



AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A461002

Issue Date: November 13, 2015

Waste Management of Canada Corporation
 2301 Carp Rd
 Ottawa, Ontario
 K0A 1L0

Site Location: West Carleton Environmental Centre
 Parts of Lots 2, 3 & 4, Concession 2, and
 Parts of Lots 3, 4 & 5, Concession 3, Geographic Township of Huntley,
 City of Ottawa

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:

for the use and operation of a 72.26 hectare landfill site (consisting of 37.8 hectare Landfill Expansion Area and 34.46 hectare Closed Landfill Area), and a waste transfer/processing facility within a total site area of 232.9 hectares, with a contaminant attenuation zone, consisting of 2 parcels totalling 51.3 ha, being known as the West Carleton Environmental Centre as follows

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*.

"Closed Landfill Area" refers to pre-existing 34.46 ha landfill waste disposal mound, that was closed in September 2011;

"Contaminant Attenuation Zone" or **"CAZ"** means the lands known as Part of Lot 4, Concession II, Part of Lot 3, Concession II, Part of Lot 2, Concession II, Geographic Township of Huntley, now in the City of Ottawa consisting of the properties identified as Parcels "B" and "C" in Schedule B.

"Contaminating Lifespan" or **"CLS"** 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;

"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 and Climate Change's Ottawa District Office;

"District Office" refers to the Ministry of the Environment and Climate Change Ottawa District Office;

"EA Approval" refers to the "Notice of Approval to Proceed With the Undertaking" issued under Environmental Assessment Act Section 9, by the Ministry on August 16, 2013, EA File No. EA-02-08-02;

"Environmental Inspector" refers to the individual employed by the Ministry of the Environment and Climate Change to inspect the *Site*;

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

CONTENT COPY OF ORIGINAL

"**Landfill Expansion Area**" means the 37.8 hectare new landfill area in the north portion of the *Site*, located at Parts of Lots 4 & 5, Concession 3, Geographic Township of Huntley, City of Ottawa, approved by this *ECA*.

"**Major Works**" are those works that have an engineering component;

"**MOECC**" or "**Ministry**" refers to the Ontario Ministry of the Environment and Climate Change;

"**Odour Referee**" is the person or agency who is technically qualified and trained in odour assessment, designated as per the Odour Enforcement Mechanism and is not a representative of the *Ministry*.

"**Operator**" has the same meaning as "operator" as defined in s.25 of the *EPA*;

"**Owner**" means Waste Management of Canada Corporation 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;

"**PLC**" means the West Carleton Environmental Centre Public Liaison Committee for the *Site*;

"**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*;

"**Regional Director**" refers to the Director of the Ministry of the Environment and Climate Change's Eastern Regional Office;

"**Regulation 347**" or "**Reg. 347**" or "**O. Reg. 347**" means Regulation 347, R.R.O. 1990, made under the *EPA*, as amended from time to time;

"**Site**" means the entire waste disposal site, including the buffer lands and contaminant attenuation zone approved by this *ECA*, shown and identified in Schedule "B"; and

"**Waste Transfer/Processing Facility**" refers to the area of land contiguous to the landfill area and part of the *Site*, to be used for the waste transfer and processing operations of industrial/commercial waste and construction and demolition waste prior to the removal of the wastes from the *Site*.

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 carry out work on or 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 carry out work on or 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".

1.4 Within ninety (90) days of the issuance of this *ECA*, the *Owner* shall submit to the *Director*, with copy to the *District Manager*, an updated Development & Operations Report that incorporates the correspondents between the *Owner* and the *Ministry* listed as Items 67 to 73 in Schedule "A".

Other Legal Obligations

1.5 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* .

Adverse Effect

1.6 The *Owner* or *Operator* shall remain responsible for any contravention of any other condition of this *ECA* or any applicable statute, regulation, or other legal requirement resulting from any act or omission that caused the adverse effect or impairment of air and/or water quality.

Furnish Information

1.7 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.

1.8 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.

1.9 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

1.10 This *ECA* revokes and replaces the previous Environmental Compliance Approval and all subsequent amendments.

1.11 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.

1.12 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.

1.13 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.

1.14 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

1.15 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.

1.16 If not completed by the issuance of this *ECA*, then two (2) copies of a completed Certificate of Requirement, containing a registerable description of the *Site* , shall be submitted to the *Director* for the *Director's* signature within sixty (60) calendar days of the date of this *ECA*.

1.17 If not completed by the issuance of this *ECA*, then the Certificate of Requirement shall be registered in the appropriate land registry office on title to the *Site* and a duplicate registered copy shall be submitted to the *Director* within 10 calendar days of receiving the Certificate of Requirement signed by the *Director* .

No Transfer or Encumbrance

1.18 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

1.19 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.

1.20 In the event of any change in the ownership of the *Site*, other than a change to a successor municipality, 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

1.21 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 closure, monitoring and maintenance of the *Site*, maintenance of all required contaminant control systems including leachate management systems, contaminant monitoring for the *Contaminating Lifespan* of the *Site* and contingency plans for the *Site* in accordance with this *ECA*.

2.2 Financial assurance may be provided in one or more of the following forms: cash, irrevocable letter of credit, surety bond, or some other form, all satisfactory to the *Director*.

Proposed Payment Schedule

2.3. (1) Within thirty (30) days of the issuance of this *ECA*, the *Owner* shall ensure that financial assurance in a form acceptable to the *Director* in the amount of **\$35,645,612.00** has been submitted to the *Director*.

(2) In addition to the amount provided in Condition 2.3 (1), the *Owner* shall provide in a form acceptable to the *Director* an additional amount of financial assurance in the amount of **\$45,871.00** for the *Waste Transfer/Processing Facility*. This financial assurance shall be provided to the *Director* 30 days prior to commencing the operation of the *Waste Transfer/Processing Facility*.

2.4 The total amount of financial assurance specified in Condition 2.3 (1) shall be updated by the *Owner* as follows by the following dates:

- i. March 31, 2016 - **\$34,301,044.00**
- ii. March 31, 2017 - **\$47,721,084.00**
- iii. March 31, 2018 - **\$52,462,515.00**
- iv. March 31, 2019 - **\$57,203,945.00**

Updated Review Report

2.5 A revised or new Financial Assurance program shall be submitted to the *Director* by no later than **March 31, 2018** and then at an interval no greater than a period of every four (4) years thereafter. The report shall include:

- a. updates of the discount, interest and inflation rates associated with the requirements for financial assurance in this *ECA* including justifications and sources of the proposed rates; and
- b. a report prepared by a qualified Professional Engineer which updates the cost estimates on which the amounts associated with the requirements for financial assurance in this *ECA* are based.

2.6 The report referenced in the above condition shall take into consideration the:

- a. actual amounts of waste landfilled;
- b. empirical leachate generation rates;
- c. empirical and theoretical landfill gas generation rates;
- 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*;
- f. annual inspection, maintenance, and monitoring costs, including costs for leachate treatment and disposal and landfill gas use or discharge from the landfill gas management works; and
- g. The operations related to the *Waste Transfer/Processing Facility*.

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. 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.

2.9 The amount of financial assurance may be less than the amounts specified in Condition 2.4 provided the *Owner* can justify to the *Director* that the amount of waste deposited on site is less than the maximum allowed during the time interval, and a financial assurance re-evaluation is submitted to the *Director*.

3.0 PUBLIC LIAISON COMMITTEE (PLC)

3.1 The *Owner* shall establish and maintain a PLC 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 PLC or establishing and participating in a new PLC (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 PLC.

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

3.4 If there is interest in forming a PLC and members are willing to serve, the PLC shall be established.

3.5 The *Owner* shall provide administrative support for the PLC including, at minimum:

- a) Providing PLC 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 CONSTRUCTION, INSTALLATION and PLANNING

Major Works

4.1 For the purposes of this *ECA* the following are *Major Works*:

- a. gas management system;
- b. leachate collection system; and
- c. liner

4.2 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, specifically Item 59 in Schedule "A".

4.3 The final detailed design of each *Major Works* 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.

4.4 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.

4.5 The final detailed design of each *Major Work* shall be submitted to the *Director*, copied to the *District Manager*.

4.6 No construction of a *Major Works* shall commence prior 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*.

4.7 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.

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

Subsequent Stages

4.9 The final detailed design for the subsequent stages shall be submitted to the *Director* for approval prior to landfilling.

4.10 Approval to proceed with landfilling in each subsequent stage 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 subsequent stage.

5.0 GENERAL OPERATIONS

Proper Operation

5.1 The *Site* shall be properly operated and maintained at all times. All waste shall be managed and disposed of in accordance with the *EPA* and *Regulation 347* and the requirements of this *ECA*. At no time shall the discharge of a contaminant that causes or may cause an adverse effect be permitted.

Operations Manual

5.2 An operations and procedures manual that addresses the requirements of this *ECA* shall be prepared for the *Site* within 180 days from the date of this *ECA*. The operations and procedures manual shall include the following information:

- a) Health and safety;
- b) Operation and maintenance of the *Site*;
- c) Waste acceptance;
- d) Waste disposal area and development;
- e) Waste processing and transferring operations
- f) Nuisance management;
- g) Leachate management;
- h) Landfill gas management;
- i) Surface water/stormwater management;
- j) Inspections and monitoring;
- k) Contingency plans and emergency procedures;
- l) Complaints; and,
- m) Reporting and record keeping.

5.3 The operations and procedures manual shall be:

- a) Retained at the *Site*;
- b) Reviewed on an annual basis and updated by the *Owner* as required; and
- c) Be available for inspection by *Ministry* staff.

Service Area

5.4 Only solid, non-hazardous waste that was generated in the Province of Ontario shall be accepted at the *Site*.

Hours of Operation

5.5 Waste shall only be accepted at the *Site* during the following time periods:

i) From 7:00 AM to 7:00 PM for Monday through Friday;

ii) From 7:00 AM to 6:00 PM for Saturday;

iii) On-*Site* equipment used for daily *Site* preparations and closing activities shall only be used from 6:00 AM to 8:00 PM for Monday through Saturday.

5.6 With the prior written approval of the *District Manager*, the time periods may be extended to accommodate seasonal or unusual quantities of waste.

5.7 The *Owner* may provide limited hours of operation provided that the hours are posted at the landfill gate and that suitable notice is provided to the public of any change in operating hours.

5.8 Upon reasonable notice to the *District Manager*, contingency actions may take place outside normal hours of operation. Emergency response may occur at any time as required.

Site Access

5.9 (1) Once the *Landfill Expansion Area* opens to accept waste, access to the *Site* for disposal and related waste operations is limited to the main entrance off of Carp Road as illustrated in Section 3.1 of the Development & Operations Report listed as Item 59 in Schedule "A".

