Richmond Sanitary Landfill Site 081-12459-00 Monitoring Report No. 25 Part of Lots 1, 2, and 3, Concession IV Township of Richmond County of Lennox and Addington

Prepared for: Waste Management of Canada Corporation 1271 Beechwood Road NAPANEE, ON K7R 3L1

Prepared by: GENIVAR Inc. 1450 First Avenue West, Suite 101 Owen Sound, Ontario N4K 6W2

Project No. 081-12459-00 (8570)



081-12459-00 (8570)

March 22, 2012

Mr. Randy Harris, Landfill Manager, Waste Management of Canada Corporation 1271 Beechwood Road RR#6 Napanee, ON K7R 3L1

Re: Waste Management of Canada Corporation - Richmond Landfill Site Annual Monitoring Report #25

Dear Randy:

We are pleased to provide Monitoring Report #25 in accordance with the conditions of Environmental Compliance Approval No A371203, and Environmental Compliance Approval No. 1688-8HZNJG. It should be noted that reporting for the site was completed in compliance with Certificate of Approval (Waste) No. A371203 with amendments, and Certificate of Approval (Industrial Sewage Works) No. 5268-7E8LJW, as these approvals were in place for the 2011 calendar year.

Please find enclosed **nineteen (19) copies** for your distribution as you see fit. **Two (2) copies** should be provided to the Ministry of the Environment, retain **one (1) copy** for your records, and the remainder can be distributed as needed at the landfill. If you require additional copies, please let us know. Please note that an electronic version of this document has been provided to Reid Cleland and Wayne Jenken.

Please note that the Ministry of Environment's Monitoring and Screening Checklist form has been included in reports submitted by Water and Earth Science Associates (WESA) under separate cover.

We trust the enclosed is satisfactory. However, if you have any additional questions, please do not hesitate to contact the writer.

Very truly yours,

**GENIVAR Inc.** 

Jeff E. Armstrong, P.Eng. Designated Consulting Engineer Director, Solid Waste Management JEA/bdl Encl.

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- A.5 Environmental Compliance Approval No. 1688-8HZNJG, dated January 10, 2012
- A.6 Certificate of Approval for Industrial Sewage Works No. 5268-7E8LJW, dated August 19, 2008 (REVOKED)
- A.7 Certificate of Approval (Industrial Sewage) No. 4-0129-64-956 (Oil/Sediment Interceptor)
- A.8 Certificate of Approval No. A710003 (Soil Recycling)
- A.8.1 Amendment to Certificate of Approval No. A710003 dated August 25, 1999, Regarding Notification of Change of Name
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# 1.0 Introduction

Waste Management of Canada Corporation's (WM) Richmond Landfill site is located within Part of Lots 1, 2, and 3, Concession IV, Former Township of Richmond, now the Town of Greater Napanee. The landfill site consists of a 16.2 hectare waste disposal landfill site within a total site area of 138 hectares, and operates under Environmental Compliance Approval (formerly Certificate of Approval No. A371203, including amendments.

This monitoring report for the Richmond Landfill site is prepared to comply with conditions listed in Environmental Compliance Approval No. A371203, and Environmental Compliance Approval (Sewage Works) No. 1688-8HZNJG. This report was prepared following a field survey on November 16, 2011, site inspections, and discussions with management.

In 2011, the Richmond Landfill operated under Certificate of Approval (Waste) No. A371203, dated March 30, 1988, and Certificate of Approval (Industrial Sewage Works) No. 5268-7E8LJW dated August 19, 2008. On January 9 and 10, 2012, the Ministry of Environment (MOE) issued Environmental Compliance Approvals (ECAs) for the site, which revoked and replaced the previous Certificate of Approvals (C of As) for waste and sewage works. While annual reporting requirements under both ECAs remain predominantly the same as the previous C of As, aside from condition reference numbers, several changes are present under the sewage works ECA, namely, the approval to allow the valves at the stormwater ponds to be operated in a normally open position, and the removal of sampling requirements prior to each discharge event. As a result of the new approvals in place, this annual monitoring report has been written to comply with the following conditions:

- Conditions 14.2 and 14.3 (i through xxiii) of ECA No. A371203; and
- Conditions 10(4) (a), (b), (c), (d), (e), (f), (g) and (h) of C of A (Sewage Works) No. 5268-7E8LJW;
   and ECA No. 1688-8HZNJG

A copy of ECA No. A371203 in included in **Appendix A.1** of this report, with the previous C of A No. A371203 and amendments provided in **Appendix A.2**. The amendments issued during the reporting year, dated May 2, 2011 and August 19, 2011, contained the following updates:

## May 2, 2011 Amendment (Appendix A.2.14)

Imposed Conditions 140, 141, and 142. This amendment approved the construction and operation of the phytoremediation system located in the northwest corner of the landfill site, and imposed new monitoring and reporting conditions pertaining to the phytoremediation system.

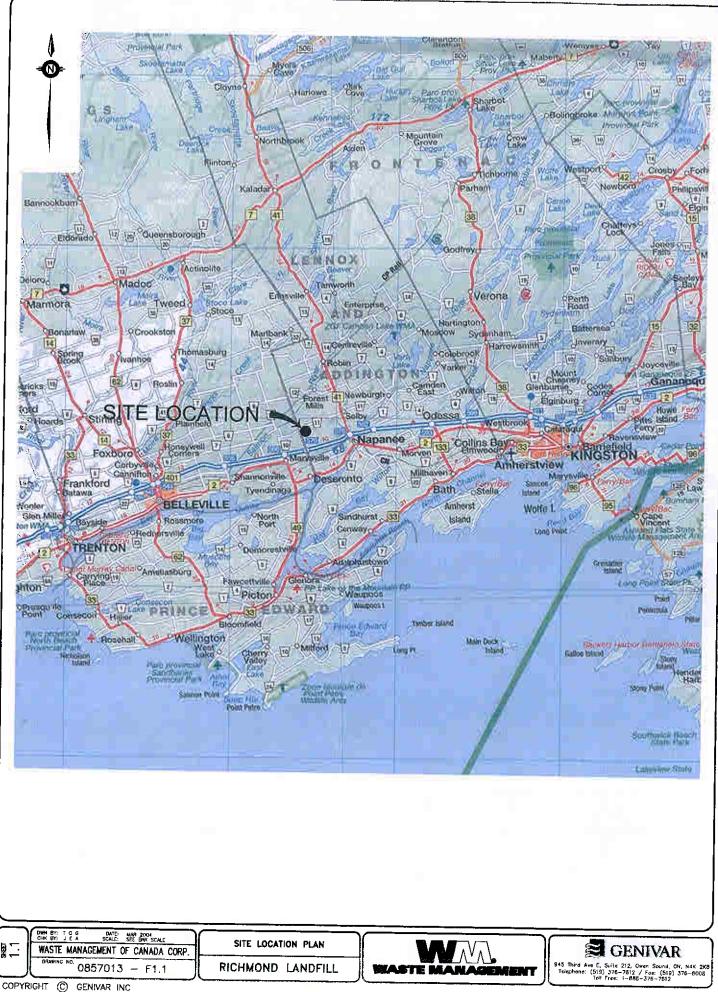
## August 19, 2011 Amendment (Appendix A.2.15)

Amended Condition 35 (ii). This amendment extended the completion timeline for installation of the final cover system on Phases II, III, IV, and V from August 31, 2011 to September 30, 2011.

The following other Certificates of Approval and Environmental Compliance Approvals concerning the site are included in **Appendix A**:

- Certificate of Approval (Sewage) No. 3-1720-90-916 (Leachate Treatment and Disposal by Spray Irrigation) dated September 4, 1991 (Appendix A.3). In March 2011, WM submitted an application to revoke this C of A, since the leachate spray irrigation system is no longer permitted under C of A No. A371203. The Ministry of Environment (MOE) granted approval to revoke this C of A in April 2011 (Appendix A.3.2).
- Certificate of Approval (Air) No. 8-4028-92-006 (Spray Irrigation System) dated March 11, 1992 (Appendix A.4). In February 2011, WM submitted a letter requesting the MOE to revoke this C of A, since the leachate spray irrigation system is no longer permitted under C of A No. A371203. The MOE granted approval to revoke the C of A in March 2011 (Appendix A.4.2).
- Environmental Compliance Approval No. 1688-8HZNJG dated January 10, 2012, can be found in Appendix A.5. This document outlines the new requirements for the operation, maintenance, monitoring, and reporting of the leachate and stormwater management systems. The previous Certificate of Approval No. 5268-7E8LJW dated August 19, 2008, is located in Appendix A.6.
- Certificate of Approval (Industrial Sewage Works) No. 4-0129-64-956 dated January 24, 1995 is located in Appendix A.7. This approval governs the operation of the oil/sediment interceptor at the contaminated soil pad.
- Certificate of Approval for a Waste Disposal Site No. A710003 (Soil Recycling) dated December 20, 1993 (Appendix A.8), and
- Certificate of Approval (Air) No. 1355-5LRN9N (Landfill Gas Collection and Flaring System) dated May 8, 2003 (Appendix A.9).

The site location can be seen in the following **Figure 1.1**.



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Richmond Landfill – Monitoring Report No. 25 Waste Management of Canada Corporation March 2012

# 2.0 Previously Submitted Reports

Several reports have been completed and filed with the MOE in compliance with requirements of the conditions of the Provisional C of A. Those prepared by GENIVAR Inc. (formerly Henderson Paddon and Associates Limited.) are as follows:

#### Monitoring Report No. 1, March 1988

1987 Annual Monitoring - Complying with Conditions 10(b), 10(c), and 10(e) of the C of A dated August 11, 1987.

#### Final Design Report, September 1988

Complying with Conditions 2(a) and 11(a) of the C of A dated August 11, 1987, (Condition 2(a) and 10(a) of the C of A dated March 30, 1988).

# Application for the Approval of Sewage Works for the Leachate Collection and Treatment Facilities, October 1988

#### Monitoring Report No. 2 to 23

1988 to 2009 Annual Monitoring Reports - Complying with Conditions 9(b), 9(c), 9(e), and 9(f) of C of A No. A371203 dated March 30, 1988, Condition 12 (3) of C of A No. 3-0975-90-916 dated October 21, 1991 (Monitoring Reports No. 5 through 22), and Conditions 10 (4) (a), (b), (c), (d), (e), (f), (g), and (h) of C of A No. 5268-7E8LJW, dated August 19, 2008 (Monitoring Reports 22 and 23).

#### Clay Liner – Design Construction and Testing, October 1989

Complying with Condition 2(b) of the C of A dated March 30, 1988.

#### Condition No. 7 Report, December 1991

This report was prepared and filed on December 31, 1991 by Laidlaw in connection with requirements of Certificate of Approval (Sewage) No. 31720-90-916.

#### Condition No. 29 Report, December 1991

This report was prepared and filed on December 31, 1991 by Laidlaw in connection with requirements of Certificate of Approval No. 19-371203 dated September 4, 1991.

#### **Development & Operations Report**

Report dated March 1996, to comply with Condition 2(a) of the C of A and as requested in the Amendment to the C of A on August 1, 1995.

#### Final Closure Plan

Final Closure Plan dated June 2007, was submitted to satisfy Condition 34 of the C of A that required a detailed closure plan pertaining to the termination of the landfill site, post closure inspection, maintenance and monitoring, and end use.

# Construction Quality Assurance/Construction Quality Control (CQA/CQC) Plan for the Final Cover System

CQA/CQC Plan dated June 25, 2010, to comply with Condition 6(b) of the amended C of A issued March 31, 2010.

#### Odour Monitoring Plan

Submitted June 25, 2010 as part of the Environmental Monitoring Plan (EMP) prepared by WESA, to satisfy Condition 8(d) of the amended C of A issued March 31, 2010.

#### Financial Assurance Update

Revised Financial Assurance Plan dated June 25, 2010, to satisfy Condition 19 of the amended C of A issued March 31, 2010.

#### **Operations and Procedures Manual**

Updated Operations and Procedures Manual, dated June 25, 2010, to satisfy Condition 66 of the amended C of A issued March 31, 2010.

#### Leachate Collection System Contingency Plan

Dated June 25, 2010, to satisfy Condition 84 of the amended C of A issued March 31, 2010.

#### Landfill Gas Collection System Contingency Plan

Dated June 25, 2010, to satisfy Condition 88 of the amended C of A issued March 31, 2010.

#### Design of Low Permeability Surface and Low Permeability Liner for Compost Pad and Pond

Dated June 25, 2010, to satisfy Conditions 138 and 139 of the amended C of A issued March 31, 2010.

#### Monitoring Report No. 24

2010 Annual Monitoring Report - Complying with Conditions 9(b), 9(c), 9(e), and 9(f) of C of A No. A371203 dated March 30, 1988 (as amended), Conditions 9a and 9b (i through xxv) of Notice 5 to amend C of A No. A371203 dated March 31, 2010, and Conditions 10(4) (a through h) of C of A No. 5268-7E8LJW dated August 19, 2008.

# 3.0 Reporting Requirements – Environmental Compliance Approval A371203

# 3.1 Assessment of Engineered Facilities, Design and Operation of the Site, and Adequacy of, and Need to, Implement Contingency Plans

Condition 14.3 i of the ECA requires an assessment of the operation and performance of all engineered facilities. The following describes the facilities reviewed and the assessment completed.

## 3.1.1 Landfill Mass

The existing landfill mass was reviewed for slope stability, areas of settlement, integrity of the final cover, vegetation, leachate and gas seeps, and areas requiring remediation. The landfill slopes are regularly reviewed by WM, and were inspected in the past year by GENIVAR. No areas were discovered with slope instability, and settlement is still occurring mainly in the higher elevations of the landfill. The landfill final cover was inspected, and leachate seeps were repaired as found, and a surface emission survey was used to locate weak areas on the final cap. On June 30, 2011, the Richmond Landfill ceased to accept waste for final disposal. By late September 2011, final cover material was placed on the remaining uncapped portions of Phases II, III, IV, and V. Vegetation of the final cap was reviewed and is becoming established. We conclude that no remedial work is required on the landfill mass.

#### 3.1.2 Leachate Collection System

The existing leachate collection system and pump stations were reviewed to determine if they are operating as designed, and if any remedial work is required. WM staff regularly reviews the operation of the leachate system, and completes repairs as required. It is understood that leachate is being collected from the system, and no blockages are present. High-level alarms were installed in the north chamber, and replaced in the south pump station, in 2010. No remedial work is required on this system.

#### 3.1.3 Gas Collection System

The existing gas collection system is regularly monitored by WM, to ensure that landfill gas is being collected and destroyed in the flare system. Three (3) new gas extraction wells were installed during 2011. The gas system is operating as required, and no additional remedial work is recommended at this time.

#### 3.1.4 Stormwater Management System

Three stormwater sedimentation ponds collect stormwater runoff from the landfill site, and remove sediment prior to discharge. Ponds are regularly inspected by WM staff, to monitor water levels, and to determine when discharge is required. The ponds in the northwest and northeast corners of the site had no issues this year, and require no remedial work. The pond in the south was recently reconstructed, and

no issues this year, and require no remedial work. The south pond required remedial work on the discharge outlet structure pertaining to the Provincial Officer's Order issued in January 2011 (see **Section 3.9**), but otherwise no further remedial work is required on this pond.

## 3.1.5 Site Access and Roads

The site entrance and roads were inspected by GENIVAR during the annual site inspection, and no problems were identified.

## 3.1.6 Leachate Holding Lagoon

The leachate holding lagoon was inspected, and was found to be in acceptable condition. The lagoon was decommissioned by WM in 2010, and will remain dry. The lagoon remains in place as a contingency for leachate storage.

## 3.1.7 Conclusions

After a review of the engineered facilities at the site, it was concluded that there is currently no need to amend the design, or adjust the operation of the Richmond Landfill site.

Since all engineering works are performing as designed, and no monitoring indicates that contingency plans should be implemented, it is our conclusion that at this time, there is no need to implement the contingency plans.

# 3.2 Leachate Collection System Efficiency

Condition 14.3 ii of the ECA requires an assessment of the efficiency of the leachate collection system.

A review of the leachate volume removed from the landfill site was determined to be of a reasonable volume to conclude that the leachate collection system is continuing to operate effectively. WM regularly inspects the infrastructure, and has determined that there are no blockages in the system.

# 3.3 Existing Site Conditions

Condition 14.3 iii of the ECA requires WM to provide plans showing the existing contours of the site.

GENIVAR completed a GPS survey on November 16, 2011 for as built purposes. The information was then incorporated into an existing conditions drawing labelled **0857013-2011**, which is contained in **Appendix B** of this report.

# 3.4 2011 Landfill Operations Area

Condition 14.3 iv of the ECA requires information regarding the areas of landfilling operations during the reporting period.

In 2011, landfilling operations concluded in the upper portions of the landfill site, with waste being placed in the upper east end of the landfill mass, and in the location of the former haul road located on the south central slope. Prior to landfilling in the area of the old access road, the gravel subgrade was removed to prevent any leachate flow paths in the granular material. On June 30, 2011, the Richmond Landfill ceased to accept waste in accordance with Condition 35 of the previous C of A (Condition 4.4 of the ECA), and landfilling operations ended at this time.

During the time of landfill operations in 2011, waste was hauled to the active area by an off road haul truck, since access to the active landfill face was restricted by the removal of the old access road. Waste brought to the site by garbage trucks was dumped in a receiving area at the toe of the landfill, within the footprint, and then loaded into WM's off road truck to be deposited at the active face. In late June 2011, the receiving area was removed, and the landfill slope was regraded and capped.

Landfilling tonnage was less than the approved annual limit again in 2011 due to the decreasing air space remaining at the landfill site, the need for WM to service the local customers, and because the site only accepted waste for the first six months of the year. Hydrocarbon-impacted soil received at the landfill site was temporarily stockpiled on the contaminated soil pad to the south of the landfill site. The material was used as daily cover in landfilling operations as required, and to fill the upper portions of the landfill site to final contours. Prior to June 30, 2011, all contaminated soil was removed from the soil pad and landfilled.

## 3.4.1 Equipment

During the first half of 2011, a D7R Caterpillar dozer was used to spread and compact waste material, and to spread daily cover. Other equipment on the site included:

- a Cat 235 excavator;
- a 1989 Pelican sweeper;
- a Case International farm tractor with a compost windrow turner and rotary mower;
- two (2) pick up trucks;
- a roll off truck
- two (2) Volvo rock trucks (one 25 tonne, one 40 tonne);
- a CAT 966 rubber-tire loader; and
- a Holder mower.

Upon completion of landfilling activities, several pieces of equipment were removed from the site however some equipment remains onsite to assist in performing regular maintenance activities. The list includes the following:

- a Caterpillar 966 front end loader;
- a Case International farm tractor with a rotary mower; and
- a 1989 Pelican sweeper.

If additional equipment was required for construction or other auxiliary uses, they were acquired from local contractors.

# 3.5 2012 Landfill Operations Area

Condition 14.3 v of the ECA requires information regarding the intended area of landfilling operations during the next reporting period.

Per Condition 4.4 of the ECA, the Richmond Landfill ceased to accept waste for landfilling after June 30, 2011. As a result, no further landfilling operations will occur at the site.

# 3.6 2011 Excavation Areas

Condition 14.3 vi of the ECA requires information regarding areas of excavation during the reporting period.

No borrow pit operations for cover material were undertaken in 2011, as a sufficient quantity of hydrocarbon-impacted soil or other soil material for daily cover requirements was stockpiled at the landfill site and/or received at the landfill gate.

A small quantity of material was removed from the southwest borrow area and used to fill the former compost pond located on the southwest corner of the site.

# 3.7 Cover Placement Progress

Condition 14.3 vii of the ECA requires information regarding the progress of final cover, vegetative cover, and any intermediate cover application.

In 2011, WM completed the placement of the final cover system on Phases II, III, IV, and V of the Richmond Landfill. The final cover, comprised of a minimum 900mm thick low permeability soil layer, and a minimum 150mm thick topsoil layer, and hydroseeding, was placed on an approximate 3.1 hectare area on the upper east central section of the landfill. The placement of the final cover was supervised by

GENIVAR to ensure compliance with the MOE approved Construction Quality Assurance/Construction Quality Control (CQA/CQC) Plan for the Final Cover System.

Due to inclement weather, the Phases II, III, IV, and V capping project was not completed by the August 31, 2011 deadline as listed under Condition 35 (ii) of the amended C of A. WM requested and received from the MOE a one month extension, to September 30, 2011. Work was completed on the final cover on September 23, 2011, and hydroseeding was applied at this time. The area will be inspected in 2012 to ensure vegetative cover has been well established, and will be re-seeded as needed.

With the completion of the Phases II through V cap project, the entire landfill mound has final cover in place.

# 3.8 **Previously Existing Site Facilities**

Condition 14.3 viii of the ECA requires information regarding previously existing site facilities.

## 3.8.1 Buildings and Signage

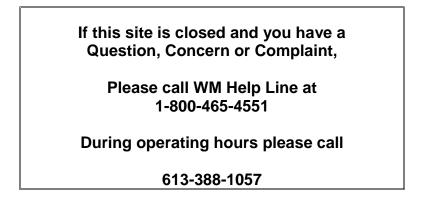
The landfill site office is located to the south of the landfill site on the main access road. The building houses management staff, secretarial and record services, communications equipment, weigh scale recording devices and operating staff facilities.

Landfill equipment is serviced in the existing maintenance building. Fuel storage is located in this area and a staff room for the landfill equipment operators is attached.

Signs are erected along the access road near Beechwood Road identify the landfill site. Prior to site closure, the main sign supplied the following information:



Additional signs on the site directed traffic to working faces and vehicles to the public drop off facility. The signs were considered satisfactory and informative to the landfill users. In compliance with the previous C of A, information directing residents with questions, concerns, or complaints to contact the Landfill Manager or WM Help Line, was added to the signage at the main gate, as shown below:



Site hours for the public were changed as of December 1, 2006 to Monday to Friday from 9am to 3pm, and closed Saturdays. The site was open the regular hours for commercial haulers. After June 30, 2011, regular hours of operation ended as the landfill is no longer permitted to receive waste for landfilling. The main sign was modified at this time to read as follows:



## 3.8.2 Staff

WM staff manages and operates the site. Mr. Randy Harris is the Landfill Manager. The site is managed by the Eastern Canada Market Area office with Mr. Reid Cleland being the Director of Disposal Operations - Ontario. From January through June 2011, other landfill staff consisted of two (2) full-time equipment operators, a mechanic/operator, office clerk/bookkeepers, a weigh scale gate attendant to oversee incoming waste traffic and volumes, and part-time staff, as required. Upon site closure on June 30, 2011, the staff was reduced to the following:

- One (1) full time landfill manager;
- One (1) full time operator who is responsible for site maintenance, gas field monitoring and repairs; and
- One (1) full time public relations and office person.

Other equipment operators are brought on the site for contract work as required for ongoing maintenance activities.

## 3.8.3 Tonnage Control

A truck weigh scale records net tonnages received at the site on a day-by-day basis.

In 1998, an 80' Active Mod-U-Dec pitless truck scale with a Toledo digital weight display and printer was connected to a computer for data management. Truck traffic is controlled from the office by traffic light signals and by an air phone intercom system as trucks approach the scale.

In 2004, electrical work was completed to allow the scale facility to be run by a generator in the event of power failure to the site. Standby power can be easily connected to the scale house facility to operate the necessities for the acceptance of waste vehicles.

Quarterly verification procedures are performed on the scale to ensure that weights are recorded correctly. Load cells have also been repaired as required.

#### 3.8.4 Soil Recycling Pad

A soil recycling pad is located to the east of the existing maintenance building and was used for temporary storage of hydrocarbon-impacted soil. Upon site closure on June 30, 2011, the Richmond Landfill ceased to accept waste, including contaminated soil, for final disposal. The pad was flushed and cleaned after soil use ended. Surface runoff from this pad is collected at an oil/sediment separator located at the south end of the pad. The oil and sediment captured by the separator is pumped out as required and trucked offsite by a licensed hauler.

## 3.8.5 Small Vehicle Transfer Area

The mini-transfer area continued to be used successfully in the first half of 2011. This area was used for small vehicles off loading waste, recyclables and compostable materials. This practice keeps small vehicles away from the working face and facilitates the transfer of material from the smaller vehicles into the roll-off bins.

In 2009, WM constructed a reuse centre where residents could donate and exchange reusable goods. This building is located in the public drop off area. WM also entered the Ontario Electronic Stewardship program and the Ontario Tire Stewardship program, and collected electronics, paint, single use batteries and tires for recycling offsite.

White goods, including scrap metal, were separated from the waste stream and temporarily stored on the site. WM removed these materials regularly for recycling.

In May 2011, WM applied to the MOE to amend the final closure plan, in order to continue the operation of the mini-transfer area. On June 30, 2011, the mini-transfer area ceased operation along with landfilling operations. It is anticipated that the mini-transfer area will resume operation in 2012, pending MOE approval.

## 3.8.6 Landfill Gas Collection and Flaring System

The landfill gas collection and flaring system was implemented for odour control at the Richmond Landfill in 2000. The construction of Phase I of the system was carried out in the years 2000/2001 with the installation of a 2.1 metre OD x 12.2 metre high enclosed flaring system, according to Certificate of Approval (C of A) (Air) No. 8-4076-99-006, issued by the MOE on December 21, 1999. In 2003, C of A (Air) No. 1355-6LRN9N was issued by the MOE, which revoked and replaced the previous C of A. Subsequent expansions and upgrades to the gas collection system have been made since the installation of the initial system in order to burn the landfill gas produced by the decomposing waste. WM reports that the present system collects gas from five (5) leachate clean-outs, two (2) leachate collection manholes and 43 vertical gas wells, of the 58 wells installed. The C of A permits 54 gas wells, 12 leachate manholes and 9 cleanouts.

Regular operation and maintenance of the landfill gas collection and flare system was completed in 2011. The landfill gas flare has been effective at reducing odour around the landfill site. In the rare occurrence of flare shutdown, operators, who are automatically notified by a paging system, attend the site to restart the flare or correct any alarm situations. The flare has operated successfully to date.

In late 2011, WM applied to the MOE to modify the C of A (Air) to permit the operation of a candlestick flare at the Richmond Landfill. The candlestick flare installation would address a contingency plan for the

landfill gas collection system, in that it would be operational only when the enclosed flare is shut down for maintenance or repair. A review of WM's application is currently being undertaken by the MOE.

## 3.8.7 Organic Waste Compost Facility Operation

WM operated the organic waste compost facility as part of its waste diversion initiative. Leaf and yard waste, wood, paper sludge from local paper mills, manure and biosolids were previously composted at this facility, although other wastes were accepted under the organic waste composting approval. No paper sludge or biosolids was used in 2011.

**Table 3.1** shows the amount of organic waste received during 2011.

## TABLE 3.1

#### 2011 Compost Quantities

Incoming Materials by Type			
Type Quantity (tonnes)			
Leaf and yard waste	120.52		
Sludge	0		
TOTAL	120.52		

This material was not processed, and was used as daily cover during landfilling operations. Upon site closure on June 30, 2011, organic waste is no longer accepted at the Richmond Landfill. As per a condition of the previous C of A and the new ECA, the compost pad and pond were decommissioned before September 30, 2011.

#### 3.8.8 Sedimentation Ponds

The three sedimentation ponds remained in place in 2011. Pond discharge was controlled and not permitted without prior testing and approval from MOE District staff. On January 9, 2012, the MOE issued ECA No. 1688-8HZNJG, which revoked and replaced the previous C of A for sewage works. The ECA allows WM to operate the discharge outlet valves on the sedimentation ponds in the open position, thereby permitting the ponds to operate in a free flowing state. Revised maintenance, monitoring, and reporting programs are also listed in the ECA.

## 3.9 Facilities Installed in 2011

Condition 14.3 ix of the ECA requires information about the installation of any facilities at the site during the reporting period.

In 2010, the control valve at the southwest sedimentation pond was inadvertently left in the open position by WM personnel, after completing a MOE approved discharge event. This resulted in approximately 4,134 cubic metres of untested water being discharged from the site. The MOE became aware of the incident, and on January 11, 2011, a Provincial Officer's Order (POO) was issued to the Richmond Landfill, requiring WM to complete several items in regards to improving the frequency of the inspection program on the discharge control system. In January and February 2011, the following alterations and modifications were undertaken by WM:

- Installation of a mechanical cap on the downgradient end of the discharge pipe from the discharge structure;
- Installation of a moisture sensor in the discharge structure discharge pipe between the downgradient end and the discharge control valve;
- Installation of a locking cap on the operating mechanism of the discharge control valve;
- Installation of a solar powered warning light and cell phone notification system activated by the moisture sensor system, and;
- Removal, cleaning, reinstallation, and testing of discharge control valve.

In March 2011, the POO was rescinded. Please refer to **Appendix C** for a copy of the POO, along with all correspondence between WM and the MOE in relation to the POO.

Also in 2011, the remaining portion of the final cover system was installed on the uncapped areas of Phases II, III, IV, and V, and a phytoremediation system was constructed on the northwest corner of the property. The purpose of the system is to make use of the natural ability of selected trees and shrubs to take up large amounts of shallow groundwater, effectively controlling the migration of low concentrations of dissolved constituents downgradient from the landfill.

# 3.10 Site Preparations and Facilities Installed in 2012

Condition 14.3 x of the ECA requires information regarding any site preparation or installation of facilities planned for the next reporting period.

It is anticipated that the mini-transfer area will resume operations at the Richmond Landfill in 2012, pending MOE approval.

# 3.11 Calculations

Condition 14.3 xi of the ECA requires calculations regarding 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.

On June 30, 2011, the Richmond Landfill ceased landfilling operations. The installation of the final cover system on the remaining uncapped portion of the landfill was completed in September 2011. The following quantities placed at the site during the reporting period are as follows:

# TABLE 3.2 2011 Landfill Quantities

Description	Quantity
Volume of waste placed – January 1, 2011 through June 30, 2011	38,492.31 tonnes
Estimated daily cover volume placed assuming 4:1 waste/cover ratio	9,623.08 tonnes
Volume of final cap placed – Phases II, III, IV, and V <sup>(1)</sup>	32,550 m <sup>3</sup>
Remaining air space	0

#### NOTES:

(1) Final landfill cap is constructed of 0.90 m of clayey material, and 0.15 m of topsoil.

Based on the November 2010 survey, a total of 44,100 m<sup>3</sup> of airspace was remaining at the site for waste and daily cover. By June 30, 2011, this airspace had been filled, and no additional waste was permitted to be landfilled.

# 3.12 Leachate Quantities

Condition 14.3 xii of the ECA requires a summary of the quantity of any leachate or pre-treated leachate removed from the site during each operating week.

In 2011, leachate continued to be hauled to Napanee for treatment. Loads are collected from the site, manifested and then discharged at the dumping facility located at Enviro Park Lane and West Street on the edge of the Town of Napanee. Leachate continues to be extracted at the landfill site at the lowest portions on Phases 2 and 4 and hauled as required for treatment off-site.

In the event that leachate cannot be hauled from the site due to conditions at the receiving plant, etc., leachate or leachate-impacted water will be stored in the leachate-holding lagoon located to the north of the site to contain leachate and to prevent spills. Once leachate treatment resumes at the receiving plant, this liquid is then hauled to the sewage treatment plant for treatment and disposal. This is a temporary measure and is outlined in the leachate management plan submitted to the MOE. In 2010, this pond was

dewatered, and allowed to drain freely in future rainfall events. In the event that this contingency is required in the future, the pond could be used again.

WM inspects the site each day for leachate seeps and problem areas in the final cap. If leachate seeps are encountered, they are promptly repaired to avoid any surface water contamination. Generally, leachate seeps are excavated and granular material and dry clay are replaced and packed. When cracks develop in other areas of the final cap and the potential for gas migration is present, the final cap is scarified or re-compacted and additional clay may be placed in the area to prevent gas migration. Through the continuous removal of leachate to the leachate treatment facilities and the extraction of landfill gas through the landfill gas collection and disposal system, the potential for leachate seeps and gas outbreaks are minimized and the potential for any off-site impact is reduced.

**Table 3.3**, located on the following page, details the weekly quantity of leachate removed from the Richmond Landfill. The volumes presented in the table were converted from the tonnage determined in the truck at the site scale, and converted using 1 tonne =  $1m^3$ .

## TABLE 3.3

#### 2011 Weekly Leachate Quantities

WEEK ENDING	TOTAL LEACHATE REMOVED - NAPANEE (m <sup>3</sup> )	WEEK ENDING	TOTAL LEACHATE REMOVED - NAPANEE (m <sup>3</sup> )
1/8/2011	289.72	7/16/2011	152.10
1/15/2011	271.49	7/23/2011	243.49
1/22/2011	232.61	7/30/2011	245.28
1/29/2011	236.83	8/6/2011	259.73
2/5/2011	175.70	8/13/2011	187.57
2/12/2011	211.94	8/20/2011	244.73
2/19/2011	298.08	8/27/2011	228.94
2/26/2011	288.53	9/3/2011	199.77
3/5/2011	304.58	9/10/2011	206.50
3/12/2011	499.47	9/17/2011	216.98
3/19/2011	569.15	9/24/2011	266.11
3/26/2011	564.77	10/1/2011	245.30
4/2/2011	802.65	10/8/2011	229.79
4/9/2011	731.24	10/15/2011	259.80
4/16/2011	786.50	10/22/2011	354.25
4/23/2011	289.34	10/29/2011	404.12
4/30/2011	737.16	11/5/2011	318.02
5/7/2011	786.64	11/12/2011	251.31
5/14/2011	497.96	11/19/2011	329.35
5/21/2011	508.18	11/26/2011	370.67
5/28/2011	470.12	12/3/2011	448.91
6/4/2011	474.23	12/10/2011	635.49
6/11/2011	401.33	12/17/2011	578.74
6/18/2011	311.90	12/24/2011	579.03
6/25/2011	223.50	12/31/2011	347.12
6/30/2011	149.84		
7/9/2011	169.72	TOTAL	19,086.28

# 3.13 Waste Tonnage Summaries

Condition 14.3 xiii of the ECA requires the weekly, maximum daily, and total annual quantity (tonnes) of waste received at the site.

**Tables 3.4** and **3.5** summarize weekly, monthly and total annual quantity of volumes in metric tonnes for the calendar year 2011. Weigh scale operators recorded the tonnages, as noted below and on the following page:

## TABLE 3.4

## 2011 Weekly Tonnage Totals

WEEK ENDING	TOTAL WASTE TONNAGE LANDFILLED (TONNES)	TOTAL CONTAMINATED SOIL RECEIVED (TONNES)	WEEK ENDING	TOTAL WASTE TONNAGE LANDFILLED (TONNES)	TOTAL CONTAMINATED SOIL RECEIVED (TONNES)
1/8/2011	297.81	544.65	4/9/2011	439.52	674.24
1/15/2011	414.68	3.51	4/16/2011	456.73	3,608.14
1/22/2011	296.24	0	4/23/2011	334.84	2,670.70
1/29/2011	277.60	176.66	4/30/2011	482.17	764.99
2/5/2011	162.04	174.14	5/7/2011	532.79	709.74
2/12/2011	285.12	36.58	5/14/2011	483.97	658.02
2/19/2011	346.52	352.67	5/21/2011	432.93	0
2/26/2011	284.94	0	5/28/2011	572.12	0
3/5/2011	305.30	0	6/4/2011	499.65	0
3/12/2011	308.91	585.70	6/11/2011	118.34	0
3/19/2011	327.12	152.87	6/18/2011	63.79	3,421.95
3/26/2011	479.70	54.78	6/25/2011	76.15	9,959.88
4/2/2011	420.05	775.64	6/30/2011	60.18	4,408.24
TOTAL	4,206.03	2,857.20	TOTAL	4,553.18	26,875.90

Total of Waste Received = 4,206.73 t + 4,555.18 t = 8,759.21 tonnes

Total of Contaminated Soil Received = 2,857.20 t + 26,875.90 t = 29,733.10 tonnes

#### **TABLE 3.5**

#### 2011 Monthly Tonnage Totals

MONTH	COMPOST DIVERTED FROM LANDFILL SITE (TONNES)	TOTAL WASTE TONNAGE LANDFILLED (TONNES)	TOTAL CONTAMINATED SOIL RECEIVED (TONNES)
January	4.09	1,319.31	724.82
February	4.29	1,080.06	563.39
March	6.45	1,709.59	1,535.46
April	103.36	1,810.33	7,751.60
May	1.76	2,281.00	1,367.76
June	0.57	558.92	17,790.07
TOTAL	120.52	8,759.21	29,733.10

NOTE: The site is licensed for 125,000 tonnes/year.

Total tonnage shown does not include recyclable material.

No waste or contaminated soil was disposed at the Richmond Landfill after June 30, 2011.

The 2011 waste tonnage landfilled outlined in **Table 3.5** was 8,759.21 tonnes of waste and 29,733.10 tonnes of soil, which was compiled from the monthly summary of wastes received. The licensed tonnage is 125,000 tonnes/year. Tonnages listed include non-hazardous impacted soil that was received at the site for disposal.

The maximum daily tonnage received was on June 21, 2011 and was 2,760.80 tonnes.

In addition, this year, WM diverted compostable material to the on-site composting program, and electronic waste (e-waste) to off-site recycling centers. Approximately 120.52 tonnes of compostable material was diverted from the landfill site, and 19.20 tonnes of e-waste was diverted. This is not included in the total tonnage received at the landfill site. Additional material was directed through on-site recycling programs at the mini transfer area but the tonnages are not available for plastics, glass and fibres. As well, 25.24 tonnes of recycled tires were diverted from the landfill, along with 16.91 tonnes of recyclable metal.

# 3.14 Summary of Complaints

Condition 14.3 xiv of the ECA requires a summary of any complaints received and the responses made.

Over the years, a few immediate neighbours have occasionally contacted WM regarding odours from the landfill site. The normal decomposition of waste causes odours from the site. WM implemented the operation of a landfill gas recovery system in 2001 to eliminate the odour source. Perimeter gas wells were drilled in the waste mound, and collection piping withdraws landfill gas from the wells and all leachate manholes to reduce the odour emitted from the landfill site. Landfill gas is flared off in a totally enclosed flare to the south of the landfill footprint. The landfill flare was commissioned in April 2001 and successfully reduces landfill gas odours.

The weather station is located south of the office area. The station monitors wind speed, wind direction, temperature, rainfall, solar radiation and relative humidity. Recorded local weather patterns help in addressing odour complaints.

In 2009, the MOE conducted a 3-week odour survey in June and July, and found no negative impacts on the local air quality. In addition, the MOE used their TAGA (Trace Atmospheric Gas Analyzer) unit to evaluate the local air quality, and concluded that the air quality was similar to any rural air quality in Ontario.

WM also continued with the surface emission survey study in 2011, where a consultant measured surface emissions to identify areas of weak cap. This year, a surface emission survey was performed on October 6, 2011. Five (5) areas were identified above 500ppmv. The final cover system in the exceedance areas were inspected and repaired as needed.

WM staff also tour the surrounding area and concession roads regularly to monitor for odour, litter and illegally dumped waste. Observations are recorded and corrective measures taken as required. In addition, when odour complaints are received at the landfill site, WM staff are dispatched to investigate the source of the odour and record the conditions that may have influenced the odour. WM is able to complete this response plan if complaints are received directly by WM. If complaints are delayed or not directed towards WM, the potential odour source cannot be investigated nor can corrective action be taken if the odour was potentially landfill related.

In 2010, in compliance with Condition 109 of the previous C of A, WM posted a sign near the front entrance, directing residents with questions, concerns and complaints to contact the Landfill Manager or WM Help Line. Phone numbers for both contacts are provided on the sign.

In 2011, there were three (3) odour complaints received by WM, for which the above procedure was used to address the complaints. Please refer to **Appendix D** for the complaint forms. One complaint, relayed from the MOE District Office in Kingston, was not substantiated at the site since all systems were operational at the time of the complaint, and the wind was not blowing in the direction of the complainant. Two additional odour complaints were relayed from neighbours, but were again not substantiated.

# 3.15 Operational Problems

Condition 14.3 xv of the ECA requires a discussion of any operational problems encountered at the site, and corrective action taken.

In 2010, the control valve at the southwest sedimentation pond was inadvertently left in the open position by WM personnel, after completing a MOE approved discharge event. This resulted in an unapproved discharge of water from the site. The MOE became aware of the incident, and on January 11, 2011, a Provincial Officer's Order (POO) was issued to the Richmond Landfill, requiring WM to complete several items in regards to operational controls at the discharge outlet and improving the frequency of the inspection program on the discharge control system. WM complied with the items in the POO, and in March 2011, the POO was rescinded.

Aside from this incident, no other operational problems were encountered at the site in 2011.

# 3.16 Refusal of Waste

Condition 14.3 xvi of the ECA requires a summary of any waste that was refused for disposal at the site, the reasons for refusal, and the carrier who brought the waste to the site.

During the approved period of landfilling operations in 2011, no waste was refused for disposal at the site.

# 3.17 Leachate Collection System Cleaning and Inspection

Condition 14.3 xvii of the ECA requires a summary of the leachate collection system cleaning and inspection activities.

In 2011, WM regularly inspected the leachate pumps and system each day that hauling of leachate occurred. On September 7 and 8, 2011, the leachate lines were flushed and cleaned. No blockages or issues were reported from this activity.

# 3.18 Financial Assurance Summary

Condition 14.3 xviii of the ECA, requires an update summary of the amount of financial assurance which has been provided to the Director.

