
Appendix A

Environmental Compliance Approvals
and Certificates of Approval

Appendix A.1

Environmental Compliance Approval No.
A371203, dated January 9, 2012

RECEIVED
Jan 17, 2012



Ministry of the Environment
Ministère de l'Environnement

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A371203

Issue Date: January 9, 2012

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

Site Location: Richmond Landfill Site
Lot Pt 1, 2, 3, Concession 4
Greater Napanee Town, County of Lennox and Addington
K7R 3L1

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

the use, operation, and closure of a 16.2 hectare waste disposal landfill site including a landfill gas collection system and landfill gas flare within a total site area of 138 hectares , as follows:

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

"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 *EPA* as a *Director* for the purposes of Part V of the *EPA*;

"District Manager " refers to the *District Manager* in the Ministry of the Environment's Kingston District Office;

"District Office " refers to the Ministry of the Environment Kingston *District Office* ;

"EAB" refers to the Environmental Approvals Branch of the Ministry of the Environment;

"EMP " refers to the Environmental Monitoring Plan;

"Environmental Compliance Approval" or "ECA" means this entire provisional Environmental

Compliance Approval document, issued in accordance with Section 20.2 of the *EPA* , and includes any schedules to it, the application and the supporting documentation listed in Schedule "A";

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

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

"*MOE* " or "*Ministry* " refers to the Ontario Ministry of the Environment;

"*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;

"*O. Reg. 101/94*" means Ontario Regulation 101/94 as amended from time to time;

"*PA* " means the *Pesticides Act* , R.S.O. 1990, c. P-11, as amended from time to time;

"*Provincial Officer* " means any person designated in writing by the Minister as a provincial officer pursuant to Section 5 of the *OWRA* or Section 5 of the *EPA* or Section 17 of *PA*;

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

"*Regulation 232* " or "*Reg. 232*" or "*O. Reg. 232/98*" means Ontario Regulation 232/98 (New Landfill Standards) made under the *EPA* , as amended from time to time;

"*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; and

"*Site* " means the Richmond Landfill 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 supporting documentation listed in Schedule "A".

Other Legal Obligations

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

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

Adverse Effect

- 1.5 The *Owner* or *Operator* 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

- 1.6 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.
- 1.7 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.
- 1.8 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

Interpretation

- 1.9 This *ECA* revokes and replaces the previous *ECA* and all subsequent amendments.
- 1.10 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.
- 1.11 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.
- 1.12 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.
- 1.13 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

- 1.14 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 *Certificate* to each person acquiring an interest in the *Site* as a result of the dealing.
- 1.15 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 ten (10) calendar days of receiving the Certificate of Requirement signed by the *Director*.

No Transfer or Encumbrance

- 1.16 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

- 1.17 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.

1.18 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 forward to the *Director* and *District Manager* .

Inspections

1.19 No person shall hinder or obstruct a *Provincial Officer* from carrying out any and all inspections authorized by 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* , 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* .

Inflation Rate

- 2.3 The *Owner* shall ensure the methodology used to determine the inflation rate for the financial assurance re-evaluation calculation is the current approach deemed acceptable by the *Ministry* .

Interest (Discount) Rate

- 2.4 The *Owner* shall ensure the methodology used to determine the interest rate for the financial assurance re-evaluation calculation is the current approach deemed acceptable by the *Ministry* .

Proposed Payment Schedule

- 2.5. The *Owner* shall ensure that financial assurance in a form acceptable to the *Director* in the amount of **\$13,236,992.00** has been provided to the *Director* . If these amount has not been provided, the *Owner* shall within thirty (30) days of issuance of this *ECA* , provide to the *Director* the financial assurance as required by this condition in a form that is in a form acceptable to the *Director* .
- 2.6. The *Owner* shall provide the *Ministry* financial assurance (total amount, not additional amount) in a form acceptable to the *Director* as follows for the following years:
- i. March 31, 2012 - **\$12,192,739.00**
 - ii. March 31, 2013 - **\$ 11,755,105.00**

Updated Review Report

- 2.7 A revised or new financial assurance program shall be submitted to the *Director* by no later than **March 31, 2013** and then at an interval no greater than a period of every three (3) 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.
- 2.8 No waste shall be received, accepted, disposed or transferred at the *Site* unless appropriate financial assurance is received.
- 2.9 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 sixty (60) days before the financial assurance terminates, the financial

assurance shall forthwith be replaced by cash.

3.0 CONSTRUCTION, INSTALLATION and PLANNING

Major Works

- 3.1 (1) The final detailed design of *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 work, 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 work, if any.
- (2) Maintenance or replacing components (i.e. piping for the gas collection system) related to existing *Major Works* are not considered *Major Works* under Section 3.0 of the *ECA*
- 3.2 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.
- 3.3 Each major work shall be constructed in accordance with the approved final detailed design and the QA/QC procedures shall be implemented as proposed by the *Owner* . Any significant variances from the conceptual design for the *Site* shall be subject to approval by the *Director* .
- 3.4 As-built drawings for all *Major Works* shall be retained on site and made available to *Ministry* staff for inspection.

4.0 GENERAL OPERATIONS

Proper Operation

- 4.1 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 is likely to cause an adverse effect be permitted.

Operations Manual

- 4.2 The *Owner* shall ensure the operations and procedures manual for the *Site* includes discussions on the following items.:
- a. Health and safety;
 - b. Operation and maintenance of the *Site* ;

- c. Waste disposal area and development;
- d. Nuisance management;
- e. Leachate management;
- f. Landfill gas management;
- g. Surface water/Stormwater management;
- h. Inspections and monitoring;
- i. Contingency plans and emergency procedures;
- j. Complaints; and,
- k. Reporting and record keeping.

