

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A371203
Issue Date: March 19, 2021

Waste Management of Canada Corporation
Rural Route, No. 6
Greater Napanee, Ontario
K7R 3L1

Site Location: Richmond Landfill Site
1271 Beechwood Rd Lots 1, 2 and 3, Concession 4, Richmond
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

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* ;

"EPB" refers to the Environmental Permissions Branch of the Ministry of the Environment, Conservation and Parks;

"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.

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

"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;

"Parties" mean Concerned Citizens Committee of Tyendinaga and Environs; Director, Ministry of the Environment, Conservation and Parks; Waste Management of Canada Corporation; Mohawks of the Bay of Quinte; and Tom Touzel on behalf of Napanee Green Lights;

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

"Site " means the Richmond Landfill Site, located at 1271 Beechwood Road, Lots 1, 2 and 3, Concession 4, Richmond, Greater Napanee Town, County of Lennox and Addington .

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 Act, RSO 1990, CF-31.

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

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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 ECA 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 Within twenty (20) days of issuance of this ECA, the Owner shall submit an updated financial assurance, as defined in Section 131 of the EPA, for the amount of **\$12,129,094.00** to the Director. This Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the closure, contingency, post-closure operation, monitoring and maintenance of the Site.

- 2.6 The total amount of financial assurance shall be updated as follows for the following years:

- i. March 31, 2022 - **\$11,720,510.00**;
- ii. March 31, 2023 - **\$11,311,887.00**; and
- iii. March 31, 2024 - **\$10,874,529.00**.

Updated Review Report

- 2.7 A revised or new financial assurance program shall be submitted to the Director by no later than **March 31, 2024** 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 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 GENERAL OPERATIONS

Proper Operation

3.1 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

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

3.3 The operations and procedures manual shall be:

- a. retained at the Site;
- b. reviewed every five (5) years and updated by the Owner as required; and
- c. be available for inspection by Ministry staff.

Site Closure

3.4 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

3.5 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).

Site Security

- 3.6 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

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

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

- 3.8 The Site shall be operated and maintained such that the vermin, vectors, dust, litter, odour, noise and traffic do not create a nuisance.
- 3.9 No scavenging is to occur at the Site.

Dust

- 3.10 The Owner shall control fugitive dust emissions from Site sources including Site roads. 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

- 3.11 The Owner shall comply with noise criteria in MECP Guideline entitled "Noise Guidelines for Landfill Sites."

4.0 SITE OPERATIONS

Cover Material

- 4.1 i. 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 .
- ii. The Owner shall ensure that no contaminated soils are used in the final cover.

Cleaning Leachate Collection System

4.2 The leachate collection system piping for each stage of the landfill shall be inspected and cleaned in accordance with the schedule outlined in Condition 13.7.

Leachate Storage System

4.3 Approval is hereby granted for construction of the leachate storage system, all in accordance with Items 70 and 71 in Schedule "A".

4.4 The Owner shall ensure there are no leachate spills during construction of the leachate storage system and during truck loading.

4.5 (1) The water level in the leachate storage tank should be maintained close to the low level of 127.50 m. Storage capacity above the low level shall only be used in case the Napanee Water Pollution Control Plant and other regional wastewater treatment plants are unable to accept all of the leachate from the Site.

(2) Leachate pumping to the storage tank shall stop when the maximum water level of 136.17 m is reached. In this case the leachate should be pumped to the holding lagoon as an emergency storage measure.

(3) Leachate in the lagoon shall be sent off-site for treatment as soon as the capacity at the the Napanee Water Pollution Control Plant and other regional wastewater treatment plants become available.

(4) The Owner shall ensure immediate actions are taken when the high water level alarms at the pumping stations and the storage tank are sound to prevent leachate spills.

4.6 (1) Approval is granted for construction of the leachate forcemain between the north pumping chamber PS2 and holding lagoon, all in accordance with the ECA application and supporting documents listed as Items 69 and 71 in Schedule "A".

(2) The leachate forcemain shall not be operated unless it has been demonstrated and accepted by the Ministry that the integrity of the liner is not compromised and leakage from the lagoon is not of concern.

Phytoremediation System

4.7 (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 3.66 metres (12 feet). Where vegetation reaches or exceeds a height of 3.66 metres (12 feet), the Owner shall prune the vegetation forthwith.

