

**Richmond Sanitary Landfill Site
OS-08-570-13-OS
Monitoring Report No. 24
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:
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Project No. 081-12459-00



OS-08-570-13-OS

March 29, 2011

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

Re: Richmond Landfill Site
Annual Monitoring Report #24

Dear Randy:

We are pleased to provide Monitoring Report #24 in accordance with the conditions of the Provisional Certificate of Approval.

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, **one (1) copy** to Wayne Jenken, 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.

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.

cc: Mr. Wayne Jenken, Area Landfill Engineer, Waste Management of Canada Corporation

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A.1.6	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.
A.2	Certificate of Approval (Sewage) No. 3-1720-90-916 (Leachate Treatment and Disposal by Spray Irrigation)
A.3	Certificate of Approval (Air) No. 8-4028-92-006 (Spray Irrigation System)
A.4	Certificate of Approval for Industrial Sewage Works No. 5268-7E8LJW
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1.0 Introduction

This monitoring report for the Waste Management of Canada Corporation (WM) Richmond Landfill site is prepared to comply with part of the Conditions of Provisional Certificate of Approval (C of A) No. A371203 dated March 30, 1988 and Certificate of Approval of Industrial Sewage Works No. 5268-7E8LJW dated August 19, 2008. This report was prepared following a field survey on November 3rd, 2010, site inspections and discussions with management.

On March 31, 2010, the Ministry of Environment issued Notice 5 to amend C of A No. A371203. The amendment approved the closure plan for the site, but also revoked and replaced several conditions of the C of A, including Condition 9, which formed the basis for previous annual monitoring reports. As a result of the amendment, this report has been prepared to satisfy Conditions 9(b), (c), (e) and (f) of the C of A in effect from January 1, 2010 to March 31, 2010 (referred to hereafter as the “former” C of A), and Conditions 9(a) and (b) (i through xxv) for the amended C of A in effect from April 1, 2010 to December 31, 2010 (referred to hereafter as the “existing” C of A). A separate monitoring report prepared by Water and Earth Science Associates Limited (WESA) addresses the items covered by 9(a) and (d) of the C of A in effect from January 1, 2010 to March 31, 2010.

Condition 10(4) (a), (b), (c), (d), (e), (f), (g) and (h) of Certificate of Approval for Industrial Sewage Works No. 5268-7E8LJW have been addressed in this report.

All amendments for the Certificate of Approval No. A371203 are contained in **Appendix A** of this report. The most recent amendment, dated March 31, 2010, contains the following updates:

March 31, 2010 Amendment (**Appendix A.1.6**)

Imposed Condition 35, revoked and replaced Conditions 6, 8, and 9, and 14 through 28, revoked Condition 30, and added Conditions 36 through 140. This amendment accepted the final closure plan for the site, and imposed new conditions regarding operations during the remaining site life, date of site closure, capping schedules, monitoring and reporting requirements, and the establishment of a Public Liaison Committee. The amendment also requested an updated financial assurance plan, including contaminating lifespan, groundwater, odour, and surface water monitoring plan, groundwater and surface water impact plan, a quality assurance/quality control plan for placement of the final cover material, and details regarding the proposed reconstruction of the compost pad and pond.

The following other Certificates of Approval 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.2**).