In 2011, the financial assurance amount of \$11,557,385 was provided to the Director for the Richmond Landfill, as per Condition 20 of the previous C of A, dated March 31, 2010. With the issuance of the new ECA for the site, which accepted the revised financial assurance plan submitted by WM in June 2010, WM will provide the Director with an updated financial assurance amount.

# 3.19 Statement of Compliance

Condition 14.3 xx of the ECA requires a statement of compliance with all conditions of the ECA and other relevant Ministry groundwater and surface water requirements.

As a result of the inspections completed in 2011, to the best of our knowledge, GENIVAR certifies that WM has complied with the conditions outlined in the various Environmental Compliance Approvals and Certificates of Approval for the site, with respect to site operations. WESA will certify the monitoring portion of this requirement.

# 3.20 Confirmation of Site Inspection Program

Condition 14.3 xxi of the ECA requires confirmation that the site inspection program as required by this ECA has been complied with by the Owner.

WM has confirmed to GENIVAR that the site inspection program that is required by the Environmental Compliance Approvals, the Certificates of Approval, and by the various reports that address the site operations and monitoring, have been complied with.

# 3.21 Operations, Equipment, or Procedures Changes

Condition 14.3 xxii of the ECA requires documentation of any changes in operations, equipment, or procedures employed at the site.

Prior to site closure, all contaminated soil was removed from the soil pad and landfilled. The soil pad was washed to remove all traces of contaminants, and runoff from the pad was collected in the oil/water separator. Also, all remaining compost from the compost pad was removed and landfilled at this time.

On June 30, 2011, the Richmond Landfill ceased to accept waste for landfilling, and the site was closed. The mini-transfer area also ceased operations after this date. Access to the landfill was restricted to the general public, and the sign at the main entrance was modified to notify residents that the site was no longer accepting waste (see **Section 3.8.1**.).

After site closure, several pieces of equipment were removed from the site, and the number of staff at the site was reduced. Please refer to Sections **3.4.1** and **3.8.2**, respectively, for additional information. The compost pad and pond were also decommissioned prior to September 30, 2011, and placement of the final cover system on the uncapped portions of Phases II, III, IV, and V were completed by September 26, 2011.

On January 10, 2012, the MOE issued an Environmental Compliance Approval for the stormwater and leachate management systems at the Richmond Landfill, which revoked and replaced the previous Certificate of Approval. The ECA permitted WM to operate the sedimentation ponds in a free flowing manner, instead of operating the discharge outlet valves in a closed position and requiring testing and MOE approval prior to discharge.

# 3.22 Recommendations

Condition 14.3 xxiii of the ECA requires recommendations regarding any proposed changes in operations of the site.

GENIVAR does not have any recommendations for changes in the site operations.

# 4.0 REPORTING REQUIREMENTS – ENVIRONMENTAL COMPLIANCE OF APPROVAL 1688-8HZNJG AND CERTIFICATE OF APPROVAL 5268-7E8LJW

In 2011, WM operated the leachate and stormwater management systems at the Richmond Landfill in accordance with Certificate of Approval No. 5268-7E8LJW. During this time, the sedimentation ponds were operated with the discharge outlet valves in the closed position, and toxicity testing was required, along with MOE approval, prior to a discharge event. In January 2012, the MOE issued Environmental Compliance Approval No. 1688-8HZNJG, which revoked and replaced the previous Certificate of Approval. The ECA removed the requirement to operate the ponds in a closed manner, thereby allowing the ponds to operate in a free flowing state, subject to quarterly toxicity testing to confirm no adverse effects to species listed in the ECA.

Since the ECA is the most recent version of the approval regarding the operation and management of the stormwater and leachate management systems at the Richmond Landfill, the annual monitoring report is submitted in accordance with Conditions 10 (4) (b), (c), (d), (e), (f), (g), and (h) of this document. An overview of the leachate management system present at the Richmond Landfill is provided below.

# 4.1 Leachate Management

Leachate haulage from the site to the Napanee (now part of the Town of Greater Napanee) sewage system began in 1996. Leachate is regularly hauled from the landfill by Sutcliffe Sanitation Services Ltd. and discharged directly to the sewage system. Close communication between the town, WM and Sutcliffe Sanitation is maintained to determine if leachate may be accepted for treatment. Sutcliffe Sanitation is the common hauler of sludge from the sewage treatment plant and leachate from the landfill site. Before picking up a load of leachate, Sutcliffe Sanitation confirms with the town that leachate can be hauled on that particular day.

During the winter of 2003/2004, WM constructed a leachate/septage dumping facility within the Town of Napanee. The dumping facility is located at Enviro Park Lane and West Street within the Town of Napanee on municipally owned property. The dumping facility was commissioned in April 2004, after which time all leachate was deposited at the dumping station. Station users are recorded by PIN numbers that uniquely identify each station user and log the quantity of material discharged to the dumping facility. Users are then billed on a user pay basis by the Napanee Utilities. Ownership, operation and maintenance of the facility are the responsibility of the Greater Napanee Utilities. WM has a usage contract, which allows WM to use the facility for a specified period of time as long as Napanee Utilities does not have a restriction on dumping due to treatment characteristics at the sewage treatment plant. The dumping facility contains dumped loads and slowly discharges wastewater into the Napanee sewage system. Napanee Utilities has a C of A for this site.

It is a requirement of the landfill site's ECA that alternative leachate treatment options are available should Napanee be unable to treat leachate. Approval has been given to discharge leachate at Cobourg, however, leachate was not hauled to Cobourg for treatment in 2011. Letters of approval for alternate leachate treatment sites can be found in **Appendix E** of this report.

#### 4.1.1 Leachate Quantities

Condition 10(4) (b) of the ECA requires a summary of the monthly quantity of leachate disposed off site and corresponding leachate average quality.

**Table 4.1** indicates the leachate quantities trucked from the site to the Napanee sewage treatment plant in 2011. The average rate of removal for treatment was  $52.29 \text{ m}^3/\text{day}$ .

#### TABLE 4.1

# 2011 Monthly Leachate Quantities

Month	Napanee (m <sup>3</sup> )
January	1,086.15
February	975.31
March	2,573.34
April	2,654.96
May	2,490.35
June	1,335.35
July	810.59
August	1,064.84
September	990.79
October	1,363.59
November	1,371.06
December	2,371.95
Total	19,086.28

#### 4.1.2 Operational Problems and Corrective Actions

Condition 10 (4) (c) of the ECA requires a description of any operating problems encountered and corrective actions taken.

In 2011, there were no operating problems encountered or corrective actions taken for the leachate management system. No issues from the treatment of the leachate at the sewage treatment plants have arisen.

## 4.1.3 Maintenance Performed On Structures

Condition 10 (4) (d) of the ECA requires a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism, or thing forming part of the Works.

In 2011, regular inspection of the leachate pumps and system took place each day that leachate was hauled from the site. On September 7 and 8, 2011, the leachate lines were flushed and cleaned. No blockages or issues were reported.

## 4.1.4 Calibration and Maintenance of Leachate Monitoring Equipment

Condition 10 (4) (e) of the ECA requires a summary of the calibration and maintenance carried out on all leachate monitoring equipment.

In 2011, the leachate monitoring system in the south pump chamber was removed and reinstalled, while the float trip level in the north chamber was verified. The onsite computer was also updated.

## 4.1.5 Summary of Complaints Received

Condition 10 (4) (f) of the ECA requires a summary of any complaints received during the reporting period, and any steps taken to address the complaints.

Three complaints were received in 2011. All complaints were for odour, which were immediately addressed by WM (following the complaints procedures previously described in **Section 3.14**) at the time the complaints were received. Please refer to **Appendix D** for the complaint logs completed by WM.

## 4.1.6 Summary of By-Pass, Spill or Abnormal Discharge Events

Condition 10 (4) (g) of the ECA requires a summary of all By-pass, spill, or abnormal discharge events.

In 2011, there were no leachate events that were a by-pass, spill, or abnormal discharge event.

## 4.2 Surface Water Management

Surface water quality management is also operated under ECA No. 1688-8HZNJG. In 2011, the Richmond Landfill operated the surface water quality system based on the conditions outlined in C of A No. 5268-7E8LJW, which detailed the operation of three (3) sedimentation ponds located on the landfill site property. In January 2012, the MOE revoked the C of A and replaced it with ECA No. 1688-8HZNJG. The new approval permits the ponds to be free flowing, subject to toxicity testing to verify no adverse effects are caused to species listed in the ECA. This section is intended to satisfy the requirements outlined in Condition 10(4) (a), (c), (d), (f) and (g) of the ECA.

## 4.2.1 Summary of Stormwater Monitoring Data

Condition 10 (4) (a) of the ECA requires a summary and interpretation of all stormwater monitoring data and a comparison to the Provincial Water Quality Objectives (PWQO), including an overview of the success and adequacy of the Works.

WESA has prepared an annual report to satisfy this section of the ECA, under separate cover. The reader is directed to this document for this information.

## 4.2.2 Operating Problems and Corrective Actions

Condition 10 (4) (c) of the ECA requires a description of any operating problems encountered and corrective actions taken.

In January 2011, WM was issued a Provincial Officer's Order by the MOE relating to an unauthorized discharge from the south sedimentation pond. The discharge, which was observed in December 2010, occurred as a result of the control valve being inadvertently left in the open position after an MOE approved discharge in November 2010. The POO listed several items which WM was required to complete, as listed previously in **Section 3.9**, and in March 2011, the POO was closed.

## 4.2.3 Summary of Maintenance Activities

Condition 10 (4) (d) of the ECA requires a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism, or thing forming part of the Works.

The two (2) northerly sedimentation ponds operated in 2010 without any maintenance required on the ponds. The ponds are regularly inspected to ensure their operation meets the ECA, and no remedial work was required in 2011.

On the south sedimentation pond, the discharge monitoring system that was required to be installed to satisfy the POO was temporarily disabled after the POO was rescinded. The pond is regularly inspected to ensure its operation meets the ECA, and no further remedial work was required in 2011.

## 4.2.4 Summary of Complaints Received

In 2011, there were no complaints received regarding the ponds.

#### 4.2.5 Summary of By-pass, Spill or Abnormal Discharge Events

The previous stormwater Certificate of Approval required toxicity, chemical testing and MOE approval prior to any discharge event. Listed below and on the following page are the MOE approved discharge

events that occurred in 2011. Volumes were calculated based on water level drop in the ponds. Prior to all discharge events, toxicity testing was completed to ensure the water was safe to discharge.

#### TABLE 4.2

## 2011 Pond Discharge Volumes

Date of Discharge	Pond Identification	Volume Discharged (m <sup>3</sup> )
January 7 through 26, 2011	Southwest Pond	10,582 m <sup>3</sup>
February 28 through March 2, 2011	Southwest Pond	2,847 m <sup>3</sup>
March 4 through 7, 2011, March 23 through 28	Northwest Pond	3,500 m <sup>3</sup>
March 11 through 23, 2011	Southwest Pond	29,450 m <sup>3</sup>
March 17 through 25, 2011	Northeast Pond	2,600 m <sup>3</sup>
April 18 through 25, 2011	Northwest Pond	2,800 m <sup>3</sup>
April 18 through 25, 2011	Northeast Pond	2,600 m <sup>3</sup>
April 18 through 21, 2011	Southwest Pond	5,700 m <sup>3</sup>
May 3 through 12, 2011	Compost Pond	5,951 m <sup>3</sup>
May 4 through 6, 2011	Southwest Pond	6,475 m <sup>3</sup>
May 4 through 16, 2011	Northwest Pond	2,800 m <sup>3</sup>
May 4 through 16, 2011	Northeast Pond	2,600 m <sup>3</sup>
May 26 through 30, 2011	Southwest Pond	8,350 m <sup>3</sup>
May 26 through 30, 2011	Northeast Pond	0 m <sup>3</sup> (valve opened May 26, but no discharge due to high creek levels. Valve closed on May 30)
May 26 through 30, 2011	Northwest Pond	1,400 m <sup>3</sup>
November 17 through 25, 2011	Northwest Pond	5,724 m <sup>3</sup>
November 17 through 25, 2011	Northeast Pond	1,500 m <sup>3</sup>
November 21 through 23, 2011	Southwest Pond	5,724 m <sup>3</sup>

December 7 through 16, 2011	Northeast Pond	1,400 m <sup>3</sup>
December 8 through 16, 2011	Southwest Pond	7,400 m <sup>3</sup>
December 16, 2011	Northwest Pond	2,200 m <sup>3</sup>

# 5.0 General

In 2011, WM completed ongoing maintenance and operation of the landfill site. Landfill operations concluded on June 30, 2011, but progressed smoothly during the first half of 2011 and there were no operational impacts on the surrounding area. Active litter control, gas management, leachate treatment and active monitoring of the landfill site resulted in no operational impacts on the surrounding area. The continued use of the landfill gas collection and flaring system, and system maintenance and upgrades, has reduced any potential landfill gas odours. WM has been very active in monitoring all aspects of the site, both on and off site, ensuring that no impacts were caused on the surrounding areas.

The tonnage of waste received at the landfill site over the past year was reduced from the annual approved tonnage to allow WM to continue to service their local customers and commitments. Landfill operations were contained to the upper extents and the south face of the landfill site, within the final contours approved for the landfill site. Upon cessation of landfilling activities, the remaining final cover system was placed on the uncapped portion of the landfill. The entire landfill mound now has final cover in place.

Leachate extraction and treatment continues at the landfill site, and 19,086.28  $m^3$  of leachate has been removed during the past year, or approximately 52.29  $m^3$ /day. It is recommended that leachate removal off site continue.

The landfill gas extraction and flaring system successfully collected and flared the landfill gas generated from the site. Continued operation and expansion of this system will be completed in the coming years to ensure that odours are minimized around the landfill site. Additional wells may be installed to replace non-functioning wells.

Neighbours with concerns are always invited to visit the landfill with their concerns, which are addressed by the site manager.

Although landfilling operations have ended, we conclude the landfill is operating in an environmentally sound and orderly manner in the post-closure period.

Respectfully submitted:

**GENIVAR Inc.** 

Jeff E. Armstrong, P.Eng. Director, Solid Waste Management JEA/bdl Appendix A

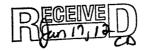
Environmental Compliance Approvals and Certificates of Approval



Appendix A.1

Environmental Compliance Approval No. A371203, dated January 9, 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 <u>Environmental Protection Act</u>, 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

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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

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
- 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-evaulation 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-evaulation 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  $1 \times 10^{-8}$  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.
- 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.

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- 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.

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39. Report entitled "Richmond Sanitary Landfill Site - Operations and Procedures Manual June 25, 2010" prepared by GENIVAR Consultants LP Inc dated June 25, 2010.

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- 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.

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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

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Page 29 - NUMBER A371203

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- 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

Page 30 - NUMBER A371203

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	Part II.1 of the Environmental Protection Act Ministry of the Environment 2 St. Clair Avenue West, Floor 12A Toronto, Ontario M4V 1L5
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\* 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

The Discoute and the

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

Page 33 - NUMBER A371203

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)



Ministere Provisional Certificate of	Approval for a					
of the ce Waste Disposal Sile	Approvation a					
Colario Environment l'Environnement Certificat provisoire d'au lieu d'élimination des déc						
Provisional Certificate of Approva Certificat provisoire d'autorisation						
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Under the Environmental Protection Act and the regulations and subject to the limitations thereof, I Approval is issued to:	his Provisional Certificate of					
Under the Environmental Protection Act and the requiations and subject to the limitations thereol, i Approval is issued to: Aux termes de la Loi sur la protection de l'environnement et des reglements y attérents et sous rest approvent, ce Cernical provisoire d'autorisation est delivere a: Tricil Limited 89 Queensway West, Suite 800 Mississauga, Ontario L5B 2V2 for the use and operation of a 16.2 hectare waste disposal (landfi within a total site area of 138 hectares all in accordance with the following plans and specifications: As per the attached Schedule "A" Located: Part of Lots 1, 2 and 3, Oncession 4 Township of Richmond County of Lennox 4 Addington which includes the use of the site only for the disposal of the following requires a new application and amendments to the provisional Cart	erve aes restrictions aut s y					
for the use and operation of a 16.2 hectare waste disposal (landfi within a total site area of 138 hectares $0.3$	lling) site					
all in accordance with the following plans and specifications:						
As per the attached Schedule "A"						
Located: Part of Lots 1, 2 and 3, Concession 4 Township of Richmond County of Lennox & Addington						
waste	ficate of					
and subject to the following conditions:						
<ul> <li>By March 31, 1988, Tricil Limited ("the Company") shall complete all</li> <li>hydrogeological works and evaluations necessary to establish the groundwater</li> <li>flow regime in order to finalize the design of the clay liner and submit the</li> <li>report cutlining the hydrogeological findings to the Director of the</li> <li>Environmental Approvals and Land Use Planning Branch of the Ministry of the</li> <li>Environment ("the Director").</li> </ul>						
<ul> <li>and subject to the following conditions:</li> <li>1. Sy March 31, 1988, Tricil Limited ("the Company") shall comp hydrogeological works and evaluations necessary to establish flow regime in order to finalize the design of the clay line report outlining the hydrogeological findings to the Directo Environmental Approvals and Land Use Planning Branch of the Divironment ("the Director").</li> <li>2. (a) By October 31, 1988, the Company shall prepare a design plans and specifications detailing the site development program. The requirements of the final design report and once written approval is given by the Director. In the shall be developed in accordance with Section 4.3 of the "Sutcliffe Sanitation Services Limited Landfill Site Exp and Operations Report" prepared by Henderson, Paddon and dated September, 1985.</li> <li>(b) By October 31, 1969, the Company shall prepare a design, testing protocol for the placement of the clay liner and approval of the Director. No Liner construction shall to prior approval of the Director and as directed by the Di- and operatic. commercial. non-hazardous solid industrial was institutional waste limited to a reasonable number of uninfe- ant parts of the Tompany of Bicherry's animal shelter may</li> </ul>	interim, the site report entitled,					
(b) By October 31, 1989, the Company shall prepare a design, testing protocol for the placement of the clay liner and approval of the Director. No liner construction shall t prior approval of the Director and as directed by the Di	ake place without					
the site. No hazardous waste or liquid industrial waste from off-site sources						
the future shall be disposed of on the site.	12 1					
the future shall be disposed of on the site.						

Ministry of the Environment

Onlario

## PROVISIONAL CERTIFICATE OF APPROVAL WASTE DISPOSAL SITE

The following conditions are additional to the conditions shown on Provisional Certificate

of Approval Number A 371203

- dated March 30, 1988
- 4. Brush and wood waste only may be burned at the site in accordance with the Ministry of the Environment "Guidelines for Burning in Landfill Sites in Ontario" dated November, 1981.
- 5. At the end of each working day a cover of at least 15 cm of fill shall be placed on all exposed refuse at the working face.
- 6. In those areas where landfilling has been completed to final crade, a compacted cap of at least 75 cm thickness and with at least 15 cm of topsoil shall be placed in accordance with the methods described in Section 4.5 and Section 4.6 of the Henderson, Paddon and Associates Limited report dated September, 1985. (item 2 of Schedule "A"). Final slopes shall have a vegetative cover.
- 7. No landfilling shall take place in areas of liner construction until a report of a geotechnical engineer or other professional acceptable to be Director certifying that the base has been prepared and the liner applied according to the methods approved by the Director in the final report, has been received by the Director and approval to proceed has been given.
- 8. (a) The Company shall carry out the monitoring program outlined in item 5 of Schedule "A" once written approval is given by the Director for the program and with any amendments as required or permitted from time to time by the Director. Any such amendments or requirements by the Director may be appealed to the Environmental Appeal Board.
  - (b) The results of all analyses shall be submitted to the Director of the Southeastern Regional Office of the Ministry of the Environment ("the Regional Director") within one month of each analysis being completed.
- 9. The Company shall submit an annual report to the Regional Director by March 31, 1988 and by March 31st of each year thereafter. The reports shall cover the year ending the preceding December 31st and shall include the following information:
  - (a) The results of an interpretive analysis of all monitoring data.
  - (b) A summary of all waste received at the site in terms of volume or weight, and a list of all current commercial/industrial users.
  - (c) A map of surface contours in the active landfill area.
  - (d) Site-related meteorological data.
  - (e) A summary of changes in operations, equipment or procedures made or proposed at the site and of any operating difficulties encountered.
  - (f) In the event that leachate collection facilities are constructed, a report in the emount of leachate collected, stored and spray irrigated.

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	of Approval Number A 371203 dated March 30, 1988
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	10. (a) By October 31. 1988, the Company shall submit for the approval of the
	Director final plans and specifications for the leachate collection and treatment facilities necessary for Phases I, II, and III of the site.
Ř	(b) If the results of any sampling at Marysville Creek indicate that the
	requirements of Table 1 below have not been met in the Creek or in the
	opinion of the Regional Director any parameter not defined in Table 1 has increased significantly and if it is the opinion of the Regional Director
	that the increase is attributable to leachate contamination from the landfill, then additional samples shall be collected and analyzed weekly
We have	for 4 consecutive weeks, and the analyses results provided to the
XX	Regional Director as soon as available.
影	Table 1
畿	
凝	Ammonia .02 mg/l as un-ionized ammonia to be determined from
談	temperature and pH table on page 32 of the "Water Management Goals, Policies, Objectives and
影	Implementation Procedures of the Ministry of the
	Aluminium not to exceed 0.1 mg/1
	Arsenic not to exceed 0.1 mg/1 Cadmium not to exceed .0002 mg/1
	Chromium not to exceed .1 mg/1
	Copper not to exceed .005 mg/1 Cyanide not to exceed .005 mg/1
	Dissolved Oxygen minimum of 4.0 mg/lat all times
\$ <u>5</u>	Lead not to exceed .3 mg/l Lead not to exceed the following based on alkalinity
<b>33</b>	.005  mg/l 0-20 mg/l as CaCO <sub>1</sub> .010 mg/l 20-40 mg/l as CaCO <sub>1</sub>
	.020  mg/1 40-60 mg/1 as CaCO <sub>3</sub>
	$.025 \text{ mg/l} = G = 80 \text{ mg/l} \text{ as } CaCo_3$ Mercury not to exceed $.0002 \text{ mg/l}$
ġ	Nickel not to exceed .025 mg/l pH 6.5 - 8.5
₿	Phenols not to exceed .001 mg/1
<b>XX</b>	Phosphorus (total) not to exceed .03 mg/l Selenium not to exceed .1 mg/l
	Silver not to exceed .0001 mg/l
56	Zinc not to exceed -03 mg/l
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#### PROVISIONAL CERTIFICATE OF APPHOVAL WASTE DISPOSAL SITE

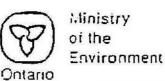
The following conditions are additional to the conditions shown on Provisional Certificate

of Approval Number A 371203

dated March 30, 1988

- (c) The leachate collection and treatment facilities approved by the Director shall be constructed if the arithmetic mean of the 5 analyses for any parameter exceeds the requirement set out in Table 1 or if in the opinion of the Regional Director the arithmetic mean of the 5 analyses for any parameter not defined in Table 1 has increased significantly and if the increase in contamination is due, in the opinion of the Regional Director, to the impact of leachate migration from the landfill site.
- 11. This certificate of approval shall be repistered on the title to the lands comprising the waste disposal site. No operation shall be carried out at the site after sixty days from this condition becoming enforceable unless this Certificate including the reasons for this condition has been registered by the applicant as an instrument in the appropriate Land Registry Office against title to the site and a duplicate registered copy thereof returned by the applicant to the Director.
- 12. No portion of the site including any part of the buffer area, 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 the carrying out of all conditions of this Certificate of Approval and sufficient additional security is deposited with the Ministry of the Environment if requested to ensure the carrying out of these conditions.
- 13. Within 60 days of the issuance of this Provisional Certificate of Approval the Company shall file with the Director a legal coinion indicating that the Company is the registered owner of the landfill site or has an unencumbered right to use the site except where any encumbrance is acceptable to the Director.
- 14. (a) Within 30 days of the issuance of this Provisional Certificate of Approval the Company shall provide to the Director an irrevocable letter of credit in a form satisfactory to the Director in the amount of \$50,000.
  - (b) The letter of credit provided pursuant to condition 14(a) shall be maintained until such time as the amount in the Special Account referred to in condition 15 exceeds \$50,000.
- 15. The Company shall establish a Special Account at a chartered bank or trust company satisfactory to the Director in a form satisfactory to the Director, which has agreed in writing to hold funds deposited in a trust account subject to the provisions of condition 16 or by making payments to the Treasurer of Ontario for deposit in the Consolidated Revenue And.

(Page 4 of ..... Pages)



### PROVISIONAL CERTIFICATE OF APPROVAL WASTE DISPOSAL SITE

The following conditions are additional to the conditions shown on Provisional Certificate

of Approval Number A 371203 dated March 30, 1988

- 16. Payment out of the Special Account established by condition 15 may only be made by authorization of the Director, his designate or such other person as may be authorized by Order-in-Council. Funds in the Special Account if it is not established in the Consolidated Revenue Fund may be invested in deposits or Certificates of Deposit coming due in not more than 3 years, of a chartered bank or trust company in Ontario or such other securities as the Director approves of in writing. When any deposit or investment is not withdrawable or payable in cash at its face value within 60 days, then for purposes of determining compliance with condition 17. it shall be valued at the lesser of its face value and its market value.
- 17. The Company shall make annual contributions to the Special Account in amounts at least equal to \$0.50 for each cubic metre or \$0.7143 for each torne of waste landfilled in the proceeding year. In any event, the amount in the Special Account at the completion of Phase III of the landfill shall be at least \$500,000. and at the time of final close-out shall be \$750,000. Both of the above amounts are expressed as 1987 dollars and may be adjusted by the Director at any time based on actual inflation rates not higher than changes in the Consumer Price Index issued by Statistics Canada for Ontario.
- 18. In the event that the amount in the Special Account reaches \$750,000. (as adjusted for inflation) prior to final close-out, the contributions required pursuant to condition 17 may be reduced or eliminated as appropriate and the Director may authorize payments cut of the Special Account of any excess.
- 19. In the event that the leachate handling and disposal contingency system is required to be installed prior to the final close-out and the operator requests that part of the Special Account be released for the purpose, the amount in the Special Account shall not be less than \$435,000. (as adjusted for inflation) at the time of final close-out.
- 20. Following final close-out, the Special Account must be maintained for a period of 25 years, at which time it shall be released by the Director. The operator may request the Director to authorize the release, on an annual basis, of funds necessary to pay for annual post-closure maintenance and monitoring of the site.
- 21. The Company may, at any time, and shall, at the request of the Director submit a report undating the cost estimates on which the amounts referred to in condition 17 are based, taking into consideration actual amounts of waste landfilled, projected rate of fill and any changes proposed in the contingency works or annual maintenance and monitoring costs and, in the event any contingency works have been carried out, the contingency works remaining to be carried out. In any event, such a report shall be submitted on or before December 31, 1992 and at intervals of not more than five years thereafter. The amounts stated in condition 17 may be adjusted in accordance with a report.

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#### PROVISIONAL CERTIFICATE OF APPROVAL WASTE DISPOSAL SITE

The following conditions are additional to the conditions shown on Provisional Certificate

of Approval Number 371203

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March 30, 1988

- 22. The company shall have the right from time to time to have paid out to the Company any amount in the Special Account which is in excess of the amount required to comply with the conditions of approval above and the Director shall review such application and, to the extent that the Director, acting reasonably, is of the opinion that such excess funds are held in the Special Account, the Director shall order that the amount of such excess funds shall be paid out to the Company. In the event that the Director raises to act on such application within a reasonable time or issues an order not satisfactory to the Company, the Company shall have the right to appeal such refusal to act or such order in accordance with the provisions of the Environmental Protection Act and any successor legislation. The Director shall have the right to require such supporting information in connection with such application as the Director, acting reasonably, may deem appropriate including, but without restricting the generality of the foregoing, a report from a qualified professional engineer certifying as to work that has been done and materials that have been supplied by the Company where such work and materials relate to the purpose for which the Special Account was established, the fair value thereof, and the balance of the conditions in connection with which the Special Account was established.
- 23. In lieu of making payments into a Special Account as provided by conditions 14(b), 15, 17 and 21 the company may provide the Director with one or more irrevocable letters of credit in an amount totalling at least the amount that would have been on deposit in the Special Account if payments had been made pursuant to the conditions and interest had accumulated on them at a rate of not less than 9% compounded annually.
- 24. For the purposes of these conditions the annual payment into the Special Account shall be made not later than January 31st in the year following the year with respect to which the payment is made, provided the first such payment is made not later than 30 days after this condition is issued.
- 25. In the event notice is received that an irrevocable Letter of Credit received for purposes of this approval will not be renewed (other than at the end of 25 years following final close-out) or any further Letter of Credit required at any time is not received, the amount that would be the balance in the Special Account if letters of credit had not been used shall be immediately paid to the Treasurer of Ontario for deposit in a special account in the Consolidated Revenue Fund, following the failure of the company to provide the required letter of credit within 5 days of receiving notice thereof from the Director.

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	The following conditions are additiona	t to the conditions show	wn on Provisional Certificate
	of Approval Number 371203	dated	March 30, 1988
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	26. Any letter of credit provided doing business in Toronto on a approves and shall include pro documentation unless the issue	such terms and condi ovision for automati	tions as the Director C renewal without further
ä	not be renewed.		
See .	27. Whenever the total amount of ! the stated amount which would	letters of credit he be held in the Cons	ld hereunder is greater than polidated Revenue Rund
ŝ	required at the time of final conditions, the Director may n	close-out as adjust	ed under these or subsequent
	thereof as would bring the am which would be held in the Or	ant of the letters	of credit down to the amount
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	28. By December 31, 1988 the Competition calculate all incoming wastes	my shall install an delivered in a vehi	d use weigh scales to cle approved as part of a
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This Schedule "A" forms part of Provisional Certificate of Approval No. A 371203 dated March 30, 1988.

- Application for a Certificate of Approval for a Waste Disposal Site (Landfill), dated January 11, 1988.
- Report entitled "Sutcliffe Sanitation Services Ltd., Landfill Site Expansion Development and Operations Report", prepared by Henderson, Paddon & 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 & Associates Limited. dated December, 1986.
- 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.

NOTICE

TO:

Tricil Limited 89 Oveensway West, Suite ECO Mississauga, Chtario L5B 2V2

You are hereby notified that Provisional Certificate of Approval No. A 371203 has been issued to you subject to the conditions outlined therein.

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

- Conditions 1 through 22 and condition 23 are reiterations of conditions 1 through 7 and conditions 9 through 24 of Provisional Certificate of Approval No. A 371203 dated August 31, 1987 with minor alterations to reflect those conditions on the former Provisional Certificate of Approval No. A 371203 whose requirements have already been met.
- 2. The reason for conditions 23 through 27 is to ensure that sufficient funds are available to carry out any closure, maintenance, contingency and monitoring or remedial works which may be required in connection with the site and its operation. Accordingly adjustment for inflation is provided for in condition 18 and periodic reports are reviewed under condition 22 to assist the Director in determining whether the form or amounts of assurance held under condition 18 should be changed. Conditions 23 through 26 provide an alternate mechanism for the provision of the necessary financial assurances. Any changes or disbursement of funds or refusal to release any financial assurance held would in the absence of agreement be implemented by the Director amending conditions or issuing orders so that the Company would have a right of appeal under the Act in the event it disagreed with a proposed course of action by the Director.

You may by written notice served upon me and the Environmental Appeal Board within 15 days after receipt of this Notice, require a hearing by the Board. Section 122a of the Environmental Protection Act, as amended in 1983. provides that the Notice requiring the nearing shall state the portions of each term or condition in the approval in respect of which the hearing is required and the grounds on which you intend to rely at the hearing.

This Notice should be served upon:

The Secretary Environmental Appeal Board 40 St. Clair Ave. West AND 6th Floor Toronto, Ontario M4V 1M2 The Director Section 38, E.P.A. Ministry of the Environment 135 St. Clair Ave. W., Toronto, Ontario MAV 1P5

Dated at Toronto this 30th day of March, 1988.

Director, / Section 38, E.P.A., Ministry of the Environment.

Amendment to Certificate of Approval No. A371203 dated September 4, 1991, Replacing Condition 2(a) and Imposing Conditions 29 and 30





APPROVALS BRANCH

250 Davisville Avenue Toronto, Onlario M4S 1H2 250, avenue Davisville Toronto (Ontano) M4S 1H2

September 4, 1991

Laidlaw Waste System (Richmond) Ltd. 3410 South Service Road P.O. Box 5057 Station "A" Burlington, Ontario L6R 3Y8

Attn: Mr. J.R. Marsh Regional Landfill Manager

Dear Mr. Marsh:

Re: Richmond Township Landfill Provisional Certificate of Approval No. A 371203

Enclosed is a Notice of Amendment of Provisional Certificate of Approval No. A 371203. Please take note of the amended and additional requirements of your certificate as outlined in the notice and of the reasons for the changes.

It is my understanding that a need has developed to deal with impounded surface water, collected along the northern perimeter of Phase 1 of the Richmond Township waste disposal site. The impoundment area, which was referenced in the site's Final Design Report (1988), was constructed to eliminate previous discharge swails which allowed flow to Marysville Creek. It is proposed that the contaminated surface water from these ponds be disposed of by implementing measures originally proposed as a contingency plan.

As the situation at your site represents a failure of the conceptual site design recommended for approval following a hearing of the Environmental Assessment Board in 1987, a condition has been imposed upon your certificate requiring that an assessment be done of the causes of the failure of the site, the suitability of the site for continued operation, and the suitability of the contingency spray irrigation system for long term leachate management.

Since circumstances now require that the contingency plan be implemented to mitigate actual environmental concerns, it is necessary that a new contingency plan be developed. This should be done in association with an overall review of the site design which takes into account the changed environmental circumstances of the waste disposal site.

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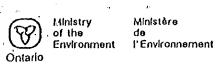
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TO: Laidlaw Waste Systems (Richmond) Ltd. 3410 South Service Road P.O. Box 5057 Station "A" Burlington, Ontario L7R 3Y8

Take Notice that Provisional Certificate of Approval No. A 371203 dated March 30, 1988 is hereby amended as follows:

- a) Condition 2(a) is hereby revoked and is replaced by the following condition 2(a):
  - 2(a) Within 6 months of the date issuance of this Notice, Laidlaw Waste Systems (Richmond) Ltd. shall submit to the Director, Approvals Branch, a design and operations report for the site which takes into account the current environmental circumstances at the site. In the interim the site shall be developed and operated in accordance with report entitled "Final Design Report" prepared by Henderson Paddon & Associates Ltd., dated September, 1988.
- b) The following conditions 29 and 30 are imposed:
  - 29. Within 120 days of the date of issuance of this Notice, Laidlaw Waste Systems (Richmond) Ltd. shall submit to the Director, Approvals Branch, with a copy to the Director, Southeastern Region, a report assessing the following:
    - a) the reasons for the recent requirement to dispose of impounded surface water and for the resultant need to implement the contingency plan;
    - b) the adequacy of the contingency plan for continued implementation as an active mitigative measure at the site; and
    - c) the environmental suitability of the site for continued operation.
  - 30. The leachate spray irrigation system shall not be constructed or operated until, and then only in accordance with, the terms and conditions of a certificate of approval for a sewage works issued under Section 24, Ontario Water Resources Act and a certificate of approval for a discharge to the air issued under Section 8, Environmental Protection Act.

The reason for the alteration of condition 2(a) and imposition of condition 29 is to ensure that the causes of the recent environmental problems of the site are properly assessed and the site is operated in accordance with a design and operations report that takes into account the changed environmental circumstances at the site. Failure to assess the causes of the environmental problems or operation of the site under a design and operations plan which does not account for the changed environmental circumstances of the site would not be in the public interest and might create a threat to the environment. The interim operation of the site in accordance with the existing design and operation plan is in the public interest in order to ensure that interim mitigative measures are taken.



#### Notice Avis

- 2 -

The reason for the imposition of condition 30 is to ensure that operation of the contingency system does not occur until all necessary environmental approvals are obtained.

- c) The following item is added to Schedule "A":
  - 6. Letter, dated September 12, 1990 from Mr. J.R. Bray, P.Eng. to Tricil Limited (c/o Laidlaw Waste Systems Ltd.).

You may by written notice served upon me and the Environmental Appeal Board within 15 days after receipt of this Notice, require a hearing by the Board. Section 122a of the Environmental Protection Act, as amended in 1983, provides that the Notice requiring the hearing shall state:

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

In addition to these statutory requirements, the Notice should include:

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the works are located;

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

This Notice should be served upon:

The Secretary, Environmental Appeal Board, 112 St. Clair Ave. West, 5th Floor, Toronto, Ontario 144V 1N3

AND

The Director, Section 38, Environmental Protection Act, Ministry of the Environment, 250 Davisville Avenue, 3rd Floor Toronto, Ontario M4S 1H2

Dated at Toronto this 4th day of September, 1991.

-94

DeAngelis Director

Section 38, E.P.A. Ministry of the Environment

Amendment to Certificate of Approval No. A371203 dated September 2, 1994, Adding Condition 31





Ministry of Environment and Energy Ministère de l'Environnement et de l'Energie 980 Devientes Attenue :"" Tarbrid ON 148 148

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APPROVALS BRANCH Srd Ylcor, 741, (415) 440-3544 Fax (416) 440-6973

September 2, 1994

Laidlaw Wasta Systems (Richmond) Ltd. 3410 South Bervice Road Burlington. Optario L7R 318

ATTENTION:

Nr. Michael J. Pullen Regional Managar, Engineering & Compliance

Dear Sir:

Rai Provisional Certificate of Approval No. A 371203

Enclosed is a Notice of amendment of the certificate for the Richmond Township landfill. The certificate has been amended to recognize the operation of a leaf and yard waste composting site within the landfill buffer area.

Operation of the composting site must not interfere with the landfill site operations, monitoring, or capacity to implement contingency:plans,

The operation of the composting sits must be done in accordance with ontario Regulation 101/94. Should you have questions concerning the requirements of the landfill pertificate, please call Nr. J. Connelly of this office at (416) 440-3567.

Yours truly,

A. Dominski, P.Eng., Acting Supervisor Nasta Sitas & Systems Approvals Unit Industrial Approvals Section

Incl.

oo: J. Bishop - Kingston District Office

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Ministry of Environment and Energy Ministère de l'Environnement et de l'Énergie

> NOTICE Page 1 of 2

Laidlaw Waste Systems (Richmond) Ltd. 3410 South Service Road P. O. Box 8057 Burlington, Ontario L7R 3Y8

You are hereby notified that the Provisional Certificate of Approval No. A 371203 dated March 30, 1988 is hereby amended by the addition of the following condition No. 31:

- 31. The buffer zone for the landfill site may be used for the operation of a leaf and yard wasta composting site, as defined in Section 30 of Ontario Regulation 101/94, provided that:
  - (a) the operation of the leaf and yard waste composting site does not interfere with the operation and monitoring of, and ability to implement contingency plans at, the landfill site; and

• •

(b) the compost pad is sited as described in the document "Undertaking to: Establish a Leaf and Yard Waste Composting Facility at the Laidlaw Waste Systems (Richmond) Ltd. Landfill Site" prepared by Laidlaw Waste Systems Ltd., dated July, 1994.

The reason condition 31 is to ensure that the activities occurring within the landfill site boundaries do not create a nuisance or a threat to the health and safety of any person.

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990 c. E-19, you may by written notice served upon me and the Environmental Appeal Board within 15 days after receipt of this Notice, require a hearing by the Board. Section 142 of the Environmental Protection Act; as amended provides that the Notice regulating a hearing shall state:

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



Ministry of Environment and Energy

Ministère de l'Environnement et de l'Energie

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NOTICE Page 2 of 2

In addition to these legal requirements, the Notice should also include:

- 3. The neme of the appellent;
- The address of the appellent;
- 5. The Certificate of Approval number;
- The date of the Certificate of Approval;
- 7. The name of the Director;

8. The municipality within which the waste management system/waste disposal site is loosted;

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

This Notice must be served upon:

The Secretary, Environmental Appeal Board, 112 St. Clair Avenue West, Suite 502, Yoronto, Ontário, 14V 1N3

AND

The Director, Bection 39, Environmental Protection Act, Ministry of the Environment and Energy, 250 Davisville Avenue, 3rd Floor, Toronto, Onterlo, M4S 1H2

DATED AT TORONTO this 2nd day of Beptember, 1994.

W. Ng, P. Bng. Director Section 39 Environmental Protection Act

Amendment to Certificate of Approval No. A371203 dated August 1, 1995, Approving Phases 4 and 5, and Imposing Conditions 32 and 33





	nistry of vironment	•	Ministère de l'Environnement		250 Devisiville Avenue Toromo ON M45 1H2		250, avanue Davisville Toromo ON M45 1H2	•••
an	d Energy	•	et de l'Énergie	•		. :		• •

APPROVAL® BRANCH 3rd Ploor Tol. (416) 440-3544 Fax (416) 440-6973

Mr. Jack Varrette General Landfill Manager Laidlaw Waste Systems (Richmond) Ltd. 3410 South Service Road P.O. Box 5057 Burlington, Ontario L7R 3Y8

Dear Mr. Varrette:

RE: Provisional Certificate of Approval A371203 Redesign of Phases IV and V

Enclosed is a Notice which approves the revised grades and liner system for Phases IV and V.

Please note that the Ministry is not satisfied that the recirculation of leachate back into Phases 2 and 3 is an acceptable method of leachate disposal. Therefore, a condition has been imposed which prohibits this and requires Laidlaw to pursue alternative methods of short term leachate management. Please be advised that whatever method is selected must be accompanied by the appropriate technical documents which support it and must be approved by the Director.