- 4.8
- (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, M66-2, M67-2, M86, M100, M101, M102 and M103
 - b. Intermediate Bedrock Zone - M3A-3, M72, M73, M74, M75 and M95-1
 - (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 - M66-2, M67-2, M101 and M103
 - b. Intermediate Bedrock Zone - M5-3, M6-3, M74 and M75
 - (3) For the monitoring wells identified in Conditions 5.10 (1) and 5.10 (2), the Owner shall analyze groundwater for determining the groundwater levels and quality around the phytoremediation system in the northwest corner of the Site based on the EMP approved and any future approved changes identified in future amendments.
- 4.9 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;

Surface Water

- 4.10 The Owner shall not discharge surface water to receiving water bodies without an approval under Section 53 of the OWRA.

5.0 WASTE AND RECYCLABLE DROP-OFF FACILITY

Compliance

5.1 Except as otherwise provided by these conditions, the Waste and Recyclable Drop-Off Facility shall be designed, developed, maintained and operated in accordance with the Applications for a Provisional Certificate of Approval for a Waste Disposal Site dated May 25, 2011, and the supporting documentation, plans and specifications listed in Schedule "A".

Waste Types

- 5.2 (1) The Waste and Recycling Drop-Off Facility shall accept the following types of waste:
- i. Solid Non Hazardous Waste - Domestic Waste, Construction and Demolition Waste;
 - ii. Blue Box Materials;
 - iii. Tires; and
 - iv. White Goods and Metal;
- (2) Contaminated soil shall not be accepted at the Waste and Recycling Drop Off Facility.
- (3) If the Owner participates in Stewardship Ontario, Ontario Tire Stewardship, or any other recycling program developed by the Province of Ontario, then the waste that has been approved for collection under the aforementioned programs will also be accepted at the public drop off area.

Waste Quantity

- 5.3 (1) The total amount of waste and recyclable material, which may be received at the Waste and Recyclable Drop off Facility shall not exceed **50 tonnes** per day.
- (2) On twenty-five occasions throughout a single calendar year the Owner is permitted to have a "Large Waste Day" where the Owner is permitted to accept up to **100 tonnes** per day. The Owner shall notify the District Manager in writing within 48 hours after the Owner has used one of the "Large Waste Days".
- (3) The maximum amount of waste that may be stored at the Waste and Recycling Drop-Off Facility shall not exceed **50 tonnes**.
- (4) The maximum number of waste storage containers that may be stored/utilized at the Waste and Recyclable Drop-Off Facility at any one time shall be as follows:
- i. nine (9) - 40 yard bins for metals, tires and solid non hazardous waste

- consisting of domestic, construction and demolition waste;
- ii. two (2) - 8 yard bins for blue box materials;
- iii. three (3) - five (5) gallon pails for single use batteries.

Service Area

5.4 Only waste that is generated within the boundaries of the **Town of Greater Napanee, Town of Deseronto and Tyendinaga Township** which includes the **Mohawks of the Bay of Quinte** shall be accepted at the Site. No waste shall be received for disposal at this Site from outside the approved service area.

Hours of Operation

5.5 The operating hours of the Waste and Recycling Drop-Off Facility shall be as follows:

- i. 8 a.m. to 5 p.m. - Monday to Friday, except for statutory holidays; and
- ii. 8 a.m. to 1 p.m. - Saturday

5.6 No waste shall be received at the Waste and Recycling Drop-Off Facility except during operating hours when the Site is under the supervision of trained personnel.

Removal Frequency

- 5.7 (1) Waste materials shall be removed from the Waste and Recycling Drop-Off Facility on a minimal frequency of twice per week with the exception of white goods and blue box materials.
- (2) White goods and blue box materials shall be removed at a frequency no less than once every six months.
- (3) Wastes which have been approved for collection under Stewardship Ontario, Ontario Tire Stewardship, or any other recycling programs developed by the Province of Ontario, shall be removed from the Site at the frequency as detailed in the requirements for the aforementioned programs.

Operations

5.8 Recycling activities shall be completed as per Ontario Regulation 101/94.

5.9 Recyclable materials shall be properly separated and each area properly identified. The areas shall be kept in a neat and tidy manner.

5.10 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.