(2) Prior to opening of the new cells in the *Landfill Expansion Area*, the existing site entrance on Carp Road may be used for existing site operations (waste transfer/processing facility), maintenance, and construction of the new cells.

Site Security

5.10 During non-operating hours, the *Site* entrance and exit gates shall be locked and the *Site* shall be secured against access by unauthorized persons.

Roads and Traffic

5.11 On-*Site* roads shall be provided and maintained in a manner that vehicles hauling waste to and on the *Site* may travel readily and safely on any operating day. Onsite roads must be clear of mud, ice and debris which may create hazardous conditions.

5.12 The *Owner* shall ensure that inbound trucks to the *Site* do not cause traffic back up on Carp Road.

Waste Inspection and Procedures

5.13 The *Operator* shall develop and implement a program to inspect waste to ensure that the waste is of a type approved for acceptance under this *ECA*.

5.14 All loads of waste must be inspected by trained site personnel prior to acceptance at the *Site* and waste vehicles must be directed to appropriate areas for waste disposal.

Litter Control:

5.15 The *Owner* shall take all practical steps to prevent escape of litter from the *Site*. All loose, windblown litter shall be collected on a daily basis and disposed of at the landfill working face when the *Site* is active and at a licensed waste disposal site when the *Site* no longer accepts waste for final disposal.

Vermin, Scavenging, Dust, Odour, Noise, etc.

5.16 The *Site* shall be operated and maintained such that the vermin, vectors, dust, odour, noise and traffic do not create adverse effect off-site.

5.17 No scavenging is to occur at the *Site*.

5.18 The *Owner* shall install tire inspection location on site and shall ensure that vehicles leaving the *Site* do not track mud or debris onto Carp Road. If mud and debris can not be managed on site, the *Owner* shall install a tire washing facility within six (6) months of a request from the *District Manager*.

Dust

5.19 The *Owner* shall control fugitive dust emissions from onsite sources including but not limited to onsite roads, stockpiled cover material and closed landfill area prior to seeding especially during times of dry weather conditions. If necessary, major sources of dust shall be treated with water and/or dust suppression materials to minimize the overall dust emissions from the *Site*.

Noise

5.20 The *Owner* shall comply with noise criteria in MOECC Guideline entitled "Noise Guidelines for Landfill Sites."

Contaminant Attenuation Zone Requirements

5.21 (1) The *Owner* shall ensure all drinking water supply wells in the *Contaminant Attenuation Zone* that are not used for groundwater monitoring are decommissioned as per current *Ministry* regulations .

(2) No new drinking water supply wells are permitted within the *Contaminant Attenuation Zone*.

(3) The *Owner* shall provide alternative drinking water supply(s) to the Karson Group Inc. operations that are affected as a reason of Condition 5.20 (1).

Contaminated Soil Stockpiling

5.22 Contaminated soil shall be stockpiled in areas of the *Site* that have a base liner and leachate collection system installed below.

Leaf and Yard Waste

5.23 Source Separated Organics, as well as Leaf and yard waste shall not be composted at the *Site* unless approved by the *Director*.

6.0 LANDFILL SITE OPERATION

Landfill Operations

6.1 Except as otherwise provided by these conditions, the landfilling operations at the *Site* shall be conducted in accordance with conditions within this *ECA* and the supporting documentation, plans and specifications listed in Schedule "A".

Capacity

6.2 The *Owner* shall only accept and deposit waste for landfilling at the *Site* as long as the total *Site*(including the *Closed Landfill Area* and the *Landfill Expansion Area*) capacity for waste and waste cover does not exceed **15,244,400** cubic meters, the capacity for the *Landfill Expansion Area* does not exceed **6,500,000** cubic metres, and there is available capacity as defined by the final waste contours for the *Site* approved by the *Director*.

Daily and Annual Waste Limit

6.3 (1) The *Site* can receive up to 4,000 tonnes of waste per day.

(2) The *Site* can receive up to a maximum of 400,000 tonnes per year of waste, including waste materials used for alternative daily cover.

Waste Types

6.4 Only solid non-hazardous waste shall be accepted at the *Site* for landfilling.

First Waste Acceptance

6.5 Within one week of the planned opening of the *Landfill Expansion Area*, the *Owner* shall notify the *District Manager* in writing of the date on which waste is first received at the *Site*.

Burning of Waste

6.6 Burning of waste is not permitted at the *Site*.

Asbestos Waste

6.7 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.

6.8 A suitable sized excavation for the asbestos waste shall be made by the *Owner* 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.

6.9 All asbestos waste shall be inspected to ensure that the asbestos waste is properly bagged or contained and free from puncture, tears or leaks.

6.10 The asbestos waste shall be placed in the excavation to avoid damage to the containers and to prevent dust and spillage.

6.11 Upon completion of the unloading and deposition of the asbestos in the excavation, at least 1.25 metres of cover or waste material shall be placed over the asbestos.

6.12 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.

International Waste

6.13 Any waste that is considered international waste shall be handled in accordance with Appendix 4, of the International Waste Directive of the Canadian Food Inspection Agency, as amended from time to time.

Cover Material

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

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

iii. Final cover of the *Landfill Expansion Area* must meet the following specifications:

a. Final Cover - In areas where landfilling has been completed to final contours, a minimum 0.85 m layer of low-permeability final cover soil shall be placed. Fill areas shall be progressively completed and rehabilitated as development reaches final contours; and

b. Topsoil - In areas where landfilling has been completed to final contours and where final cover has been placed, a minimum 0.15 metres thick layer of topsoil shall be placed.

6.15 The following materials, may be used as an alternative daily cover material in accordance with the Development and Operations Report (Item 59 in Schedule "A"):

- a. contaminated soil;
- b. tarps;

- c. processed green material;
- d. tire shred;
- e. slag and foundry sands;
- f. auto shred residue;
- g. glass aggregate;
- h. industrial residues;
- i. crushed concrete and brick; and
- j. shredded shingles

6.16 The contaminated soil, slag and foundry sand, and industrial residues listed in Condition 6.15 shall meet the Toxicity Characteristic Leaching Procedure (TCLP) criteria specified in Schedule IV of *O. Reg. 347* as amended from time to time.

6.17 Contaminated soil, slag and foundry sand, and industrial residues that are used for daily cover shall be sampled on a quarterly basis and submitted for analysis of *O. Reg. 347* Schedule IV Inorganics, VOCs, PAHs and PCBs. Quarterly testing results shall be included in the annual report. The frequency of *O. Reg. 347* testing of the cover material may be reduced subject to agreement of the *District Manager*.

6.18 Alternative daily cover shall only be used on inside slopes of the active landfilling face, clean soil shall be used on the top flat portion of daily cell.

6.19 Only native clean soil or soil that meets Table 7 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.

6.20 The application of alternative daily cover material shall not result in any nuisance including odour, dust, and litter.

6.21 Use of alternative daily cover materials shall be discontinued within two (2) working days of receipt of written notification from the *District Manager*, stating that the use of the alternative daily cover materials at the *Site* has proven to be environmentally unsuitable.

Signage

6.22 A sign shall be maintained at the main entrance/exit to the *Site* on which is legibly displayed the following information:

- a) the name of the *Site* and *Owner*;
- b) the number of the *ECA*;
- c) the name of the *Operator*;
- d) the normal hours of operation;
- e) the allowable and prohibited waste types;
- f) a warning against unauthorized access;
- g) the telephone number to which complaints may be directed;
- h) a twenty-four (24) hour emergency telephone number (if different from above); and
- i) a warning against dumping outside the *Site*

6.23 The *Owner* shall post and maintain signs to direct vehicles to working face and recycling areas.

Landfill Gas

6.24 The *Owner* shall ensure all existing structures and future structures to be built on *Site* shall be situated and constructed in a manner which minimizes the potential for accumulation of landfill gas.

6.25 The *Owner* shall install and maintain 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 *Site* which at times are occupied by people.

Surface Water Management

6.26 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.

6.27 Clean runoff from non-operating areas shall be diverted from the landfilling area and prevented from entering the lined landfill cells.

Environmental Inspector

6.28 (1) The *Owner* shall provide the *Environmental Inspector* with adequate office facilities, communication equipment, and means of transportation for the purpose of site inspection as deemed necessary by the *District Manager* during hours of waste disposal operation.

(2) The *Owner* shall, on a semi-annual basis, reimburse MOECC for the reasonable costs of the *Environmental Inspector* and associated expenses.

Air Space Survey

6.29 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. The first air space survey shall be undertaken within six months after the approval date of this *ECA* with an air space survey being completed semi-annually after the completion of the first air space survey, until landfill *Site* closure.

6.30 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 MOECC personnel upon request.

Mini-Transfer Area

6.31 The *Owner* shall operate and maintain the mini-transfer area such that the dust, odours, vectors, birds, litter, noise and traffic do not create a nuisance.

6.32 Domestic waste received from the public shall be placed within appropriate steel bin, and shall not be placed on the ground.

6.33 Waste storage bins shall be emptied and the waste be disposed of in the active landfilling area within 24 hours of being full or every seven (7) days at a minimum.

6.34 Recyclable materials received shall be properly sorted and sent to appropriate processing facility. No landfilling of recyclable materials shall be allowed.

6.35 All storage containers/bins used to store waste and/or recyclable materials shall be well sealed and maintained in good condition to prevent leakage. The *Owner* shall immediately remove from service any leaking container.

7.0 WASTE TRANSFER/PROCESSING FACILITY

Waste Transfer/Processing Operations

7.1 Except as otherwise provided by these conditions, the waste transfer and processing operations at the *Site* shall be conducted in accordance with conditions within this *ECA* and the supporting documentation, plans and specifications listed in Schedule "A".

Waste Type and Service Area

7.2 (1) Only solid non-hazardous waste which includes wastes generated by residential, commercial, institutional and industrial sectors (including construction and demolition waste) within the Province of Ontario shall be accepted at the *Site*

for processing and transfer.

(2) (a) With the exception of wood waste, no putrescible waste shall be accepted at the Construction and Demolition Processing Area; and

(b) If incidental amounts of putrescible waste and/or loads are inadvertently received at the Construction and Demolition Processing Area, the *Owner* shall remove the putrescible waste from the Construction and Demolition Processing Area forthwith.

