- vi. an assessment of the adequacy of and need to implement the contingency plans for leachate and landfill gas;
- vii. an updated estimate of the Contaminating Life-span of the landfill, based on the results of the monitoring programs to date, and
- viii. an update of the cost estimates for financial assurance for the entire Site that is prepared in accordance with the Ministry's Financial Assurance Guideline.

17.2 A vegetative cover consisting of vegetation that is suitable to local conditions and that is capable with minimal care of providing vigorous, plentiful cover no later than its 3<sup>rd</sup> growing season shall be established over all completed areas to control erosion.

**Closure of C&D Facility, Material Recovery Facility, Organic Processing Facility, Compost Processing Area, and PHC Soil Treatment Facility**

17.3 The Owner shall submit, for approval by the Director, a written Closure Plan for the C&D Facility, Material Recovery Facility, Organic Processing Facility, Compost Processing Area, and PHC Soil Treatment Facility four (4) months prior to closure of the facilities. This plan must include, as a minimum, a description of the work that will be done to facilitate closure of the above facilities including site clean-up, building and equipment decommission, disposal of residual material, and a schedule for completion of the closure work.

17.4 Within ten (10) days after closure of any of the above facilities, the Owner must notify the Director, in writing, that the applicable facility has been closed in accordance with the approved Closure Plan.

## SCHEDULE "A"

The following Schedule "A" forms part of this Environmental Compliance Approval

1. Environmental Compliance Approval Application EPA S.27 Waste, Taggart Miller Environmental Services Capital Region Resources Recovery Centre Ottawa, Ontario dated February 2018, and the appendices, prepared by Golder Associates Ltd.
2. Volume III of the Environmental Assessment of the Proposed Capital Region Resources Recovery Centre - "Geology, Hydrogeology and Geotechnical Report Capital region Resources Recovery Centre" dated December 2014 prepared by Golder Associates Ltd Ltd.
3. Volume IV of the Environmental Assessment of the Proposed Capital Region Resources Recovery Centre - "Design and Operations Report Capital Region Resource Recovery Centre" dated December 2014 prepared by Golder Associates Ltd.
4. Letter dated June 29, 2018 addressed to Paul S. Taggart, Taggart Miller Environmental Services Inc. from Rick Li, Ministry of the Environment and Climate Change providing review comments on the waste ECA application.
5. Letter dated July 27, 2018 addressed to Rick Li, Ministry of the Environment, Conservation and Parks from Golder Associates Ltd providing a response to Ministry's review comments on waste, groundwater and surface water issues sent June 29, 2018.
6. Table 5 dated August 2018 - Response to Comments from N. Orpana, Air Compliance Engineer, MECP Eastern Region, June 28, 2018, prepared by Golder Associates Ltd.
7. Report entitled "Capital Region Resources Recovery Centre (CRRRC) Odour Management Plan Revised July 2018" dated August 31, 2018 prepared by Golder Associates Ltd., as amended.
8. Letter dated October 19, 2018 addressed to Paul S. Taggart, Taggart Miller Environmental Services Inc. from Rick Li, Ministry of the Environment, Conservation and Parks regarding additional comments on the waste ECA application.
9. Table dated November 28, 2018 - Response to Ministry of the Environment, Parks and Conservation Comments Received October 19, 2018, Application for Approval of Waste Disposal Sites, Capital Region Resource Recovery Centre, Ottawa, Reference Number 1994-AW7JS8, prepared by Golder Associates Ltd.
10. Letter dated January 8, 2019 addressed to Jeff Parkes, Taggart Miller Environmental Services Inc. from Rick Li, Ministry of the Environment, Conservation and Parks regarding additional comments on the waste ECA application.
11. Letter dated January 22, 2019 addressed to Rick Li, Ministry of the Environment, Conservation

and Parks from Golder Associates Ltd providing a response to Ministry's review comments dated January 8, 2019.

12. Technical memorandum dated May 29, 2019 addressed to Rick Li, Ministry of the Environment, Conservation and Parks from J.L. Richards & Associates Limited regarding Organics Pre-processing Building - Ventilation Systems.
13. Technical memorandum dated June 5, 2019 addressed to Rick Li, Ministry of the Environment, Conservation and Parks from Golder Associates Ltd. regarding CRRRC Waste ECA Conditions of Approval.