4.3 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.

Site Closure

4.4 The *Owner* shall ensure that no waste is received for disposal at the *Site* after **June 30, 2011** and the site is capped with final cover material by **September 30, 2011**.

Capacity

4.5 The *ECA* permits disposal of waste at the *Site* to fill an air space of **2,842,700 cubic metres** (including waste, daily and interim cover material).

Yearly Waste Limit

4.6 No more than 125,000 tonnes of waste per year may be accepted at the *Site* .

Service Area

4.7 Only waste that is generated in the Province of Ontario shall be accepted at the *Site* .

Hours of Operation

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

- i. 8 am to 5 PM - Monday to Friday (except statutory holidays)
- ii. 8 am to 1 PM - Saturday

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

4.10 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.

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

Site Security

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

On-Site Roads

- 4.13 *Site* roads shall be maintained in a manner approved by Item 19 of Schedule "A".

Waste Inspection Procedures

- 4.14 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* .

Waste Inspection and Deposition

- 4.15 All loads of waste must be properly inspected by trained *Site* personnel prior to acceptance at the *Site* and waste vehicles must be diverted to appropriate areas for waste disposal.
- 4.16 The *Owner* shall deposit waste in a manner that minimizes exposure area at the landfill working face and all waste shall be compacted before cover is applied.

Litter Control:

- 4.17 All loose, windblown litter shall be collected and disposed of at an approved disposal facility.

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

- 4.18 The *Site* shall be operated and maintained such that the vermin, vectors, dust, litter, odour, noise and traffic do not create a nuisance.

- 4.19 No scavenging is to occur at the *Site* .

Dust

- 4.20 The *Owner* shall control fugitive dust emissions from *Site* sources including but not limited to *Site* 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

- 4.21 The *Owner* shall comply with noise criteria in *MOE* Guideline entitled "Noise Guidelines for Landfill Sites."

5.0 SITE OPERATIONS

Cover Material

- 5.1 i. 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 or an approved thickness of alternative cover material shall be placed.
- ii. Final Cover - Final cover placed after the effective date of this *ECA* must meet the following specifications. In areas where landfilling has been completed to final contours, a minimum 900 mm thick layer of native silty clay till soil shall be placed having a hydraulic conductivity of 1×10^{-8} m/s or less followed by 150 mm of topsoil. The *Owner* shall construct the final cover system for the *Site* in accordance with Items 33 to 36 of Schedule "A" and this *ECA* .
- iii. The *Owner* shall ensure that no contaminated soils are used in the final cover.

Cleaning Leachate Collection System

- 5.2 The leachate collection system piping for each stage of the landfill shall be cleaned on an annual basis, or more frequently as circumstances require, in order that the leachate collection system operates properly. Visual inspections of the leachate collection system shall be conducted on a quarterly basis to determine the need for more frequent cleaning.

Leachate Sump Pits

- 5.3 A leachate maintenance level of no greater than 0.66 metres shall be maintained in the north pumping chamber and documented each working day.
- 5.4 Appropriate alarms shall be installed to warn *Site* personnel of rising leachate levels within the sump pits so that the *Owner* can take appropriate action to prevent an overflow.

Surface Water

- 5.5 The *Owner* shall take all appropriate measures to minimize surface water from coming in contact with waste. Temporary berms and ditches shall be constructed around active waste disposal areas to prevent extraneous surface water from coming in contact with the active working face.
- 5.6 The *Owner* shall not discharge surface water to receiving water bodies without an approval under

Section 53 of the *OWRA* .

Compost Pad Area and Compost Pond

- 5.7 The *Owner* shall stop operation of the compost pad by no later than **September 30, 2011**.
- 5.8 The *Owner* shall removed all compost material (finished, curing compost, bulking material) from the *Site* by no later than **September 30, 2011**.

Construction and Operation of Phytoremediation System

- 5.9. (1) The phytoremediation system located in the northwest corner of *Site* shall be constructed and operated in accordance with Item 38 in Schedule A.
- (2) The extent of the phytoremediation system shall not extent beyond the limits as shown in Item 38 in Schedule A.
- (3) The phytoremediation system located in the northwest corner of the *Site* shall not be irrigated with any leachate.
- (4) The *Owner* shall ensure that the vegetation does not exceed a height of 12 feet.
- (5) Where vegetation reaches or exceeds a height of 12 feet, the *Owner* shall prune the vegetation forthwith.
- (6) Within seven (7) days of completion of planting of the phytoremediation system as identified in Item 38 of Schedule "A", the *Owner* shall notify the *District Manager* in writing that the planting has been completed.

Monitoring of Phytoremediation System

- 5.10 (1) The following monitor wells will be used to monitor groundwater levels around the phytoremediation system in the northwest corner of the *Site* :
- a. Shallow Zone - M27, M29, M30, M31, M38, M66-2, M67-2, M100, M101, M102 and M103
 - b. Intermediate Bedrock Zone - M3A-3, M5-3, M6-3, M74 and M75
- (2) The following monitors will be used to monitor groundwater quality around the phytoremediation system in the northwest corner of the *Site* :
- a. Shallow Zone - M29, M66-2, M67-2, M101, M102 and M103
 - b. Intermediate Bedrock Zone - M5-3, M6-3, M74 and M75
- (3) For the monitoring wells identified in Condition 5.10 (2), the *Owner* shall analyze groundwater

for determining the quality of groundwater around the phytoremediation system in the northwest corner of the *Site* based on the *EMP* approved prior to this notice and any future approved changes identified in future amendments.