- 5.11 With the exception of white goods, waste may only be stored within the waste storage bins in accordance with Items 52, 53, 54 and 55 in Schedule "A".
- 5.12 All waste types shall be segregated either into bins, or in designated areas defined by barriers. All bins and designated waste storage areas shall be clearly labelled.
- 5.13 The Owner shall ensure that all white goods received at the Waste and Recyclable Drop-off Facility have been drained of any refrigerants, and have the appropriate paperwork (current ODP card) demonstrating that the refrigerants have been removed.

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

Inspections and Log Book

- 7.1 (1) An inspection of the entire Site and all equipment on the Site shall be conducted daily when the transfer station 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.
- (2) If the transfer station is not in operation, daily inspection of the entire Site and all

equipment on Site is not required. However, inspection of the leachate management system and all associated components shall be carried out weekly.

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 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.

7.4 The Owner shall maintain records of monthly site inspection in the form of a written log or a dedicated electronic file that shall include at least the following:

- i. the amount of any leachate removed, or treated and discharged from the Site;
- ii. complaints received and actions taken to resolve them; and
- iii. emergency situations and actions taken to resolve them.

7.5 The Owner shall inspect the waste mound and surrounding areas for the presence of leachate seeps as required by Condition No. 13.2.

Record Retention

7.6 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.

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

7.8 All quarterly summary reports are to be kept at the Site for as long as this ECA is valid.

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

7.10 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 at least every five years, and repaired, replaced or decommissioned as required in accordance with good standard practice to prevent groundwater contamination and in compliance with the requirements of 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 (1) 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) The Owner shall submit to the District Manager by no later than April 15, 2016, with copies to the Parties, a revised Environmental Monitoring Plan ("EMP"). The revised EMP shall implement all of the provisions of the Interim Environmental Monitoring Plan Revision No. 04, prepared by WESA, dated August 2015, ("Interim EMP") subject to the following modifications ordered by the Tribunal:
 - i. The Interim EMP shall be further modified to implement continuous conductivity monitoring on Marysville Creek for one (1) year, commencing May 1, 2016, with continuous conductivity loggers placed at: an appropriate location on the Creek, far enough upstream of Deseronto Road to ensure no interference from road salt; and a second location upstream of the landfill to detect background influences. The results of the continuous conductivity monitoring shall be reported in conjunction with the January and July 2017 Semi-annual reports.
 - ii. The Interim EMP shall be further modified to state that the need for additional nested monitoring wells in the area of Marysville Creek and the landfill shall be assessed should 1,4-dioxane or another listed parameter be detected.
 - iii. The Interim EMP shall be further modified to require that the domestic and agricultural wells at properties located south of Highway 401 on County Road 1 West and Belleville Road, at the addresses noted in the row entitled "Off-site Domestic Wells", Table 2, page 11 of the August 2015 Interim EMP, should be tested for 1,4-dioxane every two (2) years

for at least the next six (6) years, or until the extent of the leachate contaminated groundwater is declined if that takes longer than six (6) years, and then every five (5) years once the delineation is complete.

- iv. The Interim EMP shall be further modified to require that confirmation resampling (Step 2 under the groundwater evaluation methods and trigger mechanisms set out in Section 7.1 of the proposed revised EMP) is to occur at the same time as a water quality conformance assessment (Step 1).
 - v. The Interim EMP shall be further modified to set a Reasonable Use Limit (RUL) for 1,4-dioxane at 1 µg/L. Should Ontario amend O. Reg 169/03 to set an Ontario Drinking Water Quality Standard for 1,4-dioxane, the RUL shall be re-calculated in accordance with procedure document B-7-1, and the Interim EMP shall be amended as necessary to reflect the re-calculated RUL.
- (b) The Owner shall carry out monitoring in accordance with the revised EMP submitted by April 15, 2016 as of April 16, 2016.
- (c) The Owner shall submit a report to all the Parties and the District Manager by April 15, 2016 detailing any relevant work carried out relating to the delineation of off-site leachate impacted groundwater or surface water not otherwise described in the January 15, 2016 report submitted further to items 8.5(c) i. to iii. set out in the Tribunal's Order dated July 21, 2015 as amended on October 29, 2015 [the provisions of which are set out in Appendix A], detailing any relevant additional work carried out during this time period, and providing an assessment with necessary supporting rationale as to whether the off-site leachate impacted groundwater has been delineated. The assessment shall be conducted in accordance with the following criteria:

The extent of leachate impacted groundwater shall be delineated if it is demonstrated that groundwater quality within a sufficient number of monitoring wells at the outer extent of the impacted area that are hydraulically connected to the defined area of leachate impacted groundwater does not exceed:

- i. the reasonable use limit ("RUL") for 1,4-dioxane;
 - ii. any RUL as defined in Guideline B-7 and its corresponding procedure, B-7-1 unless the exceedance is identified as not originating from the leachate from the landfill; or
 - iii. any RUL set out in this approval for other parameters unless the exceedance is identified as not originating from the leachate from the landfill.
- (d) The following process shall be followed with respect to the report submitted under 8.5(c):
- i. CCCTE, the MBQ and NGL shall have until June 1, 2016 to provide written comments on the report to the Owner and the District Manager and specifically whether delineation has been completed in accordance with the criteria.

- ii. After receiving the written comments from CCCTE, the MBQ and NGL, the District Manager will convene a meeting among all the Parties to obtain further input and attempt to reach a consensus on whether delineation has been completed.
- iii. By no later than July 31, 2016, the District Manager shall issue a written notice to the Owner and copying the Parties indicating whether delineation has been completed in accordance with the criteria.
- iv. If it has been determined by the District Manager that delineation has not been completed, the Owner shall submit another proposal for additional groundwater investigation that shall be considered in accordance with steps i. through iii. with timelines modified by the District Manager accordingly.
- v. The procedures or deadlines set out in steps i. through iv. can be altered with the consent of all the Parties.

- (e) Within 90 days of the District Manager providing written notice to the Owner that delineation has been completed, the Owner shall submit to the Director, Environmental Permissions Branch, Ministry of the Environment, Conservation and Parks an application for approval to amend the ECA to address any non-compliance with Condition 8.8 and Guideline B-7, including if warranted an application to incorporate a contaminant attenuation zone into the approval, and including a proposed updated EMP. The application to amend the ECA shall be treated as a standard application and be posted on the EBR Registry for public comment. The application shall outline the options that were considered for bringing the Site into compliance with Guideline B-7 and the rationale for the preferred option, and include all necessary supporting documentation.

8.6 The Owner shall ensure that a comprehensive investigation of the hydrogeological implications and potential impacts of an existing pipeline which runs across the northern part of the neighbouring properties to the south of the Site is conducted and a report outlining the findings is submitted to the District Manager and the Parties.

- 8.7 (a) The Owner shall conduct odour monitoring and undertake abatement activities as described in the Odour Monitoring Plan dated June 2016, set out as Item 67 in Schedule "A".
- (b) In the event of odours that are three (3) intensity units (based on the scale provided on Table 3.1 of the Odour Monitoring Plan) or greater are detected at an offsite receptor over a period outlined in Section 3.3.1.2 of the Odour Monitoring Plan, and the landfill mound is confirmed to be the source of the odour, repairs shall be made to the landfill mound as soon as possible. Upon completion of repairs, a surface emission survey shall be carried out to demonstrate that total hydrocarbon vapours, expressed as methane, do not exceed 500 parts per million per each grid dimension.

Compliance Criteria

- 8.8 The Site shall be operated in such a way to ensure compliance with the MECP'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.
- 8.9 For the purpose of Condition 8.8, a reasonable use limit of 1 µg/L shall be used for the parameter 1,4-dioxane unless an Ontario Drinking Water Quality Standard is established in O. Reg. 169/03 in which case the RUL for 1,4-dioxane shall be recalculated in accordance with the B-7-1 Procedure Document and the interim EMP or EMP, as the case may be, shall be amended as necessary to reflect the recalculated RUL.
- 8.10 Notwithstanding Condition 8.8, if a contaminant attenuation zone ("CAZ") is established, the Site shall be operated in such a way to ensure compliance with MECP's Guideline B-7 Reasonable Use Concept at
- i. monitoring wells that act as groundwater compliance points within the CAZ; or
 - ii. along the boundary of the CAZ where it replaces the property line,
- unless the non-compliance is identified as not originating from the leachate from the landfill.
- 8.11 Any off site exceedance 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.
- 8.12 Any monitoring result that detects 1,4-dioxane at or above the detection limit of 1 µg/l at any groundwater well or domestic well at which 1,4-dioxane has not been detected in the past or at any surface water monitoring location shall be reported to the District Manager within 48 hours of determination of the exceedance.
- 8.13 Unless otherwise agreed to in writing by the residents of the residences listed below, unless the residence is vacant and likely to remain vacant, the Owner shall provide whole house replacement water supplies for the residences located at 1264, 1252, 1250, 1206, 1181, and 1144 Beechwood Road.