Unacceptable Waste

7.3 i. The *Owner* shall conduct appropriate inspections and ensure that appropriate controls are in place to prevent the acceptance of non-approved waste as reflected by this *ECA* and to prevent the acceptance of waste from outside the approved service area.

ii. The *Owner* shall record in the daily records for the *Waste Transfer/Processing Facility* operations any occurrence of unacceptable waste delivered to the *Waste Transfer/Processing Facility*, the name of the waste hauler delivering the waste to the *Waste Transfer/Processing Facility* and waste generator (if known).

iii. The *Owner* shall forthwith notify the *District Manager* of any and all waste load refusals at the *Waste Transfer/Processing Facility* related to requirements in this *ECA*, including service area and waste types.

Capacity

7.4 The *Owner* shall ensure that:

a. the total amount of waste received at the *Waste Transfer/Processing Facility* shall not exceed 400 tonnes per day;

b. the maximum amount of processed materials, unprocessed waste and residual wastes approved to be stored at the *Waste Transfer/Processing Facility* shall not exceed 370 cubic meters as described in Table 5 of Item 54 in Schedule "A"; and

c. with the exception of statutory holidays, the *Owner* shall ensure that incoming waste material shall be removed from the *Waste Transfer/Processing Facility* within 72 hours of receipt.

7.5 In the event that waste or recyclable materials cannot be removed from the *Waste Transfer/Processing Facility* and the total approved storage capacity is reached, the *Owner* shall cease accepting additional waste to ensure the total approved storage capacity does not exceed the maximum amount approved by this *Approval*.

Hours of Operation

7.6 Operating hours of the *Waste Transfer/Processing Facility* shall be as per Condition 5.5 (i) and (ii), 5.6, 5.7 and 5.8 of this *ECA*.

Manuals

7.7 The operations and procedures manual for the *Waste Transfer/Processing Facility* shall be:

a. retained at the *Site*;

b. kept up to date through periodic revisions; and

c. be available for inspection by *Ministry* staff.

Processing/Transfer

7.8 All waste must be transferred inside the building or put into the appropriate steel bin the same day the waste is received at the *Site*.

7.9 The *Owner* is permitted to unload waste for the purposes of transfer and processing on the concrete pad as shown in Item 52 in Schedule "A".

7.10 All waste received at the *Waste Transfer/Process Facility* shall be processed and stored indoors with the exception of scrap metal and corrugated cardboard which can be stored in metal bins placed on the concrete pad as shown in Item 52 in Schedule "A".

7.11 All construction and demolition waste received at the outdoor processing pad for construction and demolition waste as shown in Item 52 of Schedule "A" must be processed the same day the waste is received. The waste must be placed in the appropriate bins or bunker. No overnight storage of waste on the pad is permitted.

Storage Bins

7.12 All storage containers/bins used to store waste and/or recyclable materials shall be maintained in good condition to prevent leakage. The *Owner* shall immediately remove from service any leaking container. Containers/bins used to store clean scrap metal may be equipped with drainage holes to permit the drainage of rainwater.

Site Security

7.13 The *Site* shall be operated and maintained in a secure manner.

Site Access

7.14 Access to and exit from the *Site* for the transportation of waste destined for the *Waste Transfer/Processing Facility* shall be through the main access gate, as illustrated on the proposed entrance realignment Drawing 91712G-E1 in Item 9 of Schedule "A".

Noise Assessment

7.15 If, in the opinion of the *District Manager*, the levels of noise from the *Waste Transfer/Processing Facility* cause or may cause an adverse impact, the *Owner* shall, within two (2) months of being so notified by the *District Manager*, submit an application for remedial measures designed to effect compliance with the *Ministry's* noise guidelines and the *EPA*, and upon approval by the *Director*, shall carry out remedial work forthwith.

Record Keeping and Reporting

7.16. Prior to receiving any waste on *Waste Transfer/Processing Facility*, the *Owner* shall prepare an operations manual for use by *Site* personnel. The operations manual shall contain the following:

- (i) outline the responsibilities of *Site* personnel;
- (ii) personnel training protocols;
- (iii) receiving and screening procedures;
- (iv) unloading, handling and storage procedures;
- (v) *Site* inspections, spill, fire, upset and leakage recording procedures;
- (vi) procedure for handling complaints.

7.17 The *Owner* shall keep a copy of an up-to-date operations manual specified in Condition 7.16 at the *Waste Transfer/Processing Facility*, in a location accessible to personnel at all times.

7.18 The *Owner* shall maintain, at the *Site*, a log which records on each day of operation, the following information:

- (a) date of record;
- (b) types, quantities and source of materials received;
- (c) quantities of materials stored on *Site*;

- (d) quantities and destination of waste and residual materials shipped from the *Site*;
- (e) results of the inspections, including the name and signature of the person conducting the inspection; and
- (f) any spills or upsets.

8.0 MAJOR WORKS APPROVALS

Leachate Management

8.1 The leachate collection system piping for each stage of the landfill shall be inspected annually for the first five years after waste placement and then as often as future inspections indicate to be necessary. Additionally, leachate collection pipes must be cleaned whenever an inspection indicates that cleaning is necessary.

8.2 The leachate drainage layer shall be constructed in accordance with the Specifications detailed in Appendix 4-B of the Development & Operations Report (Item 59 of Schedule "A")

8.3 A minimum of 50 mm of stone shall be placed below the leachate collection pipes and a minimum of 250 mm of stone shall be placed above any leachate collection pipes.

8.4 The *Owner* shall ensure that a maximum leachate head of 300 mm on the landfill liner is not exceeded except on a temporary basis as described in the Development and Operations Plan (Item 59 of Schedule "A").

SBR Leachate Pre-Treatment Facility

8.5 (1) The *Owner* is approved to construct the SBR Leachate Pre-Treatment Facility in accordance with Items 55 through 57 in Schedule "A" and applicable information submitted for the EPA Section 9 approval No. 4117-8EHQE7.

(2) The *Owner* shall notify the *District Manager* in writing at least forty-eight (48) hours prior to initially operating the SBR Leachate Pre-treatment Facility that operation of the facility will commence.

8.6 Within ninety (90) days of the initial operation of the SBR Leachate Pre-Treatment Facility, the *Owner* shall submit to the *Director*, with copies to the *District Manager*, an Operation and Maintenance Manual for the SBR Leachate Pre-Treatment Facility. The operations and maintenance manual shall be reviewed on an annual basis and updated by the *Owner* as required.

Gas Collection System

8.7 The *Owner* shall manage landfill gas in accordance with Items 44 through 48 and 59 of Schedule "A" and based on the landfill gas management system constructed under the authority of the *EPA* Approval issued which may be amended or replaced from time to time.

8.8 For the future expansion of the landfill gas collection and flaring/utilization system, the *Owner* shall submit the final detailed design to the *Director* for approval, with copies to the *District Manager* prior to construction.

8.9 a) In the event a gas well needs replacing due to damage or the well is deemed to be not functioning properly, the *Owner* may replace the gas well.

b) For any repairs, replacements and/or upsets of the landfill gas collection and flaring system, the *Owner* shall notify the *District Manager* in writing within 30 days of the changes.

c) Maintenance or replacing components relating to existing Major Works are not considered Major Works under Section 4.0 of this *ECA*.

Landfill Liner

8.10 The liner system for the *Site* will be constructed in accordance with Appendix 4 of the Development & Operations Report (Item 59 of Schedule "A").

9.0 TRAINING

Employees and Training

9.1 A training plan for all employees that operate any aspect of the *Site* (including *Waste Transfer/Processing Facility*) shall be developed and implemented by the *Operator*. Only trained employees shall operate any aspect of the *Site* or carry out any activity required under this *ECA*. For the purpose of this *ECA* "trained" means knowledgeable either through instruction or practice in:

- i. the relevant waste management legislation including *EPA, O. Reg. 347*, regulations and guidelines;
- ii. major environmental and occupational health and safety concerns pertaining to the waste to be handled;
- iii. the proper handling of wastes;
- iv. the management procedures including the use and operation of equipment for the processes and wastes to be handled;
- v. the emergency response procedures;
- vi. the specific written procedures for the control of nuisance conditions;
- vii. the terms, conditions and operating requirements of this *ECA* and,
- viii. proper inspection, receiving and recording procedures and the activities to be undertaken during and after a load rejection.

10.0 INSPECTIONS AND RECORD KEEPING

Daily Inspections and Log Book

10.1 An inspection of the entire *Site* and all equipment on the *Site* shall be conducted each day the *Site* is in operation to ensure that the *Site* is being operated in compliance with this *ECA*. Any deficiencies discovered as a result of the inspection shall be remedied immediately, including temporarily ceasing operations at the *Site* if needed.

10.2 A record of the inspections shall be kept in a daily log book or a dedicated electronic file that includes:

- i. the name and signature of person that conducted the inspection;
- ii. the date and time of the inspection;
- iii. the list of any deficiencies discovered;
- iv. the recommendations for remedial action; and
- v. the date, time and description of actions taken.

10.3 A record shall be kept in the daily log book or a dedicated electronic file of all the following:

- i. the type, date and time of arrival, hauler, and quantity (tonnes) of all waste received at the *Site*; and,
- ii. a list of the refusal of waste shipments, the reason(s) for refusal, and the origin of the waste, if known.

Monthly Records

10.4 Monthly *Site* inspection records in the form of a written log or a dedicated electronic file shall include the following:

- i. a summary of wastes received, processed, transfer and refused for disposal at the *Site*;
- ii. a calculation of the total quantity (tonnes) of waste received at the *Site* during each operating day and each operating week;
- iii. the amount of any leachate removed, or treated and discharged from the *Site*;
- iv. a record of litter collection activities and the application of any dust suppressants;
- v. a record of the daily inspections;
- vi. a description of any out-of-service period of any control, treatment, disposal or monitoring facilities, the reasons for the loss of service, and action taken to restore and maintain service;
- vii. type and amount of daily, intermediate and final cover used;
- viii. maintenance and repairs performed on equipment employed at the *Site*;
- ix. complaints received and actions taken to resolve them;

- x. emergency situations and actions taken to resolve them; and
- xi. any other information required by the *Ministry*.

Site Inspections

10.5 During *Site* operations, the *Owner* shall inspect the *Site* monthly for the following items but not limited to these items:

- i. General settlement areas or depressions on the waste mound;
- ii. Shear and tension cracks on the waste mound;
- iii. Condition of surface water drainage works;
- iv. Erosion and sedimentation in surface water drainage system;
- v. Presence of any ponded water on the waste mound;
- vi. Adequacy of cover material;
- vii. Evidence of vegetative stress, distressed poplars or side slope plantings on or adjacent to the waste mound;
- viii. Condition of groundwater monitoring wells and gas wells;
- ix. Presence of insects, vermin, rodents and scavenging animals on or adjacent to the waste mound;
- x. Condition of fence surrounding the *Site*;
- xi. Condition of storage pond located near the *Waste Transfer/Processing Facility*; and,
- xii. General *Site* appearance.