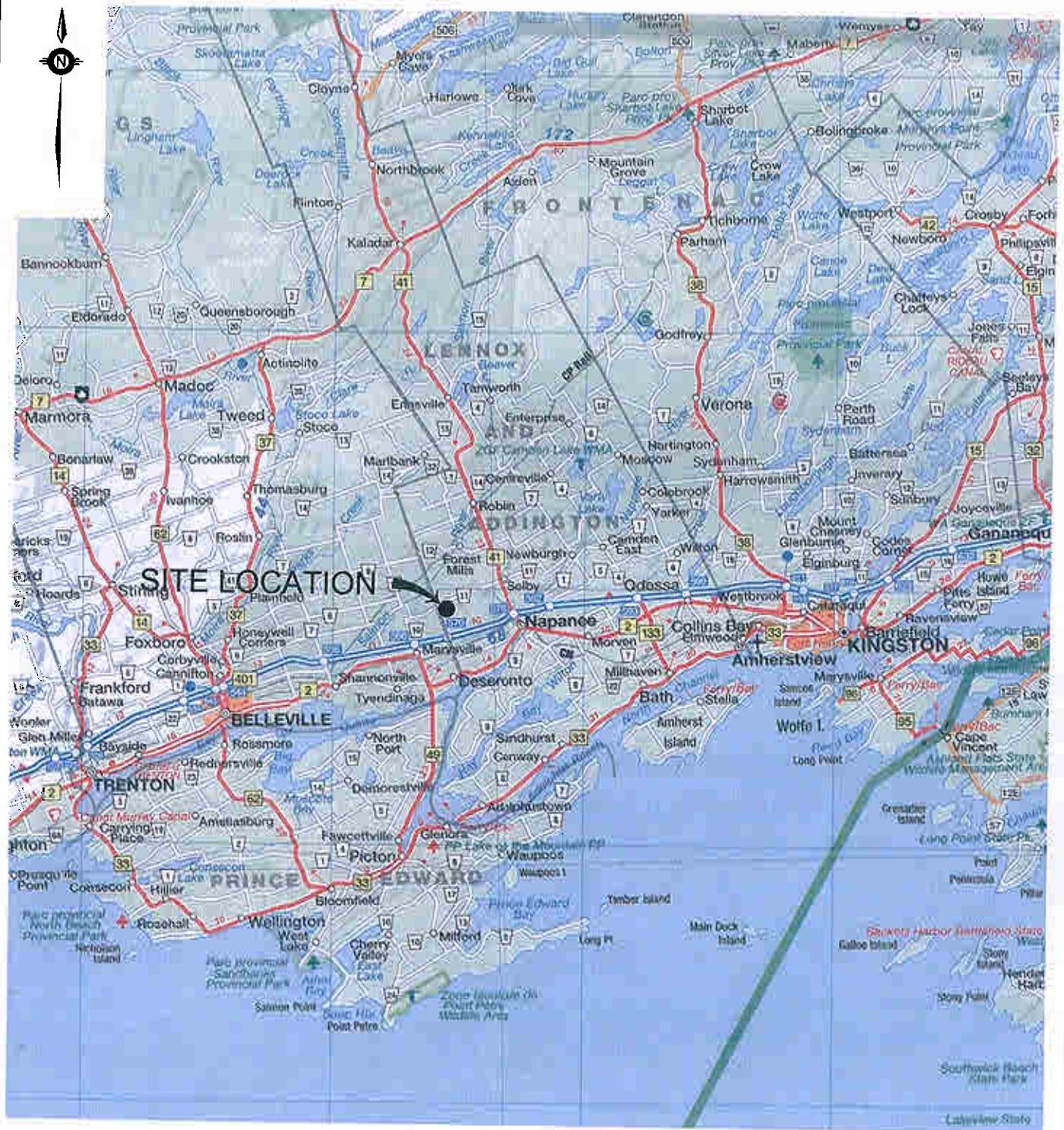
- Certificate of Approval (Air) No. 8-4028-92-006 (Spray Irrigation System) dated March 11, 1992 (**Appendix A.3**)

- The new Certificate of Approval Number 5268-7E8LJW dated August 19, 2008 is found in **Appendix A.4**, outlining the requirements for the operation of the leachate and stormwater management systems.

- Certificate of Approval for a Waste Disposal Site No. A710003 (Soil Recycling) dated December 20, 1993 (**Appendix A.5**).

- Certificate of Approval (Air) No. 8-4078-99-06 (Gas Flare System) dated December 21, 1999 (**Appendix A.6**).