Reporting

- 5.11 Reporting on the phytoremediation system shall be part of the annual monitoring report for the *Site* and shall include but not be limited to the following:
- i. results and an analysis of the results of the monitoring programs for the phytoremediation system;
 - ii. assessment of the results of the phytoremediation system as related to the stated objectives for the existing and proposed phytoremediation system;
 - iii. assessment of the need to change the monitoring program for the phytoremediation system and a recommendation of the required changes;
 - iv. a report on operational problems identified during the operation of the phytoremediation system and a discussion of each problem and details of what was done to rectify each problem;
 - v. assessment of the need for operational changes for the phytoremediation system and a recommendation of the required changes;
 - vi. a *Site* plan which shows the location of the phytoremediation system and any changes made to the phytoremediation system;

6.0 TRAINING

Employees and Training

- 6.1 A training plan for all employees that operate any aspect of the *Site* 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.

7.0 INSPECTIONS AND RECORD KEEPING

Daily Inspections and Log Book

- 7.1 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.
- 7.2 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.
- 7.3 A record shall be kept in the daily log book 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

- 7.4 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 and refused for disposal at the *Site* ;
 - ii. the area of the *Site* in which waste disposal operations are taking place;
 - iii. a calculation of the total quantity (tonnes) of waste received at the *Site* during each operating day and each operating week;
 - iv. the amount of any leachate removed, or treated and discharged from the *Site* ;
 - v. a record of litter collection activities and the application of any dust suppressants;
 - vi. a record of the daily inspections;
 - vii. 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;
 - viii. type and amount of daily, intermediate and final cover used;
 - ix. maintenance and repairs performed on equipment employed at the *Site* ;
 - x. complaints received and actions taken to resolve them;
 - xi. emergency situations and actions taken to resolve them; and

- xii. any other information required by the *District Manager* .

Site Inspections

7.5 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* ; and,
- xi. General *Site* appearance.

7.6 The *Owner* shall inspect the waste mound and surrounding areas for the presence of leachate seeps as required by Condition No. 13.5.

Record Retention

- 7.7 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.
- 7.8 The *Owner* shall retain all documentation listed in Schedule "A" for as long as this *ECA* is valid.
- 7.9 All monthly summary reports are to be kept at the *Site* until they are included in the Annual Report.
- 7.10 The *Owner* shall retain employee training records as long as the employee is working at the *Site* .
- 7.11 The *Owner* shall make all of the above documents available for inspection upon request of *Ministry* staff.

8.0 MONITORING

Groundwater Monitors

8.1 The *Owner* shall ensure all groundwater monitoring wells are properly capped, locked and

protected from damage.

- 8.2 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.
- 8.3 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.
- 8.4 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

- 8.5.
 - a. Monitoring programs shall be carried out for groundwater, surface water and landfill gas on an interim basis in accordance with Item 45 in Schedule "A" until the report required by Condition 8.5 (b) has been approved by the *Director* .
 - b. The *Owner* of the *Site* must provide an addendum report to the report entitled "*Environmental Monitoring Plan - WM Richmond Landfill Site*" prepared by WESA Inc dated June 29, 2010 to the *Director* for approval, with copies to the *District Manager*, that addresses additional information required as indicated in Item 48 in Schedule "A". The report shall be submitted within sixty (60) days upon the Ministry's Eastern Region Technical Support Section acceptance of the findings of a technical report to be prepared by the *Owner* that details the findings of the groundwater investigation. Pending final approval of the *EMP* and the addendum by the *Director* , the *Owner* shall implement the amended *EMP* upon approval by the *Director* .
 - c. The addendum report for the *EMP* must include adequate detail on groundwater and surface water monitoring locations, monitoring frequencies, parameters etc.
 - d. The addendum report for the *EMP* shall also include a monitoring program to identify odour issues along with appropriate odour abatement activities and a communication plan for the public.
 - e. Any off site exceedances of parameters for groundwater, surface water, or odour shall be reported to the *District Manager* within 48 hours of determination of the exceedance. In addition, a statement detailing which results are out of compliance with the *Ministry's* guidelines and objectives shall be provided at the same time as the results.

Compliance Criteria

- 8.6 The *Site* shall be operated in such a way to ensure compliance with the *MOE* '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* .

9.0 CONTINGENCY PLANS

Groundwater and Surface Water Impact Contingency Plan

- 9.1 In conjunction with the report required by Condition No 8.5 (b), the *Owner* shall submit for approval to the *Director* an addendum report that provides an update to the memorandum entitled "*Groundwater and Surface Water Impact Contingency Plan* " prepared by WESA Inc. dated June 29, 2010 that incorporates the additional information collected from the groundwater investigations to be conducted as detailed in Items 47 and 50 of Schedule "A". The addendum report for the Groundwater and Surface Water Impact Contingency Plan will include but not be limited to the following:

- i. Trigger mechanisms associated with the groundwater and surface water monitoring programs. These mechanisms, based on water quality monitoring data, will identify when additional measures are required to be implemented in order to ensure on-going compliance with water quality criteria;
- ii. Quantifiable timelines for each step of the impact contingency plans; and
- iii. A plan to deal with any off site groundwater and surface impacts that can be attributed to landfill operations over the long term including during landfill operation and during post-closure.