10.6 The *Owner* shall inspect the waste mound and surrounding areas weekly for presence of leachate seeps. The *Owner* will make best efforts to repair leachate seeps within 48 hours of discovery, depending on weather and ground conditions. In the event the leachate seeps are not addressed within 48 hours of discovery, the *Owner* shall document in the daily log book the reasons for which the seep(s) were not repaired within the 48 hour timeframe.

Record Retention

10.7 Except as authorized in writing by the *Director*, all records required by this *ECA* shall be retained at the *Site* for a minimum of two (2) years from their date of creation.

10.8 The *Owner* shall retain all documentation listed in Schedule "A" for as long as this *ECA* is valid.

10.9 All monthly summary reports are to be kept at the *Site* until they are included in the Annual Report.

10.10 The *Owner* shall retain employee training records as long as the employee is working at the *Site*.

10.11 The *Owner* shall make all of the above documents available for inspection upon request of *Ministry* staff.

11.0 MONITORING

Groundwater Monitors

11.1 The *Owner* shall ensure all groundwater monitoring wells are properly capped, locked and protected from damage.

11.2 All groundwater monitoring wells whether included in the monitoring program or not shall be assessed, repaired, replaced or decommissioned as required. Any well being decommissioned shall be decommissioned in accordance with good standard practice that will prevent contamination through the abandoned well and in accordance with Ontario Regulation 903.

11.3 The *Owner* shall repair or replace any monitoring well included in the monitoring program which is destroyed or in any way made inoperable for sampling such that no more than one sampling event is missed.

11.4 Any monitoring well included in the monitoring program that is no longer required as part of the groundwater monitoring program may be decommissioned provided its removal from the monitoring program has been approved by the

Director. A report on the decommissioning shall be provided in the annual monitoring report for the period during which the well was decommissioned.

Monitoring Programs

11.5. (1) Monitoring programs shall be carried out by the *Owner* for groundwater, surface water, leachate, and landfill gas in accordance with Item 62 of Schedule "A".

(2) For any changes to the monitoring program, 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.

Compliance Criteria

11.6 The *Site* shall be operated in such a way to ensure compliance with the *MOECC's* Guideline B-7 Reasonable Use Concept at monitoring points along the property line that have the potential to be impacted by leachate from the *Site*.

Best Management Programs

11.7 (1) Best Management Plans shall be carried out by the *Owner* for dust, odour, combustion by-products, noise in accordance with Item 65 of Schedule "A".

(2) For any changes to the Best Management Plans, the *Owner* shall obtain written approval for the changes by the *District Manager* prior to implementation.

12.0 TRIGGER MECHANISMS AND CONTINGENCY PLANS

Trigger Mechanisms

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

- i. immediately notify the *District Manager*; and
- ii. an investigation into the cause and the need for implementation of remedial or contingency actions shall be carried out by the *Owner* in accordance with the approved trigger mechanisms and associated contingency plans described in Items 42 and 62 of Schedule "A".

Contingency Plans

12.2 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*.

12.3 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.

13.0 COMPLAINTS PROCEDURE

13.1 If at any time, the *Owner* receives complaints regarding the operation of the *Site*, the *Owner* shall respond to these complaints according to the following procedure:

- a. The *Owner* shall record and number each complaint, either electronically or in a log book, and shall include the following information: the nature of the complaint, the name, address and the telephone number of the complainant if the complainant will provide this information and the time and date of the complaint;
- b. The *Owner*, upon notification of the complaint, shall initiate appropriate steps to determine all possible causes of the complaint, proceed to take the necessary actions to eliminate the cause of the complaint and forward a formal reply to the complainant; and
- c. The *Owner* shall complete a report written within one (1) week of the complaint date, listing the actions taken to resolve the complaint and any recommendations for remedial measures, and managerial or operational changes to reasonably avoid the recurrence of similar incidents. A copy of the report shall be retained onsite.

13.2 The *Owner* shall post the *Site* complaints procedure at the *Site* entrance along with the name and phone number of a suitable, local contact to receive complaints or questions related to the *Site*. All complaints and the *Owner's* actions taken to remedy the complaints must be summarized in the Annual Report.

13.3 All complaints received by the *Owner* are to be reported within twenty-four (24) hours of receipt to the *District Manager*. Complaints shall be reported to the PLC at the next PLC meeting.

Odour Referee

13.4 In the event of an odour complaint and the *Odour Referee* is called, the investigation conducted and decision made by the *Odour Referee* shall not constitute part of this *Approval*. In addition to the *Odour Referee*, the complaint shall also be reported to the *District Manager* for his/her investigation and determination of the compliance of the *Approval* and applicable regulations and standards.

14.0 EMERGENCY SITUATIONS

14.1 In the event of a fire or discharge of a contaminant to the environment, *Site* staff shall contact the *MOECC* Spills Action Centre (1-800-268-6060) and the *District Office* of the *MOECC*, as well as other applicable agencies as required.

14.2 The *Owner* shall submit to the *District Manager* a written report within three (3) days of the spill or incident, outlining the nature of the incident, remedial measures taken and measures taken to prevent future occurrences at the *Site*.

14.3 The *Owner* shall prepare an Emergency Response Manual for the *Site* and submit to the *District Manager* within 180 days of the issuance of this *ECA*, in consultation with local emergency response agencies. The Emergency Response Manual should indicate the responsibility of each of the stakeholders with respect to handling possible emergency situations.

14.4 The Emergency Response Manual shall be updated on an annual basis as a minimum and be provided to the *District Manager* within one month of the revision date.

14.5 The *Owner* shall ensure that adequate fire fighting and contingency spill clean up equipment is available and that emergency response personnel are familiar with its use and location.

15.0 ANNUAL REPORTING

15.1 A written report on the development, operation, closure and monitoring of the *Site* including the *Waste Transfer/Processing Facility*, shall be completed annually (the "Annual Report"). The Annual Report shall be submitted to the *District Manager*, *Regional Director*, the City of Ottawa, and the *PLC*, by **March 31st** of each year and shall cover the year ending the preceding December 31st.

15.2 The Annual Report shall include the following:

CONTENT COPY OF ORIGINAL

- i. 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;
- ii. An assessment with regards to compliance of the groundwater quality at the property boundary and compliance point with regards to Guideline B-7 - Reasonable Use Concept;
- iii. 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;
- iv. an assessment of the efficiency of the leachate management at the *Site*;
- v. site plans showing the existing contours of the *Site*;
- vi. areas of excavation during the reporting period;
- vii. the progress of final cover, vegetative cover, and any intermediate cover application;
- viii. previously existing site facilities;
- ix. facilities installed during the reporting period;
- x. site preparations and facilities planned for installation during the next reporting period;
- xi. calculations of the volume of waste, daily and intermediate cover, and final cover deposited or placed at the *Site* during the reporting period and a calculation of the total volume of *Site* capacity used during the reporting period;
- xii. a summary of the quantity of any leachate or pre-treated leachate removed from the *Site* during each operating week;
- xiii. a summary of the weekly, maximum daily and total annual quantity (tonnes) of waste received at the *Site*.
- xiv. a summary of any complaints received and the responses made;
- xv. a discussion of any operational problems encountered at the *Site* and corrective action taken;
- xvi. a summary of the amount of wastes refused for disposal at the *Site*, the reasons for refusal and the carrier who brought the waste to the *Site*;
- xvii. a summary of the leachate collection system cleaning and inspection activities;
- xviii. an update summary of the amount of financial assurance which has been provided to the *Director*;
- xix. a report on the status of all monitoring wells and a statement as to compliance with Ontario Regulation 903;
- xx. any other information with respect to the site which the *District Manager or Regional Director may require from time to time*;
- xx. a statement of compliance with all conditions of this *ECA* and other relevant *Ministry* groundwater and surface water requirements;
- xx. a confirmation that the site inspection program as required by this *ECA* has been complied with by the *Owner*;
- xx. Any changes in operations, equipment or procedures employed at the *Site*;
- xx. Recommendations regarding any proposed changes in operations of the *Site*;
- xx. total volume of landfill gases collected during the reporting year expressed in cubic metres and adjusted to standard 25⁰C, 101.3 kPa;
- xx. percentage of methane contained in the collected gases expressed as an average value of the total volume of gases collected over the reporting period;
- xx. any changes to the gas collection system implemented over the reporting period including any extensions of the collection system, installation of new extraction wells, replacement wells, and any other extraction wells that have been mothballed or decommissioned;
- xx. any other changes to the gas collection and utilization system implemented over the reporting period including the utilization facility;
- xx. any updates to the inspection and maintenance plan as a result of changes made to the gas collection system during the reporting period; and
- xx. any updates to the Operations Manual.

16.0 SITE CLOSURE

16.1 At least two (2) years prior to closure or when 90% of the site capacity is reached, whichever comes first, the *Owner* shall submit to the *Director* for approval, with copies to the *District Manager*, the PLC, a detailed *Site* 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 the following:

CONTENT COPY OF ORIGINAL

- a) a plan showing *Site* appearance after closure;
- b) a description of the proposed end use of the *Site*, that shall include a discussion on the EA commitment to dedicate portion of the lands within the *Site* that are not required for site post-closure operations and monitoring, to be used for community recreational purpose.
- c) a description of the procedures for closure of the *Site*:
 - i. advance notification of the public of the landfill closure;
 - ii. posting a sign at the *Site* entrance indicating the landfill is closed and identifying any alternative waste disposal arrangements;
 - iii. completion, inspection and maintenance of the final cover and landscaping;
 - iv. site security;
 - v. removal of unnecessary landfill-related structures, buildings and facilities; and
 - vi. final construction of any control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas;
- d) a schedule indicating the time-period for implementing sub-conditions i) to vi) above.
- e) descriptions of the procedures for post-closure care of the *Site*, including:
 - i. Operation, inspection and maintenance of the control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas;
 - ii. Record keeping and reporting; and
 - iii. Complaint contact and response procedures;
- f) an assessment of the adequacy of and need to implement the contingency plans for leachate and methane gas;
- g) an updated estimate of the *Contaminating Lifespan* of the *Site*, based on the results of the monitoring programs to date; and
- h) an update of the cost estimates for financial assurance and the amount which has been provided to the *Director* to date.