The Ministry has included a condition which requires an updated monitoring program to be submitted to and approved by the Regional Director.

In addition, Laidlaw is still required to comply with Condition 2(a). This requires the submission of an updated Design and Operations Report which takes into account the comments provided to you by the Ministry on March 7, 1994. Please note that the revised Design and Operations Report must include details on long term leachate management, contingency measures and trigger mechanisms.

August 1, 1995

I believe that a complete set of comments regarding the Design and Operations Report and the monitoring program have been provided to you. Should have any questions regarding them or the conditions imposed by this Notice, please do not hesitate to contact Ian Parrott at (416) 440-6083 or Alida Mitton at (613) 549-4000.

Sincerely, , P.Eng., Unit

Supervisor

IP/es

CCI

B. Ward - Director, Southeastern Region J. Bishop - District Manager, Kingston A. Mitton - Planner, Southeastern Region

- 2 -



Ministère de l'Environnement et de l'Énergie

> NOTICE Page 1 of 3

TO: Laidlaw Waste Systems (Richmond) Ltd. 3410 South Service Road P.O. Box 5057 Burlington, Ontario L7R 3Y8

You are hereby notified that the terms and conditions of Provisional Certificate of Approval No. A371203, dated March 30, 1988 are amended as follows:

Condition 32 is hereby added:

- (32) By October 31, 1995, an updated site monitoring plan shall be submitted to the Regional Director, for approval, which includes, but is not limited to:
  - (a) an assessment of the full extent of leachate contamination from the site;
  - (b) a listing of sampling locations, frequencies and parameter lists; and
  - (c) an assessment of the site's compliance with Ministry Guideline B-7 (Reasonable Use Policy).

Condition 33 is hereby added:

33) Leachate may not be recirculated into Phases 1, 2 or 3 of the site. By October 31, 1995, an interim plan for treatment and disposal of leachate must be submitted to the Director, for approval. Leachate shall not be collected or discharged until this interim plan has been approved by the Director.

The reason for the addition of these conditions is to ensure that the site is monitored and operated in a manner which assesses compliance with Ministry Guidelines and that the environment is protected.

The following documents are hereby added to Schedule "A":

- 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.
- Letter from Jeff Armstrong, Henderson, Paddon & Associates Limited to I. Parrott, MOEE dated May JO, 1995 re: Development of Landfill Base of Phases IV and V (including attached drawings 8570D-400 to 406, inclusive and 8570D-94-site).

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Ministry of Environment and Energy Ministère de l'Environnement et de l'Énergie

> NOTICE Page 2 of 3

- 9. Letter from Jeff Armstrong, Henderson, Paddon & 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 & Associates Limited to I. Parrott, MOEE dated July 21, 1995 re; Public Consultation on the Redesign of the Landfill Base for Phases IV and V.

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990 c. E-19, you may by written notice served upon me and the Environmental Appeal Board within 15 days after receipt of this Notice, require a hearing by the Board. Section 142 of the Environmental Protection Act, as amended provides that the Notice requiring a hearing shall state:

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

In addition to these legal requirements the Notice should also include:

- The neme of the appellant;
- -. The address of the appellant;
- 5. The Certificate of Approval number;
- 5. The date of the Certificate of Approval;
- . J. The name of the Director;
- 8. The municipality within which the weste disposal site is located;

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

AND

This Notice must be served upon:

The Secretary, Environmental Appeal Board, 112 St. Clair Avenue West, Suite 502, Toronto, Ontario, M4V 1N3

The Director, Section 39, Environmental Protection Act, Ministry of Environment and Energy, 250 Davisville Avenue, 3rd Floor, Toronto, Ontario. M4S 1H2

DATED AT TORONTO this let day of August, 1995.

A Forfinski, P. Eng. Director Section J9 Environmental Protection Act

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10.00

Amendment to Certificate of Approval No. A371203 dated February 20, 1996, Revoking and Replacing Condition 33



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CANADIAN WASTE

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Ministry of Environment and Energy Ministère de l'Environnement et de l'Énergie

> NOTICE Page 1 of 2

To:

(05/93)

Laidlaw Waste Systems (Richmond) Ltd. 3410 South Service Road P.O. Box 5057 Burlington, Ontario L7R 3Y8

Take Notice that Provisional Certificate of Approval No. A 371203 dated March 10, 1988 is hereby amended by revoking and replacing existing condition No. 33 as follows:

- 33. (1) Until January 1997, leachate shall be managed in accordance with the letter report dated October 31, 1995, from Mr. Frank C. Ford of Henderson, Paddon & Associates Ltd., to Mr. A. Dominski of the Ministry of Environment and Energy, Approvals Branch.
  - (2) Notwithstanding condition 33(1), diluted leachate from the leachate storage lagoon shall not be used for dust control purposes.
  - (3) By September 1, 1996, a plan for management of leachate beyond January 1997 shall be submitted to the Director for approval.
  - (4) A schedule for the submission of a revised site design and operations report and for development of the plan required under condition 33(3) shall be submitted to the Director by April 1, 1996. If this schedule does not include provision for feasibility studies of leachate management alternatives to be completed by March 1, 1998, a detailed workplan for the feasibility studies shall also be submitted to the Director by April 1, 1996.

The reason for condition 33 is to ensure that the site is operated in a manner which does not create nuisance or a danger to the health and safety of any person.

/2000 14:47 6133882785

CANADIAN WASTE



Ministry of Ministère de Environment l'Environnement and Energy et de l'Énergie

NOTICE Page 2 of 2

In accordance with Section 139 of the <u>Environmental Protection Act</u>, R.S.O. 1990, Chapter E-19, you may by written notice served upon me, the Environmental Appeal Board and the Environmental Commissioner, <u>Environmental Bill of Rights</u>, S.O. 1993, Chapter 28, within 15 days after receipt of this Notice, require a hearing by the Board. The Environmental Commissioner will place notice of your appeal on the Environmental Registry. Section 142 of the <u>Environmental Protection Act</u>, as amended provides that the Notice requiring a hearing shall state:

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

In addition to these legal requirements, the Notice should also include:

- 3. The name of the appellant;
- The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the waste disposal site is located;

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

This Notice must be served upon:

The Secretary, Environmental Appeal Board, 112 St. Clair Avenue West, Suite 502, Toronto, Ontario, M4V 1N3 The Environmental Commissioner, 1075 Bay Street, Suite 605 6th Floor Toronto, Ontario MISS 2W5 The Director, Section 39, Environmental Protection Act, Ministry of the Environment and Energy, 250 Davisville Avenue, 3rd Floor, Toronto, Ontario. M4S 1H2

This instrument is subject to Section 38 of the <u>Environmental Bill of Rights</u>, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek to appeal for 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry, you can determine when the leave to appeal period ends.

DATED AT TORONTO this 20th day of February, 1996

A. Dominski, P. Eng. Director Section 39 Environmental Protection Act

C/am

0979 (05/93)

Amendment to Certificate of Approval No. A371203 dated September 11, 1996, Amending Condition 31





Ministère de -250 Davisville Avenue Ministry of 250, avenue Davisville Toronto ON M4S 1H2 Toronto ON M4S 1H2 l'Environnement Environment et de l'Énergie. and Energy APPROVALS BRANCH 3rd Ploor Tel. (416) 440-3544 Fax (416) 440-6973 September 11, 1996 Laidlaw Waste Systems (Richmond) Ltd. 3410 South Service Road P.O. Box 5057 RECEIVED SEP 2 0 1996 Burlington, Ontario L7R 3Y8

Attention: Mr. M.J. Pullen, P.Eng. Director, Environmental Management

Dear Mr. Pullen:

Re: Provisional Certificate of Approval: No. A 371203 .

• • • • • Attached is a Notice of Amendment of the above-noted certificate

The amendment provides approval for the expansion of the existing . leaf and yard waste compost facility and its conversion to an organic waste composting facility. Please ensure that this facility is constructed and operated in accordance with the approved documents. 

As a point of clarification, please note that your existing leaf and yard waste composting operation would have been exempt under Ontario Regulation 101/94 from any certificate of approval requirements except for the fact that it is situated within a landfill site. General organic waste composting operations are not subject to this exemption. Thus the organic waste composting facility now approved at the site would have been subject to certificate of approval requirements even if it was not situated within the landfill site. **e**. e - 1 

Should you have any questions concerning the requirements of your certificate, please call Mr. J. Connelly of this office at (416) 440-3567

Yours truly,

A. Dominski, P.Eng., Supervisor Waste Unit

Encl. JC/es

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cc: J. Bishop - Kingston



Ministry of Environment and Energy Ministère de l'Environnement et de l'Énergie

> NOTICE Page 1 of 2

TO: Laidlaw Waste Systems (Richmond) Ltd. 3410 South Service Road P.O. Box 5057 Burlington, Ontario L7R 3Y8

You are hereby notified that Condition No. 31 of Provisional Certificate of Approval No. A 371203 dated March 30, 1988 is hereby amended as follows;

- 31. The existing leaf and yard waste composting facility in the buffer zone of the landfill site may be expanded and converted to an organic waste composting facility in accordance with the following documents:
  - a. "Application for Approval of a Waste Disposal Site", dated July 25, 1996, signed by Mr. Michael J. Pullen, Director, Environmental Management;
  - b. Report entitled "Undertaking to Establish an Organic Waste Composting Facility at the Laidlaw Waste Systems (Richmond) Ltd. Landfill Site", dated July 1996, prepared by Laidlaw Waste Systems (Richmond) Ltd; and
  - c. Plan entitled "Richmond Township Landfill Proposed Compost Pad Expansion", revised April 12, 1996, prepared by Henderson, Paddon & Associates Limited.

The reason for Condition 31 is to ensure that compost operations at the site do not create a nuisance or a hazard to the health and safety of any person.

In accordance with Section 139 of the <u>Environmental Protection Act</u>, R.S.O. 1990, Chapter E-19, you may by written notice served upon me, the Environmental Appeal Board and the Environmental Commissioner, <u>Environmental Bill of Rights</u>, S.O. 1993, Chapter 28, within 15 days after receipt of this Notice, require a hearing by the Board. Section 142 of the <u>Environmental Protection Act</u>, as amended provides that the Notice requiring a hearing shall state:

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



Ministry of Environment and Energy Ministère de l'Environnement et de l'Énergie

> NOTICE Page 2 of 2

In addition to these legal requirements, the Notice should also include:

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the waste disposal site is located;

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

This Notice must be served upon:

The Secretary, Environmental Appeal Board, 112 St. Clair Avenue West, Suite 502, Toronto, Ontario, M4V 1N3

The Environmental Commissioner, 1075 Bay Street, Suite 605 6th Floor Toronto, Ontario M55 2W5 The Director, Section 39, Environmental Protection Act, Ministry of the Environment and Energy, 250 Davisville Avenue, 3rd Floor, Toronto, Onterio. M4S 1H2

This instrument is subject to Section 38 of the <u>Environmental Bill of Rights</u>, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek to appeal for 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry, you can determine when the leave to appeal period ends.

DATED AT TORONTO this 11th day of September, 1996.

A. Domíński, P. Eng. Director Section 39 Environmental Protection Act

Amendment to Certificate of Approval No. A371203 dated August 29, 2000, Approving the Construction of the Phase 1 Leachate Collector





Ministry Ministère of the de Environment l'Environnement

Canadian Waste Services Inc. R.R. 36 (Beachwood Road) Greater Napanee, Ontario K7R 3L1

Site Location: Richmond Landfill Richmond Township Greater Napanee Town, County Of Lennox & Addington

You are hereby notified that I have amended Provisional Certificate of Approval No. A 371203 issued on March 30, 1988 for the Richmond Landfill Site, as follows:

you are hereby granted approval to install the leachate collector at the Phase 1 portion of the landfill site in order to control leachate mounding within the landfill site;

All in accordance with the application for approval dated June 22, 2000, and supporting information and documentation prepared by Henderson Paddon & Associates Limited, and subject to the following condition:

Canadian Waste Services Inc. Shall submit to the Ministry of Environment a Contingency Plan for the management of leachate collected, by no later than October 30, 2000, to be used in the event that the Napanee Sewage Treatment Plant is not capable of treating the additional leachate collected from Phase 1 portion of the landfill as a result of this approval.

The following documents are added to Schedule "A" of the existing Certificate of Approval:

1. Drawing 8570G-L1 dated May 2000- Phase I Proposed Leachate Collector, Napanee Landfill, Napanee, Ontario

2. A letter dated July 31, 2000, regarding concerns raised during review of application, to Tes Gebrezghi, MOE, from Jeff Armstrong, Henderson Paddon & Associates Limited

3. 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

4. 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.

Page 1 - NUMBER A 371203

# This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No.A 371203 dated March 30, 1988.

In accordance with Section 139 of the <u>Environmental Protection Act</u>, R.S.O. 1990, Chapter E-19, as amended, you may by written Notice served upon me, the Environmental Appeal Board and in accordance with Section 47 of the <u>Environmental Bill of Rights</u>, S.O. 1993, Chapter 28, the Environmental Commissioner, within 15 days after receipt of this Notice, require a hearing by the Board. The Environmental Commissioner will place notice of your appeal on the Environmental Registry. Section 142 of the <u>Environmental Protection Act</u>, provides that the Notice requiring the hearing shall state:

The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
 The grounds on which you intend to rely at the hearing in relation to <u>each</u> portion appealed.

The Notice should also include:

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the waste disposal site is located;

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

This Notice must be served upon:					
The Secretary*		The Environmental Cor	nmissioner	The Director	
Environmental Appeal I	Board	1075 Bay Street, 6th Floor		Section 39, Environmental Protection Act	
2300 Yonge St., 12th Fl	loor	Suite 605		Ministry of the Environment	
P.O. Box 2382	AND	Toronto, Ontario	AND	2 St. Clair Avenue West, Floor 12A	
Toronto, Ontario		M5S 2B1		Toronto, Ontario	
M4P 1E4				M4V 1L5	

\* Further information on the Environmental Appeal Board's requirements for an appeal can be obtained directly from the Board at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

This instrument is subject to Section 38 of the <u>Environmental Bill of Rights</u>, 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.ene.gov.on.ca, you can determine when the leave to appeal period ends.

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

DATED AT TORONTO this 29th day of August, 2000

Page 2 - NUMBER A 371203

Andrzej Dominski, P.Eng. Director Section 39, Environmental Protection Act

TG/

c: District Manager, MOE Kingston District Michael Pullen, Canadian Waste Services Inc.

Page 3 - NUMBER A 371203

Amendment to Certificate of Approval No. A371203 dated June 27, 2002, Imposing Condition 34





Ministry of Ministère de Environment l'Environnement and Energy et de l'Énergie AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL WAS IE DISPOSAL SITE NUMBER A371203 Notice No. 2

Canadian Waste Services Inc. 3525 Mavis Road Mississauga, Ontorio L5C 1T7

Site Location: Richmond Landfill Richmond Township Greater Napance Town, County Of Lennox & Addington

You are hereby notified that I have amended Provisional Certificate of Approval No. A371203 issued on March 30, 1988 and amended by the Notice dated May 12, 2000 for the Richmond landfill site, as follows:

The following Condition is hereby imposed:

- (34) For the duration of the labour disruption in the City of Toronto, as described in Item (5) of Schedule "A", Canadian Waste Services Inc. may accept all types of municipal waste that are generated within the City of Toronto subject to the following subconditions:
  - (a) Within five (5) days of the resolution of the labour strike, Canadian Waste Services Inc. shall cease to accept the waste identified in Condition 34;
  - (b) Conadian Waste Services Inc. shall ensure that all waste is managed and disposed in accordance with the terms and conditions of this Certificate, and any other applicable municipal, provincial and federal requirements;
  - (c) Canadian Waste Services Inc. shall forthwith notify the Director, in writing, when the labour strike is initiated and resolved; and
  - (d) The maximum amount of waste that can be received at the site is 740 tonnes per day.

The following item is hereby added to Schedule "A";

.

(5) Application for approval of a Waste Disposal Site signed by Michael J. Pullen, Director of Environmental Engineering and Compliance, Canadian Waste Services Inc., dated June 21, 2002, including all supporting documentation. re: emergency amendment

Page 1 - NUMBER A371203

The reason(s) for this amendment to the (Certificate of Approval is (are) as follows:

The reason for this amendment is to alleviate an emergency as defined in Section 31 of the Environmental Projection Act and to prevent any danger to the health and safety of the public and the environment.

All other conditions on the original Certificate, not affected by this Notice, remain in effect.

This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A371203 dated March 30, 1988

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990, Chapter E-19, as amonded, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act, provides that the Notice requiring the hearing shall state:

The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and: 1. 2.

The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

- The name of the appellant; 3.
- The address of the appellant; 4.
- The Certificate of Approval number; 5.
- The date of the Certificate of Approval; 6.
- The name of the Director; 7.

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The municipality within which the waste disposal site is located; 8.

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

This Notice must be served upon:

The Secretary*		The Direction
Environmental Review Tribunat		Section 39, Environmental Protection Act
3300 Yonge St., 12th Floor		Ministry of Environment and Energy
P.O. Box 2382	AND	2 St. Clair Avenue West, Flour 17A
Toronto, Ontario		Toronius, Ontanio
M1P 1E4		M4V 1L5

\* Further information on the Environmental Review Trihunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fus: (416) 314-4506 or www.ert.gov.on.ca

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

DATED AT TORONTO this 27th day of June, 2002

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Page 2 - NUMBER A371203

Ian Parrott, P.Eng. Director Section 39, Environmental Protection Act

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c: District Manager, MOEE Kingston - District Michael J. Pullen, P.Eng., Canadian Waste Services Inc.

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Appendix A.2.8

Amendment to Certificate of Approval No. A371203 dated November 24, 2003, Revising Condition 21





Ministry

Environment

of the

Ministère de l'Environnement AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL WASTE DISPOSAL SITE NUMBER A371203 Notice No. 3

Canadian Waste Services Inc. 2301 Carp Road Carp, Ontario K0A 1L0

Site Location: RICHMOND LANDFILL SITE Part of Lots 1, 2 & 3 - Concession 4 Richmond Ward Town of Greater Napanee, County of Lennox & Addington

You are hereby notified that I have amended Provisional Certificate of Approval No. A371203 issued on March 20, 1988, as amended for the operation of a 16.2 hectare waste disposal (landfilling) site within a total site area of 138 hectares, as follows:

#### FINANCIAL ASSURANCE

Pursuant to Condition 21 in the Certificate of Approval, the site owner shall submit to the Director by **January 31, 2004** an increase in financial assurance, in a form acceptable to the Director, to a total amount consistent with the revised financial assurance estimates presented in the following documentation and accounting for the 2003 site operating year. Financial assurance may be provided in one or more of the following forms: cash, irrevocable letter of credit and/or surety or performance bond, or some other form, all satisfactory to the Director. This Certificate of Approval No. A371203 shall be included on any non-cash form of financial assurance and any correspondence related to financial assurance that is to be submitted to the Director for this site.

#### **Documentation**

a. Letter dated December 19, 2002 from Michael Walters, Canadian Waste to Andrzej Dominski, Ministry of Environment, re: Richmond Landfill Site - Financial Assurance (revised FA amount of \$6,221,937 for 2004).

b. Letter dated February 2, 2003 from Michael Walters, Canadian Waste to Dave Staseff, Ministry of Environment, re: Richmond Landfill Site - Financial Assurance (request for concurrence with revised FA amount).

c. Letter dated February 14, 2003 from Michael Walters, Canadian Waste to Andrew Morley, Ministry of Environment, re: CWS Richmond Landfill - MOE Site Inspection Report Dated September 4, 2002 (Section 2.1 - Financial Assurance - revised FA amount of \$6,236,937 for 2004).

#### Reasons

The reasons for this amendment to the Certificate of Approval are as follows:

To approve an increase in the amount of financial assurance for this landfill site and to ensure that sufficient funds are available for proper site closure, post-closure care and contingencies, in the event that the site owner cannot or does not carry out its obligations under this Certificate of Approval.

This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A371203 dated March 20, 1988, as amended. All other terms and conditions not affected by this amendment shall remain in effect.

*In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require* 

#### CONTENT COPY OF ORIGINAL

a hearing by the Tribunal. Section 142 of the <u>Environmental Protection Act</u>, provides that the Notice requiring the hearing shall state:

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

#### The Notice should also include:

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the waste disposal site is located;

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

*This Notice must be served upon:* 

The Secretary\* Environmental Review Tribunal 2300 Yonge St., 12th Floor P.O. Box 2382 Toronto, Ontario M4P 1E4 AND

The Director Section 39, *Environmental Protection Act* Ministry of Environment and Energy 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) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

DATED AT TORONTO this 24th day of November, 2003

DS/

c: District Manager, MOE Kingston District Office Michael Walters, Canadian Waste Services Inc. Clerk, Town of Greater Napanee Ian Parrott, P.Eng. Director Section 39, *Environmental Protection Act*  Appendix A.2.9

Amendment to Certificate of Approval No. A371203, dated March 26, 2004, Regarding Notification of Change of Name



Ministry of the Environment Environmental Assessment and Approvals Branch Floor 12A 2 St Clair Ave W Toronto ON M4V 1L5 Fax: (416)314-8452 Telephone: (416) 314-7902

Ministère de l'Environnement Direction des évaluations et des autorisations environnementales Étage 12A 2 av St Clair O Toronto ON M4V 1L5 Télécopieur: (416)314-8452 Téléphone : (416) 314-7902



March 26, 2004

Jessica Campbell, Director, Regulatory Affairs & Environmental Compliance Waste Management of Canada Corporation 5045 South Service Road, Suite 300 Burlington, Ontario L7L 5Y7

Dear Sir/Madam:

## Re: Notification of Change of Name MOE Reference Number 9673-5XFSHB

The Ministry of the Environment (the "Ministry") acknowledges receipt of your letter dated February 2, 2004 requesting a change in company name:

**FROM:** Canadian Waste Services Inc.

**TO:** Waste Management of Canada Corporation

By this letter, the Ministry advises you that your notification of change in company name has been registered in our records for the following Certificate(s) of Approval:

Certificate(s) of Approval for Waste Disposal Sites, Section 27, EPA:

```
A230901 East Gwillimbury
A230701 Hwy 48
A230201 Auro'ra
A032006 Blackwell LF
A380103 Kingston - St. Remy Place
       Brant St. Hamilton
A100144
        Sarina MacGregor Rd.
A620042
       Mavis, Mississauja
A210237
        La Salle LF
A031810
        Ridge LF
A021601
8602-4HQQZW Trenton, Chester Rd.
         Tecumseth LF
A253001
         Lottridge - Hamilton
A100130
```

California Auc. - Brockville A440109 Cushman Rd. - St. Catherines A120138 Petrolia NRF A030309 Conrad Place, Waterloo A140327 Timmins-Deloro A580730 Timmins - Ogden A580731 Timmins - German A580732 Mount Forest-Sligo Rd. A170404 Lansdowne AUC - Hamilton A100139 carleton Place A450707 Maids tone A010128 Bowes Rd. A230615 Esandar A680243 Brydon A210622 A461002 Ottawa LF Warwick LF A032203 Petrolia LF A030303 Blenheim LF A021603 Exeter Rd. - London A040213 A280229 Unwin New Toronto A210328 4458-5QTLS3 Timmins MRF Saunders Rd - Barrie A250111 1308-5HNRY6 Wentworth . Brampton A371203 Richmond LF A710003 Richmond LF

The Ministry will not be providing you with an amended certificate(s) to reflect the change in company name. Therefore, this letter must be appended to its corresponding Certificate(s) of Approval. The name change will be included in any future amended Certificate(s) of Approval.

If you have any questions regarding the above, please contact me at the above phone number.

Yours truly,

Sauja Jauronic Sanja Jankovic

Sanja Jankovic Application Processor

cc: District Manager, MOE York-Durham District Manager, MOE, Sarnia District Manager, MOE Kingston District Manager, MOE Hamilton District Manager, MOE Halton-Peel District Manager, MOE Peterborough District Manager, MOE Barrie District Manager, MOE Niagara District Manager, MOE Guelph District Manager, MOE Timmins District Manager, MOE Ottawa District Manager, MOE Toronto District Manager, MOE London Area Manager, MOE Windsor Area Manager, MOE Belleville

File Storage Number: 230901, 230701, 230201, 032006, 380103, 100144, 620042, 210237, 031810, 021601, 0209, 253001, 100130, 440109, 120138, 030309, 140327, 580730, 580731, 580732, 170404, 100139, 450707, 010128, 230615, 680243, 210622, 461002, 032203, 030303, 021603, 040213, 280229, 210328, 0822, 250111, 0611, 371203

Appendix A.2.10

Amendment to Certificate of Approval No. A371203 dated March 21, 2007, Revoking and Replacing Condition 34



#### **CONTENT COPY OF ORIGINAL**



Ministry of the Environment Ministère de l'Environnement AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL WASTE DISPOSAL SITE NUMBER A371203 Notice No. 4 Issue Date: March 21, 2007

Waste Management of Canada Corporation 2301 Carp Rd Rural Route, No. 3 Carp, 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 are hereby notified that I have amended Provisional Certificate of Approval No. A371203 issued on March 20, 1988 and subsequently amended for the use and operation of a 16.2 hectare waste disposal (landfilling) site within a total site area of 138 hectares, as follows:

#### Condition 34 created on June 27, 2002 is hereby revoked and replaced with the following condition:

34. Within ninety (90) days of issuance of this amendment, the Owner shall submit to the Director for approval, with copies to the District Manager, a detailed site Closure Plan pertaining to the termination of landfilling at this *Site*, post-closure inspection, maintenance and monitoring, and end use. The plan shall include, but not limited to, the following:

a. a plan showing Siteappearance after closure including side slopes and final contours of the Site;

b. a description of the proposed end use of the Site;

e. a descriptions of the procedures for closure of the Site, including:

- advance notification of the public of the landfill closure;
- posting of a sign at the Site entrance indicating the landfill is closed and identifying any alternative waste disposal arrangements;
- completion, inspection and maintenance of the final cover and landscaping;
- site security;

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- removal of unnecessary landfill-related structures, buildings and facilities; and
- final construction of any control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas;

d. a schedule indicating the time-period for implementing sub-conditions listed above;

e. descriptions of the procedures for post-closure care of the Site, including:

- operation, inspection and maintenance of the control, treatment, disposal and monitoring facilities for leachate, groundwater, surface water and landfill gas;
- record keeping and reporting; and
- complaint contact and response procedures;

f. an assessment of the adequacy of and need to implement the contingency plans for leachate and methane gas;

g. an updated estimate of the contaminating life span of the *Site*, based on the results of the monitoring programs to date; and,

h. an update of the cost estimates for financial assurance and the amount which has been provided to the Director to date.

The reasons for this amendment to the Certificate of Approval are as follows:

1. The reasons for Condition 34 are to ensure that final closure of the Site is completed in an aesthetically pleasing manner and to ensure the long-term protection of the natural environment.

#### **CONTENT COPY OF ORIGINAL**

# This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A371203 dated March 20, 1988 as amended.

In accordance with Section 139 of the <u>Environmental Protection Act</u>, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the <u>Environmental Protection Act</u>, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;

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

AND

#### The Notice should also include:

3. The name of the appellant;

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- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the waste disposal site is located;

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

#### This Notice must be served upon:

The Secretary\* Environmental Review Tribunal 2300 Yonge St., Suite 1700 P.O. Box 2382 Toronto, Ontario M4P 1E4 The Director Section 39, *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) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

#### DATED AT TORONTO this 21st day of March, 2007

Tesfaye Gebrezghi, P.Eng. Director Section 39, *Environmental Protection Act* 

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c: District Manager, MOE Kingston - District Michael Pullen, Waste Management of Canada Corporation Michael Walters, Waste Management of Canada Corporation Appendix A.2.11

Amendment to Certificate of Approval No. A371203 dated March 31, 2010, Imposing Condition 35, Revoking and Replacing Conditions 6, 8, 9, and 14 through 28, Revoking Condition 30, and Adding Conditions 36 through 140



Ministry of the Environment Environmental Assessment and Approvals Branch Floor 12A 2 St Clair Ave W Toronto ON M4V 1L5 Fax: (416)314-8452 Telephone: (416) 314-5138 Ministère de l'Environnement Direction des évaluations et des autorisations environnementales Étage 12A 2 av St Clair O Toronto ON M4V 1L5 Télécopieur : (416)314-8452 Téléphone : (416) 314-5138



April 1, 2010

Mr. Randy Harris, Site Manager Waste Management of Canada Corporation 1271 Beechwood Road, RR #6 Napanee, Ontario K7R 3L1

Dear Mr. Harris:

## Re: Application for Approval of Closure plan Richmond Landfill, Certificate of Approval A371203 Town of Greater Napanee, County of Lennox and Addington MOE Reference Number 7421-74DHGZ

Please find attached an amendment to the Certificate of Approval for Waste Management of Canada Corporation's (WMCC'S) Richmond Landfill Site dated March 31, 2010. The amendment approves the closure plan for the site. The site will not be allowed to receive waste for disposal after June 30, 2011. Conditions have been added to define site inspection frequencies, leachate collection system cleaning frequency and other measures to occur after site closure. In addition, conditions for the site that define the site capacity, operating hours, yearly waste limit, service area, site monitoring, complaint procedures, annual reporting and record keeping during the site operating period have been incorporated into the amendment.

Also, WMCC will be required to establish and maintain a Public Liaison Committee for the site with representatives form the Town of Greater Napanee, the Ministry, the Mohawks of the Bay of Quinte, Tyendinaga Township and the Quinte Conservation Authority. All monitoring results will be required to be posted on a semi-annual basis on a publicly accessible website within 30 days of receipt.

Furthermore, by June 30, 2010, WMCC will be required to provide the following:

- an estimate of the contaminating lifespan of the site;
- an updated financial assurance plan;
- an updated groundwater, odour and surface water monitoring plan;
- an updated groundwater and surface water impact plan;

- a quality assurance/quality control plan for placement of the final cover material;
- details on the proposed synthetic membrane liner for the compost pond; and
- details on the proposed reconstruction of the compost pad area

In addition, a total of \$11,542,408 in Financial Assurance is required to be provided to the Ministry within 30 days of issuance of the amendment.

If you have any questions regarding the above, please contact me at the above phone number.

Yours truly,

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Greg Washuta, P.Eng., M.Eng., F.E.C. Senior Review Engineer-Waste

c: Trevor Dagilis, District Manager, MOE Kingston - District Craig Dobiech, MOE, Kingston District Brian Kaye, Supervisor, MOE, Kingston District Victor Castro, MOE, Technical Support, Eastern Region Kyle Stephenson, MOE, Technical Support, Eastern Region Tim Murphy, Waste Management of Canada Corporation Jeff Armstrong, Henderson Paddon and Associates V Chief Don Maracle, Mohawks of the Bay of Quinte Rod Jeffries, CAO, Mohawks of the Bay of Quinte Mayor Gordon Schermerhorn, Town of Greater Napanee Rebecca Murphy, Clerk/Treasurer, Town of Greater Napanee Terry Murphy, General Manager, Quinte Conservation Authority Ian Munro Reeve Margaret Walsh, The Corporation of the Township of Tyendinaga Steve Mercer, The Corporation of the Township of Tyendinaga



Ministry of the Environment Ministère de l'Environnement

#### AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL WASTE DISPOSAL SITE NUMBER A371203 Notice No. 5 Issue Date: March 31, 2010

Waste Management of Canada Corporation 1271 Beechwood Road, RR #6 Napanee, Ontario K7R 3L1

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

You are hereby notified that I have amended Provisional Certificate of Approval No. A371203 issued on March 20, 1988 and subsequently amended on September 4, 1991, September 2, 1994, August 1, 1995, September 11, 1996, August 29, 2000, January 27, 2002, November 24, 2003 and March 21, 2007 for 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:

#### Condition 35 is hereby added to the Certificate of Approval (C of A):

#### Site Closure:

- 35. 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 in accordance with the timelines presented below.
  - Phase I by September 30, 2010.
  - Phases II, III, IV & V by August 31, 2011.

#### Condition 6 created on March 30, 1988 is hereby revoked and replaced with the following:

6a. 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.

Final Cover - Final cover placed after the effective date of this C of A 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  $1 \times 10^{-8}$  m/s or less followed by 150 mm of topsoil. Fill areas shall be progressively completed as landfill development reaches final contours.

- 6b. By June 30, 2010, the Owner shall submit to the Director for approval a Quality Assurance/Quality Control Plan for placement of the final cover material.
- 6c. Placement of the final cover material shall not occur until the QA/QC plan is approved by the Director.

# Condition 8 created on March 30, 1988 is hereby revoked and replaced with the following:

- a. Monitoring programs shall be carried out for groundwater, surface water, and landfill gas, in accordance with Schedules "B", "C" and "D"attached to this *Certificate*.
- b. The owner of the landfill must provide an Environmental Monitoring Program (EMP) to the Director for approval by June 30, 2010. Pending final approval of the EMP by the Director, the Owner shall implement the EMP upon submission to Director.
- c. The EMP must include adequate detail on groundwater and surface water monitoring locations, monitoring frequencies, parameters etc.
- d. 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. The monitoring results from any sampling undertaken shall be submitted to the Regional Director and the District Manager within one month of each analysis being completed.
- f. 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.

# Condition 9 created on March 30, 1988 is hereby revoked and replaced with the following:

- 9a. A written report on the development, operation, closure and monitoring of the Site, shall be completed annually (the "Annual Report"). The Annual Report shall be submitted to the Regional Director, the District Manager and the PLC, by March 31st of each year and shall cover the year ending the preceding December 31st.
- 9b. The Annual Report shall include the following:
  - i. the results and an interpretive analysis of the results of all leachate, groundwater, surface water and landfill gas monitoring, including an assessment of the need to amend the monitoring programs;
  - ii. an assessment 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;
  - iii. an assessment of the efficiency of the leachate collection system;
  - iv. site plans showing the existing contours of the Site;
  - v. areas of landfilling operation during the reporting period;

- vi. areas of intended operation during the next reporting period;
- vii. areas of excavation during the reporting period;
- viii. the progress of final cover, vegetative cover, and any intermediate cover application;
  - ix. previously existing site facilities;
  - x. facilities installed during the reporting period;
- xi. site preparations and facilities planned for installation during the next reporting period;
- xii. 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;
- xiii. a summary of the quantity of any leachate or pre-treated leachate removed from the *Site* during each operating week;
- xiv. a summary of the weekly, maximum daily and total annual quantity (tonnes) of waste received at the Site.
- xv. a summary of any complaints received and the responses made;
- xvi. a discussion of any operational problems encountered at the Site and corrective action taken;
- xvii. 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;
- xviii. a summary of the leachate collection system cleaning and inspection activities;
  - xix. an update summary of the amount of financial assurance which has been provided to the *Director*;
  - xx. a report on the status of all monitoring wells and a statement as to compliance with Ontario Regulation 903;
- xxi. any other information with respect to the site which the *District Manager* or Regional Director may require from time to time;
- xxii. a statement of compliance with all conditions of this Certificate of Approval and other relevant Ministry groundwater and surface water requirements;
- xxiii. a confirmation that the site inspection program as required by this Certificate has been complied with by the Owner;
- xxiv. Any changes in operations, equipment or procedures employed at the site; and,
- xxv. Recommendations regarding any proposed changes in operations of the site.
- 9c. The Owner shall provide semi-annual monitoring results and provide such reports on a publicly accessible website within one month of receipt of the results.

#### Condition 30 created on September 4, 1991 is hereby revoked.

#### Conditions 14 to 28 are hereby revoked and replaced with the following:

#### **Financial Assurance**

14. 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 Certificate, including emergency close out, monitoring and maintenance of the Site over the planning period (operational life and the contaminating lifespan) of the Site, planned close out whether or not the site reaches approved capacity, and contingency plans for the Site.

- 15. 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*.
- 16. A written report reviewing the financial assurance required by this *Certificate* shall be submitted to the Director by November 30, 2011, and at intervals of not more than three (3) years thereafter.
- 17. The report shall include:
  - a. updates of the discount, interest and inflation rates associated with the requirements for financial assurance in this *Certificate* 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 *Certificate* are based. The report shall take into consideration the:
    - actual amounts of waste landfilled;
    - projected rate of fill;
    - progressive capping of completed fill areas;
    - leachate generation rates;
    - landfill gas generation rates;
    - contaminating life span of the Site with respect to groundwater, surface water and landfill gas;
    - any measures that have been carried out or need to be carried out to prevent and ameliorate any adverse effect that relates to the site; and
    - annual inspection, maintenance, and monitoring costs, including costs for leachate treatment and disposal and landfill gas use or discharge.
- 18. If any financial assurance is scheduled to expire or notice is received, indicating financial assurance will not be renewed, and satisfactory methods have not been made to replace the financial assurance at least 60 days before the financial assurance terminates, the financial assurance shall forthwith be replaced by cash.
- 19. By June 30, 2010, the Owner shall:
  - determine the appropriate contaminating lifespan for the Site;
  - provide a rationale for the appropriate contaminating lifespan chosen; and
  - resubmit a revised financial assurance plan for the site considering the revised contaminating lifespan.
- 20. Pending resolution of the issue of the contaminating lifespan for the site, the Owner shall provide financial assurance in a form acceptable to the Director in accordance with the following schedule:

Date	Financial Assurance Required	
Within 30 days of issuance of this amendment	\$11,542,408	
January 31, 2011	\$11,557,385	
January 31, 2012	\$11,577,385	

## The following conditions are added to the Certificate of Approval:

#### Compliance

36. The *Owner* shall ensure that any person authorized to carry out work on or operate any aspect of the *Site* is notified of the *Certificate* and the conditions herein and shall take all reasonable measures to ensure the person complies with the same. Any person authorized to carry out work on or operate any aspect of the *Site* shall comply with the conditions of this *Certificate*.

#### In Accordance

37. Except as otherwise provided for in this *Certificate*, the *Site* shall be designed, developed, built, operated and maintained in accordance with this Certificate and the supporting documentation listed in Schedule "A".

#### **Other Legal Obligations**

38. The issuance of, and compliance with, this *Certificate* does not:

- 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
- 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 *Certificate* be provided to the *Ministry*;

unless a provision of this *Certificate* 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 *Certificate*.

#### **Adverse Effect**

- 39. The *Owner* and *Operator* shall take all reasonable steps to minimize and ameliorate any adverse effect or impairment of water and air quality resulting from the operation of the *Site*, including such accelerated or additional monitoring as may be necessary to determine the nature of the effect or impairment.
- 40. The Owner or Operator shall remain responsible for any contravention of any other condition of this *Certificate* 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 water quality.

#### **Furnish Information**

41. Any information requested by the *Director* or a *Provincial Officer* concerning the *Site* and its operation under this *Certificate*, including but not limited to any records required to be kept by this *Certificate* shall be provided in a timely manner.

- 42. 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 *Certificate* or under any statute, regulation or subordinate legal instrument, in relation to the information, shall not be construed as:
  - an approval, waiver, or justification by the *Ministry* of any act or omission of any person that contravenes any condition of this *Certificate* or any statute, regulation or other subordinate legal requirement; or
  - acceptance by the *Ministry* of the information's completeness or accuracy.

## **Freedom of Information Act**

43. Any information related to this Certificate 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

- 44. Where there is a conflict between a provision of any document, including the application, referred to in this *Certificate*, and the conditions of this *Certificate*, the conditions in this *Certificate* shall take precedence.
- 45. 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.
- 46. 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.
- 47. The conditions of this *Certificate* are severable. If any condition of this *Certificate*, or the application of any condition of this *Certificate* to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this *Certificate* shall not be affected thereby.

## **Change of Owner**

- 48. 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:
  - the ownership of the *Site* ;
  - the Operator of the Site ;
  - the address of the Owner or Operator;
  - 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;
  - 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.

49. In the event of any change in the ownership of the works, other than a change to a successor municipality, the *Owner* shall notify in writing the succeeding owner of the existence of this *Certificate*, and a copy of such notice shall be forward to the *Director* and *District Manager*.

#### Inspections

- 50. No person shall hinder or obstruct a *Provincial Officer* from carrying out any and all inspections authorized by the *OWRA*, the *EPA*, the *Nutrient Management Act* or the *PA*, of any place to which this *Certificate* relates, and without limiting the foregoing:
  - to enter upon the premises where the approved works are located, or the location where the records required by the conditions of this *Certificate* are kept;
  - to have access to, inspect, and copy any records required to be kept by the conditions of this *Certificate*;
  - to inspect the Site, related equipment and appurtenances;
  - to inspect the practices, procedures, or operations required by the conditions of this *Certificate*; and
  - to sample and monitor for the purposes of assessing compliance with the terms and conditions of this *Certificate* or the *EPA*, the *OWRA* or the *PA*.

## **Proper Operation**

51. 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 *Certificate.* At no time shall the discharge of a contaminant that causes or is likely to cause an adverse effect be permitted.

## Waste Inspection and Deposition

- 52. 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.
- 53. 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.

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

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

#### Dust

56. The Owner shall control fugitive dust emissions from on site sources including but not limited to on-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

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

#### Surface Water:

- 58. 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.
- 59. The owner shall not discharge surface water to receiving water bodies without an approval under Section 53 of the OWRA.
- 60. If any discharge of surface water from the South-west Stormwater Pond is contemplated by the Owner, the Owner shall prior to discharge, collect samples and analyze them for acute toxicity testing in accordance with Environment Canada protocols for rainbow trout and daphnia magna.
- 61. No discharge of surface water from the South-west Stormwater Pond is permitted by the Owner until such time as the Owner provides the Toxicity reports to the District Manager, the Toxicity Reports indicate a passing grade and the District Manager has approved in writing the release of surface water from the South-west Stormwater Pond.