Leachate Collection System Contingency Plan

- 9.2
- i. The *Owner* shall initiate the Leachate Collection System Contingency Plan at a minimum when the trigger mechanisms identified in Items 41, 47 and 48 of Schedule "A" have been identified as occurring.
 - ii. The conceptual Leachate Collection System Contingency Plans as identified in Item Nos 41, 47 and 48 in Schedule "A" are considered acceptable. In the event the *Owner* needs to implement the Contingency Plan, the *Owner* shall submit to the *Director* for approval prior to implementation, with copies to the *District Manager* , detailed design drawings for works or any remedial system required for the contingency plan.

Leachate Contingency Plan

- 9.3 The *Owner* shall on a biannual basis confirm that there is a suitable location available for disposal of leachate and what that location is. Confirmation shall be provided to the *District Manager* upon receipt. If a location for disposal of leachate is not available, the *Owner* shall provide an action plan for approval to the *District Manager* .

Landfill Gas Contingency Plan

- 9.4 i. The *Owner* shall initiate the Landfill Gas System Contingency Plan at a minimum when the trigger mechanisms identified in Item Nos. 42, 47 and 48 in Schedule "A" have been identified as occurring.
- ii. The conceptual Landfill Gas System Contingency Plans as identified in Item Nos. 42 and 48 in Schedule "A" are considered acceptable. In the event the *Owner* needs to implement the Contingency Plan, the *Owner* shall submit to the *Director* for approval prior to implementation, with copies to the *District Manager* , detailed design drawings for works or any remedial system required for the contingency plan.

Public Notification Plan for Contingency Plans

- 9.5 Within 12 months of issuance of this notice, the *Owner* shall submit to the *Director* for approval, with copies to the *District Manager* , a public notification plan that shall address the steps to be taken to notify the adjacent property owners, the *PLC* , the Town of Greater Napanee, Township of Deseronto, Tyendinaga Township and the Mohawks of the Bay of Quinte that the *Owner* will be initiating contingency plans as approved by this *ECA* .

10.0 PUBLIC LIAISON COMMITTEE

- 10.1 The *Owner* shall use its best efforts to establish and maintain a Public Liaison Committee (PLC) for the *Site* . The PLC shall serve as a focal point for dissemination, review and exchange of information and monitoring results relevant to the operation of the undertaking. In addition, the purpose of the PLC will be to provide community review of the development, operation (current and proposed) and ongoing monitoring, closure and post-closure care related to the *Site* . The PLC will also be provided the opportunity to review and comment on any subsequent applications for approval under the *EPA* .
- 10.2 The *Owner* shall invite representatives from the Town of Greater Napanee, the *Ministry* , the Township of Tyendinaga, the Quinte Conservation Authority and the Mohawks of the Bay of Quinte to sit on the committee.
- 10.3 The *Owner* shall, in consultation with the PLC, develop a terms of reference for the PLC that will describe how the PLC shall carry out business, and the terms of reference shall include a dispute resolution strategy to resolve issues and disagreements between the PLC and the *Owner* . The *Owner* shall provide the terms of reference to the *Director* and the *Regional Director* for placement on the public record.

- 10.4 The general mandate of the PLC shall include:
- a. Review operations and provide regular input to the *Owner* with respect to all matters pertaining to landfill site operation, including issues pertaining to ongoing operations, monitoring, the need for contingency plans or remedial measures, response to community complaints, the need for changes to the *ECA* , post-closure monitoring and maintenance, and development of the proposed end use for the *Site* ;
 - b. Review operational and monitoring reports;
 - c. Consider and make recommendations to the *Owner* regarding outside consulting advice in respect of the *Site* ;
 - d. Facilitate ongoing dialogue between the *Owner* , and the community, including residents and businesses in the immediate vicinity of the *Site* ;
 - e. Provide reports regularly to the community on the activities of the PLC, the landfill operations and landfill related issues and seek public input on these activities and issues;
 - f. Monitor the *Owner* 's complaint response program and make recommendations to the *Owner* with respect to this program; and
 - g. Provide recommendations to the *Owner* with respect to unresolved complaints.
- 10.5 The PLC shall not exercise any supervisory, regulatory, approval, legal or other decision making role with respect to the operations at the *Site* .
- 10.6 The *Owner* shall provide for the administrative costs of operating the PLC, including the cost of meeting places and clerical services.
- 10.7 The PLC shall operate under a Terms of Reference of the committee. Any changes to the Terms of Reference for the PLC shall be made by the PLC. Any changes to the Terms of Reference for the PLC shall be provided to the *Ministry* for information purposes.
- 10.8 Community members shall be appointed by the PLC. The community member positions are intended to be available to individuals that are not members of groups already represented on the PLC and have an interest in the operation of the *Site* . The PLC shall encourage individuals who reside in close proximity to the *Site* to participate. A community member is defined as a taxpayer and/or resident of the Town of Greater Napanee and/or The Township of Tyendinaga.
- 10.9 The function of the *Ministry* member will be to provide advice, information and input to other members as required.
- 10.10 The PLC shall determine the appropriate meeting frequency and review it on an annual basis.
- 10.11 Minutes and agendas of meetings shall be printed and distributed on a timely basis.
- 10.12 The PLC shall have reasonable access to the *Site* and its landfill related facilities for the purpose of carrying out its objective and mandate and the *Owner* 's consultants' reports relating to *Site* operations shall be provided to the PLC.