16.2 The *Site* shall be closed in accordance with the closure plan as approved by the *Director*.

16.3 Upon closure of the *Site*, the *Owner* shall update the sign at the front gate of the *Site* to indicate the following:

- i. the name of the *Site* and *Owner*;
- ii. the Environmental Compliance Approval number;
- iii. the name of the *Operator*;
- iv. a warning against unauthorized access;
- v. the telephone number to which complaints or questions may be directed;
- vi. 24 hour emergency telephone number;
- vii. the *Site* is closed;
- viii. dumping outside of the gate is illegal; and
- ix. alternative locations for waste disposal.

16.4 Upon closure of the *Site*, the following features will be inspected, recorded and maintained on a monthly basis:

- i. evidence of settlement;
- ii. evidence of leachate seeps;
- iii. cover soil integrity;
- iv. evidence of illegal waste dumping;
- v. vegetative cover; and
- vi. surface water drainage works.

16.5 Any deficiencies noted in the above items shall be repaired within one month time of notice.

16.6 Illegal waste shall be removed and disposed of within 48 hours of detection.

16.7 An inspection of the entire *Site* shall be conducted by the *Owner* twice per year.

CONTENT COPY OF ORIGINAL

16.8 The *Owner* shall inspect ditches and surface water ponds on a yearly basis and shall clean as required.

16.9 The *Owner* shall inspect the pumps and leachate collection system on a yearly basis and shall clean as required.

16.10 The *Owner* shall abide by the equipment maintenance requirements for the landfill gas collection system as detailed in Table 7.1 of Item 27 of Schedule "A".

16.11 The *Owner* shall undertake Surface Emission Surveys at least twice per year and provide a report to the *District Manager* within one month of completion.

16.12 A vegetative cover consisting of vegetation that is suited to local conditions and that is capable with minimal care of providing vigorous, plentiful cover no later than its 3rd growing season shall be established over the entire landfill cover to control erosion and minimize evapotranspiration. The *Owner* shall complete planting as soon as possible after reaching final contours. The vegetative cover seed shall be in accordance with Ontario Provincial Standard Specifications and good practice.

16.13 If weather conditions do not allow timely placement of final and vegetative cover, silt curtains shall be employed to minimize silt loadings to surface water bodies.

16.14 The following shall remain in place and be operational at the site until the end of the *Contaminating Lifespan* unless approval is obtained from the *Director*:

- i. Leachate extraction equipment;
- ii. landfill gas extraction equipment; and
- iii. sedimentation ponds

Closure Plan for Waste Transfer/Processing Facility

16.15 (a) The *Owner* shall submit, for approval by the *Director*, a written Closure Plan at least six (6) months prior to the permanent closure of the *Waste Transfer/Processing Facility*. This plan must include, as a minimum, a description of the work that will be done to facilitate closure of the *Waste Transfer/Processing Facility* and a schedule for completion of that work; and

(b) Within ten (10) days after closure of the *Waste Transfer/Processing Facility*, the *Owner* shall notify the *Director*, in writing, that the *Waste Transfer/Processing Facility* is closed and that the *Waste Transfer/Processing Facility* Closure Plan has been implemented.

SCHEDULE "A"

1. Application for a Certificate of Approval for a Waste Disposal Site (Landfill) dated October 5, 1989.
2. The site design and operations report entitled "DESIGN AND OPERATIONS REPORT LAIDLAW LANDFILL WEST CARLETON, ONTARIO FINAL REPORT" prepared by Water and Earth Science Associates Ltd. and dated January, 1989.
3. The hydrogeological study of the area entitled "HYDROGEOLOGICAL STUDY LAIDLAW WASTE SYSTEMS LTD. LAIDLAW LANDFILL WEST CARLETON TOWNSHIP" prepared by Water and Earth Science Associates Ltd. and dated January, 1989.
4. The design report for the leachate collection system entitled "DESIGN REPORT Leachate Collection System Laidlaw Waste Systems (Ottawa) Ltd. Ottawa Landfill Final Report" prepared by Water and Earth Science Associates Ltd. and dated November, 1989.
5. Legal survey of the site entitled "PLAN OF SURVEY OF PART OF NORTH HALF OF LOT 4 CONCESSION 3 GEOGRAPHIC TOWNSHIP OF HUNTLEY NOW TOWNSHIP OF WEST CARLETON" prepared by V. Andrew Shelp,

Ontario Land Surveyor and dated June 18, 1993.

6. Final contours and site plan entitled "Landfill Final Contours Map Laidlaw Waste Systems (Ottawa) Ltd.", dated July 7, 1993 and prepared by Water and Earth Science Associates Limited.

7. Letter dated May 21, 2003 from Jessica Campbell, Director, Environmental Compliance, Canadian Waste Services Inc. to I. Parrott, MOE, re: request for emergency approvals.

8. Application for Amendment to Provisional Certificate of Approval No. 461002 (Waste Management of Canada Corporation's West Carleton Landfill Site) and supporting documentation dated September 2006 requesting the incorporation and approval of additional lands into the Certificate of Approval to address a contaminant attenuation zone issue. The application was signed by Mr. Michael Pullen, Sr. Group Director of Engineering, WMCC dated June 1, 2006. The supporting documentation included the following:

i. Report entitled "Supporting Documentation - Application to Amend Provisional Certificate of Approval Number A461002 - WM Ottawa Landfill Site" prepared for WMCC by WESA Ltd. dated September 2006.

9. Report entitled "Canada Waste Services Inc., Development & Operations, Update Report for Ottawa Landfill Site" dated April 7, 2003 prepared by Henderson, Paddon Environmental Inc.

10. The letter dated May 8, 2006 from Waste Management of Canada Corporation to the Ministry of the Environment withdrawing, from the above report, the Quebec Service Area for Contaminated Soils.

11. Report entitled "Odour Source Summary, Ottawa Landfill" report dated June 29, 2007, prepared by RWDI.

12. Report entitled "Ambient Air Quality Work Plan" dated September 20, 2007, prepared by RWDI.

13. Report entitled "Application for an Amendment to Provisional Certificate of Approval No. 461002 WM Ottawa Landfill" prepared by WESA dated August 2008.

14. Email dated September 4, 2008 addressed to Mr. Remi Godin, WMCC from Mr. Dale Gable, Ministry of the Environment requesting additional drawings and descriptions of the proposed facility and piping to and from the leachate collection system.

15. Email dated September 12, 2008 addressed to Mr. Dale Gable, Ministry of the Environment from Mr. Remi Godin, WMCC in response to comments from the Ministry of the Environment.

16. Email dated October 7, 2008 addressed to Mr. Rick Li, Ministry of the Environment from Mr. Remi Godin, WMCC in response to comments from the Ministry of the Environment.

17. Application for a Provisional Certificate of Approval for Waste Management of Canada Corporation's Carp Landfill Site signed and dated March 28, 2008.

18. Design Brief entitled "Landfill Gas 'Beanie' Cap Control System West Carleton Landfill" signed and stamped, dated March 28, 2008 prepared by Comcor Environmental Limited.

19. Letter dated August 7, 2008 from Greg Washuta, Senior Waste Engineer, Waste Unit, EAAB, MOE to Remi Godin, Senior District Engineer, WMCC.

20. Letter dated September 12, 2008 from Shannan McGarr, Comcor Environmental Limited to Remi Godin, Senior District Engineer, WMCC.

21. Application for a Provisional Certificate of Approval for Waste Management of Canada Corporation's West Carleton Landfill site signed by Reid Cleland and dated June 14, 2010.

22. Amended Design Brief entitled "Landfill Gas 'Beanie' Cap Control System West Carleton Landfill" dated June 11, 2010 prepared by Comcor Environmental Limited.

CONTENT COPY OF ORIGINAL

23. Letter dated July 29, 2010 addressed to Rick Li, Ministry of the Environment from Wayne Jenken, Waste Management of Canada Corporation providing response to EBR comments and MOE review comments on the application for amendment to the "Beanie" Cap installation.
24. Report entitled "Final Closure Plan Ottawa Landfill Site Ottawa, Ontario Waste Management of Canada Corporation" and Appendices A to E inclusive dated March 28, 2008 and prepared by Henderson Paddon & Associates Limited.
25. Drawing Number 91712E-104 entitled "West Carleton Landfill Proposed Final Landfill Contours" dated November 1, 1994 prepared by Henderson Paddon Environmental Inc.
26. Letter dated December 16, 2009 from Greg Washuta, Senior Waste Engineer, Waste Unit, EAAB, MOE to Remi Godin, Senior District Engineer Eastern Canada, Waste Management of Canada Corporation.
27. Letter and Appendices A, B, E.1 and E.2 dated February 9, 2010 from Jeff Armstrong, GENIVAR to Greg Washuta, Senior Waste Engineer, Waste Unit, EAAB, MOE.
28. Document entitled "Table 8.1 (revised)" dated February 8, 2010 prepared by GENIVAR.
29. Letter dated January 7, 2011 from Reid Cleland, WMCC to Doris Dumais, Director, Approvals Program, EAAB, MOE, re: request for emergency approvals.
30. Letter dated March 7, 2011 from Reid Cleland, Director of Operations, Eastern Canada Area, Waste Management of Canada Corporation to Tesfaye Gebrezghi, Director, Environmental Assessment and Approvals Branch, Ministry of the Environment.
31. Document and Appendix A entitled "Supporting Document Application to Amend Provisional Certificate of Approval A461002 Waste Management Ottawa Landfill Site, Ref CB6096 CAZ Supporting Document-former Holcim-June2010.docx" prepared by WESA Inc., dated June 2010.
32. Application for a Provisional Certificate of Approval for a Waste Disposal site for Waste Management of Canada Corporation's Ottawa Landfill Site, signed and dated June 26, 2010, MOE Reference # 7217-874P5V.
33. Document and Appendix A entitled "Supporting Document Application to Amend Provisional Certificate of Approval A461002 Waste Management Ottawa Landfill Site, Ref CB6096 CAZ Supporting Document-former Metcalfe-July 2010.docx" prepared by WESA Inc., dated July 2010.
34. Application for a Provisional Certificate of Approval for a Waste Disposal site for Waste Management of Canada Corporation's Ottawa Landfill Site, signed and dated July 23, 2010, MOE Reference # 7332-87YRZ2.
35. Document and Appendix A entitled "Supporting Document Application to Amend Provisional Certificate of Approval A461002 Waste Management Ottawa Landfill Site, Ref CB6096 CAZ Supporting Document-former Tomlinson-June 2010.docx" prepared by WESA Inc., dated June 2010.
36. Application for a Provisional Certificate of Approval for a Waste Disposal site for Waste Management of Canada Corporation's Ottawa Landfill Site, signed and dated June 26, 2010, MOE Reference # 4716-874Q8R.
37. Document and Appendix A entitled "Supporting Document Application to Amend Provisional Certificate of Approval A461002 Waste Management Ottawa Landfill Site, Ref CB6096 CAZ Supporting Document-former Karson-June 2010.docx" prepared by WESA Inc., dated June 2010.
38. Application for a Provisional Certificate of Approval for a Waste Disposal site for Waste Management of Canada Corporation's Ottawa Landfill Site, signed and dated June 26, 2010, MOE Reference # 3244-874QMT.
39. Memorandum dated October 29, 2010 from F. Crossley, Hydrogeologist, Technical Support Section, Eastern Region, Ministry of the Environment to G. Davis, Senior Environmental Officer, Ottawa District Office, Ministry of the Environment.