#### Litter Control:

62. The Owner shall take all practical steps to prevent escape of litter from the site. The Owner shall inspect and collect litter from the site on a weekly basis. All loose, windblown litter shall be collected and disposed of at the landfill working face.

#### Capacity

63. The Owner shall only accept and deposit waste at the site as long as there is available capacity as defined by the final contours for the Site approved by this Certificate . The approval 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

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

#### Service Area

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

#### **Operations Manual**

- 66. An operations and procedures manual that addresses the requirements of this *Certificate* shall be prepared and submitted to the District Manager for approval within ninety (90) days of the issuance of this amendment and shall include the following:
  - Health and safety;
  - Operation and maintenance of the site;
  - Waste acceptance;
  - Waste disposal area and development;
  - Nuisance management;
  - Leachate management;
  - Landfill gas management;
  - Surface water/Storm water management;
  - Inspections and monitoring;
  - Contingency plans and emergency procedures;
  - Complaints; and,
  - Reporting and record keeping.

67. The operations and procedures manual shall be:

- retained at the Site;
- reviewed on an annual basis and updated by the Owner as required; and
- be available for inspection by *Ministry* staff.

## **Hours of Operation**

- 68. Waste shall only be accepted at the Site during the following time periods:
  8 am to 5 PM Monday to Friday (except statutory holidays)
  8 am to 1 PM Saturday
- 69. With the prior written approval of the *District Manager*, the time periods may be extended to accommodate seasonal or unusual quantities of waste.
- 70. 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.
- 71. 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

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

#### Waste Inspection Procedures

73. 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 *Certificate*.

#### **On-Site Roads**

74. On-Site roads shall be provided and maintained in a manner that vehicles hauling waste to and on the site may travel readily and safely on any operating day. During winter months, when the site is in operation, roads must be maintained to ensure safe access to the landfill working face. On-Site roads must be clear of mud, ice and debris which may create hazardous conditions.

#### **Cleaning Leachate Collection System**

75. 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.

#### **Employees and Training**

- 76. 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 *Certificate*. For the purpose of this *Certificate* "trained" means knowledgeable either through instruction or practice in:
  - the relevant waste management legislation *including EPA*, O. Reg. 347, regulations and guidelines;
  - major environmental *and occupational health and safety* concerns pertaining to the waste to be handled;
  - the proper handling of wastes;
  - the management procedures including the use and operation of equipment for the processes and wastes to be handled;
  - the emergency response procedures;
  - the specific written procedures for the control of nuisance conditions;
  - the terms, conditions and operating requirements of this Certificate and,
  - proper inspection, receiving and recording procedures and the activities to be undertaken during and after a load rejection.

#### **Daily Inspections and Log Book**

77. 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 *Certificate*. Any deficiencies discovered as a result of the inspection shall be remedied immediately, including temporarily ceasing operations at the *Site* if needed.

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

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

79. A record shall be kept in the daily log book of all the following:

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

## Monthly Records

- 80. Monthly site inspection records in the form of a written log or a dedicated electronic file shall include the following:
  - a summary of wastes received and refused for disposal at the Site;
  - the area of the Site in which waste disposal operations are taking place;
  - a calculation of the total quantity (tonnes) of waste received at the Site during each operating day and each operating week;
  - the amount of any leachate removed, or treated and discharged from the Site;
  - a record of litter collection activities and the application of any dust suppressants;
  - a record of the daily inspections;
  - 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;
  - type and amount of daily, intermediate and final cover used;
  - maintenance and repairs performed on equipment employed at the site;
  - complaints received and actions taken to resolve them;
  - emergency situations and actions taken to resolve them; and
  - any other information required by the District Manager.

## LEACHATE CONTINGENCY PLAN

81. 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.

#### SITE INSPECTIONS

- 82. During site operations, the owner shall inspect the site monthly for the following items but not limited to these items:
  - Erosion rills on the waste mound;
  - General settlement areas or depressions on the waste mound;
  - Shear and tension cracks on the waste mound;
  - Condition of surface water drainage works;
  - Erosion and sedimentation in surface water drainage system;
  - Presence of any ponded water on the waste mound;
  - Adequacy of cover material;
  - Evidence of vegetative stress, distressed poplars or side slope plantings on or adjacent to the waste mound;
  - Condition of groundwater monitoring wells and gas wells;
  - Presence of insects, vermin, rodents and scavenging animals on or adjacent to the waste mound;
  - Condition of fence surrounding the site; and,
  - General site appearance.
- 83. The owner shall inspect the waste mound and surrounding areas weekly for presence of leachate seeps. Any leachate seeps that are discovered shall be repaired within 48 hours of notice by the Owner.

#### Leachate Collection System Contingency Plan

84. Within 90 days of issuance of this amendment, the Owner shall provide to the Director for approval a detailed contingency plan for failure of the leachate collection system at the Site.

#### Leachate Removal Rates

85. Within 30 days of issuance of this amendment, the Owner shall provide to the Director the amount of leachate removed from the site for the last five years. The leachate volumes shall be broken down in volumes taken from the north and south pumping stations. In addition, the information shall contain what volumes and where the leachate was taken for disposal/treatment.

#### LEACHATE SUMP PITS

- 86. A leachate maintenance level of no greater than 0.66 metres shall be maintained in the north pumping chamber and documented each working day.
- 87. 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.

#### Landfill Gas Collection System

88. Within 90 days of issuance of this amendment, the Owner shall provide to the Director for approval a detailed contingency plans for failure of the landfill gas collection system at the Site.

## PUBLIC LIAISON COMMITTEE

- 90. 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 landfill site. The PLC will also be provided the opportunity to review and comment on any subsequent applications for approval under the EPA and the OWRA.
- 91. 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.
- 92. 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.
- 93. 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 Certificate of Approval, post-closure monitoring and maintenance, and development of the proposed end use for the landfill site;
  - b. Review operational and monitoring reports;
  - c. Consider and make recommendations to the Owner regarding outside consulting advice in respect of the landfill site;
  - d. Facilitate ongoing dialogue between the Owner, and the community, including residents and businesses in the immediate vicinity of the landfill 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.
- 94. The PLC shall not exercise any supervisory, regulatory, approval, legal or other decision making role with respect to the operations at the site.

- 95. The Owner shall provide for the administrative costs of operating the PLC, including the cost of meeting places and clerical services.
- 96. 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.
- 97. 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 landfill. The PLC shall encourage individuals who reside in close proximity to the landfill 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.
- 98. The function of the Ministry member will be to provide advice, information and input to other members as required.
- 99. The PLC shall determine the appropriate meeting frequency and review it on an annual basis.
- 100. Minutes and agendas of meetings shall be printed and distributed on a timely basis.
- 101. 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.
- 102. 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.
- 103. 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.
- 104. The Owner shall allow access to the landfill 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.
- 105. All recommendations made to the Owner with respect to ongoing landfill 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.
- 106. The Owner will disclose all monitoring results to the PLC, the Town of Greater Napanee, the Township of Tyendinaga and the Mohawks of the Bay of Quinte and deliver to the PLC, the Town

of Greater Napanee, the Township of Tyendinaga and the Mohawks of the Bay of Quinte all documents and information (except as may be privileged) relevant to the operation of the landfill.

107. 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.

#### **Complaints Procedure**

- 108. 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 on-site.
- 109. 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.

#### **Groundwater Monitors**

- 110. The Owner shall ensure all groundwater monitoring wells are properly capped, locked and protected from damage.
- 111. In areas where landfilling is to proceed around monitoring wells, suitable extensions shall be added to the wells and they shall be properly re-secured.
- 112. 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.
- 113. 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.

114. 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.

#### Groundwater and Surface Water Impact Contingency Plan

115. By June 30, 2010, the Owner shall submit for approval to the Director a Groundwater and Surface Water Impact Contingency Plan. The Groundwater and Surface Water Impact Contingency Plan will include the following:

- 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;
- A leachate mass balance that compares collected leachate volumes and estimates of leachate production;
- Current groundwater and surface water impacts including observations of leachate seeps over the past five years;
- Quantifiable timelines for each step of the impact contingency plans;
- 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;

#### **Record Retention**

- 116. Except as authorized in writing by the Director, all records required by this Certificate shall be retained at the Site for a minimum of two (2) years from their date of creation.
- 117. The Owner shall retain all documentation listed in Schedule "A" for as long as this Certificate is valid.
- 118. All monthly summary reports are to be kept at the site until they are included in the Annual Report.
- 119. The Owner shall retain employee training records as long as the employee is working at the site.

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

#### **Emergency Situations**

- 121. 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.
- 122. The Owner shall submit to the District Manager a written report within 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.
- 123. The Owner shall prepare an Emergency Response Manual for the site and submit to the District Manager within 60 days of the issuance of this amendment, in consultation with local emergency response agencies. The Emergency Response Manual should indicate the responsibility of each of the stakeholders with respect to handling possible emergency situations.
- 124. 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.
- 125. 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.

## THE FOLLOWING CONDITIONS 126 TO 137 INCLUSIVE ARE APPLICABLE TO THE SITE UPON SITE CLOSURE:

## SITE CLOSURE

- 126. 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 15 to 26 on Schedule "A" and this amendment to the Certificate of Approval as approved by the *Director*.
- 127. 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.
- 128. The Owner shall update the sign at the front gate of the Site shall be updated to indicate the following:
  - the name of the site and Owner;
  - the Certificate of Approval number;
  - the name of the Operator;
  - a warning against unauthorized access;
  - the telephone number to which complaints or questions may be directed;
  - a twenty-four (24) hour emergency telephone number;

- the site is closed;
- dumping outside of the gate is illegal; and
- alternative locations for waste disposal.
- 129. 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.
- 130. Upon closure of the site, the following features will be inspected, recorded and maintained on a quarterly (every three months) basis:
  - evidence of settlement;
  - landfill gas collection system, landfill gas flare and related equipment;
  - cover soil integrity;
  - vegetative cover;
  - gates and fencing around the site;
  - surface water drainage works;
  - landfill gas monitoring wells;
  - erosion and sediment in surface water drainage system; and
  - groundwater monitoring wells.
- 131. Any deficiencies noted in the above items shall be repaired within one month time of notice.
- 132. Upon site closure, grass on the berms and the top of the landfill shall be cut a minimum of two times per year.
- 133. 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.
- 134. Upon closure of the site, the leachate collection system be cleaned and camera inspected on an annual basis for the first three (3) years after site closure. Prior to three 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.
- 135. A vegetative cover consisting of vegetation that is suited to local conditions and that is capable with minimal care of providing vigorous, plentiful cover no later than its 3<sup>rd</sup> growing season shall be established over the entire landfill cover to control erosion and minimize evaportranspiration. Complete planting as soon as possible after reaching final contours. The vegetative cover seed shall be in accordance with Ontario Provincial Standard Specifications and good practice.
- 136. 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.

- 137. The following shall remain in place and be operational at the site until the end of the contaminating lifespan:
  - Leachate extraction equipment;
  - landfill gas extraction equipment; and
  - sedimentation ponds

## COMPOST PAD AREA AND COMPOST POND

- 138. The Owner shall reconstruct the compost pond with a synthetic membrane liner. By June 30, 2010, the Owner shall submit to the Director for approval, details on the proposed synthetic membrane liner. This construction shall be completed by December 31, 2010, unless the approval is issued after August 31, 2010.
- 139. The Owner shall reconstruct the compost pad area with a low permeability surface. By June 30, 2010, the Owner shall submit to the Director for approval, details on the proposed reconstruction. This construction shall be completed by December 31, 2010, unless the approval is issued after August 31, 2010.

## PHYTOREMEDIATION SYSTEM

- 140. Prior to the start of construction of the phytoremediation system proposed for the northwest corner of the Site, the Owner shall submit for approval to the Director, details on the proposed phytoremediation system.
- Items 7 to 10 inclusive on the amendment dated August 1, 1995 are renumbered as items 6 to 9 inclusive.
- Items 1 to 4 inclusive on the amendment dated August 29, 2000 are renumbered as items 10 to 13 inclusive.

#### Item 5 on the amendment dated June 27, 2002 is hereby renumbered as item 14.

## The following items are added to Schedule "A":

- 15. Report entitled "Richmond Sanitary Landfill Site Final Closure Plan" and appendices dated June 2007 prepared by Henderson, Paddon and Associates Limited.
- 16. Memorandum dated November 30, 2007 from K. Stephenson, Hydrogeologist, Eastern Region, MOE to C. Dobiech, Kingston District, MOE.
- 17. Memorandum dated December 5, 2007 from Victor Castro, Surface Water Scientist, Eastern Region, MOE to Craig Dobiech, Kingston District, MOE.
- 18. Letter dated July 11, 2008 from Greg Washuta, Senior Waste Engineer, EAAB, MOE to Mike Walters, WMCC.
- 19. Letter, attachments, and Appendix B dated September 26, 2008 from Randy Harris, Site Manager, WMCC to Greg Washuta, Senior Waste Engineer, EAAB, MOE.

- 20. Letter dated February 23, 2009 from Greg Washuta, Senior Waste Engineer, EAAB, MOE to Randy Harris, Site Manager, WMCC.
- 21. Drawing number 8570-2006 entitled "June 2006 Existing Conditions Richmond Landfill Napanee, Ontario" dated March 19, 2007 prepared by Henderson Paddon and Associates Limited.
- 22. 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.
- 23. Letter dated March 2009 from Randy Harris, Site Manager, Waste Management of Canada Corporation to Greg Washuta, Senior Waste Engineer, Waste Unit, EAAB, MOE.
- 24. Drawing number 8570F-114 entitled "Richmond Township Landfill Landfill Sections 'A-A' and 'B-B'' created by Henderson Paddon and Associates Limited, dated March 1996.
- 25. Drawing number 8570F-115 entitled "Richmond Township Landfill Landfill Sections 'C-C', 'D-D', and 'E-E''' created by Henderson Paddon and Associates Limited, dated March 1996.
- 26. Memorandum dated February 25, 2009 from K. Stephenson, Hydrogeologist, Eastern Region, MOE to C. Dobiech, Kingston District, MOE.
- 27. 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.
- 28. 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.

#### **SCHEDULE "B" : GROUNDWATER MONITORING PROGRAM**

#### The following monitoring wells shall be monitored for water levels on a semi-annual basis:

2054	M48-1	M64-1	M96
2054	M48-2	M64-2	M97
	M48-3	M65-1	M98
M3A-1 M3A-2	M49-1	M65-2	M99-1
M3A-3	M49-2	M66-1	M99-2
M4-1	M49-3	M66-2	M100
M4-2	M50-1	M67-1	M100
	M50-1 M50-2		M102
M4-3		M67-2	M102
M5-1	M50-3	M68-1	M103
M5-2	M51-1	M68-2	OW 1
M5-3	M51-2	M68-3	_
M6-1	M51-3	M68-4	OW4
M6-2	M52-1	M69-1	OW5
M6-3	M52-2	M69-2	OW36
M9-1	M52-3	M69-3	OW37-d
M9-2	M53-1	M69-4	OW37-s
M9-3	M53-2	M70-1	OW54-d
M9R-1	M53-3	M70-2	OW54-i
M10-1	M53-4	M70-3	OW54-s
M10-2	M54-1	M71	OW55-d
M10-3	M54-2	M72	OW 55-i
M12	M54-3	M73	OW55-s
M14	M54-4	M74	OW56-d
M15	M55-1	M75	OW 56-i
M16	M55-2	M76	OW56-s
M18	M55-3	M77	OW 57
M19	M55-4	M78	PW1
M23	M56-1	M79	PW2
M27	M56-2	M80-1	
M28	M57	M80-2	
M29	M58-1	M81	
M30	M58-2	M82-1	
M31	M58-3	M82-2	
M35	M58-4	M83	
M38	M59-1	M84	
M39	M59-2	M85	
M41	M59-3	M86	
M42-1	M59-4	M87-1	
M42-2	M60-1	M87-2	
M42-3	M60-2	M88-1	-
M43-1	M60-3	M88-2	-1
M43-2	M60-4	M89-1	
M43-3		M89-2	$\dashv$
	11/161-1		
11/1/151	M61-1 M61-2		
M45-1 M45-2	M61-2	M90-1	
M45-2	M61-2 M61-3	M90-1 M90-2	
M45-2 M45-3	M61-2 M61-3 M61-4	M90-1 M90-2 M91-1	
M45-2 M45-3 M46-1	M61-2 M61-3 M61-4 M62-1	M90-1 M90-2 M91-1 M91-2	
M45-2 M45-3 M46-1 M46-2	M61-2 M61-3 M61-4 M62-1 M62-2	M90-1 M90-2 M91-1 M91-2 M93	
M45-2 M45-3 M46-1 M46-2 M47-1	M61-2 M61-3 M61-4 M62-1 M62-2 M62-3	M90-1 M90-2 M91-1 M91-2 M93 M94-1	
M45-2 M45-3 M46-1 M46-2 M47-1 M47-2	M61-2 M61-3 M61-4 M62-1 M62-2 M62-3 M62-4	M90-1 M90-2 M91-1 M91-2 M93 M94-1 M94-2	
M45-2 M45-3 M46-1 M46-2 M47-1	M61-2 M61-3 M61-4 M62-1 M62-2 M62-3	M90-1 M90-2 M91-1 M91-2 M93 M94-1	

Well	Overburden (O), bedrock (B) or Leachate (L)	Parameters	Frequency
M35	0	A	Annual
M39	0	A	Annual
M5-1	B	A	Annual
M5-2			
M5-3			
M6-1, M6-3	В	Α	Annual
M6-2	В	A, E	Annual
M45-2, M45-3	В	Α	Annual
M46-1, M46-2	В	A	Annual
OW1	В	Α	Semi-annual
OW4	B	A	Semi-annual
OW55-D	B	Α	Semi-annual
OW55-I			
OW55-S		F	
OW56-D	В	Α	Semi-annual
OW56-I			
OW56-S			
M19	0	A	Annual
M23	0	Α	Annual
M47-1, M47-2, M47-3	В	A	Annual
M50-1, M50-2	В	A, B, E	Annual
M50-3	B	A	Annual
M51-1, M51-2	В	A, B, E	Annual
M51-3	В	A	Annual
M52-1, M52-2	В	A, B, E	Annual
M52-3	В	A	Annual
M12	0	A	Annual
M14	0	A	Annual
M53-2, M53-3, M53-4	B	A	Annual
M9-2, M9-3	B	A	Annual
M9R-1	B	А, Е	Annual
M10-1, M10-2, M10-3	B	Ă	Annual
M43-3	B	A	Annual
M49-1, M49-3	B	A	Annual
M49-2	B	A, B, E	Annual
OW54-D, OW54-I	B	A, B, E	Semi-annual
OW54-S	B	A	Semi-annual
OW57	B	A	Annual

Groundwater samples shall be taken from the following wells:

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2054	B	A, B, E	Semi-annual
2055	В	A, B, E	Semi-annual
M28	0	Α	Annual
M29	0	A	Annual
M58-2, M58-3, M58-4	B	A	Annual
M3A-1, M3A-2, M3A-3	В	A	Annual
M4-1, M4-3	В	Α	Annual
M4-2	В	A, E	Annual
M42-3	В	Α	Annual
M48-2, M48-3	B	A	Annual
M96, M97, M98, M99-1, M99-2, M100, M101, M102, M103, M104		A, B, E	Semi-annual
North Chamber, South Chamber	L	С	Monthly
North Chamber, South Chamber	L	D	Semi-annual

# List A:

GENERAL CHEMISTRY:pH, conductivity, hardness, ion balance.MAJOR IONS:Alkalinity, chloride, sodium, sulphate, calcium, magnesium, potassiumMETALS:Aluminium, cadmium, chromium, copper, iron, silverNUTRIENTS:Nitrate, nitrite, Total Organic Carbon, COD, BOD, Ammonia, TKNOTHER:Mercury, phenolsVOLATILE ORGANIC COMPOUNDS (VOC's):Benzene, toluene, ethylbenzene, xylenes

# LIST B:

SELECTED VOC'S:

1,1-dicholoroethylene, 1,1-dichloroethane, 1,1,1-tricloroethane, tetrachloroethylene, 1,4-dichlorobenzene POLYCYCLIC AROMATIC HYDROCARBONS (PAH's):

naphthalene, acenaphthylene, acenaphthene, flourene, antracene, phenanthree, flouranthene, pyrene, benzo[a]anthracene, chyrsene, benzo[b]fluoranthene, benzo[k]fluoranthene, benzo[a]pyrene, indeno[1,2,3,cd] pyrene, dibenzo[a,h]anthracene, benzo[g,h,i]perylene

# LIST C:

Arsenic, cadmium, cobalt, chromium, copper, mercury, molybdenum, nickel, lead, selenium, zinc, alkalinity, hardness, Dissolved Organic Carbon (DOC), pH, ammonia, nitrite, nitrate, TKN, phenols, PAH's (as indicated on list B), benzene, toluene, ethylbenzene, xylenes, USEPA 624 VOC's, purgeable hydrocarbons.

# LIST D:

Silver, aluminium, boron, barium, beryllium, calcium, sodium, magnesium, manganese, iron, total phosphorus, conductivity, hydrogen sulphide, sulphate, BOD, total Trihalomethanes.

# LIST E:

Volatile Organic Compound Scan as per USEPA624

Detection limits shall be low enough in order to allow for comparison with the Ministry's Ontario Drinking Water Standards.

Conductivity, pH and temperature readings are to be taken from samples collected from each well during each sampling event.

# SCHEDULE "C" : SURFACE WATER MONITORING PROGRAM

Surface water samples shall be collected in the spring and the fall from the following locations: <u>S2, S3, S4R, S5, S7, S8R and S9</u>

In addition, the North-east and Northwest ponds shall be sampled during discharge events up to two times per year.

Surface water samples shall be analyzed for the following parameters:

GENERAL CHEMISTRY:	pH, conductivity, ion balance.			
MAJOR IONS:	Alkalinity, chloride, sodium, sulphate, potassium			
METALS:	Arsenic, barium, boron, cadmium, chromium, cobalt, copper, iron, lead,			
zinc				
NUTRIENTS:	Total Ammonia, Nitrate, nitrite, Un-ionized ammonia, Total Kjedahl			
Nitrogen				
	Total phosphorus, Biochemical Oxygen Demand, Chemical			
Oxygen Demand.				
OTHER:	Cyanide, Mercury, phenols, turbidity, colour, temperature, Total			
Suspended Solids.				
-	Total Dissolved Solids			
VOLATILE ORGANIC CO	MPOUNDS: Benzene, toluene, ethybenzene, xiyenes			

One blind duplicate sample shall be collected during each sampling event for quality assurance/quality control.

Velocity, depth and cross sectional area measurements shall be taken at each surface water station during each sampling event. In addition, flow measurements in Marysville Creek and Beechwood Ditch should be taken during each sampling event.

Surface water samples are to be collected from the downstream surface water station first then subsequent stations while traversing upstream.

Weather conditions during and 48 hours prior to the sampling event are to be observed and recorded.

Detection limits shall be low enough in order to provide comparisons with the Ministry's Provincial Water Quality Objectives.

Conductivity, pH, temperature and Dissolved Oxygen readings are to be taken at each surface water station during each sampling event.

# SCHEDULE "D" : LANDFILL GAS MONITORING PROGRAM

- 1. The Owner shall monitor probes GM1 to GM6 inclusive for methane concentrations on a monthly basis from November to April inclusive and two more times from the period of May to October inclusive.
- 2. If methane concentrations exceed 20% of the Lower Explosive Limit (LEL) at any time, the Owner shall resample the monitor within 24 hours.
- 3. If the resampling confirm that methane concentrations exceed 20% of LEL, the Owner shall conduct an investigation to determine the source of the methane concentrations.
- 4. If the source is landfill related, the Owner shall submit to the Director and the District Manager an action plan to reduce methane concentrations within 30 days of the resampling date.

The reasons for this amendment to the Certificate of Approval are as follows:

- 1. The reason for Condition 6 being revised 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.
- 2. The reason for Condition 8 being revised 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.
- 3. The reasons for Condition 9 being revised are to ensure that regular review in accordance with the Ministry's existing standards 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.
- 4. The reasons for Conditions 14 to 20 inclusive being revised 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.
- 5. The reason for condition 30 being revoked is to reflect that no leachate spray irrigation can occur on the closed landfill site in order to ensure protection of the environment.
- 6. Condition 35 has been included to ensure that the site is closed within the proposed timelines.

- 7. The reason for Conditions 36 to 40 inclusive, 43 to 47 inclusive, 51, 59 and 140 is to clarify the legal rights and responsibilities of the Owner under this Certificate of Approval.
- 8. Conditions 41 and 42 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.
- 9. The reasons for Conditions 48 & 49 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.
- 10. The reason for Condition 50 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 Certificate of Approval. This condition is supplementary to the powers of entry afforded a Provincial Officer pursuant to the EPA and OWRA.
- 11. Conditions 52 and 53 are necessary in order to ensure that waste is inspected and deposited in order to ensure protection of the environment and in accordance with standard waste disposal practices.
- 12. The reasons for Conditions 54, 56, 62 and 137 are to ensure that the Site is operated, inspected and maintained in an environmentally acceptable manner and does not result in a hazard or nuisance to the natural environment or any person.
- 13. The reasons for Condition 55 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.
- 14. The reason for Condition 57 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.
- 15. The reason Condition 58 has been included is in order to prevent ponding in on site ditches and any adverse impact on the environment and human health.
- 16. Conditions 60 and 61 are needed in order to make certain that any discharge of surface water may not have an adverse impact on the environment.
- 17. The reason for Condition 63 is to specify restrictions on the extent of landfilling at this Site based on the Owner's application and supporting documentation. These limits define the approved volumetric capacity of the site. Approval to landfill beyond these limits would require an application with supporting documentation submitted to the Director.
- 18. The reason for Conditions 64 and 65 is to specify the approved areas from which waste may be accepted at the Site and the annual amounts of waste that may be accepted for disposal at the Site, based on the Owner's application and supporting documentation.

- 19. The reason for Conditions 66 and 67 is to ensure that a landfill operators manual is available with specific duties and responsibilities of employees provided in order to prevent an adverse impact on the environment.
- 20. The reasons for Conditions 68 to 71 inclusive are to specify the normal hours of operation for the landfill Site and a mechanism for amendment of the hours of operation.
- 21. The reasons for Condition 72 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.
- 22. Condition 73 is necessary in order to ensure that all waste loads are inspected and waste that is disposed of at the site is in accordance with the terms and conditions in this Certificate of Approval.
- 23. The reason condition 74 has been included is to ensure that access roads are clear and do not pose a safety hazard to the general public.
- 24. The reasons for Condition 75 are to minimize the potential for clogging of leachate collection pipes and to ensure effective operation of the leachate collection system components for as long as they are required. Failure to clean out these components on a regular basis may result in a decrease in their service lives. Regular cleaning of the leachate collection pipes is especially important during stages of landfilling when the level of both organic and inorganic constituents in the leachate is high and, consequently, the potential for clogging due to encrustation is greatest. As the landfill reaches the more stable methane producing stage, pipe cleaning may be required less frequently.
- 25. The reason for Condition 76 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.
- 26. Conditions 77 and 82 are needed to ensure regular inspections of the site are conducted in order to protect the natural environment.
- 27. The reasons for Conditions 78 to 80 inclusive 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 Certificate of Approval, the EPA and its regulations.
- 28. The reason for Conditions 81, 84, 88 and 114 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.
- 29. Condition 83 has been added in order to guarantee that leachate seeps are identified and repaired

in a timely fashion in order to prevent an adverse effect on the environment.

- 30. Condition 85 ensures that additional information is provided to the Ministry on the leachate removal rates so that the Ministry is aware of what volumes and where leachate from the site is being disposed of.
- 31. Condition 86 and 87 are fundamental to ensure that leachate sump pits are emptied on a regular basis and that a warning system is available to the Owner so that an adverse impact on the environment can be avoided.
- 32. The reason for Conditions 89 to 106 inclusive 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.
- 33. The reason for Conditions 107 and 108 is to establish a procedure for dealing with complaints regarding site operation in order to maintain high standards for site operation and environmental protection.
- 34. The reasons for Conditions 109 to 113 inclusive are to ensure protection of the natural environment and the integrity of the groundwater monitoring network.
- 35. Conditions 115 to 119 inclusive ensure that records are kept by the Owner and that the Ministry has those records available upon a request to the Owner.
- 36. The reasons for Condition 120 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.
- 37. Conditions 121 to 124 inclusive are contained in the Certificate 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.
- 38. The reasons for Conditions 125 to 136 inclusive are to ensure that final closure of the Site is completed in an aesthetically pleasing manner and to ensure the long-term protection of the natural environment.
- 39. Conditions 138 and 139 have been included in order to prevent subsurface infiltration of contaminants during composting operations.

This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A371203 dated March 20, 1988 as amended.

In accordance with Section 139 of the <u>Environmental Protection Act</u>, R.S.O. 1990, Chapter E-19, as amended, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with

Section 47 of the <u>Environmental Bill of Rights</u>, S.O. 1993, Chapter 28, the Environmental Commissioner, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Environmental Commissioner 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:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;

2. The grounds on which you intend to rely at the hearing in relation to <u>each</u> portion appealed.

The Notice should also include:

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the waste disposal site is located;

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, 15th Floor Toronto, Ontario <u>AND</u> M5G 1E5	The Environmental Commissioner 1075 Bay Street, 6th Floor Suite 605 <u>AN</u> Toronto, Ontario M5S 2B1	The DirectorSection 39, Environmental Protection ActMinistry of the Environment2 St. Clair Avenue West, Floor 12AToronto, OntarioM4V 1L5
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\* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

This instrument is subject to Section 38 of the <u>Environmental Bill of Rights</u>, 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.ene.gov.on.ca, you can determine when the leave to appeal period ends.

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

DATED AT TORONTO this 31st day of March, 2010

THIS	NOTICE WAS MAILED	
	Ipril 2, 2010	
9 c		
(Signed)		

Ian Parrott, P.Eng. Director Section 39, Environmental Protection Act

# GW/

District Manager, MOE Kingston - District c: Craig Dobiech, MOE, Kingston District Brian Kaye, Supervisor, MOE, Kingston District Victor Castro, MOE, Technical Support, Eastern Region Kyle Stephenson, MOE, Technical Support, Eastern Region Randy Harris, WMCC, Richmond Landfill Tim Murphy, WMCC Jeff Armstrong, Henderson Paddon and Associates  $\checkmark$ Chief Don Maracle, Mohawks of the Bay of Quinte Rod Jeffries, CAO, Mohawks of the Bay of Quinte Mayor Gordon Schermerhorn, Town of Greater Napanee Rebecca Murphy, Clerk/Treasurer, Town of Greater Napanee Terry Murphy, General Manager, Quinte Conservation Authority Ian Munro Reeve Margaret Walsh, The Corporation of the Township of Tyendinaga Steve Mercer, Clerk/Treasurer, The Corporation of the Township of Tyendinaga

Appendix A.2.12

Amendment to Certificate of Approval No. A371203 dated August 25, 2010, Revoking and Replacing Condition 6b, And Adding Conditions 6c and 6d





#### AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL WASTE DISPOSAL SITE NUMBER A371203 Notice No. 6 Issue Date: August 25, 2010

Waste Management of Canada Corporation 2301 Carp Rd Carp, 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 are hereby notified that I have amended Provisional Certificate of Approval No. A371203 issued on March 20, 1988 and subsequently amended on September 4, 1991, September 2, 1994, August 1, 1995, September 11, 1996, August 29, 2000, January 27, 2002, November 24, 2003, March 21, 2007 and March 31, 2010 for 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 are of 138 hectares, as follows:

# Condition 6b created on March 31, 2010 is hereby revoked and replaced with the following:

6b. The Owner shall construct the final cover system for the Site in accordance with Items 29 to 32 inclusive of Schedule "A" and this Certificate of Approval.

# Conditions 6c and 6d are hereby added to the Certificate of Approval:

6c. 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.

6d. The Owner shall ensure that no contaminated soils are used in the final cover.

# Items 29 to 32 are hereby added to Schedule "A":

29. 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.

30. 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.

31. 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.

32. Document entitled "Richmond Landfill 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.

The reasons for this amendment to the Certificate of Approval are as follows:

## CONTENT COPY OF ORIGINAL

1. The reasons for the amendment to Condition 6b is to ensure that the quality assurance/quality control procedures are followed as per the proposed plan and not in a manner which the Director has not been asked to consider.

2. Conditions 6c and 6d have been included in order to ensure protection of human health and the environment.

# This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A371203 dated March 20, 1988 as amended.

In accordance with Section 139 of the <u>Environmental Protection Act</u>, R.S.O. 1990, Chapter E-19, as amended, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the <u>Environmental Bill of Rights</u>, S.O. 1993, Chapter 28, the Environmental Commissioner, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Environmental Commissioner will place notice of your appeal on the Environmental Registry. Section 142 of the <u>Environmental Protection Act</u>, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;

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

# The Notice should also include:

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the waste disposal site is located;

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, 15th Floor	AND	The Environmental Commissioner 1075 Bay Street, 6th Floor Suite 605	AND	The Director Section 39, <i>Environmental Protection Act</i> Ministry of the Environment
Toronto, Ontario		Toronto, Ontario		2 St. Clair Avenue West, Floor 12A
M5G 1E5		M5S 2B1		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) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

This instrument is subject to Section 38 of the <u>Environmental Bill of Rights</u>, 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.ene.gov.on.ca, you can determine when the leave to appeal period ends.

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

DATED AT TORONTO this 25th day of August, 2010

Tesfaye Gebrezghi, P.Eng. Director Section 39, *Environmental Protection Act* 

GW/ c: District Manager, MOE Kingston - District Jeff E. Armstrong, P.Eng., GENIVAR Consultants LP Craig Dobiech, MOE, Kingston District Randy Harris, WMCC, Richmond Landfill Chief Don Maracle, Mohawks of the Bay of Quinte First Nation

# CONTENT COPY OF ORIGINAL

Mayor Gordon Schermerhorn, Town of Greater Napanee Rebecca Murphy, Clerk/Treasurer, Town of Greater Napanee Ian Munro Reeve Margaret Walsh, The Corporation of the Township of Tyendinaga Steve Mercer, Clerk/Treasurer, The Corporation of the Township of Tyendinaga Appendix A.2.13

Amendment to Certificate of Approval No. A371203 dated September 30, 2010, Amending Condition 35





#### AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL WASTE DISPOSAL SITE NUMBER A371203 Notice No. 7 Issue Date: September 30, 2010

	Waste Management of Canada Corporation
	1271 Beechwood Rd
	Rural Route, No. 6
	Napanee, Ontario
	K7R 3L1
Site Location:	Richmond Landfill Site
	1271 Beechwood Road Part of Lots 1, 2 & 3, Concession 4, Geo. Twp. of Richmond
	Greater Napanee Town, County of Lennox and Addington

You are hereby notified that I have amended Provisional Certificate of Approval No. A371203 issued on March 20, 1988 and subsequently amended for the use, operation and closure of a 16.2 hectare waste disposal site including a landfill gas collection system and landfill gas flare within a total site area of 138 hectares, as follows:

# Condition 35 created on March 31, 2010 is hereby amended as follows:

# Site Closure:

35. 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 in accordance with the timelines presented below.

- Phase I by October 30, 2010.
- Phases II, III, IV & V by August 31, 2011.

# The following item is added to Schedule "A":

33. 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.

*The reasons for this amendment to the Certificate of Approval are as follows:* 

To ensure that placement of the final cover material on Phase I of the site is completed in accordance with quality assurance/quality control plan and is protective of the environment.

# This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A371203 dated March 20, 1988 as amended.

In accordance with Section 139 of the <u>Environmental Protection Act</u>, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the <u>Environmental Protection Act</u>, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;

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

The Notice should also include:

## CONTENT COPY OF ORIGINAL

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the waste disposal site is located;

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, 15th Floor Toronto, Ontario M5G 1E5 <u>AND</u>

The Director Section 39, *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) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

DATED AT TORONTO this 30th day of September, 2010

Tesfaye Gebrezghi, P.Eng. Director Section 39, *Environmental Protection Act* 

GW/

c: District Manager, MOE Kingston - District Randy Harris, Waste Management of Canada Corporation Dave White, Waste Management of Canada Corporation Craig Dobiech, MOE, Kingston District Chief Don Maracle, Mohawks of the Bay of Quinte First Nation Mayor Gordon Schermerhorn, Town of Greater Napanee Rebecca Murphy, Clerk/Treasurer, Town of Greater Napanee Ian Munro Reeve Margaret Walsh, The Corporation of the Township of Tyendinaga Steve Mercer, Clerk/Treasurer, the Corporation of the Township of Tyendinaga Appendix A.2.14

Amendment to Certificate of Approval No. A371203 dated May 2, 2011, Imposing Conditions 140 through 142



Ontario

**Ministry of the Environment** Ministère de l'Environnement

# AMENDMENT TO PROVISIONAL CERTIFICATE OF **APPROVAL** WASTE DISPOSAL SITE **NUMBER A371203** Notice No. 8 Issue Date: May 2, 2011

Waste Management Canada Corporation 1271 Beechwood Rd Rural Route, No. 6 Napanee, Ontario K7R 3L1

Site Location: Richmond Landfill 1271 Beechwood Road, RR #6 Lots 1,2 and 3, Conc.4, Reference Plan 29R-6605, Geo. Twp. of Richmond Greater Napanee Town, County of Lennox and Addington K7R 3L1

You are hereby notified that I have amended Provisional Certificate of Approval No. A371203 issued on March 20, 1988 and subsequently amended on September 4, 1991, September 2, 1994, August 1, 1995, September 11, 1996, August 29, 2000, January 27, 2002, November 24, 2003, March 21, 2007, March 31, 2010 and August 25, 2010 for 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:

Condition 140 is hereby amended as follows:

## **Construction and Operation of Phytoremediation System**

- 140. The phytoremediation system located in the northwest corner of *Site* shall be constructed and (1)operated in accordance with Item 33 in Schedule A.
  - The extent of the phytoremediation system shall not extent beyond the limits as shown in Item 33 (2)in Schedule A
  - The phytoremediation system located in the northwest corner of the Site shall not be irrigated (3)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 33 of Schedule "A", the *Owner* shall notify the *District Manager* in writing that the planting has been completed.

# **Monitoring of Phytoremediation System**

- 141. (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 141(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 Environmental Monitoring Plan approved prior to this notice and any future approved changes identified in future amendments.

# Reporting

- 142. 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 phytoremediation system;

# The following Item is hereby added to Schedule "A":

33. Report entitled "Phytoremediation Plan - WM Richmond Landfill Town of Greater Napanee, Ontario" dated December 2010 and prepared by WESA Inc.

# The reason(s) for this amendment to the Certificate of Approval is (are) as follows:

- 1. The reason for Condition 140 is to approve the proposed phytoremediation system as applied and established operations conditions for the phytoremediation system.
- 2. Condition 141, 142 and 143 is clarifies the responsibilities of the owner, the requirements of the ministry, the authority of the Ministry and protects the natural environment and human health.

# This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A371203 dated March 20, 1988

In accordance with Section 139 of the <u>Environmental Protection Act</u>, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the <u>Environmental Protection Act</u>, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;

2. The grounds on which you intend to rely at the hearing in relation to <u>each</u> portion appealed.

# The Notice should also include:

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;

. :{

8. The municipality within which the waste disposal site is located;

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, 15th Floor Toronto, Ontario <u>AND</u> M5G 1E5 The Director Section 39, *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) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

## DATED AT TORONTO this 2nd day of May, 2011

es Gebre

Tesfaye Gebrezghi, P.Eng. Director Section 39, *Environmental Protection Act* 

DG/

c:

District Manager, MOE Kingston - District
David Harding M.Sc., P. Eng., WESA Inc.
David Arnott, MOE, Kingston District
Randy Harris, WMCC, Richmond Landfill
Chief Don Maracle, Mohawks of the Bay of Quinte First Nation
Mayor Gordon Schermerhorn, Town of Greater Napanee
Rebecca Murphy, Clerk/Treasurer, Town of Greater Napanee
Ian Munro
Reeve Margaret Walsh, The Corporation of the Township of Tyendinaga
Steve Mercer, Clerk/Treasurer, The Corporation of the Township of Tyendinaga

Appendix A.2.15

Amendment to Certificate of Approval No. A371203 dated August 19, 2011, Amending Condition 35 (ii)





Ministry of the Environment Ministère de l'Environnement

#### AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL WASTE DISPOSAL SITE NUMBER A371203 Notice No. 9 Issue Date: August 19, 2011

Waste Management Canada Corporation 1271 Beechwood Rd Rural Route, No. 6 Napanee, Ontario K7R 3L1

Site Location: Richmond Landfill 1271 Beechwood Road, RR #6 Lots 1,2 and 3, Conc.4, Reference Plan 29R-6605, Geo. Twp. of Richmond Greater Napanee Town, County of Lennox and Addington K7R 3L1

You are hereby notified that I have amended Provisional Certificate of Approval No. A371203 issued on March 20, 1988 and subsequently amended on September 4, 1991, September 2, 1994, August 1, 1995, September 11, 1996, August 29, 2000, January 27, 2002, November 24, 2003, March 21, 2007, March 31, 2010, August 25, 2010 and May 3, 2011 for 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:

#### Condition 35 is hereby amended as follows:

#### Site Closure

35. The *Owner* is no longer permitted to landfill waste at the *Site*. The *Owner* shall ensure the *Site* is capped with final cover material in accordance with the timelines presented below.

i. Phase I - by **October 30, 2010**; and ii. Phases II, III, IV & V - by September 30, 2011.