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



G:\1957\B570\DRAWINGS\2011\B570-F1-GENIVAR.dwg PLOTTED Wednesday, March 30, 2011 11:24:40 AM

SHEET 1.1	DWN BY: TCG CHK BY: JCA	DATE: MAR 2004 SCALE: SEE BAK SCALE
	WASTE MANAGEMENT OF CANADA CORP.	
	DRAWING NO. 0857013 - F1.1	

SITE LOCATION PLAN
RICHMOND LANDFILL

	GENIVAR
845 Third Ave E, Suite 212, Owen Sound, ON, N4K 2K8 Telephone: (519) 376-7612 / Fax: (519) 376-8008 Tel Free: 1-888-376-7612	

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2.0 Previously Submitted Reports

Several reports have been completed and filed with the Ministry of the Environment 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

1998 to 2009 Annual Monitoring Reports - Complying with Conditions 9(b), 9(c), 9(e), and 9(f) of the C of A dated March 30, 1988.

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.

Financial Assurance Update

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

Operations and Procedures Manual

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

Leachate Collection System Contingency Plan

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

Landfill Gas Collection System Contingency Plan

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

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.

3.0 Reporting Requirements – Certificate Of Approval No. A371203

3.1 Monitoring Data Results and Interpretative Analysis

This condition, listed as 9(a) in the former C of A, and 9(b) (i) in the existing C of A, requires that all leachate, groundwater, surface water and landfill gas monitoring results be provided in the annual report, along with an interpretative analysis of the results and an assessment of the need to amend the current monitoring programs.

This information has been provided by WESA under separate cover.

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

Condition 9(b) (ii) in the existing C of A requires an assessment of the operation and performance of all engineered facilities. The following describes the facilities reviewed and the assessment completed.

3.2.1 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 regular surface emission surveys were used to locate weak areas on the final cap. During the last year, final cover material was placed on the remainder of the Phase 1 portion of the landfill. Vegetation of the final cap was reviewed and is becoming established. We concluded that no remedial work that is not currently being completed is required on the landfill mass.

3.2.2 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 in 2010. No remedial work is required on this system.

3.2.3 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. No new gas extraction wells were installed during 2010. The gas system is operating as required, and no additional remedial work is recommended at this time.

3.2.4 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 some problems have been encountered with the construction quality of the pond. In 2010, the pond outlet structure was reconstructed to repair seepage problems. As added security, a steel sheet pile wall was installed to prevent any further seepage problems through the outlet berm. It is expected that no further remedial work is required on this pond.

3.2.5 Site Access and Roads

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

3.2.6 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 and remain a contingency for leachate storage. The pond was slowly siphoned using a 50mm diameter pipe, discharging into a sedimentation basin to prevent erosion, and the date and volume is described in Section 4.25

3.2.7 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.

3.3 Leachate Collection System Efficiency

This condition, listed under 9(b) (iii) of the existing C of A, 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 determine 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.

3.4 Existing Site Conditions

This Condition, listed as 9(c) in the former C of A, and 9(b) (iv) of the current C of A, requires a map of surface contours in the active landfill area, and plans showing the existing contours of the site, respectively, to be provided.

GENIVAR completed a GPS survey in November 3rd, 2010 for volume and remaining airspace calculations.

The information was then incorporated into an existing conditions drawing labelled **0857013-2010**, which is contained in **Appendix B** of this report.

3.5 2010 Landfill Operations Area

This Condition, listed as 9(b) (v) in the current C of A, requires information regarding the areas of landfilling operation during the reporting period.

In 2010, landfilling operations continued 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. The landfill mass is nearing final contours and will progress to final elevations. Final grades are regularly set to control landfilling activities and to ensure that landfilling operations do not proceed above final contours. Landfilling operations will continue until June 30, 2011, when the Richmond Landfill will cease to accept waste after this date in accordance with Condition 35 of the current C of A.

Since access to the active landfill face is restricted by the removal of the old access road, waste is hauled to the active area by an off road haul truck. Waste brought to the site by the garbage trucks is 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.

Landfilling tonnage was less than the approved annual limit again in 2010 due to the decreasing air space remaining at the landfill site, and the need for WM to service the local customers. 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.