CONTENT COPY OF ORIGINAL

40. Letter dated November 2, 2010 from Greg Washuta, Senior Waste Engineer, Waste Unit, EAAB, MOE to Brad Muter, VP Eastern Canada, WMCC.
41. Letter dated December 2, 2010 from Ross Wallace, Site Manager, WMCC, Ottawa to Greg Washuta, Senior Waste Engineer, Waste Unit, EAAB, MOE.
42. Document entitled "Environmental Monitoring Plan WM Ottawa Landfill Ottawa, Ontario - Revision No. 2" dated May 18, 2011 prepared by WESA Inc.
43. Application for a Provisional Certificate of Approval for Waste Management of Canada Corporation's West Carleton Landfill site signed by Reid Cleland and dated June 14, 2010 (to replace Item 21 in Notice No.11 issued August 9, 2010).
44. Report entitled "Landfill Gas Collection and Flaring System Design Report Ottawa Landfill" dated June 2009 prepared by GENIVAR Consultants LP.
45. Letter dated June 22, 2010 addressed to Rick Li, Ministry of the Environment from Jeff Armstrong, GENIVAR providing response to MOE comments regarding the contingency plan, condensate collection, horizontal collector and proposed expansion in 2010 for the landfill gas system.
46. Design drawings for the landfill gas collection and flaring/utilization system:
- (1) Drawing No. 1712713-PGE "Proposed LFGCS Expansion June 2010, Ottawa Landfill" dated June 22, 2010 prepared by GENIVAR;
 - (2) Drawing No. 91712G-GC1 "Gas Collection As Built May 2009, Ottawa Landfill" dated June 23, 2009 prepared by GENIVAR;
 - (3) Drawing No. 91712G-CC1 "Condensate Collection As Built Drawing, Ottawa Landfill" dated June 23, 2009 prepared by GENIVAR; and
 - (4) Drawing No. 91712G-MMP "Monitoring Probe As Built February 2009, Ottawa Landfill" dated June 22, 2009 prepared by GENIVAR.
47. Letter dated February 4, 2011 addressed to Remi Godin, Waste Management of Canada Corporation from Rick Li, Ministry of the Environment providing comments on the proposed landfill gas expansion in 2010 and the condensate collection system.
48. Letter dated March 7, 2011 addressed to Rick Li, Ministry of the Environment from Jeff Armstrong, GENIVAR providing response to MOE comments (Item 47).
49. Application for Approval for a Certificate of Approval for a Waste Disposal Site and supporting documentation submitted by Waste Management of Canada Corporation signed January 31, 2011 by Beverly D Leno requesting approval for slope remedial works at the Ottawa Landfill Site. The supporting documentation included the following:
- i. Letter dated January 28, 2011 addressed to Tesfaye Gebrezghi, Ministry of the Environment from Mr. Reid Cleland, Waste Management of Canada Corporation providing the submission to satisfy former Conditions No.47 and 49.
 - ii. Letter dated January 28, 2011 addressed to Mr. Reid Cleland, Waste Management of Canada Corporation from Mr. Jeff Armstrong, GENIVAR Inc. providing information to satisfy former Conditions 47 and 49.
50. Letter dated April 4, 2011 addressed to Mr. Reid Cleland, Waste Management of Canada Corporation from Mr. Dale Gable, Ministry of the Environment requesting additional information on the proposed remedial works.
51. Letter dated April 6, 2011 addressed to Mr. Dale Gable, Ministry of the Environment from Mr. Reid Cleland, Waste Management of Canada Corporation providing additional details on the remedial work plan.
52. Report dated April 1, 2011 addressed to Mr. Tes Gebrezghi, Ministry of the Environment from Mr. Reid Cleland, Waste Management of Canada Corporation addressing the proposed Waste Transfer/Processing Facility.

53. Letter dated May 25, 2011 addressed to Mr. Reid Cleland, Waste Management of Canada Corporation from Mr. Dale Gable, Ministry of the Environment requesting additional information on the Waste Transfer/Processing Facility.

54. Letter dated June 6, 2011 addressed to Mr. Dale Gable, Ministry of the Environment from Ms. Katrina DiRenzo-McGrath, Waste Management of Canada Corporation providing additional information on the Waste Transfer/Processing Facility.

55. Letter dated March 24, 2011 addressed to Director, Environmental Assessment and Approvals Branch, Ministry of the Environment from Mr. Michael Gundry, AECOM Canada providing supporting documentation for a proposed leachate pre-treatment facility prior to discharge to the sanitary sewer. The supporting documentation included the following:

- i. Application for a Provisional Certificate of Approval for a Waste Disposal dated March 25 and signed by Mr. Reid Cleland, Waste Management of Canada Corporation;
- ii. Letter report dated November 1, 2010 entitled "Ottawa Landfill Leachate Treatment System Conceptual Design Report" addressed to Mr. Wayne Jenken, WMCC from Mr. Michael Gundry, AECOM Canada.
- iii. Drawing No. IND entitled "Ottawa Landfill Leachate Treatment System - Drawing Index" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- iv. Drawing No. LEG entitled "Ottawa Landfill Leachate Treatment System - Legend and Abbreviations" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- v. Drawing No. G01 entitled "Ottawa Landfill Leachate Treatment System - Location Plan" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- vi. Drawing No. G02 entitled "Ottawa Landfill Leachate Treatment System - Site Plan" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- vii. Drawing No. S01 entitled "Ottawa Landfill Leachate Treatment System - Process Building Foundation Plan, Sections and Details" prepared by AECOM Canada (Project no. 60156478) dated May 15, 2011.
- viii. Drawing No. S02 entitled "Ottawa Landfill Leachate Treatment System - Process Building Typical Details, General Notes, Sections and Details" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- ix. Drawing No. P01 entitled "Ottawa Landfill Leachate Treatment System - Flow Diagram" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- x. Drawing No. P02 entitled "Ottawa Landfill Leachate Treatment System - Process Building Ground Floor Plan" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xi. Drawing No. P03 entitled "Ottawa Landfill Leachate Treatment System - Process Building Sections" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xii. Drawing No. P04 entitled "Ottawa Landfill Leachate Treatment System - Process Building Sections" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xiii. Drawing No. P05 entitled "Ottawa Landfill Leachate Treatment System - Equalization and Effluent Tanks Plans and Sections" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xiv. Drawing No. P06 entitled "Ottawa Landfill Leachate Treatment System - SBR Tank Plan and Section" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xv. Drawing No. P07 entitled "Ottawa Landfill Leachate Treatment System - Sludge Tank Plan and Section" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xvi. Drawing No. P08 entitled "Ottawa Landfill Leachate Treatment System - Miscellaneous Details" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xvii. Drawing No. M01 entitled "Ottawa Landfill Leachate Treatment System - Process Building Legend and Schedules" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xviii. Drawing No. M02 entitled "Ottawa Landfill Leachate Treatment System - Process Building Floor Plan" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xix. Drawing No. M03 entitled "Ottawa Landfill Leachate Treatment System - Process Building Diagrams and Details" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xx. Drawing No. E01 entitled "Ottawa Landfill Leachate Treatment System - Overall Site Plan Legend and Details" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xxi. Drawing No. E02 entitled "Ottawa Landfill Leachate Treatment System - Site Plans and Details" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xxii. Drawing No. E03 entitled "Ottawa Landfill Leachate Treatment System - Single Line Diagram" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.

CONTENT COPY OF ORIGINAL

- xxiii. Drawing No. E04 entitled "Ottawa Landfill Leachate Treatment System - Floor Plan - Lighting Layout" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xxiv. Drawing No. E05 entitled "Ottawa Landfill Leachate Treatment System - Floor Plan - Power and Instrumental Layout" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xxv. Drawing No. E06 entitled "Ottawa Landfill Leachate Treatment System - General Drawing Index" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xxvi. Drawing No. E07 entitled "Ottawa Landfill Leachate Treatment System - Installation Details" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xxvii. Drawing No. E08 entitled "Ottawa Landfill Leachate Treatment System - Electrical Control Diagrams" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.
- xxviii. Drawing No. E09 entitled "Ottawa Landfill Leachate Treatment System - Instrumentation Control Panel, I/O List and Diagrams" prepared by AECOM Canada (Project no. 60156478) dated May 31, 2011.

56. Letter dated June 15, 2011 addressed to Mr. Reid Cleland, Waste Management of Canada Corporation from Mr. Dale Gable, Ministry of the Environment requesting additional information on proposed leachate pre-treatment system.

57. Letter dated June 24, 2011 addressed to Mr. Dale Gable, Ministry of the Environment from Mr. Michael Gundry, AECOM Canada providing a response to Item 56 above. Supporting Documentation included the following:

- i. Drawing No. G01 entitled "Ottawa Landfill Leachate Treatment System - Location Plan" prepared by AECOM Canada (Project no. 60156478) dated June 20, 2011.
- ii. Drawing No. G02 entitled "Ottawa Landfill Leachate Treatment System - Site Plan" prepared by AECOM Canada (Project no. 60156478) dated June 20, 2011.
- iii. Drawing No. S01 entitled "Ottawa Landfill Leachate Treatment System - Process Building Foundation Plan, Sections and Details" prepared by AECOM Canada (Project no. 60156478) dated June 20, 2011.
- iv. Drawing No. S02 entitled "Ottawa Landfill Leachate Treatment System - Process Building Typical Details, General Notes, Sections and Details" prepared by AECOM Canada (Project no. 60156478) dated June 20, 2011.

58. Environmental Compliance Approval Application for "West Carleton Environmental Centre, Ottawa - New Landfill Footprint" signed by Reid Cleland dated August 20, 2014.

59. Report entitled "Development & Operations Report West Carleton Environmental Centre" dated July 2014 prepared by WSP Canada Inc.

60. Report entitled "Hydrogeologic Assessment Report, Proposed West Carleton Environmental Centre Landfill, Ottawa, Ontario" dated July 2014 prepared by WESA.