- 10.13 The *Owner* shall provide the PLC with access to the *Owner* 's consultants as required and consultants reports in accordance with protocols agreed to between the *Owner* and the PLC.
- 10.14 Unless disclosure would be contrary to the Freedom of Information and Protection of Privacy Act ,the PLC, the Town of Greater Napanee, the Township of Tyendinaga, and the Mohawks of the Bay of Quinte are to be provided all formal submissions and correspondence related to the *Site* operations by the *Owner* at the same time as these items are submitted to the *Ministry* .
- 10.15 The *Owner* shall allow access to the *Site* during normal operating hours, to enable any individual member of the PLC and member of the public recommended by local representatives on the PLC, to observe operations. An individual member of the PLC must contact the *Operator* to arrange for a *Site* pass, be accompanied by an *Operators* representative at all times and follow all safety procedures.
- 10.16 All recommendations made to the *Owner* with respect to ongoing *Site* operations, monitoring and the implementation of contingency measures shall be discussed at joint meetings between representatives of the *Owner* and the PLC. The purpose of these meetings will be to arrive at an agreement between the *Owner* and PLC with respect to implementation of the recommendations.
- 10.17 The *Owner* will provide and deliver to the PLC, the Town of Greater Napanee, the Township of Tyendinaga and the Mohawks of the Bay of Quinte all monitoring results, reports and any other information required to be collected and/or submitted to the *MOE* by a Condition of this *ECA* .
- 10.18 The *Owner* with approval from the *Director* and the *District Manager*, may dispense with the PLC if, after a period of time and after giving sufficient notice, there is no interest from the public in continuing with it. The need for a PLC shall be reviewed by the *Owner* on a yearly basis.

11.0 COMPLAINTS PROCEDURE

- 11.1 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 at the *Site* .

11.2 The *Owner* shall post *Site* complaints procedure at *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.

12.0 EMERGENCY SITUATIONS

12.1 In the event of a fire or discharge of a contaminant to the environment, *Site* staff shall contact the *MOE* Spills Action Centre (1-800-268-6060) and the *District Office* of the *MOE* .

12.2 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* .

12.3 The Emergency Response Manual shall be updated on a regular basis and be provided to the *District Manager* within one month of the revision date.

12.4 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.

13.0 SITE CLOSURE

13.1 i. The *Owner* shall construct the final cover system for the *Site* in accordance with Items 33 to 36 inclusive of Schedule "A" and this *ECA* .

ii. Prior to subgrade preparation, the *Owner* shall inspect for any evidence of leachate springs or seeps and immediately remedy any seeps or springs prior to placement of the final cover and topsoil.

13.2 If final contours are reached in any part of the *Site* then that part of the *Site* shall be closed in accordance with the closure plan, Items 19 to 30 on Schedule "A" and this amendment to the *ECA* as approved by the *Director*.

13.3 Within sixty (60) days prior to *Site* closure, the *Owner* shall notify the public via an advertisement in all local newspapers. In addition, notice shall be given to the *District Office* , the Town of Greater Napanee, the Mohawks of the Bay of Quinte and all residents and businesses within a 1,000 metre radius of the *Site* .

13.4 The *Owner* shall update the sign at the front gate of the *Site* to indicate the following:

- a. the name of the *Site* and *Owner* ;
- b. the *ECA* number;

- c. the name of the *Operator* ;
 - d. a warning against unauthorized access;
 - e. the telephone number to which complaints or questions may be directed;
 - f. a twenty-four (24) hour emergency telephone number;
 - g. the *Site* is closed;
 - h. dumping outside of the gate is illegal; and
 - i. alternative locations for waste disposal.
- 13.5 After *Site* closure, on a weekly basis, the *Owner* shall inspect the *Site* for leachate seeps and for signs of illegal dumping of waste. Illegal waste shall be removed and disposed of within 48 hours of detection. Leachate seeps shall be repaired within 48 hours of detection.. Upon approval from the *Director* , the frequency for inspecting for leachate seeps may be reduced to quarterly.
- 13.6 Upon closure of the *Site* , the following features will be inspected, recorded and maintained on a quarterly (every three (3) months) basis:
- a. evidence of settlement;
 - b. landfill gas collection system, landfill gas flare and related equipment;
 - c. cover soil integrity;
 - d. vegetative cover;
 - e. gates and fencing around the *Site* ;
 - f. surface water drainage works; and
 - g. erosion and sediment in surface water drainage system.
- 13.7 Any deficiencies noted in the above items shall be repaired within one month time of notice.
- 13.8 Upon *Site* closure, grass on the berms and the top of the landfill shall be cut a minimum of two (2) times per year.
- 13.9 Upon closure of the *Site* , the ditches and culverts surrounding the *Site* shall be cleaned on an annual basis for the first five (5) years after *Site* closure. Prior to five years after *Site* closure, the *Owner* shall submit to the *Director* for approval a proposed maintenance schedule for the ditches and culverts for the period covering 5 years after *Site* closure until the end of the contaminating lifespan.
- 13.10 Upon closure of the *Site* , the leachate collection system shall be cleaned and camera inspected on an annual basis for the first three (3) years after *Site* closure. Prior to three (3) years after *Site* closure, the *Owner* shall submit to the *Director* for approval a proposed maintenance schedule for the leachate collection system or the period covering 3 years after *Site* closure until the end of the *contaminating lifespan* .
- 13.11 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.

13.12 The following shall remain in place and be operational at the *Site* until the end of the contaminating lifespan:

- a. Leachate extraction equipment;
- b. Landfill gas extraction equipment; and
- c. Sedimentation ponds.