*The reasons for the imposition of these terms and conditions are as follows:*

1. *The reason for inclusion of the definitions is to define the specific meaning of terms and simplify the wording of conditions in this Environmental Compliance Approval.*
2. *The reason for Conditions 1.1, 1.2 and 1.3 is to ensure that the Site is designed, operated, monitored and maintained in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider.*
3. *The reason for Conditions 1.4, 1.8, 1.9, 1.10, and 1.11 is to clarify the legal rights and responsibilities of the Owner under this Approval.*
4. *Conditions 1.5, and 1.6 are included to ensure that the appropriate Ministry staff have ready access to information and the operations of the Site, which are approved under this ECA.*
5. *Condition 1.7 has been included in order to clarify what information may be subject to the Freedom of Information Act.*
6. *Conditions 1.12 to 1.14 inclusive are included, pursuant to subsection 197(1) of the EPA, to provide that any persons having an interest in the Site are aware that the land has been approved and used for the purposes of waste disposal.*
7. *The reasons for Condition 1.15 are to restrict potential transfer or encumbrance of the Site without the approval of the Director and to ensure that any transfer of encumbrance can be made only on the basis that it will not endanger compliance with this Approval.*
8. *The reasons for Conditions 1.16 and 1.17 are to ensure that the Site is operated under the corporate name which appears on the application form submitted for this approval and to ensure that the Director is informed of any changes.*
9. *The reason for Condition 1.18 is to ensure that appropriate Ministry staff have ready access to the Site for inspection of facilities, equipment, practices and operations required by the conditions in*

*this Environmental Compliance Approval. This condition is supplementary to the powers of entry afforded a Provincial Officer pursuant to the EPA and OWRA.*

- 10. The reasons for Conditions 2.1 to 2.7 inclusive are to ensure that sufficient funds are available to the Ministry to clean up and close the Site, and to carry out all expected post-closure care activities and any contingencies. Failure to include requirements for financial assurance would not be in the public interest and may result in a hazard or nuisance to the natural environment or any person.*
- 11. The reason for Condition 4.1 is to specify the areas from which the Site may receive waste for processing and disposal.*
- 12. The reason for Condition 4.2 is to specify the types of waste that may be accepted at the Site based on the Owner's application and supporting documentation.*
- 13. The reason for Conditions 4.3 to 4.5 is to specify the quantity of wastes that may be accepted and stored on Site based on the Owner's application and supporting documentation and the amount of financial assurance required for the Site.*
- 14. The reason for Conditions 4.6 and 4.7 is to ensure that waste is handled indoors to prevent adverse effect to the environment.*
- 15. The reason for Condition 4.8 is to ensure residual waste is properly disposed of so that so that is does not result in negative impact to the environment.*
- 16. The reason for Condition 5.1 is to require that the Site is well constructed, operated, and maintained for the protection of the environment and public health.*
- 17. The reason for Conditions 5.2 to 5.4 is to ensure that the Site's users, operators and the public are fully aware of important information and restrictions related to the operation of the Site*
- 18. The reason for Conditions 5.5 to 5.8 is to ensure that the Site is sufficiently secured, supervised and operated by properly trained personnel and to ensure controlled access and integrity of the Site by preventing unauthorized access when the Site is closed and no site personnel is on duty.*
- 19. The reason for Condition 5.9 is to specify the hours of operation for the Site to ensure that the hours of Site's operation do not result in an adverse effect or a hazard to the natural environment or any person.*
- 20. The reason for Conditions 5.10 and 5.11 is to ensure that incoming waste is screened and directed to the proper processing and/or disposal facility.*
- 21. The reason for Conditions 5.12 is to ensure that only approved waste types are accepted and processed/disposed of at the Site.*
- 22. The reason for Condition 5.13 is to specify the requirements for handling of the Rejected Waste that*



*was inadvertently received at the Site, This is to ensure that waste received at the Site does not result in an adverse effect or a hazard to the environment or any person.*