61. Report entitled "Surface Water Assessment for the West Carleton Environmental Centre Landfill, Ottawa, Ontario" dated July 2014 prepared by AECOM Canada Ltd.

62. Report entitled "Environmental Monitoring Plan, Groundwater, Surface Water, Leachate & Subsurface Gas Components, West Carleton Environmental Centre, Ottawa, Ontario" dated October 2015 prepared by BluMetric Environmental Inc.

63. Report entitled "West Carleton Environmental Centre Ambient Air Quality Monitoring Program Version 1" dated July 30 2014 prepared by RWDI.

64. Report entitled "West Carleton Environmental Centre Noise Monitoring Program Version 1" dated July 30 2014 prepared by RWDI.

65. Best Management Practice Plan Reports, WCEC that include the following:

- (1) "Groundwater Best Management Practices Plan, West Carleton Environmental Centre, Ottawa, Ontario" dated July 2014 prepared by WESA.
- (2) "Best Management Practices Plan (Surface Water, Sediment & Erosion Control), West Carleton Environmental Centre,

CONTENT COPY OF ORIGINAL

Ottawa, Ontario" dated July 2014 prepared by WSP Canada Inc.

(3) "West Carleton Environmental Centre, Biology Best Management Plan" dated July 2014 prepared by AECOM Canada Ltd.

(4) "Integrated Gull Management Plan, Waste Management of Canada Corporation, West Carleton Environmental Centre" dated August 2014 prepared by Beacon Environmental.

(5) "Best Management Practices Plan (Dust), West Carleton Environmental Centre Landfill" dated July 30, 2014 prepared by RWDI Air Inc.

(6) "Best Management Practices Plan (Odour and LFG), West Carleton Environmental Centre" dated July 30, 2014 prepared by RWDI Air Inc.

(7) "Best Management Practices Plan (Combustion By-Products), West Carleton Environmental Centre Landfill" dated July 30, 2014 prepared by RWDI Air Inc.

(8) "Noise Best Management Practices Plan (Odour and LFG), West Carleton Environmental Centre" dated July 30, 2014 prepared by RWDI Air Inc.

(9) "Odour Enforcement Mechanism", Waste Management of Canada Corporation.

66. Report entitled "Financial Assurance Report, West Carleton Environmental Centre" dated April 2015 prepared by WSP Canada Inc.

67. Letter dated March 10, 2015 addressed to Reid Cleland, Waste Management of Canada Corporation from Dale Gable, Ministry of the Environment and Climate Change providing comments on the application for landfill expansion.

68. Letter dated April 16, 2015 addressed to Dale Gable, Ministry of the Environment and Climate Change from Reid Cleland, Waste Management of Canada Corporation providing a response to the Ministry's review comments.

69. Letter dated August 21, 2015 addressed to Reid Cleland, Waste Management of Canada Corporation from Rick Li, Ministry of the Environment and Climate Change Regarding groundwater and surface water comments on the application for landfill expansion.

70. Document dated August 26, 2015 WSP #131-19416-00 - WSP Response to Rick Li, MOECC, Comments Contained in Letter to Reid Cleland, Director of Operations – Eastern Canada Landfills, WMCC Dated August 21, 2015.

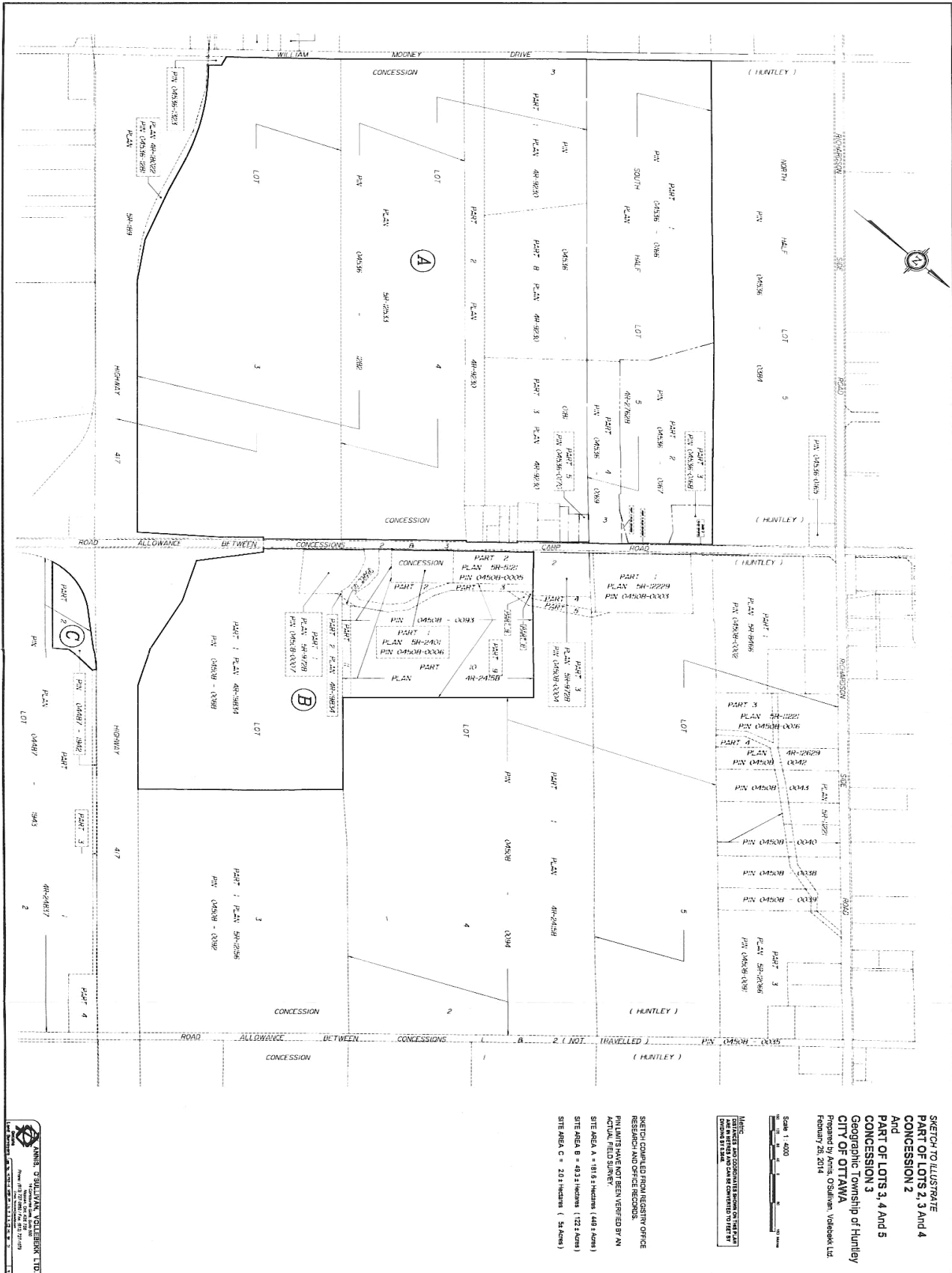
71. Memorandum dated September 4, 2015 to Tim Murphy, Waste Management Canada Corporation from Karen Greer and David Harding, BluMetric Environmental Inc. regarding Response to MOECC Comments.

72. Letter dated September 9, 2015 addressed to Reid Cleland, Waste Management of Canada Corporation from Rick Li, Ministry of the Environment and Climate Change Regarding comments on the D & O Report for landfill expansion.

73. Document dated September 16, 2015 WSP #131-19416-00 - WSP Response to Rick Li, MOECC, Comments Contained in Letter to Reid Cleland, Director of Operations – Eastern Canada Landfills, WMCC Dated September 9, 2015.

SCHEDULE "B"

B-1 Legal Survey of the Site



B-2 Legal Description of the Site (includes Parcels "A", "B", and "C")

A. Lands Identified as Parcel "A"

1. PIN 04536-0166 (LT), being Part of Lot 5, Concession 3, (Geographic Township of Huntley), now in the City of

CONTENT COPY OF ORIGINAL

Ottawa, designated as Part 1 on Plan 5R-10801.

2. PIN 04536-0167 (LT), being Part of Lot 5, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, designated as Parts 2 and 3 on Plan 5R-10801.

3. PIN 04536-0168 (LT), being Part of Lot 5, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, designated as Part 1 on Plan 5R-3716.

4. PIN 04536-0169 (LT), being Part of Lot 5, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, designated as Parts 1 and 2 on Plan 5R-11322.

5. PIN 04536-0170 (LT), being Part of Lot 4, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, as set out in Instrument N731718.

6. PIN 04536-0171 (LT), being Part of Lot 4, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, as set out in Instrument NS253990.

7. PIN 04536-0172 (LT), being Part of Lot 4, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, as set out in Instruments CT157338 and CT157339, save and except lands set out in Instrument CT157340.

8. PIN 04536-0723 (LT), being Part of Lot 4, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, designated as Part 1 on Plan 5R-4345 and Part 1 on Plan 4R-14182.

9. PIN 04536-0399 (LT), being Part of Lot 4, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, as set out in Instrument NS138205, save and except Part 1 on Plan 4R-14182.

10. PIN 04536-0175 (LT), being Part of Lot 4, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, as set out in Instrument CT256061.

11. PIN 04536-0176 (LT), being Part of Lot 4, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, as set out in Instrument N299777.

12. PIN 04536-0177 (LT), being Part of Lot 4, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, as set out in Instrument N299973.

13. PIN 04536-0181 (LT), being Part of Lot 4, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, designated as Parts 1, 2, 3, 4, 5, 6, 7 and 8 on Plan 4R-9230.

14. PIN 04536-0392 (LT), being Part of Lot 4, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, as set out in Instrument N765624.

15. PIN 04536-1282 (LT), being Part of Lots 3 and 4, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, designated as Part 1 on Plan 5R- 12533, save and except Parts 1 and 2 on Plan OC536758.

16. PIN 04536-0180 (LT), being Part of Lot 4, Concession 3, (Geographic Township of Huntley), now in the City of Ottawa, as set out in Instrument N765631.

B. Lands Identified As Parcel "B"

1. PIN 04508-0005 (LT), being Part of Lot 4, Concession 2, (Geographic Township of Huntley), now in the City of Ottawa, designated as Part 2 on Plan 5R-5121.

2. PIN 04508-0006 (LT), being Part of Lot 4, Concession 2, (Geographic Township of Huntley), now in the City of Ottawa, designated as Part 1 on Plan 5R-2401.