3.5.1 Equipment

During 2010, 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.

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

3.6 2011 Landfill Operations Area

This Condition, listed as 9(b) (vi) in the current C of A, requires information regarding the intended area of landfilling operations during the next reporting period.

WM will continue to landfill on the upper east end of the landfill mass, and on the south slope at the location of the former haul road, in order to bring these areas to the final approved contours prior to the placement of the final cover system. Landfilling operations at the Richmond Landfill will cease after June 30, 2011, as per Condition 35 of the current C of A.

3.7 2010 Excavation Areas

This Condition, listed under 9(b) (vii) of the current C of A, requires information regarding areas of excavation during the reporting period.

No borrow pit operations for cover material were undertaken in 2010, 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.

Material was removed from the southwest borrow area and used as fill prior to placing the final cap on Phase 1. Soil was placed on top of the landfill to provide the 5% slope on top of the landfill, prior to placing the final cover on the Phase 1 portion of the landfill.

3.8 Cover Placement Progress

This Condition, listed under 9(b) (viii) of the current C of A, requires information regarding the progress of final cover, vegetative cover, and any intermediate cover application.

In 2010, WM completed the placement of the final cover system on Phase 1 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 a 0.6 hectare area on the upper west central section of the landfill, as shown in Drawing 0857013-2010 in **Appendix B**. 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 Phase 1 capping project was not completed by the September 30, 2010 deadline as listed under Condition 35 of the amended C of A. WM requested and received from the MOE a one-month extension, to October 31, 2010. Work was completed on the final cover on October 28, 2010, and hydroseeding was applied at this time. The area will be inspected in 2011 to ensure vegetative cover has been well established, and will be re-seeded as needed.

Intermediate cover was placed on the lower section of the south central slope, in the area of the old access road.

3.9 Previously Existing Site Facilities

This Condition, listed under 9(b) (ix) in the current C of A, requires information regarding previously existing site facilities.

3.9.1 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. The main sign supplies the following information:



Additional signs on the site direct traffic to working faces and vehicles to the storage area for white goods. The signs are considered satisfactory and informative to the landfill users.

In compliance with Condition 109 of the amended C of A, a sign has been posted at the main entrance directing residents with questions, concerns, or complaints to contact the WM Help Line after hours, or the Landfill Manager during operating hours.

Site hours for the public have been changed as of December 1, 2006 to Monday to Friday from 9am to 3pm, and closed Saturdays. The site is open the regular hours for commercial haulers.

3.9.2 Staff

WM staff manages and operates the site. Mr. Randy Harris is the Landfill Manager. The site was managed by the Eastern Canada Market Area office with Mr. Dave White being the Director of Disposal Operations - Ontario.

Other landfill staff presently consists 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.

Other equipment operators are brought on the site for additional excavating, stockpiling of cover materials and for contract work as required for ongoing site development. Temporary workers are obtained from placement agencies to handle litter-picking duties.

The on-site mechanic handles equipment preventive maintenance programs.

3.9.3 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.

3.9.4 Soil Recycling Pad

A soil recycling pad is located to the east of the existing maintenance building and is used for temporary storage of hydrocarbon-impacted soil. This pad is used sporadically and allows incoming soil vehicles to avoid conflict with the waste vehicles. The soil is moved to other stockpiles on top of the landfill or to the active face for daily cover, as required.

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.

3.9.5 Small Vehicle Transfer Area

The mini-transfer area continued to be used successfully in 2010. This area is 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 can 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 collect electronics and tires for recycling offsite.

White goods, including scrap metal, are presently separated from the waste stream and temporarily stored on the site. WM removes these materials regularly for recycling and it is anticipated this practice will continue.

3.9.6 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 Ministry of Environment (MOE) on December

21, 1999. The C of A can be found in **Appendix A.6**. 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. The present system collects gas from five (5) leachate clean-outs, three (3) leachate collection manholes and 55 vertical gas wells.

Regular operation and maintenance of the landfill gas collection and flare system was completed in 2010. 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.