9.0 CONTINGENCY PLANS

Groundwater and Surface Water Impact Contingency Plan

- 9.1 (a) The Owner shall initiate the contingency plans outlines in section 7.4 of the revised EMP referenced in Condition 8.5(a), or as replaced with an updated version, when any of the identified trigger mechanisms occur.
- (b) Notwithstanding Condition 9.1(a), the Owner shall not use fracture trench as a Leachate

Collection System contingency measure.

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.
- 9.4
- (1) By June 30, 2021, the Owner shall submit a Spill Contingency Plan to the District Manager. The Spill Contingency Plan shall be prepared in accordance with Ontario Regulation 224/07 and should include procedures to prevent and mitigate accidental leachate discharge to the environment.
 - (2) The Spill Contingency Plan shall be readily accessible to any Operators on Site, and shall be kept up to date by the Owner.

Landfill Gas Contingency Plan

- 9.5
- 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

- 9.6
- (a) The Owner shall provide notice to interested persons and follow the procedures set out in

the Public Notification Plan dated November 2020 set out as Item 73 in Schedule "A" upon the occurrence of any event that triggers notice to be given as set out in the Plan.

- (b) Should the Owner wish to amend the Public Notification Plan, the Owner shall submit a request for amendment, with supporting documents, to the District Manager, for approval. The request should also include a list of interested persons that were consulted on the proposed amendments and a summary of their comments.

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 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.
- 10.4 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 Owner shall provide for the administrative costs of operating the PLC, including the cost of meeting places and clerical services.
- 10.6 The PLC meetings shall take place on a semi-annual basis.
- 10.7 Minutes and agendas of meetings shall be prepared and distributed on a timely basis.
- 10.8 The Owner shall provide the PLC with reasonable access to the Site , as well as the Owner's consultants as required and consultants reports in accordance with protocols agreed to between the Owner and the PLC.
- 10.9 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 .
- 10.10 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.
- 10.11 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 MECP by a Condition of this ECA.
- 10.12 The Owner, with approval from the District Manager, may dispense with the PLC after January 1, 2022 if there is no interest from the public in continuing with it.

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 the 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 MECP Spills Action Centre (1-800-268-6060) and the District Office of the MECP.
- 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 (1) 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 The Owner shall ensure a sign with the following information is present at the front gate of the Site:
- 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.
- 13.2 (1) 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 within 48 hours of detection. Leachate seeps shall be repaired within 7 days of detection. Upon approval from the Director, the frequency for inspecting for leachate seeps may be reduced to quarterly.

- (2) Once the leachate management system in accordance with Items 69 and 70 of Schedule "A" is in operation, inspection frequency for leachate seeps and signs of illegal dumping of waste can be reduced to once a month.
- 13.3 (1) During the post-closure period, the Owner shall inspect the Site monthly for the following (but not limited to) items:
- a. General settlement areas or depressions on the waste mound;
 - b. Shear and tension cracks on the waste mound;
 - c. Condition of the surface water drainage works;
 - d. Erosion and sedimentation in surface water drainage system;
 - e. Presence of any ponded water on the waste mound;
 - f. Adequacy of cover material;
 - g. Evidence of vegetative stress, distressed poplars, or sideslope plantings on or adjacent to the waste mound;
 - h. Condition of groundwater monitoring wells and gas wells;
 - i. Presence of insects, vermin, rodents, and scavenging animals on or adjacent to the waste mound;
 - j. Condition of fence surrounding the Site; and
 - k. General Site appearance.
- (2) During the post-closure period, the following features shall 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.
- 13.4 Any deficiencies noted in the above items shall be repaired within one (1) month time of notice.
- 13.5 Upon Site closure, grass on the berms and the top of the landfill shall be cut a minimum of once per per year.
- 13.6 The ditches and culverts surrounding the Site shall be inspected on an annual basis and cleaned as required until the end of the contaminating lifespan.
- 13.7 (1) The leachate collection system shall be camera inspected every five (5) years after 10 years of Site closure, with cleaning as required; and
- (2) Changes to the maintenance schedule for the leachate collection system shall be approved

by the District Manager.