#### The following Item is hereby added to Schedule "A":

34. 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 this amendment to the Certificate of Approval is as follows:

1. The reason for the amendment to Condition 35 is to amend the date in which the final cover in Phases II, III, IV and V is placed by a month to compensate for the on-going inclement weather which has hampered construction activities resulting in construction delays and made final cover completion by August 31, 2011 near impossible. This extension will allow WMCC to complete the final cover and ensure that placement of the final cover material on Phase II, III, IV and V of the site is completed in accordance with quality assurance/quality control plan. The amendment is administrative and is not considered environmentally significant.

# CONTENT COPY OF ORIGINAL

# This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A371203 dated March 20, 1988

In accordance with Section 139 of the <u>Environmental Protection Act</u>, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the <u>Environmental Protection Act</u>, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;

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

#### The Notice should also include:

3. The name of the appellant;

- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the waste disposal site is located;

#### 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, 15th Floor Toronto, Ontario MSG 1E5 AND

The Director Section 39, *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) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted waste disposal site is approved under Section 39 of the Environmental Protection Act.

#### DATED AT TORONTO this 19th day of August, 2011

Tesfaye Gebrezghi, P.Eng. Director Section 39, *Environmental Protection Act* 

#### DG/

c: District Manager, MOE Kingston - District Jeff Armstrong, GENIVAR Inc. David Arnott, MOE Kingston District Randy Harris, WMCC, Richmond Landfill Chief Don Maracle, Mohawks of the Bay of Quinte First Nation Mayor Gordon Schermerhorn, Town of Greater Napanee Rebecca Murphy, Clerk/Treasurer, Town of Greater Napanee Ian Munro Reeve Margaret Walsh, The Corporation of the Township of Tyendinaga Steve Mercer, Clerk/Treasurer, The Corporation of the Township of Tyendinaga Appendix A.3

Certificate of Approval (Sewage) No. 3-1720-90-916 (Leachate Treatment and Disposal by Spray Irrigation)





APPROVALS BRANCH

250 Davisville Avenue Toronto, Ontano M4S 1H2

250, avenue Davisville Toronte (Ontano) M4S 1H2

September 4, 1991

Laidlaw Waste Systems (Richmond) Ltd. 3410 South Service Road P.O. Box 5057, Station A Burlington, Ontario LGR 3YB your

Attn: Mr. J.R. Marsh Regional Landfill Manager

Dear Mr. Marsh:

Re: Richmond Township Landfill Certificate of Approval (Sewage) 3-1720-90-916

Please find enclosed the above noted Certificate of Approval for leachate treatment and disposal works on Laidlaw's Richmond Township site.

This Certificate has been issued to your company subject to the terms and conditions outlined therein. The reasons for the conditions are outlined in the accompanying Notice.

There is a need for a comprehensive monitoring program to assess the effects of the spray irrigation program. This is addressed in Condition 7. Under Condition 9 reporting of the monitoring results is to be done in conjunction with the landfill site annual report.

Until the monitoring program has been approved and the background soil samples taken, only a portion of the proposed irrigation area is allowed, under Condition 8, to be used. The This is to ensure that representative background samples are obtained.

Please note that Certificate of Approval No. 3-1720-90-916 constitutes the authority to construct the sewage works as required by Section 24, Ontario Water Resources Act. However, as the spray irrigation system may emit a contaminant to the air, an approval under Section 8, Environmental Protect Act is also required. Construction of the spray irrigation system should not begin until this additional approval is obtained.

Should you have any questions regarding the requirements of Certificate of Approval (Sewage) No. 3-1720-90-916, please contact Mr. J. Connelly of this office at (416) 440-3567.

Yours truly,

D.J. Andrijiw, Supervisor Waste Sites & Systems Approvals Unit Industrial Approvals Section

Encl. JC/ec CC:

B.R. Ward - Director, S.E. Pegion J.D. Bishop - District Officer, Kingston District Office

Ministere

Certificate of Approval (Sewage) Certificat d'autorisation (eaux usées)

Number / Numero 3-1720-90-916

Whereas / Attendu que

BURLINGTON, ONTARIO

LAIDLAW WASTE SYSTEMS (RICHMOND) LTD.

has applied in accordance with Section 24 of the Ontario Water Resources Act for approval of: a fait, conformément à l'article 24 de la foi sur les ressources en eau de l'Ontario, une demande d'autorisation:

a leachate pipe collection system, leachate pumping station, leachate forcemain, leachate treatment lagoon, spray pumping station and spray distribution system; all in accordance with the items listed in Schedule "A" attached and subject to the following conditions:

- 1. For the purpose of this Certificate of Approval:
  - "Company" means Laidlaw Waste Systems (Richmond) Ltd., its successors a) or assignees;
  - b) "Director" means the Director of Approvals Branch, Ministry of the Environment.
- The Company shall establish and maintain a buffer zone of 150 meters from 2. the wastewater treatment works and effluent spray irrigation system to the nearest residence and a buffer zone of 100 meters from the effluent spray irrigation system to the nearest water course.
- Spray irrigation shall be carried out in a manner to ensure that spray 3. runoff to any area water course or ponding of spray irrigated effluent will not occur at any time.
- 4. When wind speeds exceed 15 km/hr during spray irrigation operations, the Company shall assess the potential for the spray to cause adverse impacts on water courses or on neighbouring properties and shall implement any necessary modifications to site operations to ensure that adverse impacts do not occur. Spray irrigation operation shall be terminated when wind speeds exceed 30 km/hr.

.../2

Now therefore this is to certify that after due enquiry the said proposed works have been approved under Section 24 of the Ontario Water Resources Act.

Le présent document certifie qu'après vérification en bonne et due forme la construction dudit projet d'ouvrages a été approuvée aux termes de l'article 24 de la loi sur les ressources en eau de l'Ontario.

**DATED AT TORONTO this** DATÉ À TORONTO ce

4th

day of jour d

September, 1991

Director / Directeur

JC/ec

0731 02/90



of / d

I'Environnement



attre

Number Numero

3-1720-90-916 (Continued)

- 5. The Company shall provide and maintain a fence around the entire land area which will be spray irrigated with leachate.
- The perimeter fences and gates shall be provided with appropriate signs 6. designating the nature of the facility and prohibiting trespassing.
- 7. Within 120 days of the date of issuance of this Certificate of Approval, the Company shall submit to the Director, for approval, a detailed program for monitoring the effects of the leachate application. This program shall include but not be limited to the following:
  - initial pre-irrigation analysis of soil properties and subsequent a) regular analyses
  - b) monitoring of shallow groundwater flow within and adjacent to the spray irrigation area including background monitoring
  - c) sampling of nearby surface water flow including storm events
  - d) weather conditions
  - e) spatial variability of application rates over the application area
  - f) rates and daily quantities of leachate application
  - chemical characteristics of the spray irrigation effluent g)
  - h) air quality during spray irrigation events; and
  - **i**) effects of the effluent on the vegetation.
- Until the monitoring program required under Condition 7 above is approved 8. and the initial soil samples required under Condition 7a) above are taken, application of effluent may only be made onto 6 of the 9 spray areas.
- Results of all monitoring undertaken in accordance with Condition 7 above 9. shall be reported in any annual report required to be submitted to the Ministry under Provisional Certificate of Approval (Waste Disposal Site) No. A 371203 dated March 30, 1988 or its successors.

01214 (05-89)

de Environment 1'Environnement

TO:

Ontario

of the

Laidlaw Waste Systems (Richmond) Ltd. 3410 South Service Poad P.O. Box 5057. Station A Burlington, Ontario L6R 3Y8

You are hereby notified that Certificate of Approval (Sewage) No. 3-1720-90-916 has been issued to you subject to the conditions outlined therein.

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

- 1. The reason for Condition 1 is to simplify the wording of subsequent conditions and define the specific meaning of terms used in this Certificate.
- 2. The reason for Conditions 2, 3, 4, 5 and 6 is to ensure that adverse effects of spray irrigation do no occur off-site, that access to the site is restricted and that surface water hodies are not contaminated by the spray. Otherwise the spray irrigation may create a nuisance, may be a threat to the health and safety of any person or may cause harm to the environment which would not be in the public interest.
- 3. The reason for Conditions 7, 8 and 9 is to ensure that comprehensive monitoring of this leachate disposal program is undertaken and reported to the Ministry. Spray irrigation without this monitoring and reporting may result in a nuisance, a danger to the health and safety of any person, or harm to the environment which would not be in the public interest.

You may by written notice served upon me and the Environmental Appeal Board within 15 days after receipt of this Notice, require a hearing by the Board. Section 63 of the Ontario Water Resources Act, R.S.O. 1980, C. 361, as amended, provides that the Notice requiring the hearing shall state the portions of each term or condition in the approval in respect of which the hearing is required and the grounds on which you intend to rely at the hearing.

This Notice should be served upon:

The Secretary, Environmental Appeal Board, 112 St. Clair Ave. West, 5th Floor, AND Toronto, Ontario M4V 1N3

The Director, Section 24, O.W.R. Act, Ministry of the Environment. 250 Davisville Avenue Toronto, Ontario M4S 1H2

DATED at Toronto this 4th day of September, 1991.

DeAngelis

Director, Section 24, O.W.R. Act, Ministry of the Environment

# SCHEDULE "A"

This Schedule "A" forms part of Certificate of Approval (Sewage) No. 3-1720-90-916 dated September 4, 1991.

- Report entitled "Final Design Report" prepared by Henderson, Paddon and Associates Ltd., dated September 1988 and accompanying drawings.
- 2. Application for the approval of a sewage works dated August 30, 1991 signed by Mr. R.J. Poland.
- 3. Letter dated September 12, 1990 from Mr. J.R. Bray, P.Eng. to Tricil Limited (c/o Laidlaw Waste Systems Ltd.).

Appendix A.3.1

Amendment to Certificate of Approval No. 3-1720-910-916 dated July 23, 1993 – Notification of Compliance with Condition 7





Ministry of Ministère da Environment l'Environnement and Energy et de l'Énergie

NOTICE Page 1 of 2

#### NOTICE OF AMENDMENT

) the Applicant: Laidlaw Waste Systems (Richmond) Ltd. 3410 South Service Road P.O. Box 5057, Station A Burlington, Ontario L7R 3Y8

The Applicant is hereby notified that the approval issued under Certificate of Approval No. 10. 3-1720-90-916, dated September 4, 1991, for the construction of a landfill leachate collection, treatment nd disposal system at the Laidlaw Landfill located in part of Lots 1, 2, and 3. Concession 4 in the Township f Richmond is hereby amended to indicate compliance with Condition No. 7 of the Certificate as specified elow.

in accordance with the requirements of said Condition, you have submitted the following documents:

- . A report entitled "LAIDLAW WASTE SYSTEM (RICHMOND) LTD. RICHMOND LANDFILL. Certificate of Approval (Sewage) No. 31720-90-916. Condition No. 7. December 1991." prepared by Henderson, Paddon & Associates Limited.
- Letter to the Approvals Branch of the Ministry from Laidlaw Waste Systems Ltd., dated July 19, 1993.

e proposed program for monitoring of the effects of leachate application, s outlined in the above documents, has now been reviewed and found cceptable.

herefore, this notice will serve to indicate that Condition No. 7 of the ertificate has now been complied with.

his Notice shall constitute part of the approval isrued under Certificate of pproval No. 3-1720-90-916 dated September 4, 1991.

The Applicant may by written notice served upon me and the Environmental Appeal Board within 5 days after receipt of this Notice, require a hearing by the Board. Section 101 of the <u>Ontario Water</u> <u>sources Act</u>, R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;

The grounds on which the Applicant intends to rely at the hearing in relation to each portion appealed.



Ministry of Ministère da Environment and Energy

l'Environnement et de l'Énergie

The Notice should also include:

- The name of the appellant;
- The address of the appellant:
- The Certificate of Approval number;
- The date of the Certificate of Approval;
- The name of the Director;
- The municipality within which the sewage works are located:

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

This Notice must be served upon:

ie Secretary, The Director, wironmental Appeal Board. Section 53, Ontario Water Resources Act, 12 St. Clair Avenue West, Ministry of Environment and Energy. site 502, AND 250 Davisville Avenue, 3rd Floor, Honto, Ontario. Toronto, Ontario. 4V 1N3 M4S 1H2

e above noted sewage works are approved under Section 53 of the Ontario Mater Resources Act.

ILU AT TORONTO this 23rd day of

July, 199 W. Gregson, Ρ. Eqg. Director

Section 53 Catario Water Resources Act

tn: -M. Walters, General Manager, Ontario Landfill Division -Mr. J. Bishop, MOEE, Kingston District Officer 2

/fn

Appendix A.3.2

Revocation of Certificate of Approval No. 3-1720-90-916, dated April 14, 2011



Ministry of the Environment Ministère de l'Environnement



# REVOCATION OF CERTIFICATE OF APPROVAL MUNICIPAL AND PRIVATE SEWAGE WORKS

Issue Date: April 14, 2011

Waste Management of Canada Corporation 117 Wentworth Crt Brampton, Ontario L6T 5L4

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

I hereby give notice that, under Section 53(4)(e) of the <u>Ontario Water Resources Act</u>, I have revoked Certificate of Approval No. 3-1720-90-916 issued on September 4, 1991 for a leachate pipe collection system, leachate pumping station, leachate forcemain, leachate treatment lagoon, spray pumping station and spray distribution system.

The reasons for the revocation of the Certificate of Approval are as follows:

- 1. The approved leachate spray pumping station and spray distribution system were never constructed and they are no longer required.
- The approved leachate pipe collection system, leachate pumping station, leachate forcemain, and leachate treatment lagoon have been constructed and they have been approved under Certificate of Approval No. 5268-7E8LJW issued on August 19, 2008 for Richmond Landfill Site.

In accordance with Section 100 of the <u>Ontario Water Resources Act</u>, R.S.O. 1990, Chapter 0.40, as amended, you may have a right of appeal by serving a written notice upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the <u>Ontario Water Resources Act</u>, R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The grounds on which you intend to rely at the hearing considering your appeal.

The Notice should also include:

- 2. The name of the appellant;
- 3. The address of the appellant;

- 4. The Certificate of Approval number;
- 5. The date of the Certificate of Approval;
- 6. The name of the Director;
- 7. The municipality within which the works are located;

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, 15th Floor Toronto, Ontario M5G 1E5

AND

The Director Section 53, *Ontario Water Resources 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) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

DATED AT TORONTO this 14th day of April, 2011



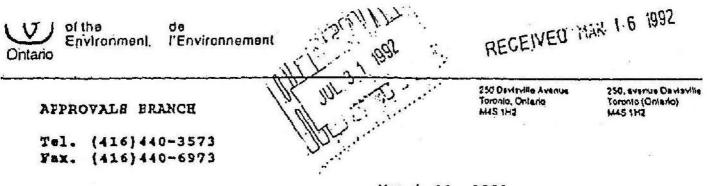
Ian Parrott, P.Eng. Director Section 53, *Ontario Water Resources Act* 

SH/

c: District Manager, MOE Kingston - District Katrina DiRenzo-McGrath, Waste Management of Canada Corporation Appendix A.4

Certificate of Approval (Air) No. 8-4028-92-006 (Spray Irrigation System)





March 11, 1992

Mr. J.R. Marsh Regional Landfill Manager Laidlaw Waste Systems (Richmond) Ltd. 3410 South Service Road, Box 5057, Station A Burlington, Ontario L7R 3Y8

Dear Mr. Marsh:

RE: Cartificate of Approval (Air) No. 8-4028-92-006 Leachate Spray Irrigation System

Please find enclosed the above noted Certificate of Approval.

This certificate is issued in keeping with the Provisional Certificate of Approval, Waste Disposal Site A371203 dated March 31, 1988 based on recommendations listed in the report of the Environmental Assessment Board dated February 20, 1986 identifying spray irrigation as the contingency for treating leachate from this site.

Based on our technical evaluation and the information submitted with your application, the spray irrigation system is capable of operating within the limits of Regulation 'JOB under the Environmental Protection Act.

However, while implementation of the spray irrigation continency plan is necessary at this time, leachate treatment or other disposal options may be environmentally more desirable. Therefore, suitability of the spray irrigation system as a long term leachate management option must be carefully examined as required by Notice to Amend Provisional Certificate of Approval A 371203 issued on September 4, 1991. I expect that any future proposals for leachate treatment at the site will include consideration of the impact on air emissions.

.../2.

J.R. Marsh March 11, 1992 Page 2

We emphasize that if, at any time, emissions from the spray irrigation system contravene any part of the Environmental Protection Act, Regulation 308 or any conditions stipulated by the above noted Certificate, such contravention may become the subject of enforcement in accordance with Section 186 of the Act. In addition, the Director may issue an Order or amend or revoke the above noted Certificate in accordance with his powers under the Act.

If you have any questions regarding the above, please do not hesitate to contact Neil Parrish, Senior Engineer, Industrial Approvals (Air) at (416) 440-6983.

Yours truly,

A. M. Pennanen, .P. Eng. Acting Supervisor Industrial Approvals (Air)

Encl.

c.c: D. Andrijiw, MOE, Approvals Branch Mr. B. Ward, MOE SE, Reg. Dir. M. Pullen, Laidlaw Waste Systems Ltd.



Laidlaw Waste Systems (Richmond) Ltd. 3410 South Service Road, Box 5057, Station A Burlington, Ontario L7R 3Y0

Localed al: Part of Lots 1, 2 and J Concession 4 Township of Richmond Lennox and Addington County, Ontario

has applied in accordance with Section 9 of the Environmental Protection Act for approval of:

 one (1) spray irrigation system, with a maximum capacity of 505 litres per minute of landfill leachate, all in accordance with the documents listed in Schedule "A",

The above noted works are approved under Section 9 of the Environmental Protection Act.

LED AT TORONTO this	llth	day of	March, 1992
			THIS IS A TRUE COPY OF
			THE ORIGINAL CERTIFICATE
35			SIGNED BY
			P. DEANGELIS, P. ENG.
			MAILED ON KAR 1 2 1992
			BY

NP/fs

cc:-Mr. B. Ward, MOE SE, Reg. Dir.

#### SCHEDULE "A"

This Schedule "A" forms part of Certificate of Approval (Air) Number 8-4028-92-006

"he following documents were submitted as part of the application:

- 1. Application for Certificate of Approval (Air) submitted by Laidlaw Waste Systems (Richmond) Ltd. dated January 21, 1992.
- Report prepared for Laidlaw Waste Systems (Richmond) Ltd., titled "Application for Certificate of Approval (Air) -Leachate Control System Pumping Stations and Evapotranspiration System".
- 3. Drawing No. 8570-6 prepared by Henderson, Paddon, & Associates labelled "Contingency Plan" and dated August 12, 1988.

Drawing No. 8570-6 prepared by Henderson, Paddon, & Associates labelled "Leachate Treatment Lagoons" and dated September 1, 1988. Appendix A.4.1

Amendment to Certificate of Approval No. 8-4028-92-006, dated January 13, 2004, Regarding Notification of Change of Name



Ministry of the Environment Environmental Assessment and Approvals Branch Floor 12A 2 St Clair Ave W Toronto ON M4V 1L5 Fax: (416)314-8452 Telephone: (416) 314-7902 Ministère de l'Environnement

Direction des évaluations et des autorisations environnementales Étage 12A 2 av St Clair O Toronto ON M4V 1L5 Télécopieur: (416)314-8452 Téléphone : (416) 314-7902



January 13, 2004

Jessica Campbell, Director, Regulatory Affairs & Environmental Compliance 5045 South Service Road, Suite 300 Burlington, Ontario L7L 5Y7

Dear Sir/Madam:

#### Re: Notification of Change of Name MOE Reference Number 9258-5V6ST6

The Ministry of the Environment (the "Ministry") acknowledges receipt of your letter dated January 8, 2004 requesting a change in company name:

FROM: Laidlaw Waste Systems (Richmond) Ltd.

**TO:** Waste Management of Canada Corporation

By this letter, the Ministry advises you that your notification of change in company name has been registered in our records for the following Certificate(s) of Approval:

Certificate(s) of Approval for Air, Section 9, EPA:

8-4028-92-006 - Richmond LF

The Ministry will not be providing you with an amended certificate(s) to reflect the change in company name. Therefore, this letter must be appended to its corresponding Certificate(s) of Approval. The name change will be included in any future amended Certificate(s) of Approval.

If you have any questions regarding the above, please contact me at the above phone number.

Yours truly,

Danja Lamenà

Sanja<sup>(J</sup>ankovic) Application Processor

cc: District Manager, MOE Kingston

File Storage Number: 0027

Appendix A.4.2

Revocation of Certificate of Approval No. 8-4028-92-006, dated March 12, 2011



Ministry of the Environment Ministère de l'Environnement



# REVOCATION OF CERTIFICATE OF APPROVAL

Issue Date: March 12, 2011

Waste Management of Canada Corporation 117 Wentworth Crt Brampton, Ontario L6T 5L4

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

In accordance with Section 139(1)(e) of the <u>Environmental Protection Act</u>, R.S.O. 1990, Chapter E-19, I hereby give notice that, under Section 9(5)(b) of the Act, I have revoked Certificate of Approval No. 8-4028-92-006 issued on March 11th, 1992 for one (1) spray irrigation system, with a maximum capacity pf 505 litres per minute of landfill leachate, all in accordance with the documents listed in Schedule "A"

The reason for the revocation of the Certificate of Approval is as follows:

In the letter received on February 3rd, 2011, signed by Katrina DiRenzo-McGrath, Senior Environmental Manager, Waste Management of Canada Corporation, addressed to the Ministry of the Environment, requesting that Certificate of Approval No.8-4028-92-006 be revoked, as the Certificate of Approval no longer applies to the site. It is in the interest of the public to revoke a Certificate of Approval for equipment that is not operating.

In accordance with Section 139 of the <u>Environmental Protection Act</u>, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the <u>Environmental Protection</u> <u>Act</u>, provides that the Notice requiring the hearing shall state:

1. The grounds on which you intend to rely at the hearing considering your appeal.

The Notice should also include:

- 2. The name of the appellant;
- 3. The address of the appellant;
- 4. The Certificate of Approval number;
- 5. The date of the Certificate of Approval;
- 6. The name of the Director;

7. The municipality within which the works are located;

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, 15th Floor Toronto, Ontario M5G 1E5

<u>AND</u>

The Director Section 9, *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) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

DATED AT TORONTO this 12th day of March, 2011

Victor Low, P.Eng. Director Section 9, *Environmental Protection Act* 

GN/

c: District Manager, MOE Kingston - District Katrina Di Renzo-McGrath, Waste Management of Canada Corporation Appendix A.5

Environmental Compliance Approval No. 1688-8HZNJG, issued January 10, 2012





#### AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 1688-8HZNJG Issue Date: January 10, 2012

Waste Management Canada Corporation 1271 Beechwood Rd Rural Route, No. 6 Napanee, Ontario K7R 3L1

Site Location: Richmond Landfill Site 1271 Beechwood Road, Parts of Lots 1,2, &3, Concession 4, Richmond Greater Napanee Town, County of Lennox and Addington

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

leachate collection and disposal facility and stormwater management facility to service the Richmond Landfill Site located on Parts of Lots 1, 2 and 3, Concession 4, in the Town of Greater Napanee as follows:

#### SEWAGE WORKS APPROVED ON AUGUST 19, 2008:

#### Stormwater Management Pond - SWM Pond No. 3

a new stormwater management facility located south of the approved landfill footprint and north of Beechwood Road to service 20 ha drainage area of the Richmond Landfill Site, designed to provide quantity and quality control of stormwater runoff from storm events up to 1:100 return frequency consisting of the following:

- two (2) extended wet detention ponds interconnected by two (2) 750 mm diameter culverts providing a permanent pool storage capacity (including sediment storage) of 19,642 m<sup>3</sup> between the elevations of 122.4 m ASL and 124.4 m ASL and active storage capacity of 7,620 m<sup>3</sup> between the elevations of 124.4 m ASL and 124.73 m ASL (overall total storage capacity of 27,262 m<sup>3</sup>);
- each detention pond equipped with a rip rap lined inlet structure, a forebay, and cattails planted in the shallow areas surrounding the permanent pool;

- an outlet structure consisting of one (1) 600 mm x 600 mm precast concrete catch basin equipped with a 100 mm diameter inlet orifice, one (1) 300 mm diameter PVC discharge pipe equipped with one (1) 300 mm diameter gate valve, discharging through a drainage ditch to the Beechwood Road side ditch eventually flowing to Marysville Creek;
- one (1) 3.0 m wide rip rap lined emergency spillway with an invert elevation of 124.73 m ASL, discharging through a drainage ditch to the Beechwood Road side ditch; and
- including all controls and associated appurtenances.

all in accordance with the Application for Approval of Industrial Sewage Works submitted by Waste Management of Canada Corporation dated April 11, 2008, drawings and design specification prepared by Henderson Paddon & Associates Limited, Owen Sound, Ontario and the document listed in Schedule 'B'.

#### EXISTING LEACHATE MANAGEMENT FACILITY:

- one (1) approximately 504 m long 200 mm diameter perforated PVC or HDPE perimeter leachate collector pipe, installed in a 50 mm clear stone bedding wrapped in geotextile, extending through seven (7)1200 mm diameter pre-cast concrete service manholes (MH12, MH11, MH10, MH9, MH8, MH7 and MH1) along the west side and north side of landfill footprint discharging to a 22.3 m<sup>3</sup> capacity North Concrete Pumping Chamber which is not equipped with pumps;
- one (1) approximately 429 m long 150 mm diameter perforated PVC perimeter leachate collector pipe, installed in a 50 mm clear stone bedding wrapped in geotextile, extending through six (6) 1200 mm diameter pre-cast concrete service manholes (MH6, MH5, MH4, MH3, MH2 and MH1) along the east side and north side of landfill footprint discharging to a 22.3 m<sup>3</sup> capacity North Concrete Pumping Chamber which is not equipped with pumps;
- one (1) approximately 393 m long 200 mm diameter perforated PVC perimeter leachate collector pipe, installed in a 50 mm clear stone bedding wrapped in geotextile, extending along the west side and south side of landfill footprint discharging to a leachate pumping station described below;
- one (1) approximately 296 m long 200 mm diameter perforated PVC perimeter leachate collector pipe, installed in a 50 mm clear stone bedding wrapped in geotextile, extending along the east side and south side of landfill footprint discharging to a leachate pumping station described below;
- one (1) side slope riser leachate pumping station equipped with two (2) 80 USGPM capacity submersible pumps and a sump with bottom dimension of 2 m x 2 m filled with 50 mm gravel, discharging to a leachate lagoon described below;

- one (1) 16,245 m<sup>3</sup> storage capacity leachate lagoon, lined with clay and HDPE synthetic liner, located north of the landfill footprint used for temporary storage of leachate or leachate contaminated stormwater until dispose off site to a pre-approved sewage treatment plant;
- one (1) leachate storage lagoon located west of the landfill footprint used for collecting leachate and stormwater runoff from a composting facility until it is used for composting operations or disposed off-site to a pre-approved sewage treatment plant;
- including all controls and associated appurtenances.

#### SEWAGE WORKS APPROVED ON OCTOBER 21, 1991:

#### Stormwater Management Pond - SWM Pond No. 1

A stormwater management pond constructed on a site approximately 750 m north of Beechwood Road and north of the fill area for a 25 year design storm having a minimum storage volume of 228 m<sup>3</sup> to retain surface runoff from an area of 3.38 ha (consisting of fill area) and to discharge at a rate of 70 L/s via a 375 mm diameter outlet pipe (fitted to a drop inlet pipe structure) to a Headwater Tributary of Marysville Creek (Intermittent), together with a drawdown structure, a 1200 mm diameter drop inlet pipe, a 3.5 m wide emergency spill-way channel, rock baffle, erosion and silt control protection;

#### Stormwater Management Pond - SWM Pond No. 2

A stormwater management pond constructed on a site approximately 750 m north of Beechwood Road and northwest of the fill area for a 25 year design storm having a minimum storage volume of 332 m<sup>3</sup> to retain surface runoff from an area of 4.94 ha (consisting of fill area) and to discharge at a rate of 103 L/s via a 375 mm diameter outlet pipe (fitted to a drop inlet pipe structure) to a Headwater Tributary of Marysville Creek (Intermittent), together with a drawdown structure, a 1200 mm diameter drop inlet pipe, a 3.5 m wide emergency spill-way channel, rock baffle, erosion and silt control protection;

all in accordance with the information submitted by Henderson Paddon and Associates Limited Consulting Engineers and the following documents listed in Schedule 'A'.

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

"*Approval* " means this Environmental Compliance Approval and any schedules attached to it, and the application .

*"By-pass"* means any discharge from the *Works* that does not undergo any treatment before it is discharged to the environment;

"*Director*" means a person appointed by the Minister pursuant to section 5 of the *EPA* for the purposes of Part II.1 of the *EPA*.

"District Manager " means the District Manager of the Kingston District Office;

"EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended.

"*Ministry*" means the ministry of the government of Ontario responsible for the *EPA* and *OWRA* and includes all officials, employees or other persons acting on its behalf.

"Owner" means Waste Management of Canada Corporation and its successors and assignees;

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended.

"Substantial Completion" has the same meaning as "substantial performance" in the Construction Lien Act; and

"*Works*" means the sewage works described in the *Owner*'s application, this *Approval* and in the supporting documentation referred to herein, to the extent approved by this *Approval*.

You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:

#### **TERMS AND CONDITIONS**

#### I - <u>GENERAL</u>

#### 1. <u>GENERAL PROVISIONS</u>

- (1) The *Owner* shall ensure that any person authorized to carry out work on or operate any aspect of the *Works* is notified of this *Approval* and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (2) Except as otherwise provided by these Conditions, the *Owner* shall design, build, install, operate and maintain the *Works* in accordance with the description given in this *Approval*, the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this *Approval*.
- (3) Where there is a conflict between a provision of any submitted document referred to in this *Approval* and the Conditions of this *Approval*, the Conditions in this *Approval* shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

- (4) Where there is a conflict between the listed submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.
- (5) The requirements of this *Approval* are severable. If any requirement of this *Approval*, or the application of any requirement of this *Approval* to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this *Approval* shall not be affected thereby.

#### 2. <u>EXPIRY OF APPROVAL</u>

The approval issued by this *Approval* will cease to apply to those parts of the *Works* which have not been constructed by August 19, 2013.

#### 3. <u>CHANGE OF OWNER</u>

- (1) The *Owner* shall notify the *District Manager* and the *Director*, in writing, of any of the following changes within 30 days of the change occurring:
  - (a) change of *Owner*;
  - (b) change of address of the *Owner* ;
  - (c) change of partners where the *Owner* is or at any time becomes a partnership, and a copy of the most recent declaration filed under the <u>Business Names Act</u>, R.S.O. 1990, c. B17 shall be included in the notification to the *District Manager*;
  - (d) change of name of the corporation where the *Owner* is or at any time becomes a corporation, and a copy of the most current information filed under the <u>Corporations</u> <u>Information Act</u>, R.S.O. 1990, c. C39 shall be included in the notification to the *District Manager*;
- (2) In the event of any change in ownership of the *Works*, other than a change to a successor municipality, the *Owner* shall notify in writing the succeeding owner of the existence of this *Approval*, and a copy of such notice shall be forwarded to the *District Manager* and the *Director*.

#### 4. <u>UPON THE SUBSTANTIAL COMPLETION OF THE WORKS</u>

(1) Within one year of the *Substantial Completion* of the *Works*, a set of as-built drawings showing the works "as constructed" shall be prepared. These drawings shall be kept up to date

through revisions undertaken from time to time and a copy shall be retained at the *Works* or at operational office of the *Owner* for the operational life of the *Works*.

#### 5. <u>BY-PASSES</u>

- (1) Any *By-pass* of sewage from any portion of the *Works* is prohibited, except where:
  - (a) it is necessary to avoid loss of life, personal injury, danger to public health or severe property damage;
  - (b) the *District Manager* agrees that it is necessary for the purpose of carrying out essential maintenance and the *District Manager* has given prior written acknowledgment of the *By-pass*; or
- (2) The *Owner* shall maintain a logbook of all *By-pass* events which shall include, at a minimum, the time, location, duration, quantity of *By-pass*, the authority for *By-pass* pursuant to subsection (1), and the reasons for the occurrence.

#### II - LEACHATE COLLECTION AND DISPOSAL SYSTEM

#### 6. <u>LEACHATE MONITORING AND RECORDING</u>

The *Owner* shall, upon commencement of operation of the *Works*, carry out the following monitoring program:

- (1) All samples and measurements taken for the purposes of this *Approval* are to be taken at a time and in a location characteristic of the quality and quantity of the leachate stream over the time period being monitored.
- (2) For the purposes of this condition, the following definitions apply:
  - (a) Monthly means once every month;
  - (b) Quarterly means once every three months;
  - (c) Semi-annually means once every six months; and
  - (d) Annually means once every twelve months;
- (3) Leachate grab samples shall be collected from a designated sampling location at the indicated

monitoring frequency and analyzed for each parameter listed in Table 1 and all results recorded:

Table 1 Leachate Monitoring Sampling Location: North Pumping Chamber				
Sampling Frequency: Quarterly		Sampling Frequency: Annually		
Parameter	Parameter	Parameter		
Alkalinity	Arsenic	Silver		
Dissolved Organic Carbon (DOC)	Cadmium	Aluminum		
Hardness	Chromium	Boron		
pH	Cobalt	Barium		
Total Ammonia Nitrogen	Copper	Beryllium		
Nitrate Nitrogen	Mercury	Calcium		
Nitrite Nitrogen	Molybdenum	Sodium		
Total Kjeldahl Nitrogen	Nickel	Magnesium		
Phenols	Lead	Manganese		
PAHs	Selenium	Iron		
BTEX	Zinc	Total Phosphorus		
USEPA 624		Conductivity		
		Hydrogen Sulphide		
		Sulphate		
		BOD5		
		Total Trihalomethanes (THM)		

- (4) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:
  - (a) the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended from time to time by more recently published editions;
  - (b) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions;
  - (c) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions; and
  - (d) the Environment Canada publications "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout" (July 1990) and "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to <u>Daphnia</u>

magna" (July 1990), as amended from time to time by more recently published editions.

(5) The *Owner* shall retain for a minimum of three (3) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this *Approval*.

#### 7. <u>OPERATION AND MAINTENANCE</u>

- (1) The *Owner* shall exercise due diligence in ensuring that, at all times, the *Works* and the related equipment and appurtenances used to achieve compliance with this *Approval* are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate funding, adequate operator training, including training in all procedures and other requirements of this *Approval* and the *Act* and regulations, process controls and alarms.
- (2) By February 19, 2009, the *Owner* shall prepare an operations manual, that includes, but not necessarily limited to, the following information:
  - (a) operating procedures for routine operation of the *Works* ;
  - (b) inspection programs, including frequency of inspection, for the *Works* and the methods or tests employed to detect when maintenance is necessary;
  - (c) repair and maintenance programs, including the frequency of repair and maintenance for the *Works*;
  - (d) procedures for the inspection and calibration of monitoring equipment;
  - (e) a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the *District Manager*; and
  - (f) procedures for receiving, responding and recording public complaints, including recording any follow up actions taken.
- (3) The *Owner* shall maintain the operations manual current and retain a copy at the *Works* or *Owner* 's Head Office for the operational life of the *Works*. Upon request, the *Owner* shall make the manual available to *Ministry* staff.
- (4) The *Owner* shall maintain a logbook to record and report the volume of leachate disposed off-site, the date, and the name of the receiving sewage treatment plant;

#### III - STORMWATER MANAGEMENT FACILITY

#### 8. MONITORING AND RECORDING

The *Owner* shall carry out the following monitoring program:

- (1) All samples and measurements taken for the purposes of this *Approval* are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
- (2) The *Owner* shall collect stormwater grab samples from the following designated sampling locations at a monthly sampling frequency during spring and fall (March, April, May, September, October, and November and analyse for the parameters listed in Table 2;

Table 2 Stormwater and Surface Water Monitoring Sampling Location: SWM Ponds No. 1, No. 2, and No. 3				
Parameter	Parameter	Field Parameter		
pH	Aluminum	pH		
Alkalinity	Arsenic	Temperature		
Hardness	Barium	Conductivity		
Biological Oxygen Demand (CBOD5)	Boron			
Un-ionized Ammonia	Cobalt			
Total Ammonia Nitrogen	Beryllium			
Total Kjeldahl Nitrogen	Cadmium			
Nitrate Nitrogen	Chromium			
Total Phosphorus	Copper			
Total Suspended Solids	Iron			
Total Dissolved Solids	Mercury			
Total Organic Carbon	Nickel			
Chloride	Potassium			
Chemical Oxygen Demand (COD)	Sodium			
Phenols	Selenium			
BTEX	Silver			
Naphthalene	Zinc			

- (3) The *Owner* shall collect stormwater grab samples from SWM Ponds No. 1, No. 2, and No. 3 sampling locations at a Quarterly frequency and conduct acute lethality tests for Daphnia magna and Rainbow Trout;
- (4) The methods and protocols for sampling, analysis and recording shall conform, in order of

precedence, to the methods and protocols specified in Condition 6 (4);

- (5) The measurement frequencies specified in subsection (2) in respect to any parameter are minimum requirements which may, after two (2) years of monitoring in accordance with this Condition, be modified by the *District Manager* in writing from time to time.
- (6) The *Owner* shall retain for a minimum of three (3) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this *Approval* at the *Works* or *Owner* 's Head Office.

#### 9. OPERATION AND MAINTENANCE

- (1) Within six (6) months of the issuance date of this *Approval*, the *Owner* shall prepare a "Stormwater Contingency and Remedial Action Plan" for the *Works* and submit to the *District Manager* for approval.
- (2) The *Owner* shall operate the *Works* (SWM Pond No. 1, SWM Pond No. 2, and SWM Pond No. 3) in a normally open position.
- (3) Using the monitoring results obtained under Condition 8 (3), the *Owner* shall ensure that the stormwater runoff discharged from the *Works* (SWM Pond No. 1, SWM Pond No. 2, and SWM Pond No. 3) is not acutely lethal to Daphnia *magna* and Rainbow Trout.
- (4) In the event that monitoring results obtained under Condition 8 (3) show that the stormwater is acutely lethal either to Daphnia *magna* or Rainbow Trout, then, the *Owner* shall resample within two (2) weeks period after receiving the lab results to confirm the toxicity results.
- (5) In the event that the toxicity results **are not confirmed** during the second round of sampling conducted under Condition 9 (4), then, normal stormwater monitoring shall be resumed.
- (6) In the event that the toxicity results are confirmed after the second round of sampling conducted under Condition 9 (4), the *Owner* shall operate the *Works* in a normally closed position, notify the *District Manager* forthwith, and conduct acute lethality tests for Daphnia *magna* and Rainbow Trout at a monthly frequency.
- (7) While operating the *Works* in a **normally closed position**, the *Owner* shall implement the "Stormwater Contingency and Remedial Action Plan" prepared under Condition 9 (1) and continue conducting the toxicity monitoring program required under Condition 9 (6).
- (8) The *Owner* shall resume operating the *Works* in a **normally open position** if toxicity monitoring results from **two (2) consecutive sampling events** conducted under Condition 9(6) show that the stormwater is not acutely lethal to Daphnia *magna* and Rainbow Trout.

- (9) Discharge of contaminated stormwater from the *Works* to storm sewer/surface water is prohibited, except where it is necessary to avoid loss of life, personal injury, danger to public health or severe property damage;
- (10) The *Owner* shall prepare an operations manual prior to the commencement of operation of the *Works*, that includes, but not necessarily limited to, the following information:
  - (a) operating procedures for routine operation of the *Works* ;
  - (b) inspection programs, including frequency of inspection, for the *Works* and the methods or tests employed to detect when maintenance is necessary;
  - (c) repair and maintenance programs, including the frequency of repair and maintenance for the *Works*;
  - (d) procedures for the inspection and calibration of monitoring equipment;
  - (e) a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the *District Manager*; and
- (10) The *Owner* shall maintain the operations manual current and retain a copy at the *Works* or *Owner* 's Head Office for the operational life of the *Works*. Upon request, the *Owner* shall make the manual available to *Ministry* staff.
- (11) The *Owner* shall maintain a record of the date and the estimated volume of leachate contaminated stormwater disposed off site under the approved "Stormwater Contingency and Remedial Action Plan" for the *Works*.
- (12) The *Owner* shall notify the *District Manager* orally, as soon as possible, and in writing within seven days of any discharge of leachate contaminated stormwater to receiving surface water including an assessment of the relative extent of leachate contamination, estimated volume of stormwater discharged, and proposed or completed remedial actions.
- (13) The *Owner* shall inspect the *Works* (SWM Ponds) at least once a year and, if necessary, clean and maintain the *Works* to prevent the excessive build-up of sediments and/or vegetation.
- (14) The *Owner* shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the logbook at the site and/or *Owner's* operational headquarter for inspection by the *Ministry*. The logbook shall include the following:
  - (a) the name of the *Works* ;

- (b) the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed; and
- (c) the volume of contaminated stormwater disposed off-site, the date, and the name of the receiving sewage treatment plant;

#### IV - GENERAL

#### 10. <u>REPORTING</u>

- (1) Ten (10) days prior to the date of a planned *By-pass* being conducted pursuant to Condition 5 and as soon as possible for an unplanned *By-pass*, the *Owner* shall notify the *District Manager* (in writing) of the pending start date, in addition to an assessment of the potential adverse effects on the environment and the duration of the *By-pass*.
- (2) In addition to the obligations under Part X of the Environmental Protection Act, the *Owner* shall, within 10 working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by product, intermediate product, oils, solvents, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the *District Manager* describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.
- (3) The *Owner* shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to *Ministry* staff.
- (4) The *Owner* shall prepare on an annual basis, and submit upon request, a performance report within ninety (90) days following the end of the calendar year being reported upon. The first such report shall cover the period following the commencement of operation of the *Works* and subsequent reports shall be prepared to cover successive calendar years following thereafter. The reports shall contain, but shall not be limited to, the following information:
  - (a) a summary and interpretation of all stormwater monitoring data and a comparison to the Provincial Water Quality Objectives (PWQO), including an overview of the success and adequacy of the *Works*;
  - (b) a summary of the monthly quantity of leachate disposed off site and corresponding average leachate quality;
  - (c) a description of any operating problems encountered and corrective actions taken;
  - (d) a summary of all maintenance carried out on any major structure, equipment,

apparatus, mechanism or thing forming part of the Works ;

- (e) a summary of the calibration and maintenance carried out on all leachate monitoring equipment; and
- (f) a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- (g) a summary of all *By-pass*, spill or abnormal discharge events; and
- (h) any other information the *District Manager* requires from time to time.