3. PIN 04508-0007 (LT), being Part of Lots 3 and 4, Concession 2, (Geographic Township of Huntley), now in the City of Ottawa, designated as Part 1 on Plan 5R-9728, together with a right-of-way as set out in Instrument N359845.

4. PIN 04508-0088 (LT), being Part of Lot 3, Concession 2, (Geographic Township of Huntley), now in the City of

Ottawa, designated as Parts 1 and 2 on Plan 4R-19834, together with a right-of-way as set out in Instrument N359617 and subject to a right-of-way as set out in Instruments N359617, N359845 and N464480.

5. PIN 04508-0093 (LT), being Part of Lot 4, Concession 2, (Geographic Township of Huntley), now in the City of Ottawa, designated as Parts 2, 3, 6, 8, 9, 10, 11 and 12 on Plan 4R-24158, subject to easements as set out in Instruments N359617, N359845, N464480 and OC1084547.

C. Lands Identified as Parcel "C"

1. Part of PIN 04487-1942 (LT), being Part of Lot 2, Concession 2, (Geographic Township of Huntley), now in the City of Ottawa, designated as Part 2 on Plan 4R-24837, subject to easements as set out in Instruments CR1194798 and CT1194800, and together with an easement as set out In Instrument CT1194799.

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 1.4 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 1.3, 1.5, 1.6, 1.10, 1.11, 1.12, 1.13 and 1.14 is to clarify the legal rights and responsibilities of the Owner under this Approval.*
- 4. Conditions 1.7 and 1.8 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 1.9 has been included in order to clarify what information may be subject to the Freedom of Information Act.*
- 6. Conditions 1.15 to 1.17 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 1.18 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 1.19 and 1.20 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 1.21 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 2.8 inclusive are to ensure that sufficient funds are available to the Ministry to close the landfill, 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 Conditions 3.1 to 3.5, 13.1 and 13.2 is to establish a forum for the exchange of information and public dialogue on activities carried out at the landfill Site. Open communication with the public and local authorities is important in helping to maintain high standards for site operation and environmental protection.*
- 12. The reason for Conditions 4.1 to 4.7 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.*

CONTENT COPY OF ORIGINAL

13. *The reason for Condition 4.8 is to ensure the availability of as-built drawings for inspection and information purposes.*
14. *Conditions 5.1, 6.1, 7.1 and 11.6 are included in order to ensure that waste disposal, waste transfer operations at the site is undertaken in accordance with applicable Ministry of the Environment regulations and guidelines. Compliance with these regulations and guidelines will ensure that the site does not cause and adverse effect on the environment.*
15. *Conditions 5.2, 5.3, and 7.7 are to ensure the Owner has a operations plans for the site that details all current operations at the site and that a copy is kept on site for the Owner, the Owner's staff and/or operator. This is to ensure the site is operating in a safe manner and the environment and human health are protected.*
16. *The reason for Conditions 5.4, 6.3, 6.4, 7.2 and 7.3 is to specify the approved areas from which waste may be accepted at the Site and the types and amounts of waste that may be accepted for disposal at the Site, based on the Owner's application and supporting documentation.*
17. *The reasons for Conditions 5.5, 5.6, 5.7, 5.8 and 7.6 are to specify the normal hours of operation for the landfill Site and a mechanism for amendment of the hours of operation.*
18. *The reasons for Conditions 5.9, 5.10 and 7.14 are to specify site access to/from the Site and to ensure the controlled access and integrity of the Site by preventing unauthorized access when the Site is closed and no site attendant is on duty.*
19. *The reason condition 5.11 has been included is to ensure that access roads are clear and do not pose a safety hazard to the general public.*
20. *Condition 5.12 is to ensure that the Site operation does not cause local traffic congestion.*
21. *Condition 5.13 is necessary in order to ensure that all waste loads are inspected and waste that is disposed of at the site is in accordance with the terms and conditions in this Environmental Compliance Approval.*
22. *The reasons for Conditions 5.14, 5.15, 5.16, 5.18, 7.1, and 7.13 are to ensure that the Site is operated, inspected and maintained in an environmentally acceptable manner and does not result in a hazard or nuisance to the natural environment or any person.*
23. *The reasons for Condition 5.17 are the protection of public health and safety and minimization of the potential for damage to environmental control, monitoring and other works at the landfill Site. Scavenging is the uncontrolled removal of material from waste at a landfill site.*
24. *The reason for Condition 5.20 is to ensure that noise from or related to the operation of the landfill is kept to within Ministry limits and does not result in a hazard or nuisance to any person.*
25. *The reason for Condition 5.21 is to ensure the Owner decommissions all water supply wells and no new water supply wells in the contaminant attenuation zone as indicated in the application submission. The condition is also to ensure the Owner is aware that it needs to provide alternative water supply to company effected by the decommissioning of the water supply wells. This is to ensure long-term health and safety of the public and the environment.*
26. *The reason for Condition 5.22 is to reflect operation procedures for receiving contaminated soil. This is to ensure the long term protection of the environment and human health.*
27. *The reason for Condition 5.23 is to ensure that no composting operation shall be carried out on site.*
28. *The reason for Condition 6.2 is to specify restrictions on the extent of landfilling at this Site based on the Owner's application and supporting documentation. These limits define the approved volumetric capacity of the site. Approval to landfill beyond these limits would require an application with supporting documentation submitted to the Director.*
29. *The reason for Condition 6.5 is to ensure the Ministry is informed when the new landfilling area opens to receive waste.*
30. *The reason for Condition 6.6 is that open burning of municipal waste is unacceptable because of concerns with air emissions, smoke and other nuisance affects, and the potential fire hazard.*
31. *The reason for Conditions 6.7 to 6.12 is to ensure asbestos waste is handled and disposed of in accordance with O.*

CONTENT COPY OF ORIGINAL

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.

- 32. The reason for Condition 6.13 is to ensure that appropriate approval is obtained by the Owner for the handling of international waste.*
- 33. The reason for Conditions 6.14 to 6.21 is 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.*
- 34. The reason for Conditions 6.22 and 6.23 is to ensure that users of the Site are fully aware of important information and restrictions related to Site operations under this ECA.*
- 35. The reason for Condition 6.24 and 6.25 is to ensure concentration of landfill gas does not pose a hazard to human health or the environment.*
- 36. The reason for Conditions 6.26 and 6.27 is to ensure that surface water from the Site is properly managed and does not pose an impact to the environment.*
- 37. The reason for Condition 6.28 is to ensure that there is a person, reporting directly to the Ministry, with associated costs reimbursed by the Owner, to carry out necessary site inspection to ensure that the Site is operated in an environmentally acceptable manner based on the requirements in this Approval.*
- 38. The reason for Conditions 6.29 and 6.30 is to require that the air space consumption is regularly monitored to ensure the site is developed in accordance with the approved site plan.*
- 39. The reason for Conditions 6.31 to 6.35 is to ensure the mini-transfer area is operated in a manner that does not cause an impact on the environment and public health.*
- 40. The reasons for Conditions 7.4 and 7.5 is to specify the amount of waste that can be stored at the facility and the steps to be taken should the facility reach that amount.*
- 41. The reason for Conditions 7.8, 7.9, 7.10, 7.11 and 7.12 is to identify where waste may be unloaded and stored.*
- 42. The reason for Conditions 7.16, 7.17, 7.18 and 10.2 through 10.11 is to ensure that accurate waste records are maintained to ensure compliance with the conditions in this Environmental Compliance Approval (such as fill rate, site capacity, record keeping, annual reporting, and financial assurance requirements), the EPA and its regulations.*
- 43. The reason for Conditions 8.1 to 8.4 is to ensure that the leachate collection system is build in accordance with the Regulation and the Ministry's standards.*
- 44. The reason for Condition 8.5 is to incorporate the proposed construction of the SBR Leachate Pre-Treatment Facility into the ECA based on the submitted information. This is to ensure the protection of the environment and human health.*
- 45. The reason for Condition 8.6 is to ensure an operation and maintenance plan is available for the SBR leachate treatment facility.*
- 46. The reason for Condition 8.7, 8.8 and 8.9 is to ensure that the landfill gas collection system is constructed in accordance with the information submitted to the Director and not in a manner that the Director has not been asked to consider, and to allow improvements to the landfill gas collection system be implemented as required.*
- 47. The reason for Condition 8.10 is to ensure that the landfill liner system is constructed in accordance with the information submitted to the Director and in a manner complies with the Ministry's Regulation and standards.*
- 48. The reason for Condition 9.1 is to ensure that the Site is supervised and operated by properly trained staff in a manner which does not result in a hazard or nuisance to the natural environment or any person.*
- 49. Condition 10.1, 10.5 and 10.6 is needed to ensure regular inspections of the site are conducted in order to protect the*

natural environment.

50. The reason for Conditions 10.2, 10.3 and 10.4 is to ensure that detailed records of Site inspections are recorded and maintained for inspection and information purposes.

51. The reason for Conditions 10.7 to 10.11 is to ensure that accurate waste records are maintained to ensure compliance with the conditions in this Environmental Compliance Approval (such as fill rate, site capacity, record keeping, annual reporting, and financial assurance requirements), the EPA and its regulations.

52. The reasons for Conditions 11.1 through 11.4 are to ensure the integrity of the groundwater monitoring network and protection of the natural environment.

53. The reason for Conditions 11.5 and 11.6 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.

54. The reason for Conditions 11.7 is to ensure that the site is managed in a manner that minimizes nuisance. This is for the protection of the public health and the environment.

55. The reason for Conditions 12.1 through 12.3 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.

56. The reason for Conditions 13.1 and 13.2 is to ensure that any complaints regarding landfill operations at this Site are responded to in a timely and efficient manner.

57. The reasons for Conditions 14.1 through 14.5 are to ensure that the Ministry is informed of any spills or fires at the Site and to provide public health and safety and environmental protection.

58. The reasons for Conditions 15.1 and 15.2 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.

59. The reasons for Conditions 16.1 through 16.14 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.

60. The reason for Condition 16.15 is to ensure the waste transfer and processing facility is closed in an appropriate manner.

61.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). A461002 issued on September 8, 2011

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:

- 1. 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;*
- 2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.*

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The environmental compliance approval number;
6. The date of the environmental compliance approval;
7. The name of the Director, and;
8. 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 Secretary*
Environmental Review Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5

AND

The Director appointed for the purposes of Part II.1 of the
Environmental Protection Act
Ministry of the Environment and Climate Change
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**

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 November, 2015

Dale Gable, P.Eng.
Director
appointed for the purposes of Part II.1 of the
Environmental Protection Act

RL/
c: District Manager, MOECC Ottawa
Peter Brodzikowski, WSP Canada Inc.