13.8 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:

- a. The results in tabular form and an interpretive analysis of the results from the leachate, groundwater, surface water, and landfill gas monitoring programs approved by this ECA, including:
 - i. an assessment of the need to amend the monitoring programs;
 - ii. an evaluation of any observations of saline upwelling in the groundwater;
 - iii. an estimation of the leachate generated at the Site;
 - iv. an evaluation of leachate quality, levels, and mounding within the landfill;
 - v. figure(s) showing the landfill site and contaminant attenuation zone;
 - vi. maps or figures showing groundwater concentrations of alkalinity, tritium, 1-4 dioxane, and ammonia in the shallow and intermediate aquifers;
 - vii. figure(s) showing the off-site properties suspected or confirmed of being impacted by leachate from the landfill;
 - viii. a complete inventory of the groundwater monitoring well locations;
 - ix. detailed analysis on groundwater quality trends on downgradient groundwater wells which have been impacted or are suspected of being impacted by leachate from the landfill.
- b. 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;
- c. A report on the status of any monitoring wells required to be tested pursuant to the EMP and a statement as whether those wells are in compliance with Ontario Regulation 903;
- d. 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.

- e. All surface and groundwater analytical results reported in future Semi-Annual and Annual Monitoring Reports shall be reported by groups of substances (i.e. VOCs, PAHs, inorganics, etc.) and by numeric location, and shall be posted by WMC on a publicly accessible website, with the data being posted on such website being updated annually.

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 District Manager, the PLC, the Town of Greater Napanee, the Township of Tyendinaga, the Mohawks of the Bay of Quinte, and a representative of the Concerned Citizens Committee of Tyendinaga and Environs 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. a summary of the inspection of the final cover and vegetative cover including identification of any seepages and remedial actions taken;
- iv. previously existing Site facilities;
- v. a summary of the quantity of any leachate or pre-treated leachate removed from the north and south pumping stations at the Site during each operating month;
- vi. a discussion of the results of the toxicity testing of the landfill stormwater management ponds which includes potential impacts to the groundwater by the SWMP;
- vii. a summary of any complaints received, the responses made and corrective/remedial taken if required;
- viii. a summary of any seeps, upset conditions or emergency situations and or corrective/remedial actions taken
- ix. a discussion of any operational problems encountered at the Site and corrective action taken;
- x. 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;
- xi. a summary of the leachate collection system cleaning and inspection activities;
- xii. an update summary of the amount of financial assurance which has been provided to the Director;
- xiii. a statement of compliance with all conditions of this ECA and other relevant Ministry groundwater and surface water requirements;
- xiv. a confirmation that the Site inspection program as required by this ECA has been

- complied with by the Owner;
- xv. any changes in operations, equipment or procedures employed at the Site; and recommendations regarding any proposed changes in operations of the Site.

- 14.4 (a) In the event the District Manager requires additional information to be submitted to complete the District Office's assessment on whether or not the Site is in compliance, the District Manager shall provide written notification to the Owner at least sixty (60) days before the submission of the next Semi-Annual or Annual Report submission date on the type of additional information to be included in the report.
- (b) In the event the District Manager determines that the inclusion of information in either the annual or semi-annual report annual for which notification under 14.4(a) was provided is no longer warranted or needed for the Ministry's assessment of whether or not the Site is in compliance, the District Manager shall notify the Owner in writing of the information that is no longer required. The District Manager can later request the information be re-included in the report as per Condition 14.4 (a).

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 Application 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.