23. *The reason for Conditions 5.14 to 5.19 is to ensure that the Site is operated and maintained in an environmentally acceptable manner which does not result in a negative impact on the natural environment or any person.*
24. *The reason for Condition 5.20 is to ensure that the Site is operated in a manner that does not result in odour impact and mitigation measures are employed in case of any odour emission.*
25. *The reason for Conditions 5.21 to 5.24 is to require the Site to be maintained and inspected thoroughly and on a regular basis to ensure that the operations at the Site are undertaken in a manner which does not result in an adverse effect or a hazard to the health and safety of the environment or any person.*
26. *The reason for Conditions 6.1 and 6.2 is to ensure that incoming waste that is suitable for resource recovery is processed at the proper facility to maximize the diversion rate.*
27. *The reason for Conditions 6.3 and 6.4 is to ensure that waste stored at the C&D Facility and MRF does not exceed the designed capacity and the waste storage does not result in adverse effect.*
28. *The reasons for Conditions 6.5 and 6.6 is to ensure that operations of the C&D Facility and MRF complies with other applicable approvals required by the Ministry.*
29. *The reasons for Condition 7.1 is to ensure that the organic processing facility is designed, operated and maintained according to the Ministry's regulations, standards and guidelines for the protection of the environment and public health.*
30. *The reasons for Conditions 7.2 to 7.8 is included to control odour emission resulted from the operations at the organic pre-processing building.*
31. *The reason for Condition 7.9 is to ensure that wastewater generated during processing of organic waste is properly managed to prevent contamination to the environmental*
32. *The reason for Condition 7.10 is to specify the operation period for BioPower Demonstration Facility and to ensure that full scale operation of the BioPower Facility is only permitted if it is demonstrated to not have unacceptable impact to the environment.*
33. *The reason for Conditions 7.11 to 7.13 is to ensure that operation of the BioPower Demonstration Facility does not result in unacceptable odour emission.*
34. *The reason for Condition 7.14 is to ensure that any odour issues at the BioPower Demonstration Facility are adequately addressed in a timely manner so they do not create unacceptable impact to the environment.*

35. *The reason for Conditions 8.1, 8.2, 8.4 and 8.5 is to ensure that only waste that meets the approved criteria is accepted for composting, and the quantity does not exceed the designed capacity.*
36. *The reason for Condition 8.3 is to ensure that wastewater from the composting area is managed in accordance with the Ministry's regulation and policy.*
37. *The reason for Conditions 8.6 to 8.13 is to ensure that composting operation complies with the Ministry's Compost Guideline and the quality of compost meets the Compost Standard.*
38. *The reason for Conditions 9.1, 9.2 and 9.10 is to specify the type and quantity of contaminated soil that can be accepted at the PHC soil treatment Facility.*
39. *The reason for Conditions 9.3 to 9.8 is to ensure that the PHC soil treatment Facility is operated in a manner that does not result in negative impact to the environment.*
40. *The reason for Condition 9.9 is to ensure that wastewater from the PHC soil treatment Facility is managed in accordance with the Ministry's regulation and policy.*
41. *The reason for Conditions 9.11 and 9.12 is to ensure that processed soil from the PHC soil treatment Facility is properly managed according to the Ministry's soil standards.*
42. *The reason for Conditions 10.1 to 10.7 is to ensure that the Site is designed, constructed and operated in an environmentally acceptable manner, based on the conceptual design and operations for the Site.*
43. *Conditions 10.8 and 10.9 were included to require the submission of the detailed design and to allow for optimization of design for subsequent stages of the landfill based on operating experience and monitoring results.*
44. *Condition 10.10 is to ensure the landfill is operated in accordance with the document approved by the Ministry.*
45. *Condition 10.11 is to specify the maximum capacity for the landfill as per the design submitted by the Owner.*
46. *Conditions 10.12 and 10.13 is to specify the annual tonnage of waste and the type of waste that can be disposed of at the landfill.*
47. *Condition 10.14 is to ensure the Ministry is informed when the landfill opens to accept waste.*
48. *Condition 10.15 is to clarify that open burning of municipal waste is unacceptable because of concerns with air emissions, smoke and other nuisance affects, and the potential fire hazard.*
49. *Conditions 10.16 to 10.19 are to ensure asbestos waste is handled and disposed of in accordance with O. Reg. 347 as amended from time to time. Proper handling and disposal of asbestos waste*

*ensures that the asbestos waste does not cause an adverse impact on the environment and also does not affect human health.*