14.0 SEMI ANNUAL AND ANNUAL REPORTING

Semi Annual Monitoring Reporting

14.1 By **January 15** and **July 15** of each year, the *Owner* shall submit semi-annual monitoring reports to the *District Office* and post the reports on a publicly accessible website. These semi annual reports shall include:

- i. The results and an interpretive analysis of the results from the leachate, groundwater, surface water, and landfill gas monitoring programs approved by this *ECA* , including an assessment of the need to amend the monitoring programs;
- ii. An assessment with regards to the compliance of the groundwater quality at the property boundary and compliance points with regards to Guideline B-7 Reasonable Use Concept;
- iii. A report on the status of all monitoring wells and a statement as to compliance with Ontario Regulation 903; and
- iv. The second semi-annual report will include an Annual Summary section which describes the results from the current calendar year and any data quality changes identified from previous years, or through the current year.

Annual Reporting

14.2 A written report on the development, operation, and closure of the *Site* shall be completed annually (the "Annual Report"). The Annual Report shall be submitted to the *Regional Director* , the *District Manager* , the *PLC*, the Town of Greater Napanee, the Township of Tyendinaga and the Mohawks of the Bay of Quinte , by **March 31st** of each year and shall cover the year ending the preceding December 31st.

14.3 The Annual Report shall include the following:

- i. 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;
- ii. an assessment of the efficiency of the leachate collection system;
- iii. *Site* plans showing the existing contours of the *Site*;
- iv. areas of landfilling operation during the reporting period;
- v. areas of intended operation during the next reporting period;

- 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. 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;
- xxi. a confirmation that the *Site* inspection program as required by this *ECA* has been complied with by the *Owner* ;
- xxii. Any changes in operations, equipment or procedures employed at the *Site* ; and
- xxiii. Recommendations regarding any proposed changes in operations of the *Site* .

Schedule "A"

1. Application for a Certificate of Approval for a Waste Disposal Site (Landfill), dated January 11, 1988.
2. Report entitled "Sutcliffe Sanitation Services Ltd., Landfill Site Expansion Development and Operations Report", prepared by Henderson Paddon and Associates Limited, dated September 1985.
3. Report entitled "Addendum No. 1 Sutcliffe Sanitation Services Limited Landfill Site Expansion Development and Operations Report" prepared by Henderson Paddon and Associates Limited dated December 1986.
4. Report entitled "Hydrogeologic Study Proposed Landfill Expansion, Township of Richmond" prepared by Morrison Beatty Limited and dated September 30, 1985.
5. Report entitled "Proposed Groundwater and Surface Water Monitoring Program, Sutcliffe Sanitation Services Limited Landfill, Township of Richmond" prepared by Morrison Beatty Limited and dated August 1987.
6. Letter dated September 12, 1990 from Mr. J.R. Bray, P.Eng. to Tricil Limited (c/o Laidlaw Waste Systems Ltd.).
7. Application for Approval of a Waste Disposal Site, dated May 24, 1995 and signed by Michael Pullen, Director, Environmental Management, Laidlaw Waste Systems (Richmond) Ltd.
8. Letter from Jeff Armstrong, Henderson, Paddon & Associates Limited to I. Parrott, MOEE dated May 30, 1995 re: Development of Landfill Base of Phases IV and V (including attached drawings 8570D-400 to 406, inclusive and 8570D-94-Site).
9. Letter from Jeff Armstrong, Henderson Paddon and Associates Limited to i. Parrott, MOEE dated June 23, 1995 re: Additional information to Support Applciation for Provisional Certificate of Approval for a Waste Disposal Site A371203.
10. Letter from Jeff Armstrong, Henderson Paddon and Associates Limited to I. Parrott, MOEE dated July 21, 1995 re: Public Consultation on the Re-Design of the Landfill Base for Phase IV and V.
11. Application for Approval for a Waste Disposal Site dated July 25, 1996 signed by Mr. Michael Pullen, Director, Environmental Management.
12. Report entitled "Undertaking to Establish an Organic Composting Facility at the Laidlaw Waste Systems (Richmond) Ltd. Landfill Site" dated July 1996, prepared by Laidlaw Waste Systems (Richmond) Ltd.

13. Plan entitled "Richmond Township Landfill Proposed Compost Pad Expansion", revised April 12, 1996, prepared by Henderson Paddon and Associates Ltd.
14. The June 9, 1999, report entitled "Conceptual Design for a Landfill Gas Collection and Flaring System Richmond Landfill Site Napanee, Ontario" which was prepared by Comcor Environmental Limited.
15. Drawing 8570G-L1 dated May 2000- Phase I Proposed Leachate Collector, Napanee Landfill, Napanee, Ontario
16. A letter dated July 31, 2000, regarding concerns raised during review of application, to Tes Gebrezghi, MOE, from Jeff Armstrong, Henderson Paddon & Associates Limited
17. A report titled "Assessment of Napanee Water Pollution Control Plant To Treat Leachate from the Laidlaw Landfill, Richmond, Ontario, dated May 1996 and prepared by Henderson, Paddon & Associates Limited
18. A report titled "CWS Response to the Town of Greater Napanee Audit of the Richmond Landfill Operation, dated May 12, 2000, and prepared by Canadian Waste Services Inc.
19. Report entitled "Richmond Sanitary Landfill Site Final Closure Plan" and appendices dated June 2007 prepared by Henderson, Paddon and Associates Limited.
20. Memorandum dated November 30, 2007 from K. Stephenson, Hydrogeologist, Eastern Region, MOE to C. Dobiech, Kingston District, MOE.
21. Memorandum dated December 5, 2007 from Victor Castro, Surface Water Scientist, Eastern Region, MOE to Craig Dobiech, Kingston District, MOE.
22. Letter dated July 11, 2008 from Greg Washuta, Senior Waste Engineer, EAAB, MOE to Mike Walters, WMCC.
23. Letter, attachments, and Appendix B dated September 26, 2008 from Randy Harris, Site Manager, WMCC to Greg Washuta, Senior Waste Engineer, EAAB, MOE.
24. Letter dated February 23, 2009 from Greg Washuta, Senior Waste Engineer, EAAB, MOE to Randy Harris, Site Manager, WMCC.
25. Drawing number 8570-2006 entitled "June 2006 Existing Conditions Richmond Landfill Napanee, Ontario" dated March 19, 2007 prepared by Henderson Paddon and Associates Limited.
26. Drawing number 8570F-104 entitled "Richmond Landfill Site Proposed Final Contours Landfill and Borrow Areas" dated March 1995 prepared by Henderson Paddon and Associates Limited.