52. Letter report dated May 25, 2011 addressed to Mr. Tesfaye Gebrezghi, Ministry of the Environment from Mr. Jeff Armstrong, GENIVAR Inc. requesting an amendment to permit the approval of continued recyclables disposal at the Richmond Landfill Site. 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 May 25, 2011;
 - ii. Drawing No 8570713-MT1 entitled "Site Location Map" prepared by GENIVAR INC. and dated May 17, 2011; and
 - iii. Drawing No. 8670713-MT2 entitled "Site Plan Mini-transfer Station" prepared by GENIVAR Inc. and dated May 17, 2011.
53. Letter report dated May 25, 2011 addressed to Mr. Tesfaye Gebrezghi, Ministry of the Environment from Mr. Jeff Armstrong, GENIVAR Inc. requesting an amendment to Condition No. 35 which would allow the continue use of the mini-transfer station at the Richmond Landfill Site. 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 May 25, 2011;
 - ii. Development and Operations Report for a Waste Transfer Station prepared by GENIVAR Inc. (Project No. 081-12493-00) and dated May 2011
 - iii. Drawing No 8570713-MT1 entitled "Site Location Map" prepared by GENIVAR INC. and dated May 17, 2011; and
 - iv. Drawing No. 8670713-MT2 entitled "Site Plan Mini-transfer Station" prepared by GENIVAR Inc. and dated May 17, 2011.
54. Letter dated June 20, 2011 addressed to Mr. Reid Cleland, Waste Management of Canada Corporation from Mr. Dale Gable, Ministry of the Environment requesting additional information on the continued operation of the Waste and Recycling Drop-Off Facility.
55. Letter dated June 30, 2011 addressed to Mr. Dale Gable, Ministry of the Environment from Mr. Jeff Armstrong, GENIVAR Inc. providing additional information on the operations of the Waste and Recycling Drop-Off Facility. The information included the following:
- i. Development and Operations Report for a Waste Transfer Station prepared by GENIVAR Inc. (Project No. 081-12493-00) and dated June 2011.
56. Environmental Review Tribunal Order for Case No. 12-033 issued on April 26, 2013.
57. Report entitled "Richmond Sanitary Landfill Site- Odour Monitoring Plan - Revision No. 2" prepared by Waste Management of Canada Corporation.
58. Report entitled "Richmond Sanitary Landfill Site - Public Notification Plan - February 2013" prepared for WMCC by GENIVAR Inc. and dated February 2013.

59. Environmental Review Tribunal Order for Case No. 12-033 issued on July 21, 2015.
60. Environmental Review Tribunal Order for Case No. 12-033 issued on August 13, 2015.
61. Environmental Review Tribunal Order for Case No. 12-033 issued on October 29, 2015.
62. Environmental Compliance Approval Application dated June 10, 2014 signed by Reid Cleland, Waste Management of Canada Corporation.
63. Environmental Compliance Approval Application dated January 13, 2015 signed by Reid Cleland, Waste Management of Canada Corporation, and the supporting documentation including the Design Brief - Leachate Storage System Richmond Landfill Site dated January 2015 prepared by WSP Canada Inc.
64. Environmental Review Tribunal Order for Case No. 12-033 issued on December 24, 2015.
65. Email dated May 13, 2016 from Peter Brodzikowski, WSP Canada to Rick Li, Ministry of the Environment and Climate Change providing a response to the Ministry' review comments on the leachate storage system and the maintenance schedule.
66. Environmental Review Tribunal Order for Case No. 12-033 issued on April 14, 2016.
67. Report entitled "Odour Monitoring Plan - Revision No. 3 Richmond Sanitary Landfill Site" prepared for WMCC by WSP Canada and dated June 2016.
68. Environmental Compliance Approval Application dated January 14, 2020 signed by William McDonough, Waste Management of Canada Corporation, and the supporting documentation, for amending the ECA to remove irrelevant conditions and update conditions as necessary.
69. Environmental Compliance Approval Application dated April 15, 2020 signed by William McDonough, Waste Management of Canada Corporation, and the supporting documentation, for installation of a forcemain between pumping chamber PS2 and the leachate holding lagoon.
70. Environmental Compliance Approval Application dated April 30, 2020 signed by William McDonough, Waste Management of Canada Corporation, and the supporting documentation regarding modifications to the leachate storage system.
71. Letter dated October 8, 2020 addressed to Rick Li, Ministry of the Environment, Conservation and Parks from WSP providing a response to MECP's review comments on the above three applications (Items 68, 69 and 70).
72. Email dated November 11, 2020 to Rick Li, MECP from Bev Leno, WSP RE: *WM Richmond Landfill Site ECA No. A371203 - Response to MECP Comments re Three Applications with Reference Nos. 4645-BKVS9Y, 9759-BNQQC6, and 9778-BP7HQJN.*

73. Report entitled "Richmond Sanitary Landfill Site Public Notification Plan – November 2020", prepared by Waste Management of Canada Corporation and dated November 2020.