50. *The reason for Condition 10.20 is to ensure that disposal of drywall at the landfill does not result in odour impacts.*
51. *Conditions 10.21 to 10.23 are to ensure that landfilling operations are conducted in an environmentally acceptable manner. Daily and intermediate cover is used to control potential nuisance effects, to facilitate vehicle access on the site, and to ensure an acceptable site appearance is maintained. The proper closure of a landfill site requires the application of a final cover which is aesthetically pleasing, controls infiltration, and is suitable for the end use planned for the site.*
52. *Condition 10.24 is included to ensure that leachate will not seep through the temporary berm as no liner was proposed for the temporary berm.*
53. *Conditions 10.25 and 10.26 are to ensure concentration of landfill gas does not pose a hazard to human health or the environment.*
54. *The reason for Conditions 10.27 and 10.28 is to ensure that surface water from the Site is properly managed and does not pose an impact to the environment.*
55. *The reason for Conditions 10.29 and 10.30 is to require that the air space consumption is regularly monitored to ensure the site is developed in accordance with the approved site plan.*
56. *The reason for Conditions 10.31 to 10.34 is to specify the site inspection requirement and ensure that any deficiencies in the landfill can be discovered and remedial actions be taken in a timely manner.*
57. *The reason for Conditions 11.1 to 11.5 and 11.8 is to demonstrate that the landfill site is performing as designed and the impacts on the natural environment are acceptable. Regular monitoring allows for the analysis of trends over time and ensures that there is an early warning of potential problems so that any necessary remedial/contingency action can be taken.*
58. *The reason for Condition 11.6 is to ensure the Owner follows established procedure to identify the odour from site operations so that mitigation measures can be implemented promptly in order to prevent off-site odour impact.*
59. *The reason for Condition 11.7 is to require monitoring of the subsurface migration of landfill gas to ensure compliance with Reg 232.*
60. *The reason for Conditions 11.9 through 11.13 is to ensure that the Owner follows a plan with an organized set of procedures for identifying and responding to unexpected but possible problems at the Site. A remedial action / contingency plan is necessary to ensure protection of the natural environment.*

61. *The reason for Conditions 12.1 to 12.4 is to ensure that personnel employed at the Site are fully aware and properly trained on the requirements and restrictions related to Site operations under this ECA.*
62. *The reason for Conditions 13.1 to 13.5 is to ensure that the Owner and the site employee is prepared and properly equipped to take action in the event of an emergency situation.*
63. *The reason for Conditions 13.6 and 13.7 is to require further spill notification to the Ministry, in addition to the requirements already listed in Part X of the EPA.*
64. *The reason for Conditions 14.1 to 14.1 is to require the Owner to appropriately respond to any environmental complaints resulting from the waste management operations and/or operation of the air pollution control equipment approved under section 9 of the EPA for this Site.*
65. *The reason for Conditions 15.1 to 15.7 is to ensure that detailed records of Site activities, inspections, monitoring and upsets are recorded and maintained for inspection and information purposes.*
66. *The reasons for Conditions 16.1 and 16.2 are to ensure that regular review of site development, operations and monitoring data is documented and any possible improvements to site design, operations or monitoring programs are identified. An annual report is an important tool used in reviewing site activities and for determining the effectiveness of site design.*
67. *The reasons for Conditions 17.1 through 17.4 are to ensure that final closure of the Site is completed in an aesthetically pleasing manner and to ensure the long-term protection of the natural environment.*

*In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:*

- a. *The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;*
- b. *The grounds on which you intend to rely at the hearing in relation to each portion appealed.*

*The Notice should also include:*

1. *The name of the appellant;*
2. *The address of the appellant;*
3. *The environmental compliance approval number;*
4. *The date of the environmental compliance approval;*
5. *The name of the Director, and;*
6. *The municipality or municipalities within which the project is to be engaged in.*

*And the Notice should be signed and dated by the appellant.*

*This Notice must be served upon:*

The Director appointed for the purposes of

The Secretary\*  
Environmental Review Tribunal  
655 Bay Street, Suite 1500  
Toronto, Ontario  
M5G 1E5

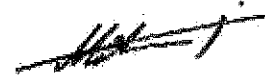
AND

Part II.1 of the Environmental Protection Act  
Ministry of the Environment,  
Conservation and Parks  
135 St. Clair Avenue West, 1st Floor  
Toronto, Ontario  
M4V 1P5

\* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or [www.ert.gov.on.ca](http://www.ert.gov.on.ca)

*The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.*

DATED AT TORONTO this 13th day of December, 2019



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Mohsen Keyvani, P.Eng.  
Director  
appointed for the purposes of Part II.1 of the  
*Environmental Protection Act*

RL/

c: District Manager, MECP Ottawa  
Trish Edmond, Golder Associates Ltd Ltd.