27. Letter dated March 2009 from Randy Harris, Site Manager, Waste Management of Canada Corporation to Greg Washuta, Senior Waste Engineer, Waste Unit, EAAB, MOE.
28. Drawing number 8570F-114 entitled "Richmond Township Landfill Sections 'A-A' and 'B-B'" created by Henderson Paddon and Associates Limited, dated March 1996.
29. Drawing number 8570F-115 entitled "Richmond Township Landfill Sections 'C-C', 'D-D', and 'E-E'" created by Henderson Paddon and Associates Limited, dated March 1996.
30. Memorandum dated February 25, 2009 from K. Stephenson, Hydrogeologist, Eastern Region, MOE to C. Dobiech, Kingston District, MOE.
31. Letter dated June 1, 2009 from Mr. Randy Harris, Site Manager, Waste Management of Canada Corporation to Application Processor, Client Services Section, Environmental Assessment and Approvals Branch, Ministry of the Environment.
32. Report entitled "Site Conceptual Model Report, WM Richmond Landfill" and attached appendices A to H inclusive by Dr. B.H. Kueper and WESA Inc., dated October 2009.
33. Report entitled "Richmond Sanitary Landfill Site OS-08-570-13-OS Construction Quality Assurance/Construction Quality Control Plan for the Final Cover System", dated June 2010, prepared by GENIVAR Consultants LP.
34. E-mail dated August 20, 2010 from Greg Washuta, Senior Waste Engineer, Waste Unit, Environmental Assessment and Approvals Branch, Ministry of the Environment to Dave White and Randy Harris, Waste Management of Canada Corporation.
35. Letter dated August 24, 2010 from Jeff E. Armstrong, Senior Environmental Engineer, GENIVAR Consultants LP to Greg Washuta, Senior Waste Engineer, Waste Unit, Environmental Assessment and Approvals Branch, Ministry of the Environment.
36. Document entitled "Richmond Sanitary Landfill Site Construction Quality Assurance/Construction Quality Control Plan for the Final Cover System ERRATA" prepared by Jeff E. Armstrong, Senior Environmental Engineer, GENIVAR Consultants LP, dated August 24, 2010.
37. Application for a Provisional Certificate of Approval for a Waste Disposal Site for Waste Management of Canada Corporation's Richmond Landfill Site, signed by Randy Harris, Site Manager on September 30, 2010.
38. Report entitled "Phytoremediation Plan - WM Richmond Landfill Town of Greater Napanee, Ontario" dated December 2010 and prepared by WESA Inc.
39. Report entitled "Richmond Sanitary Landfill Site - Operations and Procedures Manual June 25, 2010" prepared by GENIVAR Consultants LP Inc dated June 25, 2010.

40. Report entitled "Landfill Gas Collection and Flaring System Design Report - Richmond Landfill" prepared by GENIVAR Consultants LP dated June 29, 2009.
41. Report entitled "Richmond Sanitary Landfill Site - Leachate Collection System Contingency Plan" prepared by GENIVAR Consultants LP dated June 25, 2010.
42. Report entitled "Richmond Sanitary Landfill Site - Landfill Gas Collection System Contingency Plan" prepared by GENIVAR Consultants LP dated June 25, 2010.
43. Report entitled "Financial Assurance Plan" completed by GENIVAR Consultants LP and dated June 25, 2010;
44. Report entitled "Contaminating Lifespan" (Appendix D of Financial Assurance Plan) completed by GENIVAR Consultants LP and dated June 16, 2010.
45. Report entitled "Final Report - Environmental Monitoring Plan - WM Richmond Landfill" prepared for Waste Management of Canada Corporation by WESA Inc. and dated June 29, 2010.
46. Appendix "A" (Report Entitled "Odour Monitoring Plan" prepared for Waste Management of Canada Corporation by GENIVAR Consultants LP dated June 25, 2010) of the report entitled "Environmental Monitoring Plan - WM Richmond Landfill" prepared for Waste Management of Canada Corporation by WESA Inc. and dated June 29, 2010.
47. Letter dated January 14, 2011 addressed to Mr. Randy Harris, Waste Management of Canada Corporation from Mr. Greg Washuta, Ministry of the Environment providing comments on Items 39 through 46 in Schedule "A".
48. Letter dated February 28, 2011 addressed to Mr. Greg Washuta, Ministry of the Environment from Mr. Randy Harris, Waste Management of Canada Corporation providing additional information regarding financial assurance, the status of the environmental monitoring plan and various contingency plans.
49. Letter dated April 5, 2011 addressed to Mr. Randy Harris, Waste Management of Canada Corporation from Mr. Dale Gable, Ministry of the Environment requesting additional information on financial assurance, the status of the environmental monitoring plan and various contingency plans.
50. Letter dated April 20, 2011 addressed to Mr. Dale Gable, Ministry of the Environment from Mr. Jeff Armstrong, GENIVAR Inc. providing additional information on the environmental monitoring plan, financial assurance and the contaminating lifespan of the Site.
51. Letter dated August 12, 2011 and supporting documentation addressed to Mr. Tesfaye Gebrezghi, Ministry of the Environment from Mr. Reid Cleland, Waste Management of Canada Corporation requesting amendment to Condition No. 35. The supporting documentation included the following:

- i. Application for a Certificate of Approval for a Waste Disposal Site signed by Mr. Reid Cleland, Waste Management of Canada Corporation and dated August 15, 2011.

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

- 1. The reason for Conditions 1.1 and 1.2 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.*
- 2. The reason for Conditions 1.3, 1.4, 1.5, 1.9, 1.10, 1.11, 1.12, 1.13, 3.1, 3.2, 3.3 and 8.6 is to clarify the legal rights and responsibilities of the Owner under this ECA.*
- 3. Conditions 1.6, 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 Certificate.*
- 4. Conditions 1.14 and 1.15 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.*
- 5. The reasons for Condition 1.16 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 ECA.*
- 6. The reasons for Conditions 1.17 and 1.18 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.*
- 7. The reason for Condition 1.19 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 ECA. This condition is supplementary to the powers of entry afforded a Provincial Officer pursuant to the EPA and OWRA.*
- 8. The reasons for Conditions 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, and 2.9 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.*
- 9. The reason for Condition 3.4 is to ensure the availability of as-built drawings for inspection and information purposes.*
- 10. The reasons for Conditions 4.1, 4.2 and 4.3 are to ensure the Owner operates the Site in an environmentally safe manner. This to is ensure the environment and public health are*

protected.

11. *The reason for Condition 4.4 is to establish a closure date for the Site.*
12. *The reasons for Conditions 4.5, 4.6 and 4.7 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.*
13. *The reasons for Conditions 4.8, 4.9, 4.10 and 4.11 are to specify the normal hours of operation for the landfill Site and a mechanism for amendment of the hours of operation.*
14. *The reasons for Condition 4.12 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.*
15. *The reasons for Condition 4.18 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.*
16. *The reason for Condition 4.21 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.*
17. *The reason for Condition 5.1 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.*
18. *The reasons for Conditions 5.2, 5.3 and 5.4 are to ensure proper operation of the leachate collection system. This is to ensure the protection of the environment and public health.*
19. *The reason for Conditions 5.5 and 5.6 are to ensure surface water at the site is not impacted by landfill operations. This is to ensure the environment and public health are protected.*
20. *The reasons for Condition 5.7 and 5.8 is to ensure the Owner is aware that the composting operation will cease by the given date.*
21. *The reason for Condition 5.9 is to approve the proposed phytoremediation system as*

applied and established operations conditions for the phytoremediation system.

22. *The reason for Conditions 5.10 and 5.11 is to clarify the responsibilities of the Owner, the requirements of the Ministry, the authority of the Ministry and protects the natural environment and human health.*
23. *The reason for Condition 5.12 is to approve the continued operation of the Waste and Recycling Drop-Off Facility as per the submitted information.*
24. *The reason for Conditions 5.13, 5.14, 5.15 and 5.18 is to ensure the type of waste, the quantity of waste service and removal frequency are clearly identified.*
25. *The reasons for Condition 5.16 and 5.17 is to specify the normal hours of operation for the landfill Site and a mechanism for amendment of the hours of operation and ensure trained staff are present to accept waste.*
26. *The reasons for Conditions 5.19 through 5.24 is to ensure the operation is done in a manner that will not cause a nuisance or an adverse effect. This is to ensure the long-term protection of the environment and human health.*
27. *The reason for Condition 6.1 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.*
28. *The reasons for Conditions 7.1, 7.2 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.10, 7.11 and 14.1 are to provide for the proper assessment of effectiveness and efficiency of Site design and operation, their effect or relationship to any nuisance or environmental impacts, and the occurrence of any public complaints or concerns. Record keeping is necessary to determine compliance with this ECA, the EPA and its regulations*
29. *The reasons for Conditions 8.1, 8.2, 8.3, and 8.4 are to ensure protection of the natural environment and the integrity of the groundwater monitoring network.*
30. *The reason for Condition 8.5 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.*
31. *The reason for Condition 9.1 is to ensure the Owner submits a contingency plan for the Site based on the current soil and groundwater investigation. This is to ensure the environment and public are protected.*
32. *The reason for Conditions 9.2, 9.3, 9.4, 11.1 and 11.2 is to ensure that the Owner follows a plan with an organized set of procedures for identifying and responding to*

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 Environmental Commissioner
1075 Bay Street, Suite 605
Toronto, Ontario
M5S 2B1

AND

The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** 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) 314-4506 or www.ert.gov.on.ca**

This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at www.ebr.gov.on.ca, you can determine when the leave to appeal period ends.

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

DATED AT TORONTO this 9th day of January, 2012



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

DG/

c: District Manager, MOE Kingston - District
Randy Harris, Waste Management of Canada Corporation

Appendix A.2

Provisional Certificate of Approval No.
A371203, dated March 30, 1988
(REVOKED, INCLUDING
AMENDMENTS)