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

- 1. Condition 1 is imposed to ensure that the *Works* are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the *Approval* and the practice that the *Approval* is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the *Owners* their responsibility to notify any person they authorized to carry out work pursuant to this *Approval* the existence of this *Approval*.
- 2. Condition 2 is included to ensure that, when the *Works* are constructed, the *Works* will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
- 3. Condition 3 is included to ensure that the *Ministry* records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the *Works* are made aware of the *Approval* and continue to operate the *Works* in compliance with it.
- 4. Condition 4 is included to ensure that the *Works* are constructed in accordance with the *Approval* and that record drawings of the *Works* "as constructed" are maintained for future references.
- 5. Condition 5 is included to indicate that by-passes of untreated sewage to the receiving watercourse is prohibited, save in certain limited circumstances where the failure to *By-pass* could result in greater injury to the public interest than the *By-pass* itself where a *By-pass* will not violate the approved leachate requirements, or where the *By-pass* can be limited or otherwise mitigated by handling it in accordance with an approved contingency plan. The notification and documentation requirements allow the *Ministry* to take action in an informed manner and will ensure the *Owner* is aware of the extent and frequency of *By-pass* events.
- 6. Conditions 6 and 8 are included to enable the *Owner* to evaluate and demonstrate the performance of the *Works*, on a continual basis, so that the *Works* are properly operated and maintained at a level which is consistent with the design objectives specified in the *Approval* and that the *Works* does not cause any impairment to the receiving watercourse.

- 7. Conditions 7 and 9 are included to require that the *Works* be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, damage to any property or injury to any person is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the *Owner* and made available to the *Ministry*.
- 8. Condition 10 is included to provide a performance record for future references, to ensure that the *Ministry* is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this *Approval*, so that the *Ministry* can work with the *Owner* in resolving any problems in a timely manner.

#### SCHEDULE 'A'

- 1. Application for the sewage works dated March 20, 1990, signed by 171496 Canada Inc., F.C. Ford, P. Eng., Henderson, Paddon and Associates and Township of Richmond.
- 2. Report entitled "Tricil Limited Landfill site parts of Lots 1, 2 and 3, Concession IV, Township of Richmond, County of Lennox and Addington" dated September 1988, prepared by Henderson Paddon and Associates Limited.
- 3. Letter dated July 19, 1990, signed by Dick Van Wyck, Legal Counsel, Laidlav Waste System, addressed to Ranee Mahalingam, Review Engineer, Ministry of the Environment.
- 4. Letter dated September 6, 1990, signed by J. M. Tomlinson. P.Eng., Henderson Paddon and Associates Limited, addressed to Ranee Mahalingam, Approvals Branch, Ministry of the Environment, together with revised section entitled "Stormwater management facilities" of the report entitled "Tricil Limited Landfill Site Parts of Lots 1, 2 and 3, Concession IV, Township of Richmond, County of Lennox and Addington" dated September 1988, prepared by Henderson Paddon and Associates Limited.
- 5. Letter dated September 6, 1990, signed by Jay Clark, P.Eng., Henderson Paddon and Associates Limited, addressed to Ranee Mahalingam, P. Eng., Review Engineer, Approvals Branch, Ministry of the Environment.
- 6. Letter dated April 29, 1991, signed by Ranee Mahalingam. P.Eng., Review Engineer, Approvals Branch, Ministry of the Environment, addressed to J. K. Tomlinson. P.Eng., Henderson Paddon and Associates Limited.
- Letter dated May 23, 1991, signed by Jay Clark, P.Eng., Henderson Paddon and Associates Limited, addressed to Ranee Mahalingam, P.Eng., Review Engineer, Approvals Branch, Ministry of the Environment.

- 8. Minutes of the meeting held at Ministry of the Environment, 250 Davisville Avenue, Toronto, on June 25, 1991.
- 9. Letter dated July 24, 1991, signed by J. M. Tomlinson, P.Eng.. Henderson Paddon and Associates Limited, addressed to Bruce W. Metcalfe, Surface Water Technologist, Southeastern Region, Ministry of the Environment.
- 10. Letter dated July 25, 1991, signed by Bruce W. Metcalfe, Surface Water Technologist, Southeastern Region, Ministry of the Environment, addressed to J. M. Tomlinson, P.Eng., Henderson Paddon and Associates Limited.
- 11. Letter dated July 29, 1991, signed by J. M. Tomlinson, P. Eng., Henderson Paddon and Associates Limited, addressed to Ranee Mahalingan, Approvals Branch, Ministry of the Environment, enclosing a copy of the revised application and revised drawings No. 8570A (1, 2, 3, 4) and 8570 -7.
- 12. Application for Approval of Sewage Works dated May 19, 2011, submitted by Waste Management of Canada and prepared by Genivar Inc., Owen Sound, Ontario.

#### SCHEDULE 'B'

1. "Final Report - 2007 Annual Monitoring Report, Waste Management of Canada Richmond Landfill, Town of Napanee, Ontario" dated March 2008, prepared by Water and Earth Science Associates Ltd. (WESA), Kingston, Ontario.

# Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 5268-7E8LJW issued on August 19, 2008

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

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

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

The Notice should also include:

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

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

#### This Notice must be served upon:

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

<u>AND</u>

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

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

DATED AT TORONTO this 10th day of January, 2012



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

SH/

c: District Manager, MOE Kingston - District Jeff Armstrong, GENIVAR Inc.

Appendix A.6

Certificate of Approval for Industrial Sewage Works No. 5268-7E8LJW (REVOKED)



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#### Ministry of the Environment Ministère de l'Environnement

CERTIFICATE OF APPROVAL INDUSTRIAL SEWAGE WORKS NUMBER 5268-7E8LJW Issue Date: August 19, 2008

Waste Management of Canada Corporation 117 Wentworth Crt Brampton, Ontario L6X 5L4

Site Location: Richmond Landfill Site 1271 Beechwood Road Parts of Lots 1, 2 & 3, Concession 4, Richmond Greater Napanee Town, County of Lennox and Addington

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

leachate collection and disposal facility and stormwater management facility to service the Richmond Landfill Site located on Parts of Lots 1, 2 and 3, Concession 4, in the Town of Greater Napanee as follows:

### PROPOSED STORMWATER MANAGEMENT FACILITY:

### Stormwater Management Pond - SWM Pond No. 3

replacing the existing Stormwater Detention Pond No. 3 with a new stormwater management facility located south of the approved landfill footprint and north of Beechwood Road to service 20 ha drainage area of the Richmond Landfill Site, designed to provide quantity and quality control of stormwater runoff from storm events up to 1:100 return frequency consisting of the following:

- two (2) extended wet detention ponds interconnected by two (2) 750 mm diameter culverts providing a permanent pool storage capacity (including sediment storage) of 19,642 m<sup>3</sup> between the elevations of 122.4 m ASL and 124.4 m ASL and active storage capacity of 7,620 m<sup>3</sup> between the elevations of 124.4 m ASL and 124.73 m ASL (overall total storage capacity of 27,262 m<sup>3</sup>);
- each detention pond equipped with a rip rap lined inlet structure, a forebay, and cattails
  planted in the shallow areas surrounding the permanent pool;

- an outlet structure consisting of one (1) 600 mm x 600 mm precast concrete catch basin equipped with a 100 mm diameter inlet orifice, one (1) 300 mm diameter PVC discharge pipe equipped with one (1) 300 mm diameter gate valve, discharging through a drainage ditch to the Beechwood Road side ditch eventually flowing to Marysville Creek;
- one (1) 3.0 m wide rip rap lined emergency spillway with an invert elevation of 124.73 m ASL, discharging through a drainage ditch to the Beechwood Road side ditch; and
- including all controls and associated appurtenances.

all in accordance with the Application for Approval of Industrial Sewage Works submitted by Waste Management of Canada Corporation dated April 11, 2008, drawings and design specification prepared by Henderson Paddon & Associates Limited, Owen Sound, Ontario and the following documents:

 "Final Report - 2007 Annual Monitoring Report, Waste Management of Canada Richmond Landfill, Town of Napanee, Ontario" dated March 2008, prepared by Water and Earth Science Associates Ltd. (WESA), Kingston, Ontario.

### EXISTING LEACHATE MANAGEMENT FACILITY:

- one (1) approximately 504 m long 200 mm diameter perforated PVC or HDPE perimeter leachate collector pipe, installed in a 50 mm clear stone bedding wrapped in geotextile, extending through seven (7)1200 mm diameter pre-cast concrete service manholes (MH12, MH11, MH10, MH9, MH8, MH7 and MH1) along the west side and north side of landfill footprint discharging to a 22.3 m<sup>3</sup> capacity North Concrete Pumping Chamber which is not equipped with pumps;
- one (1) approximately 429 m long 150 mm diameter perforated PVC perimeter leachate collector pipe, installed in a 50 mm clear stone bedding wrapped in geotextile, extending through six (6) 1200 mm diameter pre-cast concrete service manholes (MH6, MH5, MH4, MH3, MH2 and MH1) along the east side and north side of landfill footprint discharging to a 22.3 m<sup>3</sup> capacity North Concrete Pumping Chamber which is not equipped with pumps;
- one (1) approximately 393 m long 200 mm diameter perforated PVC perimeter leachate collector pipe, installed in a 50 mm clear stone bedding wrapped in geotextile, extending along the west side and south side of landfill footprint discharging to a leachate pumping station described below;
- one (1) approximately 296 m long 200 mm diameter perforated PVC perimeter leachate collector pipe, installed in a 50 mm clear stone bedding wrapped in geotextile, extending along the east side and south side of landfill footprint discharging to a leachate pumping station described below;

- one (1) side slope riser leachate pumping station equipped with two (2) 80 USGPM capacity submersible pumps and a sump with bottom dimension of 2 m x 2 m filled with 50 mm gravel, discharging to a leachate lagoon described below;
- one (1) 16,245 m<sup>3</sup> storage capacity leachate lagoon, lined with clay and HDPE synthetic liner, located north of the landfill footprint used for temporary storage of leachate or leachate contaminated stormwater until dispose off site to a pre-approved sewage treatment plant;
- one (1) leachate storage lagoon located west of the landfill footprint used for collecting leachate and stormwater runoff from a composting facility until it is used for composting operations or disposed off-site to a pre-approved sewage treatment plant;
- including all controls and associated appurtenances.

### SEWAGE WORKS APPROVED ON OCTOBER 21, 1991:

### Stormwater Management Pond - SWM Pond No. 1

A stormwater management pond constructed on a site approximately 750 m north of Beechwood Road and north of the fill area for a 25 year design storm having a minimum storage volume of 228 m<sup>3</sup> to retain surface runoff from an area of 3.38 ha (consisting of fill area) and to discharge at a rate of 70 L/s via a 375 mm diameter outlet pipe (fitted to a drop inlet pipe structure) to a Headwater Tributary of Marysville Creek (Intermittent), together with a drawdown structure, a 1200 mm diameter drop inlet pipe, a 3.5 m wide emergency spill-way channel, rock baffle, erosion and silt control protection;

### Stormwater Management Pond - SWM Pond No. 2

A stormwater management pond constructed on a site approximately 750 m north of Beechwood Road and northwest of the fill area for a 25 year design storm having a minimum storage volume of 332 m<sup>3</sup> to retain surface runoff from an area of 4.94 ha (consisting of fill area) and to discharge at a rate of 103 L/s via a 375 mm diameter outlet pipe (fitted to a drop inlet pipe structure) to a Headwater Tributary of Marysville Creek (Intermittent), together with a drawdown structure, a 1200 mm diameter drop inlet pipe, a 3.5 m wide emergency spill-way channel, rock baffle, erosion and silt control protection;

all in accordance with the information submitted by Henderson Paddon and Associates Limited Consulting Engineers and the following list of documents containing the information relied upon in the issuance of the Certificate of Approval No. 3-0915-90-916.

- Application for the sewage works dated March 20, 1990, signed by 171496 Canada Inc., F.C. Ford, P. Eng., Henderson, Paddon and Associates and Township of Richmond.
- 2. Report entitled "Tricil Limited Landfill site parts of Lots 1, 2 and 3, Concession IV,

Township of Richmond, County of Lennox and Addington" dated September 1988, prepared by Henderson Paddon and Associates Limited.

- Letter dated July 19, 1990, signed by Dick Van Wyck, Legal Counsel, Laidlav Waste System, addressed to Ranee Mahalingam, Review Engineer, Ministry of the Environment.
- 4. Letter dated September 6, 1990, signed by J. M. Tomlinson. P.Eng., Henderson Paddon and Associates Limited, addressed to Ranee Mahalingam, Approvals Branch, Ministry of the Environment, together with revised section entitled "Stormwater management facilities" of the report entitled "Tricil Limited Landfill Site Parts of Lots 1, 2 and 3, Concession IV, Township of Richmond, County of Lennox and Addington" dated September 1988, prepared by Henderson Paddon and Associates Limited.
- Letter dated September 6, 1990, signed by Jay Clark, P.Eng., Henderson Paddon and Associates Limited, addressed to Ranee Mahalingam, P. Eng., Review Engineer, Approvals Branch, Ministry of the Environment.
- Letter dated April 29, 1991, signed by Ranee Mahalingam. P.Eng., Review Engineer, Approvals Branch, Ministry of the Environment, addressed to J. K. Tomlinson. P.Eng., Henderson Paddon and Associates Limited.
- Letter dated May 23, 1991, signed by Jay Clark, P.Eng., Henderson Paddon and Associates Limited, addressed to Ranee Mahalingam, P.Eng., Review Engineer, Approvals Branch, Ministry of the Environment.
- 8. Minutes of the meeting held at Ministry of the Environment, 250 Davisville Avenue, Toronto, on June 25, 1991.
- Letter dated July 24, 1991, signed by J. M. Tomlinson, P.Eng.. Henderson Paddon and Associates Limited, addressed to Bruce W. Metcalfe, Surface Water Technologist, Southeastern Region, Ministry of the Environment.
- Letter dated July 25, 1991, signed by Bruce W. Metcalfe, Surface Water Technologist, Southeastern Region, Ministry of the Environment, addressed to J. M. Tomlinson, P.Eng., Henderson Paddon and Associates Limited.
- Letter dated July 29, 1991, signed by J. M. Tomlinson, P. Eng., Henderson Paddon and Associates Limited, addressed to Ranee Mahalingan, Approvals Branch, Ministry of the Environment, enclosing a copy of the revised application and revised drawings No. 8570A (1, 2, 3, 4) and 8570 -7.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

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"Act " means the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended;

"Certificate " means this entire certificate of approval document, issued in accordance with Section 53 of the Act, and includes any schedules;

"By-pass" means any discharge from the Works that does not undergo any treatment before it is discharged to the environment;

"Director " means any Ministry employee appointed by the Minister pursuant to section 5 of the Act

"District Manager " means the District Manager of the Kingston District Office of the Ministry;

"Ministry " means the Ontario Ministry of the Environment;

"Owner " means Waste Management of Canada Corporation and includes its successors and assignees;

"Previous Works" means those portions of the sewage works previously constructed and approved under a certificate of approval;

"Proposed Works" means the sewage works described in the Owner's application, this Certificate and in the supporting documentation referred to herein, to the extent approved by this Certificate;

"Substantial Completion" has the same meaning as "substantial performance" in the Construction Lien Act; and

"Works " means the sewage works described in the Owner 's application, this Certificate and in the supporting documentation referred to herein, to the extent approved by this Certificate and includes both Previous Works and Proposed Works.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

#### **TERMS AND CONDITIONS**

#### I - GENERAL

#### 1. <u>GENERAL PROVISIONS</u>

- (1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Certificate and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (2) Except as otherwise provided by these Conditions, the *Owner* shall design, build, install, operate and maintain the *Works* in accordance with the description given in this *Certificate*,

the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this *Certificate*.

- (3) Where there is a conflict between a provision of any submitted document referred to in this *Certificate* and the Conditions of this *Certificate*, the Conditions in this *Certificate* shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.
- (4) Where there is a conflict between the listed submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.
- (5) The requirements of this *Certificate* are severable. If any requirement of this *Certificate*, or the application of any requirement of this *Certificate* to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this certificate shall not be affected thereby.

### 2. EXPIRY OF APPROVAL

The approval issued by this *Certificate* will cease to apply to those parts of the *Proposed Works* which have not been constructed within five (5) years of the date of this *Certificate*.

### 3. CHANGE OF OWNER

- (1) The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within 30 days of the change occurring:
  - (a) change of Owner;
  - (b) change of address of the Owner;
  - (c) change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the <u>Business Names Act</u>, R.S.O. 1990,
     c. B17 shall be included in the notification to the District Manager;
  - (d) change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the <u>Corporations</u>. <u>Information Act</u>, R.S.O. 1990, c. C39 shall be included in the notification to the *District Manager*;
  - (2) In the event of any change in ownership of the *Works*, other than a change to a successor municipality, the *Owner* shall notify in writing the succeeding owner of the existence of this *Certificate*, and a copy of such notice shall be forwarded to the *District Manager* and the *Director*.

# 4. UPON THE SUBSTANTIAL COMPLETION OF THE WORKS

(1) Within one year of the Substantial Completion of the Proposed Works, a set of as-built drawings showing the works "as constructed" shall be prepared. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the Works or at operational office of the Owner for the operational life of the Works.

#### 5. <u>BY-PASSES</u>

- (1) Any *By-pass* of sewage from any portion of the *Works* is prohibited, except where:
  - (a) it is necessary to avoid loss of life, personal injury, danger to public health or severe property damage;
  - (b) the District Manager agrees that it is necessary for the purpose of carrying out essential maintenance and the District Manager has given prior written acknowledgment of the by-pass; or
- (2) The Owner shall maintain a logbook of all By-pass events which shall include, at a minimum, the time, location, duration, quantity of By-pass, the authority for By-pass pursuant to subsection (1), and the reasons for the occurrence.

## II - LEACHATE COLLECTION AND DISPOSAL SYSTEM

### 6. LEACHATE MONITORING AND RECORDING

The Owner shall, upon commencement of operation of the Works, carry out the following monitoring program:

- (1) All samples and measurements taken for the purposes of this *Certificate* are to be taken at a time and in a location characteristic of the quality and quantity of the leachate stream over the time period being monitored.
- (2) For the purposes of this condition, the following definitions apply:
  - (a) Monthly means once every month;
  - (b) Quarterly means once every three months;
  - (c) Semi-annually means once every six months; and
  - (d) Annually means once every twelve months;
- (3) Leachate grab samples shall be collected from a designated sampling location at the indicated monitoring frequency and analyzed for each parameter listed in Table 1 and all results recorded:

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Table 1 - Leachate Monitoring         Sampling Location: North Pumping Chamber				
Sampling Frequency: Quarterly	Sampling Frequency: Annually			
Parameter	Parameter	Parameter		
	Arsenic	Silver		
Alkalinity Dissolved Organic Carbon (DOC)	Cadmium	Aluminum		
	Chromium	Boron		
Hardness	Cobalt	Barium		
pH	Copper	Berrylium		
Total Ammonia Nitrogen	Mercury	Calcium		
Nitrate Nitrogen	Molybdenum	Sodium		
Nitrite Nitrogen	Nickel	Magnesium		
Total Kjeldahl Nitrogen	Lead	Manganese		
Phenols	Selenium	Iron		
PAHs	Zinc	Total Phosphorus		
BTEX		Conductivity		
USEPA 624		Hydrogen Sulphide		
		Sulphate		
		BOD5		
		Total Trihalomethanes (THM)		

- (4) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:
  - (a) the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended from time to time by more recently published editions;
  - (b) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions;
  - (c) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions; and
  - (d) the Environment Canada publications "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout" (July 1990) and "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to <u>Daphnia magna</u>" (July 1990), as amended from time to time by more recently published editions.

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(5) The *Owner* shall retain for a minimum of three (3) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this *Certificate*.

# 7. OPERATION AND MAINTENANCE

- (1) The Owner shall exercise due diligence in ensuring that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Certificate are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate funding, adequate operator training, including training in all procedures and other requirements of this Certificate and the Act and regulations, process controls and alarms.
- (2) The Owner shall prepare an operations manual within six (6) months of the issuance date of this Certificate, that includes, but not necessarily limited to, the following information:
  - (a) operating procedures for routine operation of the Works ;
  - (b) inspection programs, including frequency of inspection, for the *Works* and the methods or tests employed to detect when maintenance is necessary;
  - (c) repair and maintenance programs, including the frequency of repair and maintenance for the *Works*;
  - (d) procedures for the inspection and calibration of monitoring equipment;
  - (e) a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the *District Manager*; and
  - (f) procedures for receiving, responding and recording public complaints, including recording any follow up actions taken.
- (3) The Owner shall maintain the operations manual current and retain a copy at the Works or Owner 's Head Office for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.
- (4) The *Owner* shall maintain a logbook to record and report the volume of leachate disposed off-site, the date, and the name of the receiving sewage treatment plant;

# III - STORMWATER MANAGEMENT FACILITY

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# 8. MONITORING AND RECORDING

The Owner shall carry out the following monitoring program:

- (1) All samples and measurements taken for the purposes of this *Certificate* are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
- (2) The Owner shall collect stormwater grab samples from the following designated sampling location **prior to each planned discharge event** and analyse for the parameters listed in Table 2;
- (3) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in Condition 6 (4);
- (4) The measurement frequencies specified in subsection (2) in respect to any parameter are minimum requirements which may, after two (2) years of monitoring in accordance with this Condition, be modified by the *District Manager* in writing from time to time.
- (5) The *Owner* shall retain for a minimum of three (3) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Certificate at the *Works* or *Owner* 's Head Office.

Table 2 - Stormwater and Surface Water Monitoring         Sampling Location: SWM Ponds No. 1, No. 2, and No. 3         Parameter		
I ai ameter	Parameter	Field Parameter
pH	Aluminum	pH
Alkalinity	Arsenic	
Hardness	Barium	Temperature
Biological Oxygen Demand (CBODS	5) Boron	Conductivity
Un-ionized Ammonia	Cobalt	
Total Ammonia Nitrogen	Beryllium	<u> </u>
Total Kjeldahl Nitrogen	Cadmium	
Nitrate Nitrogen	Chromium	
Total Phosphorus	Copper	
Total Suspended Solids	Iron	
Total Dissolved Solids	Mercury	
Total Organic Carbon	Nickel	
Chloride	Potassium	
Chemical Oxygen Demand (COD)	Sodium	
Phenols		
BTEX	Selenium	
Acute Lethality - Daphnia magna	Silver	
Acute Lethality - Rainbow Trout	Zinc	
rout		

# 9. <u>OPERATION AND MAINTENANCE</u>

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- (1) The *Owner* shall prepare an operations manual prior to the commencement of operation of the *Proposed Works*, that includes, but not necessarily limited to, the following information:
  - (a) operating procedures for routine operation of the Works ;
  - (b) inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;
  - (c) repair and maintenance programs, including the frequency of repair and maintenance for the *Works*;
  - (d) procedures for the inspection and calibration of monitoring equipment;
  - (e) a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the *District Manager*; and
- (2) The Owner shall maintain the operations manual current and retain a copy at the Works

or Owner 's Head Office for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.

- (3) The Owner shall keep the outlet gate valves of SWM Pond No. 1, SWM Pond No. 2, and SWM Pond No. 3 in closed position during normal operation periods.
- (4) Prior to any planned discharge of stormwater from any of the SWM Ponds to the natural environment, the *Owner* shall collect stormwater grab sample from a designated sampling location at the SWM Pond and conduct acute lethality testing for Daphnia *magna* and Rainbow Trout. The *Owner* shall ensure that the stormwater runoff collected in the SWM Pond is not acutely lethal to Daphnia *magna* and Rainbow Trout before allowing any discharge of stormwater from the SWM Pond.
- (5) In the event that toxicity monitoring results obtained under Condition 9 (4) show that the contents of the **SWM Pond** are acutely lethal either to Daphnia *magna* or Rainbow Trout, or both, the *Owner* shall ensure that the contents of the affected **SWM Pond** deemed to be leachate contaminated is disposed in a preapproved manner;
- (6) The *Owner* shall maintain a record of the date and the estimated volume of leachate contaminated stormwater disposed off site under Condition 9 (5);
- (7) Discharge of leachate contaminated stormwater to the receiving surface water from the *Works* is prohibited, except where it is necessary to avoid loss of life, personal injury, danger to public health or severe property damage;
- (8) The *Owner* shall notify the *District Manager* orally, as soon as possible, and in writing within seven days of any discharge of leachate contaminated stormwater to receiving surface water including an assessment of the relative extent of leachate contamination, estimated volume of stormwater discharged, and proposed or completed remedial actions.
- (9) The *Owner* shall maintain the water level in all the **SWM Ponds** at a level that ensures adequate storage is available for stormwater runoff associated with major storm events by ensuring that detained stormwater is disposed of in a timely manner to minimize the occurrence of emergency overflow during major storm events.
- (10) The Owner shall inspect the Works (SWM Ponds) at least once a year and, if necessary, clean and maintain the Works to prevent the excessive build-up of sediments and/or vegetation.
- (11) The Owner shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the logbook at the site and/or Owner's operational headquarter for inspection by the Ministry. The logbook shall include the following:
  - (a) the name of the Works ;

(b) the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed; and

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(c) the volume of contaminated stormwater disposed off-site, the date, and the name of the receiving sewage treatment plant;

#### IV - GENERAL

#### 10. <u>REPORTING</u>

- (1) Ten (10) days prior to the date of a planned By-pass being conducted pursuant to Condition 5 and as soon as possible for an unplanned By-pass, the Owner shall notify the District Manager (in writing) of the pending start date, in addition to an assessment of the potential adverse effects on the environment and the duration of the By-pass.
- (2) In addition to the obligations under Part X of the <u>Environmental Protection Act</u>, the Owner shall, within 10 working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by product, intermediate product, oils, solvents, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the *District Manager* describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.
- (3) The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to *Ministry* staff.
- (4) The Owner shall prepare on an annual basis, and submit upon request, a performance report within ninety (90) days following the end of the calendar year being reported upon. The first such report shall cover the period following the commencement of operation of the Works and subsequent reports shall be prepared to cover successive calendar years following thereafter. The reports shall contain, but shall not be limited to, the following information:
  - (a) a summary and interpretation of all stormwater monitoring data and a comparison to the Provincial Water Quality Objectives (PWQO), including an overview of the success and adequacy of the *Works*;
  - (b) a summary of the monthly quantity of leachate disposed off site and corresponding average leachate quality;
  - (c) a description of any operating problems encountered and corrective actions taken;
  - (d) a summary of all maintenance carried out on any major structure, equipment,

apparatus, mechanism or thing forming part of the Works ;

- (e) a summary of the calibration and maintenance carried out on all leachate monitoring equipment; and
- (f) a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- (g) a summary of all By-pass, spill or abnormal discharge events; and
- (h) any other information the District Manager requires from time to time.

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

- 1. Condition 1 is imposed to ensure that the *Works* are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the *Certificate* and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this *Certificate* the existence of this *Certificate*.
- 2. Condition 2 is included to ensure that, when the *Works* are constructed, the *Works* will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
- 3. Condition 3 is included to ensure that the *Ministry* records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the *Works* are made aware of the *Certificate* and continue to operate the *Works* in compliance with it.
- 4. Condition 4 is included to ensure that the *Works* are constructed in accordance with the approval and that record drawings of the *Works* "as constructed" are maintained for future references.
- 5. Condition 5 is included to indicate that by-passes of untreated sewage to the receiving watercourse is prohibited, save in certain limited circumstances where the failure to *By-pass* could result in greater injury to the public interest than the *By-pass* itself where a *By-pass* will not violate the approved leachate requirements, or where the *By-pass* can be limited or otherwise mitigated by handling it in accordance with an approved contingency plan. The notification and documentation requirements allow the *Ministry* to take action in an informed manner and will ensure the *Owner* is aware of the extent and frequency of *By-pass* events.
- 6. Conditions 6 and 8 are included to enable the *Owner* to evaluate and demonstrate the performance of the *Works*, on a continual basis, so that the *Works* are properly operated and maintained at a level which is consistent with the design objectives specified in the *Certificate* and that the *Works* does not cause any impairment to the receiving watercourse.

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7. Conditions 7 and 9 are included to require that the *Works* be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, damage to any property or injury to any person is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the *Ministry*.

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8. Condition 10 is included to provide a performance record for future references, to ensure that the *Ministry* is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this *Certificate*, so that the *Ministry* can work with the *Owner* in resolving any problems in a timely manner.

This Certificate of Approval revokes and replaces Certificate(s) of Approval No. 3-0975-90-916 issued on October 21, 1991.

In accordance with Section 100 of the <u>Ontario Water Resources Act</u>, R.S.O. 1990, Chapter 0.40, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the <u>Ontario Water Resources Act</u> , R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

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

The Notice should also include:

- 3. The name of the appellant;
- The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the works are located;

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

This Notice must be served upon:

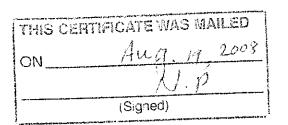
The Secretary*		
Environmental Review Tribunal		The Director
655 Bay Street, 15th Floor		Section 53. Ontario Water Resources Act
Toronto, Ontario	AND	Ministry of the Environment
M5G 1E5		2 St. Clair Avenue West, Floor 12A
		Toronto, Ontario

\* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

M4V 1L5

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 19th day of August, 2008



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Mansoor Mahmood, P.Eng. Director Section 53, Ontario Water Resources Act

SHI/

District Manager, MOE Kingston - District Jeff Armstrong, P.Eng., Henderson Paddon & Associates Limited c:

Appendix A.7

Certificate of Approval (Industrial Sewage) No. 4-0129-64-956 (Oil/Sediment Interceptor)



Ministry of Environment and Energy

of Ministère de ment l'Environnement ergy et de l'Énergie CERTIFICATE OF APPROVAL INDUSTRIAL SEWAGE NUMBER 4-0129-94-956 Page 1 of 3

Laidlaw Waste Systems (Canada) Ltd. 3410 South Service Road Burlington, Ontario L7R 3Y8

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval

of:

Establishment of sewage works for the collection, transmission, treatment and disposal of stormwater from Laidlaw Landfill, Richmond Township, Ontario, consisting of the following:

- collection and transmission of stormwater and other drainage from a petroleum hydrocarbon contaminated soils storage area of 3,200 square metres, with collected drainage discharging at a maximum rate of 15,000 Litres per hour, via a catch basin and 150 millimetre diameter piping to a three chambered oil/sediment interceptor,
- one oil interceptor with three interconnected chambers, with each chamber having dimensions of 1.15 metres length, 1.34 metre width, and a liquid depth of 0.925 metres, discharging via 150 millimetre diameter piping to the sediment control ditch leading to the.
   downstream sedimentation pond,
- all other controls, electrical equipment, instruments, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned sewage works,

all in accordance with the Application for Approval of Industrial Sewage Works dated November 11, 1994 signed by .J. Pullen, P.Eng. (Regional Manager, Engineering and Compliance), Laidlaw Waste Systems (Canada) Ltd. ("the Owner"), and all supporting documentation and information.

You are hereby notified that this approval is issued subject to the terms and conditions outlined

below:

TERMS AND CONDITIONS

OPERATION

(1) The Owner shall prepare a draft operations manual prior to the commencement of operation of the works and shall revise and implement the operations manual within six (6) months of the commencement of operation of the works.

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Ministry of Ministère de Environment l'Environnement and Energy et de l'Énergie CERTIFICATE OF APPROVAL INDUSTRIAL SEWAGE NUMBER 4-0129-94-956 Page 2 of 3

- (2) The Owner shall ensure that both the draft and revised manuals include as a minimum:
  - (a) operating procedures for routine operation of the works, including but not limited to, routine inspection of the oil interceptor chambers, and removal of accumulating solid and liquid wastes;
  - (b) operating procedures for operation of the works during spills, fires, equipment malfunction, power outages, and other emergency or abnormal operating conditions, including notification procedures for the Ministry;
  - (c) best management practices to minimize contaminant discharges to the oil interceptor; and,
  - (d) any other procedures the Owner deems necessary for the proper operation of the works.
- (3) The Owner shall maintain the operations manual, as revised from time to time, at the location of the works for so long as it is in operation, and shall make the manual available to Ministry personnel for inspection and copying, upon request.
- (4) The Owner shall keep the operations manual up to date through revisions undertaken from time to time, so as to reflect any changes in described operation and maintenance procedures for the works or any newly introduced operation and maintenance procedures made necessary by good engineering practice, this certificate or the requirements of the Ministry.

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

1. Condition No. 1 is included to ensure certain operation procedures are followed to prevent deleterious effects on the environment.

You may by written notice served upon me and the Environmental Appeal Board within 15 days after receipt of this Notice, require a hearing by the Board. Section 101 of the <u>Ontario Water Resources Act</u>, R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;

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

Ontario

Ministry of Ministère de Environment l'Environnement and Energy et de l'Énergie CERTIFICATE OF APPROVAL INDUSTRIAL SEWAGE NUMBER 4-0129-94-956 Page 3 of 3

#### The Notice should also include:

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the sewage works are located;

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

This Notice must be served upon:

The Secretary, Environmental Appeal Board, 112 St. Clair Avenue West, Suite 502, <u>AND</u> Toronto, Ontario. M4V 1N3 The Director, Section 53, Ontario Water Resources Act, Ministry of Environment and Energy, 250 Davisville Avenue, 3rd Floor, Toronto, Ontario. M4S 1H2

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 24th

day of January 1995

R. P. Cornelius, P. Eng. Director Section 53 Ontario Water Resources Act

AA/pm

cc District Manager, MOEE Kingston District Office

Appendix A.8

Certificate of Approval No. A710003 (Soil Recycling)



Ministry Ministère of the de Environment l'Environnement

PROVISIONAL CERTIFICATE OF APPROVAL FOR A WASTE DISPOSAL SITE

# CERTIFICAT D'AUTORISATION PROVISOIRE DE DÉCHARGE

# Provisional Certificate Number A710003 Certificat provisoire no.

Page 1 of 13 de

Under the Environmental Protection Act and Regulations, and subject to the limitations thereof, this Provisional Certificate of Approval is issued to: Aux termes de la Loi sur la protection de l'environnement et des règlements et sous réserve des restrictions qui y sont stipulées, le présent certificat provisoire d'autorisation est délivré à:

Laidlaw Waste Systems (Canada) Ltd. 3410 South Service Road BURLINGTON, Ontario L7R 3Y8

the use and operation of a waste processing facility

- .11 in accordance with the plans and specifications:
- Application for a Certificate of Approval for a Waste Disposal Site (Processing) dated August 30, 1993.
- Letter from Laidlaw Waste Systems Ltd. to the Ministry of Environment and Energy, dated July 12, 1993, briefly describing the proposal for recycling petroleum contaminated soils and listing supporting documentation.
- 3. Letter from Laidlaw Waste Systems Ltd. to the Ministry of Environment and Energy, dated July 12, 1993, explaining the soil recycling process. Supporting information includes District Office Notification Form - Mobile Soil Reclamation, Certificate of Insurance, letter of credit, site plan and layout drawings, and detail drawings of sediment/oil interceptor system for quality control of leachate run-off.
- 4. Letter and supporting documentation from Laidlaw Waste Systems Ltd. to the Ministry of Environment and Energy dated November 5, 1993 providing additional information on emergencies and contingencies, public information (including public notice and newspaper advertisement), hours of operation, and a monitoring plan for the soil storage pad at the Laidlaw landfill site in Richmond Township.

#### CERTIFICAT D'AUTORISATION PROVISOIRE DE DÉCHARGE

Provisional Certificate Number A710003 Certificat provisoire no.

> Page 2 of 13 de

- 5. Memo to the Ministry of Environment and Energy from Laidlaw Waste Systems Ltd. dated November 9, 1993, providing list of property owners which received a hand delivered public notice explaining the proposal.
- Letter from the Richmond-Tyendinaga Environmental Association to the Ministry of Environment and Energy dated September 23, 1993 providing support for the soil recycling proposal.
- Letter from the Township of Richmond to the Ministry of Environment and Energy dated October 8, 1993 and Resolution No. 316/93, dated October 4, 1993, providing Council's support for the proposal.

Ontario Ministry of Environment and Energy Provisional Certificate of Approval for a Waste Disposal Site A210222 dated September 18, 1992, or as amended.

- Ontario Ministry of Environment and Energy Provisional Certificate of Approval for a Waste Management System A840681 dated March 18, 1992, or as amended.
- .0. Ontario Ministry of Environment and Energy Certificate of Approval (Air) Number 8-3212-88-919 dated April 23, 1992, or as amended.
- ocated in: Township of Richmond Part of Lot 2, Concession IV (Beechwood Road)

nd is subject to the following definitions and conditions:

#### elinitions:

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ertificate" means the entire certificate of approval including its
nedules, if any, issued in accordance with Section 27, Part V of the
inmental Protection Act;
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### CERTIFICAT D'AUTORISATION PROVISOIRE DE DÉCHARGE

Provisional Certificate Number A710003 Certificat provisoire no.

> Page 3 of 13 de

"Director" means Director of the Southeastern Region of the Ministry or his appointee;

"District Manager" means the District Manager of Kingston District Office, Southeastern Region of the Ministry;

"Ministry" means the Ontario Ministry of Environment and Energy;

"Owner" means Laidlaw Waste Systems (Richmond) Ltd.;

"Operator" means Laidlaw Waste Systems (Canada) Ltd.; its officers, er loyees, agents or contractors;

"Site" means the area(s) on landfill site, Certificate of Approval No. .371203, to be used by the processing facility described in this Certificate.

#### General Conditions

- The requirements of this Certificate are imposed pursuant to Part V of the Environmental Protection Act. The issuance of this Certificate in no way abrogates the operator's legal obligations to take all reasonable steps to avoid violating other applicable provisions of this legislation and other legislation and regulations.
- 2. (1) The requirements of this Certificate are severable. If any requirement of this Certificate, or the application of any requirement of this Certificate to any circumstance, is held invalid, the application of such requirement to other circumstances and the remainder of this Certificate shall not be affected thereby.

(2) In all matters requiring the interpretation and implementation of this Certificate, the conditions of the certificate shall take precedence, followed in descending order by the application and the documentation, referred to in this Certificate, which is submitted in support of the application.

#### CERTIFICAT D'AUTORISATION PROVISOIRE DE DÉCHARGE

Provisional Certificate Number A710003 Certificat provisoire no.

> Page 4 of 13 de

- 3. The operator must ensure compliance with all the terms and conditions of this Certificate. Non-compliance constitutes a violation of the Environmental Protection Act and is grounds for enforcement.
- 4. (1) The operator shall, forthwith upon the request of the Director or District Manager, furnish any information requested concerning compliance with this Certificate including any records required to be kept by this Certificate.

(2) In the event the operator provides to the Ministry information, records, documentation of notification in accordance with this Certificate,

- (a) the receipt of said information by the Ministry;
- (b) the acceptance by the Ministry of the information's completeness or accuracy; or,
- (c) the failure of the Ministry to prosecute the operator, or to require the operator to take any action, under this Certificate of any statute or regulation in relation to said information;

shall not be construed as the approving, excusing or justifying by the Ministry of any act or omission of the operator relating to said information, amounting to non-compliance with this Certificate or any statute or regulation.

(3) All records referred to in this Certificate shall be retained on file in a secure manner for a period not less than two years.

5. The owner/operator shall allow Ministry personnel, or a Ministry authorized representative(s) to:

(1) carry out any and all inspections authorized by Section 156, 157 or 158 of the Environmental Protection Act, as amended from time to time, of any place to which this Certificate relates; and, without restricting the generality of the foregoing, to:

# CERTIFICAT D'AUTORISATION PROVISOIRE DE DÉCHARGE

Provisional Certificate Number A710003 Certificat provisoire no.

> Page 5 of 13 de

- (a) enter at reasonable times upon the premises, or the location where the records required by the conditions of this Certificate are kept:
- (b) have access to and copy, at reasonable times, any records required by the conditions of this Certificate;
- (c) inspect at reasonable times any facilities, equipment, practices, or operations required by the conditions of this Certificate; and
- (d) sample and monitor at reasonable times for the purpose of assuring compliance with the conditions of this Certificate.
- 6. (1) The owner/operator shall notify the District Manager in writing of any change in ownership, name of corporation, the operator, or termination of the facility within 30 days of the change occurring.