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, and 8.8 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, and 2.8 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 reasons for Conditions 3.1, 3.2 and 3.3 are to ensure the Owner operates the Site in an environmentally safe manner. This is to ensure the environment and public health are protected.*

10. *The reason for Condition 3.4 is to establish a closure date for the Site.*
11. *The reasons for Condition 3.5 is to specify the total Site capacity approved under this ECA, based on the Owner's application and supporting documentation.*
12. *The reasons for Condition 3.6 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.*
13. *The reason for Condition 3.7 is to ensure the on-site roads are well maintained to provide access to the site operation and maintenance works.*
14. *The reason for Conditions 3.8 and 3.10 is to ensure that nuisance such as odour, litter, and dust are minimized during landfilling.*
15. *The reasons for Condition 3.9 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 3.11 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 4.1 is to ensure proper closure of the landfill Site by 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 Condition 4.2 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 4.3 and 4.4 is to approve the proposed leachate storage system for improvement to the leachate handling and trucking.*
20. *The reasons for Condition 4.5 is to ensure leachate collected from the Site is transported off-site for treatment in time, and the water level of the leachate storage system is controlled to prevent overflow and spills.*
21. *The reason for Condition 4.6 is to approve the construction of forcemain between the north pumping chamber and holding lagoon to provide emergency storage capacity for leachate in case the leachate storage system is full.*
22. *The reason for Conditions 4.7 to 4.9 is to approve the phytoremediation system and ensure it is properly operated, maintained and monitored.*

23. *The reason for Condition 4.10 is to ensure surface water at the site is not impacted by landfill operations. This is to ensure the environment and public health are protected.*
24. *The reason for Condition 5.1 is to approve the continued operation of the Waste and Recycling Drop-Off Facility as per the submitted information.*
25. *The reason for Conditions 5.2, 5.3, 5.4 and 5.7 is to ensure the type of waste, the quantity of waste service and removal frequency are clearly identified.*
26. *The reasons for Condition 5.5 and 5.6 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*
27. *The reasons for Conditions 5.8 through 5.13 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.*
28. *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.*
29. *The reasons for Conditions 7.1, 7.2 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.10, 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.*
30. *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.*
31. *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.*
32. *The reason for Condition 8.6 is to ensure that the existing pipeline at south of the Site does not pose an impact on neighbouring properties.*
33. *The reason for Condition 8.7 is to ensure the odour from the Site does not result in adverse effect to the surrounding environment.*
34. *The reason for Condition 8.8 is to ensure the groundwater quality at the Site boundary complies with applicable MECP standards and does not pose an impact to the*

environment.

35. *The reason for Conditions 8.9, 8.10, 8.13 and 9.1 is to incorporate the Environmental Review Tribunal Order dated April 14, 2016.*
36. *The reason for Conditions 8.11 and 8.12 is to incorporate the interim orders issued by the Environmental Review Tribunal on July 21, 2015 and August 13, 2015.*
37. *The reason for Conditions 9.2, 9.3, 9.4, 9.5, 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 unexpected but possible problems at the Site. A remedial action / contingency plan is necessary to ensure protection of the natural environment.*
38. *The reasons for Condition 9.6 are to ensure there is a public notification plan in the event that any contingency plan is activated or engaged, and to reflect the interim order issued by the ERT on April 26, 2013.*
39. *The reason for Conditions 10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7, 10.8, 10.9, 10.10, 10.11, and 10.12 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.*
40. *The reasons for Conditions 12.1 and 12.2 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.*
41. *The reason for Condition 12.3 is to ensure the Emergency Response Manual is updated regularly.*
42. *The reasons for Condition 12.4 are to guarantee that appropriate measures are taken by the Owner to prevent future occurrences of spills or fires at the site and to protect public health and safety and the environment.*
43. *The reasons for Conditions 13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7, and 13.8 are to ensure that final closure of the Site is completed in accordance with Ministry requirements, an aesthetically pleasing manner and to ensure the long-term protection of the natural environment.*
44. *Conditions 14.1 and 14.4 is included in the ECA to reflect the interim order issued by the ERT on April 26, 2013.*
45. *The reasons for Conditions 14.2 and 14.3 are to reflect the interim order issued by the ERT on April 26, 2013, and 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.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). A371203 issued on March 20, 1988

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

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

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:

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

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

This Notice must be served upon:

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

AND

The Minister of the Environment,
Conservation and Parks
777 Bay Street, 5th Floor
Toronto, Ontario
M7A 2J3

AND

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

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

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 <https://ero.ontario.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 19th day of March, 2021



Mohsen Keyvani, P.Eng.

Director

appointed for the purposes of Part II.1 of the
Environmental Protection Act

RL/

c: District Manager, MECP Kingston - District
Peter Brodzikowski, P.Eng. , WSP Canada Inc.