(2) In the event the facility is permanently closed a Provincial Officer shall inspect the site and the site shall not be used for any other purpose prior to the inspection and written clearance by the District Manager.

(3) The operator shall ensure that all communications made pursuant to this condition will refer to this Certificate's number.

7. (1) In accordance with Section 19(4) of the Environmental Protection Act this Certificate, the application filed to obtain and documentation referred to in the certificate which may be reasonably necessary for a proper reading and understanding of it, with the exclusion of those documents marked "confidential" by the operator shall be made available for public inspection at the request of any person.

(2) Additional information to that set out in subcondition (1) relating to this Certificate 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.

#### CERTIFICAT D'AUTORISATION PROVISOIRE DE DÉCHARGE

Provisional Certificate Number A710003 Certificat provisoire no.

> Page 6 of 13 de

- 8. Except as specified in this Certificate the site shall be operated in accordance with the application for this Provincial Certificate of Approval dated August 30, 1993 and its supporting information described in items 1 to 10 on pages 1 and 2 of this Certificate.
- 9. (1) The operation of this site is limited to the storage and processing of non hazardous waste soils contaminated with petroleum hydrocarbons, liquid waste classes 211, 212, 213; 221, 222, 251, 252, 253 and 254 as defined in the Ministry of the Environment "New Ontario Waste Classes" document, dated January, 1986 from the Province of Ontario.

(2) No wastes other than those listed in subcondition (1) shall be collected and stored at this site without amendment to this Certificate.

(3) No wastes contaminated with halogenated organics, including PCBs, with concentrations greater than two (2) micrograms per grams shall be accepted at this site.

(4) No waste mixing or diluting with uncontaminated soil shall occur at the site. No waste mixed or diluted with uncontaminated soil shall be accepted at the site.

(5) No users outside the areas listed in subcondition (1) shall use this site without amendment to this Certificate.

10. (1) The operator shall ensure that site personnel, trained in contingency measures are on duty at all times during normal operating hours or during any additional hours the facility may be open. Public access to the site shall be restricted.

#### CERTIFICAT D'AUTORISATION PROVISOIRE DE DÉCHARGE

#### Provisional Certificate Number A710003 Certificat provisoire no.

Page 7 of 13 de

(2) All site personnel shall have practical knowledge of the waste material to be handled under this Certificate and shall be fully trained and knowledgeable about all aspects of the site operation including the requirements of this Certificate which relate to the work they are doing and their safety on the site.

(3) Prior to operating the site the operator shall prepare an operation manual for use by site personnel which shall contain, but not necessarily be limited to the following:

- (a) an outline of the responsibilities of site personnel;
- (b) operation and receiving procedures;
- (c) storage, handling, sorting and shipping procedures;
- (d) contingency procedures to be followed by personnel in the event of fire and other emergencies.

(4) A copy of the manual shall be placed in a central location on the site and this manual shall be accessible to all site personnel during operating hours.

(5) Within 30 days of the issuance date of this Certificate a copy of the operation manual shall be submitted to the District Manager.

11. (1) The operator shall establish a record system for all waste received at the site which shall include, but not necessarily be limited to, the documentation of quantities received and processed at the site each month; source of generation; receiving and shipping dates and volumes of wastes or processed soils shipped to approved markets, transfer/processing facilities and waste landfill sites; and documentation of environmental and other problems experienced in operating this site.

### CERTIFICAT D'AUTORISATION PROVISOIRE DE DÉCHARGE

Provisional Certificate Number A710003 Certificat provisoire no.

> Page 8 of 13 de

(2) The information collected under subcondition (1) shall be submitted in a report to the District Manager on or before the first day of December during each year of operation or until the Director or the District Manager has given notice in writing that these submissions are no longer required.

12. (1) The operator shall ensure that the site is operated in a safe and secure manner; that the operation of this site does not impede or is impeded by the landfilling operation on which this site is located; and that the wastes are properly handled, contained, stored, tested and processed at the site; so as not to pose a threat to the general public, site personnel and the environment.

(2) The operator shall ensure that wastes received at the facility are processed and moved from the site to approved markets, processing facilities and landfill sites on a regular basis; and that waste processing does not exceed 5,000 tonnes per day and waste storage on site does not exceed 40,000 tonnes.

(3) Notwithstanding Condition 1 the operator shall ensure that the processing operation is in compliance with noise, hours of operation, fire regulations and any other applicable by-laws of the local municipality/regional governments; and the requirements of Ontario Provisional Certificate of Approval for a Waste Disposal Site-A210222; and Ontario Provisional Certificate of Approval for a Waste Management System A840681 described in items 8 and 9 on page 2 of this Certificate.

(4) The operator shall take all necessary measures possible to contain and minimize all emissions, including air emissions caused by the operation of the processing equipment, waste storage and the processed soil storage; and shall comply with Ontario Certificate of Approval (Air) 8-3212-88-919 described in item 10 on page 2 of this Certificate; and all other applicable legislation governing emissions.

(5) Any waste water collected in the catchment basin for the soil storage pad described in item 3 on page 1 of this Certificate shall be disposed of in a proper manner under Section 53 of the Ontario Water Resources.

#### CERTIFICAT D'AUTORISATION PROVISOIRE DE DÉCHARGE

Provisional Certificate Number A710003 Certificat provisoire no.

> Page 9 of 13 de

(6) Only waste processing equipment as approved under Certificates of Approval A210222 and 8-3212-88-919 described in items 8 and 10 on page 2 of this Certificate shall be used at this site.

- The local fire department shall be informed of the processing facility and this Certificate.
- 14. (1) Processed waste which contains Total Volatile Hydrocarbons above (100) micrograms per gram which are not reprocessed or soil waste which is not processed shall be taken from the site for disposal to approved landfill sites or to approved transfer or processing sites for further processing shall be transported under a approved waste management system.

(2) Testing of waste soils and processed soils on this site shall be carried out as specified in Certificates of Approval A210222 and 8-3212-88-919 described in items 8 and 10 on page 2 of this Certificate.

- 15. This Certificate expires with the termination of the site; when all the wastes have been removed from the site; and the restoration of the site has been approved, in writing, by the District Manager.
- 16. (1) Within 90 days of the date of this Certificate the operator shall provide financial security for the closure of the site in an amount acceptable to the Director. The security can be in the form of a fund, bond, an irrevocable letter of credit or any other form as may be acceptable to the Director. The amount of financial assurance shall be established based on current costs for cleaning up the site and the assessed value of the fund, bond, or letter of credit shall be approved by the Director, in writing, before being submitted to the Ministry. The assessed value submitted to the Director for approval shall be an independent estimate which shall include, but not necessarily be limited to:

## CERTIFICAT D'AUTORISATION PROVISOIRE DE DÉCHARGE

Provisional Certificate Number A710003 Certificat provisoire πο.

> Page 10 of 13 de

- trucking, disposal and labour costs for removal of all waste from the site;
- ii) costs of equipment dismantling and cleaning on the site.
- iii) any legal and contractual costs associated with the closure of the site.

(2) In the event the financial assurance is scheduled to expire or notice is received that it will not be renewed and a replacement in a form satisfactory to the Director is not received at least 60 days before the expiry or renewal date, the operator shall forthwith replace it with a cash deposit.

(3) The operator shall review the closure costs as specified in subcondition (1) on a yearly basis and shall increase, or may decrease the financial assurance when instructed, in writing, by the Director. A copy of the review assessment shall be provided in the report specified in Condition 11(2).

(4) The operator shall at all times while the site is operating maintain the ten million dollars (\$10,000,000) third party liability insurance described in item 3 on page 1 of this Certificate and a copy of the policy shall be submitted to the Director within 30 days of the date of this Certificate.

17. The obligations imposed by the terms and conditions of this Certificate of Approval are obligations of due diligence.

The reasons for the imposition of these condition are as follows:

1. Conditions 1, 2, 3, 4 and 7 are to clarify the legal rights and obligations of this Provisional Certificate of Approval.

# CERTIFICAT D'AUTORISATION PROVISOIRE DE DÉCHARGE

Provisional Certificate Number A710003 Certificat provisoire no.

> Page 11 of 13 de

- 2. Condition 5 is to ensure that the appropriate Ministry staff have ready access to the waste disposal site to inspect the operations that are approved under this Provisional Certificate of Approval. The condition is supplementary to the powers of entry afforded a Provincial Manager pursuant the Environmental Protection Act, as amended.
- 3. Conditions 6, 8 and 15 are to ensure that the waste disposal site is operated in accordance with the application for this Certificate and supporting information and not under any name or in any way which the Director has not been asked to consider; and to ensure the property is cleaned up and restored to the satisfaction of the Ministry prior to closure.
- 4. Condition 9 is to ensure that this site is used only to collect, handle and transport waste within the limitations approved under this Provisional Certificate of Approval.
- 5. Conditions 10 and 12 are to ensure that the waste recycling site is properly managed in an organized manner by adequately trained persons, in order to prevent environmental detriment; and to ensure the safety of the general public and site personnel.
- Condition 11 is to provide both the operator and the Ministry of Environment and Energy with an assessment of the waste recycling site.
- Condition 13 is to ensure fire personnel are informed of the this waste processing site and the type of waste which is stored on this site.
- Condition 14 is to ensure that the collection, handling, and transportation of all waste materials are conducted in an environmentally acceptable manner in accordance with provincial regulations.

### CERTIFICAT D'AUTORISATION PROVISOIRE DE DÉCHARGE

Provisional Certificate Number A710003 Certificat provisoire no.

> Page 12 of 13 de

- 9. Condition 16 is to ensure funds are available from the operator for site closure in the event the site needs to be closed and the operator is not able to do the work; ant to clean up any environmental impairment should the operator be unable or refuse to do so. The use and operation of the site without this condition would not be in the public interest.
- 10. Condition 17 is required to clarify that the terms and conditions of this Certificate of Approval impose a standard of due diligence and not absolute liability.

You may, by written notice served upon me and the Environmental Appeal Board within 15 ; after receipt of this Certificate, require a hearing by the Board. Section 142 of the Environmental Protection Act, R.S.O. 1990 c. E-19, as amended, provides that the notice requiring the hearing shall state:

- 1. The portion of the approval or each term or condition in the approval in respect of which the hearing is required, and;
- The grounds on which you intend to rely at the hearing in relation to <u>each</u> portion appealed.

In addition to these legal requirements, the notice should include:

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the works are located;

and the notice should be signed and dated by the appellant.

#### CERTIFICAT D'AUTORISATION PROVISOIRE DE DÉCHARGE

Provisional Certificate Number A710003 Certificat provisoire no.

> Page 13 of 13 de

This notice should be served upon:

The SecretaryANDThe DirectorEnvironmental Appeal BoardSection 39, E.P.A.112 St. Clair Avenue WestMinistry of Environment and EnergySth Floor133 Dalton Avenue, Box 820TORONTO, OntarioKINGSTON, OntarioM4V 1N3K7L 4X6

sted at Kingston this LG day of December, 1993.

Director Section 39, E.P.A. Ministry of Environment and Energy

(Pour obtenir une copie du present document certificat en francais, communiquer le Ministère de l'Environnement et de l'Énergie 613 549-4000.) Appendix A.8.1

Amendment to Certificate of Approval No. A710003 dated August 25, 1999, Regarding Notification of Change of Name





1.

Ministry of the Environment

Ministère de l'Environnement NOTICE Page 1 of 2

Canadian Waste Services Inc. 1275 North Service Road, Suite 700 Oakville, Ontario L6M 3G4

You are hereby notified that the Provisional Certificate of Approval No. A 710003, dated December 20, 1993, which was issued to Laidlaw Waste Systems (Canada) Ltd., as amended, is further amended as follow:

The Name and Address of the Company have changed:

- FROM: Laidlaw Waste Systems (Canada) Ltd. 3410 South Service Road Burlington, Ontario L7R 3Y8
- TO: Canadian Waste Services Inc. 1275 North Service Road, Suite 700 Oakville, Ontario L6M 3G4

The following definitions in "Definitions" are revoked and replaced with:

"Operator" means Canadian Waste Services Inc.; its officers, employees, agents or contractors; and

"Owner" means Canadian Waste Services Inc.

The list of Plans and Specifications is hereby amended, by adding the following:

1. Letter and its attachment dated June 22, 1999, from Michael J. Pullen, Director, Canadian Waste Services Inc., to Geoff Carpentier, Ministry of the Environment (MOE), notifying the Ministry of a change in Corporate name, address and providing list of their officers.

The reason for the imposition of these conditions is as follows:

The reason for the above changes is to acknowledge the letter regarding the notification of name and address change, dated June 22, 1999.

All other conditions on the original Certificate and as amended, not affected by this amendment, remain in effect.



Ministry Ministère of the de Environment l'Environnement NOTICE Page 2 of 2

In accordance with Section 139 of the Environmental Protection Act, R.S.O. 1990 c. E-19, you may by written notice served upon me and the Environmental Appeal Board within 15 days after receipt of this Notice, require a hearing by the Board. Section 142 of the Environmental Protection Act, as amended provides that the Notice requiring a hearing shall state:

- 1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
- 2. The grounds on which you intend to rely at the hearing in relation to <u>each</u> portion appealed.

In addition to these legal requirements, the Notice should also include:

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the waste disposal site is located;

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

This Notice must be served upon:

The Secretary,\* Environmental Appeal Board, 2300 Yonge St., 12th Floor, P.O. Box 2382 Toronto, Ontario. M4P 1E4

<u>AND</u>

The Director, Section 39, Environmental Protection Act, Ministry of the Environment, 250 Davisville Avenue, 3rd Floor, Toronto, Ontario. M4S 1H2

\*Further information on the Environmental Appeal Board's requirements for an appeal can be obtained directly from the Board by: Tel: (416) 314-4600, Fax: (416) 314-4506 or e-mail: www.ert.gov.on.ca.

DATED AT TORONTO this 25th day of August, 1999.

A. Dominski, P. Eng. Director Section 39 Environmental Protection Act

MK/lf c: District Manager, Kingston Appendix A.8.2

Amendment to Certificate of Approval No. A710003 dated March 26, 2004, Regarding Notification of Change of Name



Ministry of the Environment Environmental Assessment and Approvals Branch Floor 12A 2 St Clair Ave W Toronto ON M4V 1L5 Fax: (416)314-8452 Telephone: (416) 314-7902

Ministère de l'Environnement Direction des évaluations et des autorisations environnementales Étage 12A 2 av St Clair O Toronto ON M4V 1L5 Télécopieur: (416)314-8452 Téléphone : (416) 314-7902



March 26, 2004

Jessica Campbell, Director, Regulatory Affairs & Environmental Compliance Waste Management of Canada Corporation 5045 South Service Road, Suite 300 Burlington, Ontario L7L 5Y7

Dear Sir/Madam:

#### Re: Notification of Change of Name MOE Reference Number 9673-5XFSHB

The Ministry of the Environment (the "Ministry") acknowledges receipt of your letter dated February 2, 2004 requesting a change in company name:

**FROM:** Canadian Waste Services Inc.

**TO:** Waste Management of Canada Corporation

By this letter, the Ministry advises you that your notification of change in company name has been registered in our records for the following Certificate(s) of Approval:

Certificate(s) of Approval for Waste Disposal Sites, Section 27, EPA:

```
A230901 East Gwillimbury
A230701 Hwy 48
A230201 Auro'ra
A032006 Blackwell LF
A380103 Kingston - St. Remy Place
       Brant St. Hamilton
A100144
        Sarina MacGregor Rd.
A620042
       Mavis, Mississauja
A210237
        La Salle LF
A031810
        Ridge LF
A021601
8602-4HQQZW Trenton, Chester Rd.
         Tecumseth LF
A253001
         Lottridge - Hamilton
A100130
```

California Auc. - Brockville A440109 Cushman Rd. - St. Catherines A120138 Petrolia NRF A030309 Conrad Place, Waterloo A140327 Timmins-Deloro A580730 Timmins - Ogden A580731 Timmins - German A580732 Mount Forest-Sligo Rd. A170404 Lansdowne AUC - Hamilton A100139 carleton Place A450707 Maids tone A010128 Bowes Rd. A230615 Esandar A680243 Brydon A210622 A461002 Ottawa LF Warwick LF A032203 Petrolia LF A030303 Blenheim LF A021603 Exeter Rd. - London A040213 A280229 Unwin New Toronto A210328 4458-5QTLS3 Timmins MRF Saunders Rd - Barrie A250111 1308-5HNRY6 Wentworth . Brampton A371203 Richmond LF A710003 Richmond LF

The Ministry will not be providing you with an amended certificate(s) to reflect the change in company name. Therefore, this letter must be appended to its corresponding Certificate(s) of Approval. The name change will be included in any future amended Certificate(s) of Approval.

If you have any questions regarding the above, please contact me at the above phone number.

Yours truly,

Sauja Jauronic Sanja Jankovic

Sanja Jankovic Application Processor

cc: District Manager, MOE York-Durham District Manager, MOE, Sarnia District Manager, MOE Kingston District Manager, MOE Hamilton District Manager, MOE Halton-Peel District Manager, MOE Peterborough District Manager, MOE Barrie District Manager, MOE Niagara District Manager, MOE Guelph District Manager, MOE Timmins District Manager, MOE Ottawa District Manager, MOE Toronto District Manager, MOE London Area Manager, MOE Windsor Area Manager, MOE Belleville

File Storage Number: 230901, 230701, 230201, 032006, 380103, 100144, 620042, 210237, 031810, 021601, 0209, 253001, 100130, 440109, 120138, 030309, 140327, 580730, 580731, 580732, 170404, 100139, 450707, 010128, 230615, 680243, 210622, 461002, 032203, 030303, 021603, 040213, 280229, 210328, 0822, 250111, 0611, 371203

Appendix A.9

Certificate of Approval (Air) No. 1355-5LRN9N (Landfill Gas Collection and Flaring System)





Ministry Ministère of the de Environment l'Environnement AMENDED CERTIFICATE OF APPROVAL AIR NUMBER 1355-6LRN9N

Canadian Waste Services Inc. 1271 Beachwood Road, RR 6 Napanee, Ontario K7R 3L1

Site Location: Richmond Landfill Part of Lots 1,2, &3, Conc. 4 Greater Napanee Town, County Of Lennox & Addington

You have applied in accordance with Section 9 of the Environmental Protection Act for approval of:

one (1) enclosed flare used to incinerate the landfill gases from a expanded landfill gas collection system to
include landfill gas collection from a maximum of 54 landfill gas wells, 12 leachate manhole and 9
cleanouts, having a landfill gas burning capacity of 0.61 standard cubic metre per second with the
combustible levels ranging from 30 to 55 precent by volume. The flare has a maximum heat input of 41
gigajoules per hour, exhausting into the atmosphere through a stack, having an exit diameter of 2.1 metres,
extending 12.2 metres above grade;

all in accordance with the Application for Certificate of Approval submitted by Canadian Waste Services Inc., along with the supporting information prepared by Randy Harris and a facsimile transmission from Matt Dugan of COMCOR ENVIRONMENTAL LIMITED to Remi Godin of Canadian Waste Services Inc. dated April 25, 2003.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

For the purpose of this Certificate of Approval:

(1) "Act" means the Environmental Protection Act;

- (2) "CEM System" means the continuous monitoring and recording system used to optimize the operation of flare to minimize the emissions from the flare, as described in the Company's application, this Certificate, including Schedule "A", and in the supporting documentation referred to herein, to the extent approved by this Certificate;
- (3) "Certificate" means this Certificate of Approval, including Schedule "A", issued in accordance with Section 9 of the Act;
- (4) "Company" means Canadian Waste Services Inc.;
- (5) "Equipment" means the flare system described in the Company's application, this Certificate and in the supporting documentation referred to herein, to the extent approved by this Certificate;
- (6) "Ministry" means the Ontario Ministry of the Environment; and
- (7) "Publication NPC-232" means Publication NPC-232, Sound Level Limits for Stationary Sources in Class 3 Areas (Rural), October 1995.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

#### TERMS AND CONDITIONS

#### PERFORMANCE REQUIREMENTS

- 1. The Company shall ensure that the noise emissions from the Equipment, at all times, with the limits sets in Publication NPC-232.
- 2. The Company shall operate the Equipment in such a manner that a minimum temperature, as recorded by CEM, shall be 900 degrees Celsius at a point representing a minimum retention time of 0.75 second, at all times the landfill gases are flowing to the flare system.

#### OPERATION AND MAINTENANCE

- 3. The Company shall ensure that the Equipment, including CEM, is properly operated and maintained at all times. The Company shall:
  - (1) prepare, not later than three (3) months after the issuance of the Certificate and update, as necessary, a manual outlining the operating procedures and a maintenance program for the Equipment, including:
    - (a) the routine and emergency operating and maintenance procedures recommended by the Equipment and CEM System supplier;

- (b) the calibration procedures of the CEM System;
- (c) the operator training which is to be provided by an individual experienced with the Equipment;
- (d) the procedures for optimizing the operation of the Equipment to minimize the emissions from the Equipment;
- (e) the periodic inspection of the Equipment which is to be conducted by individuals experienced with the Equipment; and timetables for work to be carried out;
- (f) the procedures for recording and responding to complaints regarding the operation of the Equipment; and
- (2) implement the recommendations of the operating and maintenance manual.

#### **RECORD RETENTION**

- 4. The Company shall retain for a minimum of two (2) years from the date of their creation, all records and information related to or resulting from the operation of the Equipment, and monitoring and recording activities required by this Certificate. These records shall be made available to the Ministry upon request. The Company shall retain:
  - (1) all records on maintenance, repair and inspection of the Equipment and the CEM System;
  - (2) all records produced by the CEM System;
  - (3) all records on operator training;
  - (4) all records on the environmental complaints, including:
    - (a) a description, time and date of the incident;
    - (b) wind direction at the time of the incident; and
    - (c) a description of the measures taken to address the cause of the incident and to prevent a similar occurrence in the future; and
  - (5) description of all upset conditions associated with the operation of the Equipment and remedial action taken.

. .

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

- 1. Condition Nos. 1 and 2 are included to outline the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Equipment.
- 2. Condition No. 3 is included to emphasize that the Equipment must be operated and maintained according to a procedure that will result in compliance with the Act, the regulations and this Certificate.
- 3. Condition No. 4 is included to require the Company to retain records and provide information to the Ministry so that the environmental impact and subsequent compliance with the Act, the regulations and this Certificate can verified.

#### SCHEDULE "A"

This Schedule "A" forms part of Certificate of Approval

PARAMETER:	Temperature		
LOCATION:	The sample point for the continuous temperature monitoring and recording system shall be located at a location in the combustion chamber where the minimum retention time of the combustion gases at a minimum temperature of 900 degrees Celsius for at least 0.75 second is achieved.		
PERFORMANCE:	The continuous temp meet the following m following parameters	erature monitoring and recording system shall inimum performance specifications for the .	
	PARAMETERS	SPECIFICATION	
	Туре:	shielded "K" type thermocouple, or equivalent	
	Accuracy:	±1.5 percent of the minimum gas temperature	
DATA RECORDER:	measurement of the r	est be capable of registering continuously the nonitoring system without a significant loss a time resolution of 1 minute or better.	
RELIABILITY:	The monitoring system shall be operated and maintained so that accurate data is obtained during a minimum of 95 percent of the time for each calendar quarter.		

### Page 5 - NUMBER 1355-5LRN9N

# This Certificate of Approval revokes and replaces Certificate(s) of Approval No. 8-4078-99-006 issued on December 21, 1999.

In accordance with Section 139 of the <u>Environmental Protection Act</u>, R.S.O. 1990, Chapter E-19, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the <u>Environmental Protection Act</u>, provides that the Notice requiring the hearing shall state:

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

The Notice should also include:

- 3. The name of the appellant;
- 4. The address of the appellant;
- 5. The Certificate of Approval number;
- 6. The date of the Certificate of Approval;
- 7. The name of the Director;
- 8. The municipality within which the works are located;

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

#### This Notice must be served upon:

The Secretary\*The DirectorEnvironmental Review TribunalSection 9, Environmental Protection Act2300 Yonge St., 12th FloorMinistry of Environment and EnergyP.O. Box 2382AND2 St. Clair Avenue West, Floor 12AToronto, OntarioToronto, OntarioM4P 1E4M4V 1L5

\* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at; Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted works are approved under Section 9 of the Environmental Protection Act.

DATED AT TORONTO this 8th day of May, 2003

THIS CERTIFICATE WAS MAILED
ON May 13,2003
ec
(Signed)

Neil Parrish, P.Eng. Director Section 9, Environmental Protection Act

Page 6 - NUMBER 1355-5LRN9N

-

AK/

District Manager, MOE Kingston - District Jeff Armstrong, P. Eng., Henderson, Paddon & Associates Limited C:

Page 7 - NUMBER 1355-5LRN9N

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Appendix A.9.1

Amendment to Certificate of Approval No. 1355-5LRN9N dated January 13, 2004, Regarding Notification of Change of Name



Ministry of the Environment Environmental Assessment and Approvals Branch Floor 12A 2 St Clair Ave W Toronto ON M4V 1L5 Fax: (416)314-8452 Telephone: (416) 314-7902

Ministère de l'Environnement Direction des évaluations et des autorisations environnementales Étage 12A 2 av St Clair O Toronto ON M4V 1L5 Télécopieur: (416)314-8452 Téléphone : (416) 314-7902



January 13, 2004

Jessica Campbell, Director, Regulatory Affairs & Environmental Compliance 5045 South Service Road, Suite 300 Burlington, Ontario L7L 5Y7

Dear Sir/Madam:

#### Re: Notification of Change of Name MOE Reference Number 1717-5V6S5Q

The Ministry of the Environment (the "Ministry") acknowledges receipt of your letter dated January 8, 2004 requesting a change in company name:

FROM: Canadian Waste Services Inc.

**TO:** Waste Management of Canada Corporation

By this letter, the Ministry advises you that your notification of change in company name has been registered in our records for the following Certificate(s) of Approval:

Certificate(s) of Approval for Air, Section 9, EPA:

3227-4K9QYW - OttawaLF(West Carleton)
8245-4VWJYQ - London . Exeter Rd.
3017-4JQPJS - Blackwell LF
8-3295-89-006 - Aurora (Bayuraw Ave) 0956-55DL24 - Bowes Rd. Vaughan 8-2211-92-937 - Cushman Rd., St. Catherine's
0956-55DL24 - Bowes Rd. Vaughan
8-2211-92-937 - Cushman Rd., St. Catherine's
8-3252-91-927 - Mavis Rd., Mississauja 3747-5LFKW5 - La Salle LF
8788-5LFNR7 - Blackwell LF
1355-5LRN9N - Richmond LF
4414-5N7JNB - La Salle LF

The Ministry will not be providing you with an amended certificate(s) to reflect the change in company name. Therefore, this letter must be appended to its corresponding Certificate(s) of Approval. The name change will be included in any future amended Certificate(s) of Approval.

If you have any questions regarding the above, please contact me at the above phone number.

Yours truly,

Sanja Januari Sanja Jankovic

**Application Processor** 

cc: District Manager, MOE Ottawa District Manager, MOE London District Manager, MOE Sarnia District Manager, MOE York-Durham District Manager, MOE Niagara District Manager, MOE Halton-Peel District Manager, MOE Kingston

File Storage Number: 0369, 0076, 0473, 0832, 1502, 1450, 0480, 0828, 0441, 1616

Appendix A.9.2

Amendment to Certificate of Approval No. 1355-5LRN9N dated January 24, 2007, Regarding Notification of Change of Address



Ministry of the Environment Environmental Assessment and Approvals Branch Floor 12A 2 St Clair Ave W Toronto ON M4V 1L5 Fax: (416)314-8452 Telephone: (416) 212-3679 Ministère de l'Environnement Direction des évaluations et des autorisations environnementales Étage 12A 2 av St Clair O Toronto ON M4V 1L5 Télécopieur : (416)314-8452 Téléphone : (416) 212-3679



January 24, 2007

Katrina DiRenzo-McGrath, Environmental Coordinator Waste Management of Canada Corporation 2305 Wyecroft Rd, Suite 100 Oakville ON L6L 6R2

Dear Ms. DiRenzo-McGrath:

#### Re: Notification of Change of Address MOE Reference Number 2875-6WNT8F

The Ministry of the Environment (the "Ministry") acknowledges receipt of your letter dated September 11, 2006 and October 12, 2006 requesting a change in company address:

- FROM: Waste Management of Canada Corporation 5045 South Service Road, Unit 300 Burlington, Ontario L7L 5Y7
- TO: Waste Management of Canada Corporation Waste Management of Canada 117 Wentworth Crt Brampton, Ontario L6T 5L4

By this letter, the Ministry advises you that your notification of change in company address has been registered in our records for the following Certificate(s) of Approval:

Certificate(s) of Approval for Air, Section 9, EPA:

9406-6Q5L25 - Huy 48 3227-4K9QYW - Othewa 3017-4JQPJS - Blackwell 8-3295-89-006 - Aurona 0956-55DL24 - Bowes 8-3252-91-927 - Mavis 8788-5LFNR7 - Blackwell 1355-5LRN9N - Bichmond 4414-5N7JNB - LaSalle 8-4028-92-006 - Richmond 8-4076-99-006 - Ottawa. 8-1121-98-006 - Warwick 8-4031-98-006 - Ottawa. 8-4141-93-006 - Ottawa. 8-4141-93-006 - Stornington 9774-68CR9R - LaSalle. 0883-6CRQRS - Petrolica 2800-6JPNZM - Exeter Rd, London

Certificate(s) of Approval for Municipal and Private Sewage Works, Section 53, OWRA:

3-0509-91-006 - Blenheim 3-0975-90-916 - Richmond 3-1720-90-916 - Richmond 3-1500-94-956 - Warwick.

Certificate(s) of Approval for Industrial Sewage Works, Section 53, OWRA:

1493-5F7L7F - Exeter Rd., London 5924-5QDKAY - Westbrook Rd, Ottawa 4-0013-95-006 - Blackwell 4-0129-94-956 - Richmond 2046-5XKS5R - Westbrook 6141-5YGP94 - Petrolia 1457-6KRJY7 - LaSalle

Certificate(s) of Approval for Waste Disposal Sites, Section 27, EPA:

A230901 - East Guillimbury A031810 - Lasalle A230701 - Huy 48 A230201 - Aurora A032203 - Warwick A280229 - Unwin A210622 - Brydon A210237 - Mavis 8602-4HQQZW - Trenton A253001 - Teamseth. A100144 - Brant St A100144 - Brant St A100130 - Lottridge A440109 - Brackville A021606 - Blenheim A380103 - Kingston A120138 - St. Catharines

and a second second

# Certificate(s) of Approval for Waste Management Systems, Section 27, EPA:

#### A840311 A920273

The Ministry will not be providing you with an amended certificate(s) to reflect the change in company address. Therefore, this letter must be appended to its corresponding Certificate(s) of Approval. The address change will be included in any future amended Certificate(s) of Approval.

If you have any questions regarding the above, please contact me at the above phone number.

Yours truly,

J. De Jourgo. Josephine DeSouza

Application Processor

cc: District Manager, MOE Barrie District Office

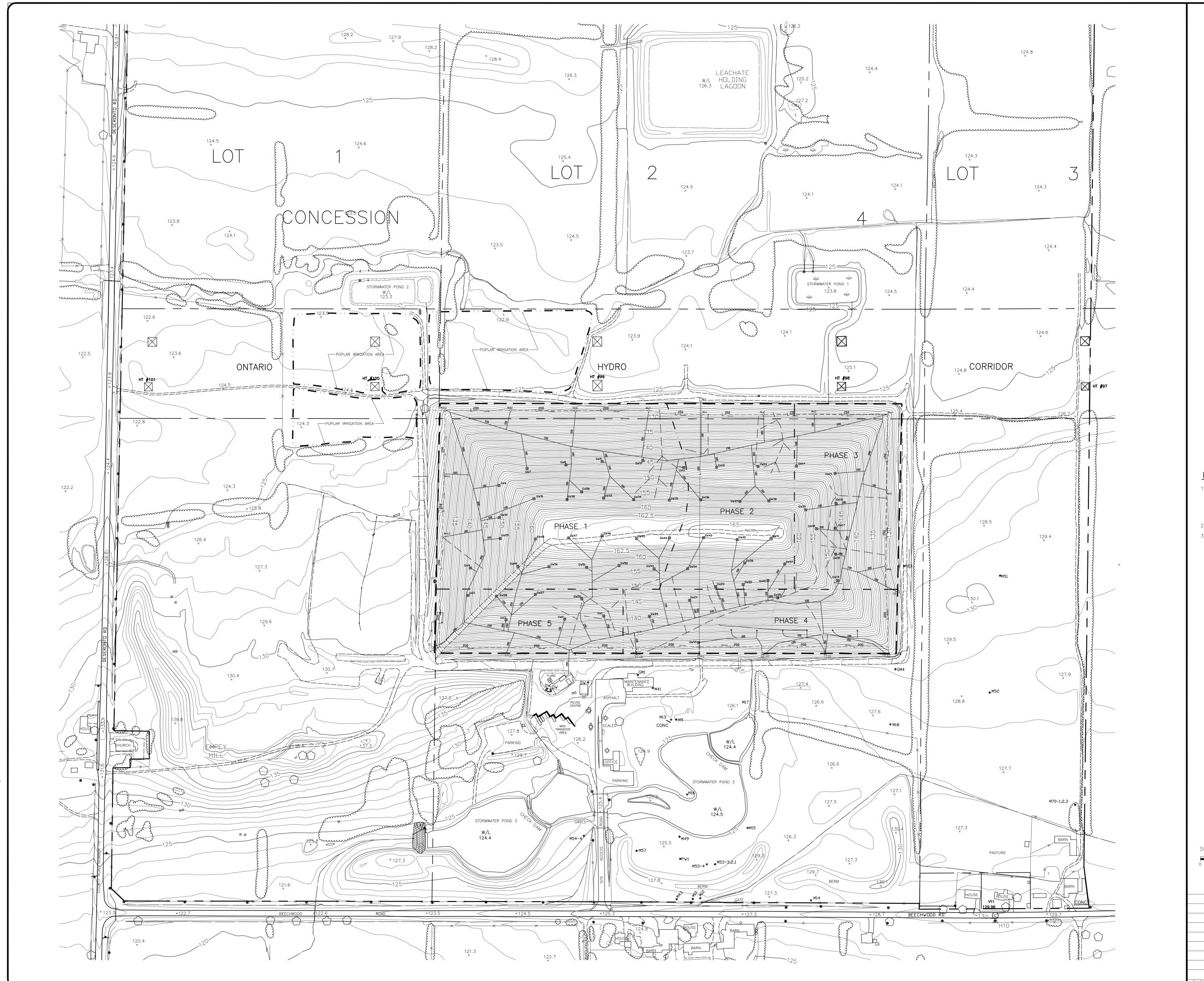
Area Supervisor, MOE Belleville Area Supervisor District Manager, MOE Guelph District Office District Manager, MOE Halton-Peel District Office District Manager, MOE Hamilton District Office District Manager, MOE Kingston District Office District Manager, MOE London District Office District Manager, MOE Niagara District Office District Manager, MOE Niagara District Office District Manager, MOE Ottawa District Office District Manager, MOE Peterborough District Office District Manager, MOE Sarnia District Office District Manager, MOE Toronto District Office District Manager, MOE Toronto District Office District Manager, MOE Windsor Area Office District Manager, MOE York-Durham District Office

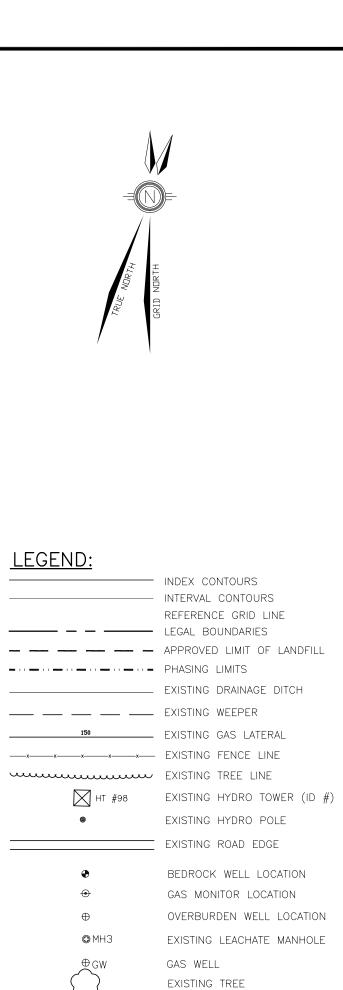
File Storage Number: 0031, 0369, 0473, 0832, 1502, 0480, 0828, 0441, 1616, 0027, 0029, 0028, 0030, 0032, 1502, 0076, 0076, 0022, 0023, 0024, 0026, 0475, 0208, 0006, 0007, 0006, 0030, 0135, 230901, 031810, 230701, 230201, 032203, 280229, 210622, 210237, 0209, 253001, 100144, 100130, 440109, 021606, 380103, 120138, 030309, 140327, 580730, 580731, 580732, 170404, 100139, 450707, 250111, 010128, 230615, 371203, 680243, 461002, 021603, 040213, 030303, 0822, 0611, 710003, 381502, 461009, 032006, 0830, 840311 and 920273

Appendix B

Drawing 0857013-2011 – November 2011 Existing Conditions







\_ EXISTING DRAINAGE DITCH BEDROCK WELL LOCATION GAS MONITOR LOCATION OVERBURDEN WELL LOCATION EXISTING LEACHATE MANHOLE

# NOTES:

1) EXISTING GROUND CONTOURS AND TOPOGRAPHIC INFORMATION SHOWN IS BASED ON INFORMATION OBTAINED FROM AERIAL PHOTOGRAPHY FLOWN ON JUNE 27, 2009 BY BASE MAPPING. WELL LOCATIONS AND LANDFILL MOUND CONTOURS WERE UPDATED FROM FIELD SURVEY DATA BY GENIVAR INC ON NOVEMBER 2011 AND FEBRUARY 22, 2012

2) CONTOUR INTERVAL SHOWN IS 0.5m

3) THE LOCAL SITE GRID IS BASED ON 0+000N BEING THE NORTH LANDFILL LIMIT. THE NORTH WEST CORNER OF THE LANDFILL LIMIT IS 0+300E AND IS PERPENDICULAR TO THE EAST/WEST GRID LINE. THE WEST LIMIT OF THE LANDFILL IS LOCATED ALONG THE LOT LINE BETWEEN LOTS 1 AND 2, CONCESSION 4.

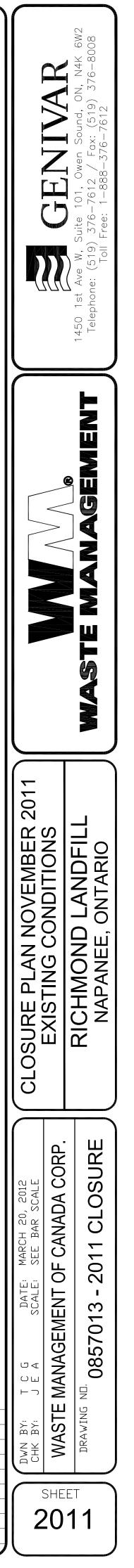
B.M. #1 ELEV. = 124.667 TOP OF BRACKET, NORTH WEST LEG OF HYDRO TOWER No. 99. LOCATED  $\pm 25m$  NORTH AND  $\pm 180m$  EAST OF NORTH WEST CORNER OF APPROVED LANDFILL LIMIT.

B.M. #2 ELEV. = 125.146 TOP OF BRACKET, NORTH WEST LEG OF HYDRO TOWER No. 100. LOCATED  $\pm 25$ m NORTH AND  $\pm 80$ m WEST OF NORTH WEST CORNER OF APPROVED LANDFILL LIMIT.

SCALE : 1:2000		
0	100	200m

DESCRIPTION

APP BY



Appendix C

Provincial Officer's Order and Subsequent Correspondence between WM and MOE





Ministry of the Environment Ministère de l'Environnement

# **Provincial Officer's Order**

Environmental Protection Act, R.S.O. 1990, c.E 19 (EPA) Ontario Water Resources Act, R.S.O. 1990, c. O. 40 (OWRA) Pesticides Act, R.S.O. 1990, c. P11 (PA) Safe Drinking Water Act, S.O. 2002, c.32 (SDWA) Nutrient Management Act, 2002, S.O. 2002, c.4 (NMA)

Order Number 7430-8CYPVP

Incident Report No. 7048-8CUL2A

To:

Site:

2

Waste Management of Canada Corporation 117 Wentworth Crt Brampton, Ontario, Canada L6T 5L4

1271 Beechwood Road, RR #6 Lots 1,2 and 3, Conc.4, Reference Plan 29R-6605, Geo. Twp. of Richmond Greater Napanee, County of Lennox and Addington

Pursuant to my authority under EPA Section 157.1 and EPA Section 196(2), I order you to do the following:

#### Work Ordered

Item No. 1

By January 28, 2011, provide the undersigned Provincial Officer for his review and approval a written report that includes but is not necessarily limited to the following information (Written Report):

- identification of the steps that will be taken and the date those steps will be taken to improve the frequency and efficiency of the inspections of the outlet valve at the stormwater facility at the Site identified in the attached Provincial Officer's Report;
- a review of the effectiveness of the current maintenance and inspection program of the stormwater facility at the Site; and
- outline of proposed recommendations for improvements to the maintenance and inspection program of the stormwater facility at the Site, together with a schedule for implementation of those recommendations.

Item No. 2

**Compliance Date** 

**Compliance Date** 

2011/01/11-

2011/01/28

Upon the receipt of the Provincial Officer's approval, implement the recommendations in the approved Written Report.

Item No. 3

**Compliance Date** 

YY/MM/DD

#### 3.) Site Description:

The Richmond Landfill site (Site) is located at 1271 Beechwood Road, Greater Napanee, Ontario. The current activities at the Site are primarily related to waste disposal operations. The Site is currently owned and operated by Waste Management of Canada Corporation (Company). Surrounding land uses include both agricultural and residential.

4.) Summary of Events Leading to the Order:

On August 19, 2008, Waste Management of Canada Corporation was issued a Certificate of Approval (Industrial Sewage Works) Number 5268-7E8LJW, for the existing leachate management facility and a proposed stormwater management facility, which has since been constructed. The stormwater management facility was inspected on November 16, 2009 and November 26, 2010, during which various deficiencies were identified.

As part of the 2010 inspection, the undersigned Provincial Officer and Victor Castro (Surface Water Scientist, Ministry of the Environment, Eastern Region Technical Support Section) visited the Site on December 20, 2010 to conduct surface water sampling at the outlet structure of the stormwater management facility. While collecting the samples both the undersigned Officer and Mr. Castro observed that the stormwater management facility was actively discharging impounded surface water from the outlet structure eventually leading off-site to the Beechwood ditch. Due to the nature of operations at this site, stormwater may become contaminated through contact with on-site waste, thus requiring an Industrial Sewage Certificate of Approval for the stormwater management facility. The conditions contained within the Certificate ensure that precautions are taken to prevent any possible impacts to the natural environment.

When the undersigned Provincial Officer returned to the local ministry office on December 20, 2010, Company representatives were contacted to discuss the apparent discharge. During that conversation it was evident that the Company was unaware that the stormwater management facility at the Site was discharging from the outlet structure to the natural environment. Company staff confirmed by email on December 21, 2010 that the valve at the outlet structure had not been closed at the conclusion of the last planned discharge, November 25, 2010. The ministry was also informed on December 21, 2010 that the valve was now closed.

Due to these circumstances, the ministry requested of the Company that an additional round of surface water sampling take place before any further discharging. The Company agreed to undertake the requested sampling.

On January 5, 2011 at approximately 1:30 pm, the Company was contacted by the undersigned, and a meeting was requested on-site at 3:00 pm that afternoon to discuss the observations of December 20, 2010. Following that telephone call the undersigned Provincial Officer received an email from the Company, stating that earlier in the day (January 5, 2011), the value at the outlet structure of the stormwater management facility at the Site was showing 'some slight leakage'.

### APPEAL/REVIEW INFORMATION

#### REQUEST FOR REVIEW

You may request that this order be reviewed by the Director. Your request must be made in writing (or orally with written confirmation) within seven days of service of this order and sent by mail or fax to the Director at the address below. In the written request or written confirmation you must,

- specify the portions of this order that you wish to be reviewed;
- include any submissions to be considered by the Director with respect to issuance of the order to you or any other person and with respect to the contents of the order; apply for a stay of this order, if necessary; and provide an address for service by one of the following means:

2. fax

The Director may confirm, alter or revoke this order. If this order is revoked by the Director, you will be notified in writing. If this order is confirmed or amended by order of the Director, the Director's order will be served upon you. The Director's order will include instructions for requiring a hearing before the Environmental Review Tribunal.

#### DEEMED CONFIRMATION OF THIS ORDER

If you do not receive oral or written notice of the Director's decision within seven days of receipt of your request, this order is deemed to be confirmed by order of the Director and deemed to be served upon you.

You may require a hearing before the Environmental Review Tribunal if, within 15 days of service of the confirming order deemed to have been made by the Director, you serve written notice of your appeal on the Environmental Review Tribunal and the Director. Your notice must state the portions of the order for which a hearing is required and the grounds on which you intend to rely at the hearing. Except by leave of the Environmental Review Tribunal, you are not entitled to appeal a portion of the order or to rely on grounds of appeal that are not stated in the notice requiring the hearing. Unless stayed by the Environmental Review Tribunal, the order is effective from the date of service.

Written notice requiring a hearing must be served personally or by mail upon:

The Secretary Environmental Review Tribunal 655 Bay Street, 15th Floor Toronto ON M5G 1E5	א ג א ג ג ג	Director (Provincial Officer Orders) Ainistry of the Environment Singston District Office 259 Gardiners Rd, Unit 3 O Box 22032 Singston, ON 57M 885 el: (613)549-4000
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Where service is made by mail, it is deemed to be made on the fifth day after the date of mailing and the time for requiring a hearing is not extended by choosing service by mail.

Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the

Tel: (416) 314-4600

Fax: (416) 314-4506

www.ert.gov.on.ca

#### FOR YOUR INFORMATION

- Unless stayed by the Director or the Environmental Review Tribunal, this order is effective from the date of service. Non-compliance with the requirements of this order constitutes an offence. ø
- The requirements of this order are minimum requirements only and do not relieve you from complying with the following:
  - any applicable federal legislation;
  - any applicable provincial requirements that are not addressed in the order; and
  - any applicable municipal law.
- The requirements of this order are severable. If any requirement of this order or the application of any requirement to any circumstance is held invalid, the application of such requirement to other circumstances and the remainder of the order are not affected.
- Further orders may be issued in accordance with the legislation as circumstances require.
- The procedures to request a review by the Director and other information provided above are intended as a guide. The legislation should be consulted for additional details and accurate reference.

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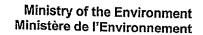
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# **Provincial Officer's Report**

Order Number 7430-8CYPVP

Waste Management of Canada Corporation 117 Wentworth Crt Brampton, Ontario, L6T 5L4 Canada

#### Site

1271 Beechwood Road, RR #6 Lots 1,2 and 3, Conc.4, Reference Plan 29R-6605, Geo. Twp. of Richmond Greater Napanee, County of Lennox and Addington

#### Observations

On 2010/12/20, I visited the above site(s) and made the following observations: 1.) Authority to Issue Order:

This Order is being issued pursuant to my authority under section 157.1 and 196(2) of the Environmental Protection Act.

2.) Definitions:

For the purposes of this Order, the following terms shall have the meanings described below;

"Certificate" means Certificate of Approval (Industrial Sewage Works) Number 5268-7E8LJW.

"Company" means Waste Management of Canada Corporation.

"Site" means the Richmond Landfill, located at 1271 Beechwood Road, Greater Napanee, Ontario.

"EPA" means the Environmental Protection Act R.S.O. 1990, c E. 19 as amended.

"Order" means this Provincial Officer's Order Number 7430-8CYPVP.

Commencing upon issuance of this Order and until this item is revoked or amended, provide to the undersigned Provincial Officer on the day of each visual inspection of the stormwater facility at the Site, a copy of the inspection log entry for that day.

#### Item No. 4

#### Compliance Date

2011/02/25

By February 25, 2011, provide to the undersigned Provincial Officer a written report that shall include but not necessarily limited to the following with respect to the time period commencing January 4, 2011;

- description of the nature and extent of repairs, alterations and modifications undertaken at or associated with the outlet structure of the stormwater management facility at the Site and the date those repairs, alterations and modifications were undertaken;
- description of the nature and extent of other repairs, alterations and modifications undertaken at or associated with the stormwater facility at the Site and the date those repairs, alterations and modifications were undertaken; and
- description of any changes to the maintenance and inspection program of the stormwater facility at the Site and the date those changes were implemented.
- A. While this Order is in effect, a copy or copies of this order shall be posted in a conspicuous place.
- **B.** While this Order is in effect, report in writing, to the District or Area office, any significant changes of operation, emission, ownership, tenancy or other legal status of the facility or operation.

This Order is being issued for the reasons set out in the annexed Provincial Officers Report which forms part of this Order.

Issued at Kingston this 11th day of January, 2011.

Craig Dobiech Badge No: 955 Kingston District Office Tel: (613) 549-4000 Ext. 2670

The undersigned Provincial Officer and Provincial Officer Chris Raffael arrived at the Site on January 5, 2011 at 3:02 pm and met with Company staff. During that visit, a Provincial Offences Notice (ticket) was issued to the Company for failure to comply with the terms and conditions of the Certificate (relating specifically to the outlet gate valve being opened during normal operation periods on December 20, 2010). Following the issuance of the ticket, ministry staff proceeded to the outlet structure, where a significant amount of water was observed discharging from the outlet structure. Ministry staff estimated a discharge rate of over 20,000 litres per day. During this Site visit, the Company notified the undersigned Provincial Officer that a construction company had been contacted to repair the valve at the outlet structure. To date, the ministry has received no confirmation that the valve at the outlet structure has been repaired. This information will be required as part of the attached Provincial Officer's Order.

On January 5, 2011, ministry staff requested a copy of all stormwater management facility inspection logs relating to the Site, dating back to December 20, 2010. The January 4, 2011 log entry was provided during the January 5th site visit. The log entry identified that the leaking outlet value of the stormwater management facility at the Site was detected on January 4, 2011, not January 5, 2011 as was indicated to the undersigned Provincial Officer in the email dated January 5, 2011 from the Company. As of January 10, 2011, the remaining inspection log entries have not been provided as per the undersigned Provincial Officer's verbal request on January 5, 2011. The undersigned Provincial Officer is not confident that the Company is providing accurate information within an acceptable timeframe.

The inspection program for the stormwater management facility at the Site is set out in the Company's operations manual (as required by the Certificate). The Certificate requires the Company to

(1) Prepare an operations manual for the stormwater management facility that included but is not limited to the following information:

(a) operating procedures for routine operation of the stormwater management facility;

(b) inspection programs, including frequency of inspection, for the stormwater management facility and the methods or tests employed to detect when maintenance is necessary;

(c) repair and maintenance programs, including frequency of repair and maintenance for the stormwater management facility;

(d) procedures for the inspection and calibration of monitoring equipment; and (e) a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the District Manager; and

(2) maintain the operations manual current and retain a copy, which shall be provided to ministry staff upon request.

Due to the recent non-compliance incidents relating to this Certificate described in this report, it

is the opinion of the undersigned Provincial Officer that the inspection programs for the stormwater management facility at the Site is deficient. Further, it is the opinion of the undersigned Provincial Officer that the program defined by the manual is inadequate to be fully protective of the environment in light of the identified incidents of leakages from the stormwater management facility.

I reasonably believe that the requirements specified in this Order are necessary and advisable to prevent or reduce the risk of any discharge of contaminants into the natural environment from the stormwater management facility, or to prevent, decrease or eliminate any adverse effect that may result from the discharge of a contaminant from the stormwater management facility.

#### Offence(s)

 Suspected Violation(s)/Offence(s):

 Act - Regulation - Section,

 Description

 {General Offence}

 1) EPA - 186 (3),

 Every person who fails to comply with a term or condition of a certificate of approval or of a provisional certificate of approval or of a licence or permit under this Act or who fails to comply with the terms of a report under Section 29 is guilty of an offence.

Craig Dobiech Provincial Officer Badge Number: 955 Date: 2011/01/11 District Office: Kingston District Office

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WASTE MANAGEMENT 1271 Beechwood Road Napanee, ON K7R 3L1 (613) 388-1057 (613) 388-2785 Fax

	•	
	Date:	January 28, 2011
	To: ·	Craig Dobiech
		Senior Environmental Officer
1		1259 Gardiners Rd, Unit 3
		Kingston, Ontario
	From :	Randy Harris
		Site Manager
		Waste Management of Canada Corporation
		1271 Beechwood Rd
1		Napanee, Ontario, K7R 3L1
1		
i	<u>Re:</u>	Provincial Officer's Order, Order Number 7430-8CYPVP, Incident Report No. 7048-8CUI2A
		And the second s
	l am writii	ng to you in response to the above mentioned Provincial Officer's Order dated, January 11, 2011.
:		2011. 2011.
-	ltem # <u>1</u>	
	•	Steps to be taken to improve the frequency and efficiency of the inspections of the discharge control structure.
:		<ul> <li>The discharge structure will be checked each work day to verify the status of discharge from the nond</li> </ul>
		discharge from the pond.
-		<ul> <li>No discharge.</li> </ul>
		<ul> <li>Approved discharge.</li> </ul>
:		<ul> <li>Unapproved discharge.</li> </ul>
÷		O Inspection report will be contraction and a
i		<ul> <li>Inspection report will be sent to the MOE the same day the inspection is performed.</li> </ul>
1		<ul> <li>Effective date: January 12, 2011</li> </ul>
1		O Corrective action will be taken to a
:		<ul> <li>Corrective action will be taken to stop any unapproved discharge.</li> <li>Three staff members are accimentation of the state</li> </ul>
		<ul> <li>Three staff members are assigned the full responsibility for this inspection.</li> <li>Review of the effectiveness of the surrouted assigned the full responsibility for this inspection.</li> </ul>
:		<ul> <li>Review of the effectiveness of the current maintenance and inspection program of the storm water management facility is a</li> </ul>
1		<ul> <li>the storm water management facility, was completed January 20, 2011.</li> <li>Proposed recommendations for improvements.</li> </ul>
:		<ul> <li>Proposed recommendations for improvements to the maintenance and inspection program of the storm water management facility.</li> </ul>
-		
		From ourseday collection to environmental metals of the
0%	post-consumer	From everyday collection to environmental protection, Think Green? Think Waste Management. Cuillette quotidienne et protection de l'environnement : pensez vert? penzez Waste Management.
r.		

Printed on 100<sup>st</sup> recycled paper.

LTH-003-WM

- Install a sensor / warning light system in the discharge structure to identify 0 when the structure is discharging.
  - Monitor the warning light daily (visible from the scale house) н,
  - Effective date: February 7, 2011.
- Install a second closure mechanism in the discharge structure when the . structure is not performing an authorized discharge.
  - Effective date January 26, 2011.
- Install a lock on the access to the discharge control valve operating mechanism.
  - Effective date January 25, 2011. 民
- Adjust inspection frequency of the discharge control structure from one time per day to one time per week when the above listed modifications are fully operational and the revised frequency of inspection is approved by the Ministry.
  - Effective date: February 28, 2011.
- Inspect full Surface Water Management facility one time per week. 0 Effective January 28, 2011.

item #2

Item #3

Item #4

Upon approval of the Provincial Officer, these actions will be fully implemented. Some of the improvements recommended above have been implemented as noted. If these improvements are not approved by the Ministry, they will be revised and replaced by Ministry approved changes. WM implemented the changes to minimize the risk of further unauthorized releases from the stormwater management system.

Visual inspections have been forwarded to the Provincial Officer each working day since January 4, 2011. These visual inspections and reports will be performed each work day until the requirement is changed by the Ministry.

By February 28<sup>th</sup>, 2011, we will provide a full report to the Provincial Officer describing the nature and extent of repairs, alterations and modifications undertaken associated with the outlet structure, as well as any other repairs or modifications associated with the stormwater facility. The description of changes to the maintenance and inspection program at the storm water facility and the dates they were implemented will also be provided.

#### Regards.

**Randy Harris** Site Manager Cc Trevor Dagilis, MOE David Arnott, MOE Victor Castro, MOE



#### WASTE MANAGEMENT OF CANADA CORPORATION

R.R. #6 1271 Beechwood Road Napanee, ON K7R 3L1 (613) 388-1057 (613) 388-2785 Fax

Craig Dobiech Kingston District Office Unit 3 1259 Gardiners Road Kingston, ON K7M 8S5

#### February 23, 2011

Attention: Craig Dobiech

Item No. 4 of the POO requires WM to respond by 2/25/2011 as follows

- Description of the nature and extent of repairs, alterations and modifications undertaken at or associated with the outlet structure of the stormwater management facility at the Site and the date those repairs. Alterations and modifications were undertaken;
  - 1.) January 19, 2011 Mechanical cap installed on the downgradient end of the discharge pipe from the discharge structure.
  - 2.) January 26, 2011 Moisture sensor installed in the discharge structure discharge pipe between the down gradient end and the discharge control valve.
  - 3.) January 26, 2011 Locking cap installed on the operating mechanism of the discharge control valve.
  - 4.) February 7, 2011 Installation of a solar powered warning light and cell phone notification system activated by the moisture sensor system.
  - 5.) February 8, 2011 Contractor removed, cleaned, reinstalled and tested the discharge control valve...Valve not leaking.
- Description of the nature and extent of other repairs, alterations and modifications undertaken at or associated with the stormwater facility at the Site and the date those repairs, alterations and modifications were undertaken:

1.) None

- Description of any changes to the maintenance and inspection program of the stormwater facility at the Site and the date those changes were implemented.
  - 1.) January 4, 2011 Inspection of the discharge structure of the SW

stormwater pond is conducted each workday for the status of discharge.

Any discharge not authorized by the Ministry will be reported immediately to the Ministry.

- 2.) January 4, 2011 Submit the inspection report for each stormwater facility inspection to the Ministry on the day of the inspection, until the requirement to submit is released. Maintain the inspection reports on file at the site for review by the Ministry.
- 3.) January 28, 2011 Inspection of the full stormwater facility is conducted each week.

Thank you,

Randy Harris Site Manager Waste Management Richmond Landfill

From:	Dobiech, Craig (ENE) [Craig.Dobiech@ontario.ca]
Sent:	Thursday, March 10, 2011 1:28 PM
To:	White, Dave - WEN; Harris, Randy - BEN
Cc:	Arnott, David (ENE); Kaye, Brian (ENE); Dagilis, Trevor (ENE)
Subject:	Provincial Officer's Order No. 7430-8CYPVP

Randy/Dave:

This emails serves as notification that all items in Provincial Officer's Order No. 7430-8CYPVP were complied with in full, and that the Order has been signed off by this office and is considered closed.

If you require any further information on the matter, please feel free to contact me.

Sincerely,

Craig Dobiech Ministry of the Environment Appendix D

**Complaint Forms** 



	· · · · · · · · · · · · · · · · · · ·		
			· . *
	COMPI	LAINT LOG (FO-02) 2011-01	r
		2011 203 (FO-02) = 2011 - 01	
· · ·	A. ADMINISTRATIVE		
•	Complaint Number (year-number, Ex		
	Certificate of Approval/Permit Number	er for site:	
	I WHULE, OD TO SECTION BY		
	Does a condition of the C. of A./Perm be (tick those that apply):	hit require this complaint log	
•	a) Retained on site		• .
	b) Submitted to the Er		
	b) Submitted to the Er c) Summarized for inc	Ivironment Ministry	
		lusion in a Report (monthly,	•
	Note: it is the Site Manager's responsibility to	ensure compliance with C. of A./Permit conditions.	· · ·
		Contractions.	•
•	B. SUMMARY		
•	1. Date and Time of Complaint	MAR 24/11 USENERAL DOLK BOT	
	2. Name of Complainant	DAUID ARNOTT (PROU. OFFICER	ee N
	3. Address of Complainant 4. Telephone Number of Complainant		~ )
•	5. Relationship of Complainant		• .
•	6. Employee receiving complaint	MOE	
	(name):	RANBY HARRIS	-
	7. Type of complaint	Codoury Noise / Litter / Durt / Noise	
	8. Nature of complaint (details):	Odour/ Noise / Litter / Dust / Vermin / Other:	
-	OF LANDFILL	COMPLIENT - SOUTHWEST	
	· · · · ·		•
		MAR, 22 - 23 - 24	
	9. Precipitation: Yes No	$\frac{MAR}{10. \text{ Wind Direction: } NW - 115 - 110}$	
· · · · ·	9. Precipitation: Yes No 11. Precipitation Type & Amount:	$\frac{MAR}{10. \text{ Wind Direction: } NW - NE - NW}{12. \text{ Wind Speed:}}$	
· · · · · ·		10. Wind Direction: NIN - ILE - Allel	
· · · · ·	11. Precipitation Type & Amount:	10. Wind Direction: NIN - ILE - Allel	
	11. Precipitation Type & Amount: C. INVESTIGATION	10. Wind Direction: $NW - NE - NW$ 12. Wind Speed:	
	11. Precipitation Type & Amount: <b>C. INVESTIGATION</b> 1. Were there any unusual events/occ	10. Wind Direction: $NW - NE - NW$ 12. Wind Speed:	
	<ul> <li>11. Precipitation Type &amp; Amount:</li> <li>C. INVESTIGATION</li> <li>1. Were there any unusual events/occ the complaint that may have contribute</li> </ul>	10. Wind Direction: $NW - NE - NW$ 12. Wind Speed:         currences around the time of ed to the complaint?	
	<ol> <li>Precipitation Type &amp; Amount:</li> <li>C. INVESTIGATION         <ol> <li>Were there any unusual events/occ the complaint that may have contribute</li> <li>If yes, describe (Ex. high winds created)</li> </ol> </li> </ol>	10. Wind Direction: $NW - NE - NW$ 12. Wind Speed:         currences around the time of ed to the complaint?	
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	<ol> <li>Precipitation Type &amp; Amount:</li> <li>C. INVESTIGATION         <ol> <li>Were there any unusual events/occ the complaint that may have contribute</li> <li>If yes, describe (Ex. high winds created)</li> </ol> </li> </ol>	10. Wind Direction: $NW - NE - NW$ 12. Wind Speed:         currences around the time of ed to the complaint?	
	<ul> <li>11. Precipitation Type &amp; Amount:</li> <li>C. INVESTIGATION</li> <li>1. Were there any unusual events/occ the complaint that may have contribute</li> <li>2. If yes, describe (Ex. high winds created):</li> </ul>	10. Wind Direction: $\widehat{NW} - \widehat{NE} - \widehat{NW}$ 12. Wind Speed: currences around the time of ed to the complaint? Yes Tho ating litter, unusual waste stream creating odours,	
	<ul> <li>11. Precipitation Type &amp; Amount:</li> <li>C. INVESTIGATION</li> <li>1. Were there any unusual events/occ the complaint that may have contribute</li> <li>2. If yes, describe (Ex. high winds created):</li> <li>3. If the site-specific nuisance control of the site-specific nuisance control of</li></ul>	10. Wind Direction: $\widehat{NW} - \widehat{NE} - \widehat{NW}$ 12. Wind Speed: currences around the time of ed to the complaint? Yes Wo ating litter, unusual waste stream creating odours,	
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	<ul> <li>11. Precipitation Type &amp; Amount:</li> <li>C. INVESTIGATION <ol> <li>Were there any unusual events/occ</li> <li>Were there any unusual events/occ</li> <li>the complaint that may have contribute</li> <li>If yes, describe (Ex. high winds created)</li> </ol> </li> <li>3. If the site-specific nuisance control of describe the problem and when it was </li> <li>ALL SYSTEM <ol> <li>Where the complaint was for odours</li> <li>An odour suppression system and</li> <li>The suppression system operation</li> </ol> </li> </ul>	10. Wind Direction: $NW - NE - NW$ 12. Wind Speed:         12. Wind Speed:         currences around the time of ed to the complaint?         Yes $\Box No$ ating litter, unusual waste stream creating odours,         equipment/procedures were not operational corrected:         S, was:         available for use at the site?	
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	<ul> <li>11. Precipitation Type &amp; Amount:</li> <li>C. INVESTIGATION <ol> <li>Were there any unusual events/occ</li> <li>the complaint that may have contribute</li> <li>If yes, describe (Ex. high winds createtc):</li> </ol> </li> <li>3. If the site-specific nuisance control of describe the problem and when it was </li> <li>An SYSTEM <ol> <li>Where the complaint was for odours</li> <li>An odour suppression system at b) The suppression system operated</li> </ol> </li> <li>Waste Management of Canada Corporation Document Name: </li> <li>Controlled by: Environmental</li></ul>	10. Wind Direction: $NW - ME - NW$ 12. Wind Speed:         12. Wind Speed:         currences around the time of ed to the complaint?         Yes $\Box Mo$ ating litter, unusual waste stream creating odours,         equipment/procedures were not operational corrected:         2. S <u>SPERATIONAL</u> s, was:         available for use at the site?         Yes $\Box No$ Page 1 of 2         Document No.: F0-02	
	11. Precipitation Type & Amount: <b>C. INVESTIGATION</b> 1. Were there any unusual events/occ         the complaint that may have contribute         2. If yes, describe (Ex. high winds created):         3. If the site-specific nuisance control edescribe the problem and when it was <i>ALL SYSTEM</i> 4. Where the complaint was for odours         a) An odour suppression system as         b) The suppression system operated         Waste Management of Canada Corporation         Document Name:         Complaint Log         Controlled by: Environmental Protection Canada         Approved by:K. DiRenzo-McGrath	10. Wind Direction: $NW - ME - NW$ 12. Wind Speed:         12. Wind Speed:         currences around the time of ed to the complaint?         Yes $\Box Mo$ ating litter, unusual waste stream creating odours,         ating litter, unusual waste stream creating odours,         equipment/procedures were not operational corrected:         S. SPERATIONAL s, was: available for use at the site?         Yes $\Box No$ Page 1 of 2 Document No.: FO-02 Revision number: 02	
	11. Precipitation Type & Amount: <b>C. INVESTIGATION</b> 1. Were there any unusual events/occ         the complaint that may have contribute         2. If yes, describe (Ex. high winds created):         3. If the site-specific nuisance control edescribe the problem and when it was <i>ALL SYSTEM</i> 4. Where the complaint was for odours         a) An odour suppression system as         b) The suppression system operated         Waste Management of Canada Corporation         Document Name:         Complaint Log         Controlled by: Environmental Protection Canada         Approved by:K. DiRenzo-McGrath	10. Wind Direction: $NW - ME - NW$ 12. Wind Speed:         12. Wind Speed:         currences around the time of ed to the complaint?         Yes $\Box Mo$ ating litter, unusual waste stream creating odours,         equipment/procedures were not operational corrected:         2. S <u>SPERATIONAL</u> s, was:         available for use at the site?         Yes $\Box No$ Page 1 of 2         Document No.: F0-02	

#### **D. CORRECTIVE ACTION**

1. What actions were taken to resolve the source of the complaint. Describe:

INVESTIGATE & REPORT TOMOG - WIND DIRECTION ON MAR 22-24 WERE FROM NW WHICH WOULD NOT CAUSE A PROBLEM IN SW AREA REPORTED

2. When were these actions taken (date/time):

3. What measures have been employed or will be employed to prevent any future reoccurrence? Describe:

N/A

NO ISSUES ON SITE WERE NOTED FOR CORRECTIVE ACTION

#### E. FOLLOW-UP

 Note: where complainant contact information is provided, all complainants must be contacted to provide the details of the investigation, and to describe any corrective/preventative actions taken.

 Date and time complainant was contacted to provide details of the investigation and to describe any corrective and/or preventative measures:
 N/A

 Who contacted the complainant (name/title):
 DAUID
 ARNOTT
 Mo E

 How was the complainant contacted?
 Person / Telephone / Letter (attach copy)

#### F. FORM COMPLETION

Date completed: MAR 28/11	
	<u> </u>

Waste Management of Canada Corpor	ration	
Document Name:		Page 2 of 2
Complaint Log		Document No.: FO-02
Controlled by: Environmental	Effective Date: January 1, 2010	Revision number: 02
Protection Canada		Revision number: 02
Approved by:K. DiRenzo-McGrath	Explry Date: December 31,2013	Next Review Dates by Describer Of
		Next Review Date: by December 31, annually

GO TO THE CANADIAN ENVIRONMENTAL SITE ON WMVISOR TO ENSURE THIS IS THE MOST CURRENT VERSION OF THIS DOCUMENT

1	COMPLAINT LOG (FO-02) 2011-02	
	A. ADMINISTRATIVE	· .
* *	Complaint Number (year-number, Ex. 2001-001):	
	Contificate ( A	
×	Certificate of Approval/Permit Number for site: (If none, go to Section B)	· · · · ·
<b>.</b> .	Does a condition of the C. of A./Permit require this complaint log	
	be (tick those that apply):	
	a) Retained on site	
	b) Submitted to the Environment Ministry	
	c) Summarized for inclusion in a Report (monthly, quarterly, annual)	•
	Note: it is the Site Manager's responsibility to ensure compliance with C. of A./Permit conditions.	
		· · · ·
•	B. SUMMARY  1. Date and Time of Complaint	•
	2. Name of Complainant	
• •	3. Address of Complainant	· ,
	4. Telephone Number of Complainant	
· ·	5. Relationship of Complainant <i>NEIGHBOUR</i> 6. Employee receiving complaint	
	(name):	
	7. Type of complaint 8. Nature of complaint (details): Odour Noise / Litter / Dust / Vermin / Other:	
	details). (ATTSMELL OPCO	
	PERFUME ODOUR FROM MISTING SUSTEM	· · ·
~~-		
	9. Precipitation: Yes No 10. Wind Direction:	• •
	11. Precipitation Type & Amount: 12. Wind Speed:	
	C. INVESTIGATION	• . •
I	1. Were there any unusual events/occurrences around the time of the complaint that may have a still be the second the time of the complaint that may have a still be the second the time of the second the second the time of the second the secon	•.
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	2. If yes, describe (Ex. high winds creating litter, unusual waste stream creating odours, etc):	
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	<ul> <li>2. If yes, describe (Ex. high winds creating litter, unusual waste stream creating odours, etc):</li> <li>3. If the site-specific nuisance control equipment/procedures were not operational describe the problem and when it was corrected:</li> </ul>	• • •
	<ul> <li>2. If yes, describe (Ex. high winds creating litter, unusual waste stream creating odours, etc):</li> <li>3. If the site-specific nuisance control equipment/procedures were not operational describe the problem and when it was corrected:</li> <li>4. Where the complaint was for odours, was:</li> </ul>	· · · · · · · · · · · · · · · · · · ·
	<ul> <li>2. If yes, describe (Ex. high winds creating litter, unusual waste stream creating odours, etc):</li> <li>3. If the site-specific nuisance control equipment/procedures were not operational describe the problem and when it was corrected:</li> <li>4. Where the complaint was for odours, was: <ul> <li>a) An odour suppression system available for use at the site?</li> <li>b) The suppression system operational?</li> </ul> </li> </ul>	· · · · · · · · · · · · · · · · · · ·
	<ol> <li>If yes, describe (Ex. high winds creating litter, unusual waste stream creating odours, etc):</li> <li>If the site-specific nuisance control equipment/procedures were not operational describe the problem and when it was corrected:         Image: Mage: Mag</li></ol>	· · · · · · · · · · · · · · · · · · ·
	<ol> <li>If yes, describe (Ex. high winds creating litter, unusual waste stream creating odours, etc):</li> <li>If the site-specific nuisance control equipment/procedures were not operational describe the problem and when it was corrected:         Image: Mage: Mag</li></ol>	- - - - - - - - - - - - - - - - - - -
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#### D. CORRECTIVE ACTION

1. What actions were taken to resolve the source of the complaint. Describe:

2. When were these actions taken (date/time):

3. What measures have been employed or will be employed to prevent any future. reoccurrence? Describe:

#### E. FOLLOW-UP

Note: where complainant contact information is provided, all complainants must be contacted to provide the details of the investigation, and to describe any corrective/preventative actions taken. Date and time complainant was contacted to provide details of the investigation and to describe any corrective and/or preventative measures:

Who contacted the complainant (name/title):

How was the complainant contacted? Person / Telephone / Letter (attach copy) Complainant Response:

BETTY TOLD SCALE OPERATOR SHE DID NOT WANT ME TO CALL HAR. THARE IS NO MISTING SYSTEM PERFUME ODOUR, LAS SYSTEM WORKING FINE, NO. GAS OOOVR .

#### F. FORM COMPLETION

	· ·	. •	•	•
KANDY HARPIS		· ·		•
MANAGER.		•		•
17 JUNE			• . •	
		MANACRE.	MANACRE	MANACRE.

Waste Management of Canada Corporation Document Name: Page 2 of 2 Complaint Log Document No.: FO-02 Controlled by: Environmental Effective Date: January 1, 2010 Revision number: 02 Protection Canada Approved by:K. DiRenzo-McGrath Expiry Date: December 31,2013 Next Review Date: by December 31, annually

GO TO THE CANADIAN ENVIRONMENTAL SITE ON WMVISOR TO ENSURE THIS IS THE MOST CURRENT VERSION OF THIS DOCUMENT

• •	
	2011-3
	COMPLAINTLOO
	COMPLAINT LOG (FO-02)
·	A. ADMINISTRATIVE
	Complaint Number (year-number, Ex. 2001-001):
	Certificate of Approval/Permit Number for eiter
· · ·	Does a condition of the C. of A./Permit require this complaint log
•	
• •	a) Retained on site
	b) Submitted to the Environment Ministry
	c) Summarized for inclusion in a Report (monthly,
	Note: it is the Site Manager's responsibility to ensure compliance with C. of A./Permit conditions.
	P. Climina py
• •	B. SUMMARY
	1. Date and Time of Complaint     June 24       2. Name of Complainant     June 24
• ,	3. Address of Complainant
	4 Telephone Number of Orman Line CULOWAAN SOUP ROLL
	5. Relationship of Complainant
	6. Employee receiving complaint
×	
•	7. Type of complaint Odour / Noise / Litter / Dust / Vermin / Other:
	8. Nature of complaint (details):
·	
•	9. Precipitation: Yes No 10. Wind Direction:
	11. Precipitation Type & Amount: 12. Wind Direction:
• •	
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	C. INVESTIGATION
	1. Were there any unusual events (accurrence and the second s
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· · ·	2. If yes, describe (Ex. high winds creating litter, unusual waste stream creating odours, etc):
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	Complaint Log Page 1 of 2
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Note: where complainant contact information is provided, all complainants must be contacted to provide the details of the investigation, and to describe any corrective/preventative actions taken." Date and time complainant was contacted to provide details of the investigation and to describe any corrective and/or preventative measures:

Who contacted the complainant (name/title): How was the complainant contacted?

Person / Telephone / Letter (attach copy) Complainant Response:

inth Mr Crar Zir

#### F. FORM COMPLETION

Form completed by: Name: Title:	Community Relations	
Date completed:		÷

P		
Waste Management of Canada Corpo	ration	Т
Document Name:		Page 2 of 2
Complaint Log		Document No.: FO-02
Controlled by: Environmental	Effective Date: January 1, 2010	Revision number: 02
Protection Canada		
Approved by:K. DiRenzo-McGrath	Expiry Date: December 31,2013	Next Review Date: hy December 31, annually

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Appendix E

Letters of Approval for Alternate Leachate Treatment Sites





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### THE CORPORATION OF THE TOWN OF COBOURG

MAILING ADDRESS: VICTORIA HALL 55 KING STREET WEST COBOURG, ONtario K9A 2M2

WATER POLLUTION CONTROL:
PLANT #1
Tel: (905) 372-7332 *
Fax: (905),372-4439 E-mail: wpcp1 @eagleica
E-mail: wpcp1@eagleica
F
المستعدة أربست المراجع وتراجع المحمد مبتله الرئيس

January 10 2002

Henderson, Paddon 945 Third Avenue East, Suite 212 Owen Sound ON N4K 2K8

Attention : Jeff Armstrong

Upon reviewing the analytical results from the Richmond Landfill Site in Napanee Ontario, The Town of Cobourg will accept leachate on a contingency basis. Prior to bringing leachate into The Lucas Point Water Pollution Control Plant a phone

prior to bringing leachate into The Lucas Point water Pollution Control Plant a phone call authorizing disposal is required. Robert Landry is the only person that can authorize such disposal, he can be reached by cell phone at 905-376-2584, do not leave a message, verbal confirmation is required.

It is understood by all parties that there are no guarantees that The Town of Cobourg can unconditionally accept this leachate. We have our own landfill leachate to treat and the sequencing batch reactor has a maximum design capacity that must be adhered too.

The address of the Lucas Point Water Pollution Control Plant is; 95 Normar Road Cobourg ON K9A 2M2 (located in the east end of town).

The disposal rate for landfill leachate is \$45.00 per 1000 gallons. Any extra costs for operator overtime, spot check sampling and analysis etc. will also be invoiced. Could you please provide me a contact list.

Do not hesitate to call if you have any questions or concerns.

Sincerely,

The they

Robert Landry

Cc Ian Roger P.eng Ted MacDonald P.eng Ray Davis Plant File Director of Operations Manager of Engineering & Environmental Services Environmental Technician TELEPHONE 613-968-6481 FAX 613-967-3262

FILE NO.



PUBLIC WORKS DEPARTMENT CITY HALL 169 FRONT STREET BELLEVILLE, ONTARIO K8N 2Y8

.

## City of Belleville

December 19, 2000

Henderson, Paddon & Associates Limited Civil Engineering Consultants & Planners Attn: Mr. Frank C. Ford, M.A.Sc., P.Eng. Owen Sound Professional Centre 945 Third Avenue East, Suite 212 OWEN SOUND, Ontario N4K 2K8

Dear Mr. Ford:

4

#### Re: Possibility of Accepting Leachate from CWS Richmond Landfill Site for Treatment at the Belleville Sewage Treatment Plant

Reference is made to your letter dated December 11, 2000. I wish to confirm that the City of Belleville is willing to consider acceptance of leachate from the Richmond Landfill Site, which is owned by Canadian Waste Services Inc. at it's Wastewater Treatment Facility on St. Paul Street, on a contingency basis only. It is understood that leachate from the Richmond Landfill Site normally be disposed of at the Wastewater Treatment Facility located in Napanee.

This approval is given on the understanding that the quality of the leachate being received at the Belleville facility will be in compliance with the City's Sewer Use By-Law, and will not pose any problem for the operation of our Wastewater Treatment Facility and its compliance with the City's Certificate of Approval issued by the Ministry of Environment.

....2 . . . . . . . . . . . . . . . . 

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It is further understood that prior to knowledge of any leachate to the Belleville facility, the Belleville Plant Manager will be contacted in advance advising of the intent by Canadian Waste Services Inc.

Canadian Waste Services Inc. will be invoiced by the City of Belleville for disposal of such waste at the Belleville facility.

Yours truly,

J. Angelo, P. City Engineer 'ng.

JA:dh

cc Mr. Jeff DeMarsh

85706

Ministry of the Environment

Bay View Mall 470 Dundas St E Belleville ON K8N 1G1 Telephone: (613) 962-9208 Fax: (613) 962-6809 Ministère de l'Environnement



Centre commercial Bay View 470 rue Dundas est Belleville ON K8N 1G1 Téléphone: (613) 962-9208 Télécopieur: (613) 962-6809

June 10, 2002

Henderson, Paddon & Associates Limited Owen Sound Professional Centre 945 Third Avenue East, Suite 212 Owen Sound ON N4K 2K8

Attention: Jeff Armstrong, Environmental Engineer

Re: Canadian Waste Services Inc. - Richmond Landfill - Acceptance of Leachate at the City of Belleville Water Pollution Control Plant

Please accept my apologies for not responding earlier to your letter concerning the acceptance on a contingency basis, of leachate from the above noted landfill, by the Belleville Water Pollution Control Plant.

Mr. Joe Angelo's December 19, 2000 letter to your office appears to satisfactorily respond to your proposal to haul leachate to the Belleville Water Pollution Control Plant.

Provided there are no conditions in the Certificate(s) of Approval restricting the service area for the Belleville plant, the City is responsible for approving whether or not the leachate can be received at the plant.

Since the time of Mr. Angelo's letter, the City of Belleville has revised their Sewer Use By-law (January 28, 2002). I would therefore advise you to read the revised document.

If there are any questions please do not hesitate to contact the writer.

Yours truly,

D.E. Graham Senior Environmental Officer Abatement Section Eastern Region





The Corporation of the Town of Cobourg 55 King Street West Cobourg, ON, K9A 5H3

March 2, 2012

WM Waste Management Mr. Randy Harris, Site Manager 1271 Beechwood Road RR #6, Napanee, ON, K7R 3L1

Dear Mr. Harris:

We have reviewed the analytical data for the leachate collected from the Richmond Landfill site in Napanee, ON. Based on this data we are confident that our Sequence Batch Reactor (SBR), located at the Lucas Point Water Pollution Control Plant on Normar Road, will be able to adequately treat this material on a contingency basis.

The available capacity in the SBR varies from day to day, depending on others who have elected to use our facility for similar purposes. In this regard we would ask that you please contact us prior to sending this material, to arrange an appropriate time for delivery. Verbal consent to discharge at the Lucas Point facility can be obtained from one of the following:

- 1. Bill Peeples (WPCP Manager): 905-372-7332
- 2. Jennifer Leno (Environmental Technician): 905-372-5539
- 3. Ray Davis (Foreman, Plant #2): 905-372-5539
- 4. Barry Thrasher (Deputy Director of Public Works): 905-372-9971

It is understood by all parties that there can be no guarantees that the Town of Cobourg can unconditionally accept the leachate from your landfill site. Domestic leachate from our own landfill sites must be accepted on a priority basis. If the incoming volume from your landfill site would cause us to exceed the maximum capacity of the SBR unit, we would not be able to accept it. Historically, such conditions have never occurred; however, we would like you to be aware that this is a possibility. Mr. Randy Harris March 2, 2012 Page 2

The address of the facility to which you are to discharge your leachate is:

Lucas Point Water Pollution Control Plant (Plant #2) 95 Normar Road Cobourg, ON, K9A 4J8 905-372-5539

The disposal rate for leachate is dependant upon the organic strength of the material received. Our rate schedule can be obtained from the Town of Cobourg website at <u>www.cobourg.ca</u> or by contacting Jennifer Leno at the above listed phone number.

If you have any questions regarding this issue, please give me a call.

Regards,

Bill Peeples, Manager Water Pollution Control Department Town of Cobourg 905-372-7332