3.9.7 Organic Waste Compost Facility Operation

WM operates 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 are presently composted at this facility, although other wastes can be accepted under the organic waste composting approval. No paper sludge or biosolids was used in 2010. In 2010, some compost material was processed in windrows, but the completed compost was used on site in construction activities as topsoil amendment.

Raw material is separated into piles. Brush and large wood pieces are stockpiled for tub grinding. If incoming material is contaminated (plastic bags, etc.), the load is set aside and labourers will separate the load. **Table 3.1** shows the amount of material received during 2010.

TABLE 3.1
2010 Compost Quantities

Incoming Materials by Type	
Type	Quantity (tonnes)
Leaf and yard waste	633.57
Sludge	0
TOTAL	633.57

When material arrives on site, the components of the windrow recipe are placed in a windrow by the bucket of a farm tractor. A Sittler windrow turner pulled by a farm tractor turns new windrows two to three times per week. Pertinent information about each windrow is recorded in a daily record book. Operations of the compost pad follow the operation manual written for the compost facility, which is updated regularly.

A monitoring program was established to ensure safety and quality standards are maintained throughout the composting process. The program includes daily (five days per week) monitoring of temperature and moisture. Approximately three to five temperatures are taken along a windrow. All temperatures are

recorded in a daily logbook. Ontario Ministry of the Environment Guidelines require that a minimum temperature of 55°C be achieved for fifteen days to achieve pathogen reduction.

Compost windrows are turned following the guidelines outlined in the operations manual. Once the temperature reaches 55°C, the windrow is turned at least five (5) times and must reach 55°C after the fifth turning. Once ambient temperature is reached, compost is moved from the originating location to the curing location. After curing, the compost is screened to remove all oversized material from the finished product. The oversized material is recycled back into a new windrow. If a windrow does not reach 55°C for the required time, the windrow will be recycled into a new windrow.

Any precipitation that lands on the compost pad, is collected and contained within the compost runoff pond. This water is either used in the composting process to increase windrow moisture content, or removed from the site and treated at the Napanee Sewage treatment plant, and is included in the volume presented in Section 3.13 and 4.1.1 of this report. The MOE has required that a liner be installed in the compost runoff pond, and a low permeability surface be installed on the compost pad. WM has decided that the compost pad and pond will be decommissioned, and will be preparing an outline of this work.

3.9.8 Sedimentation Ponds

The three sedimentation ponds remained in place in 2010, with work being completed on the outlet structure of the south pond. Pond discharge is controlled, and not permitted without prior testing and approval from MOE District staff.

3.10 Facilities Installed in 2010

This Condition, listed under 9(e) of the former C of A, and under 9(b) (x) of the current C of A, requires information about the installation of any facilities at the site during the reporting period.

No new facilities were installed in 2010.

3.11 Site Preparations and Facilities Installed in 2011

This Condition, listed under 9(e) of the former C of A, and under 9(b) (xi) of the current C of A, requires information regarding any site preparation or installation of facilities planned for the next reporting period.

In 2011, the final portion of the final cover system will be installed at the landfill, to close the site. Also, the compost pad and pond are expected to be decommissioned.

3.12 Calculations

This Condition, listed under 9(b) (xii) of the current C of A, 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.

Using the survey of November 3, 2010, site volumes were calculated. The remaining air space and expected site life can be found in the following **Table 3.2**.

TABLE 3.2
2010 Landfill Quantities

Description	Quantity (m ³)
Gross remaining air space (including final cap)	69,000
Remaining quantity of final cap to be placed ⁽¹⁾	24,900
Remaining air space for waste and daily cover	44,100
Estimated daily cover volume remaining assuming 4:1 waste/cover ratio	8,800
Air space for waste	35,300

NOTES:

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

3.13 Leachate Quantities

This Condition, listed under 9(f) of the former C of A, and 9(b) (xiii) of the current C of A, requires a summary of the quantity of any leachate or pre-treated leachate removed from the site during each operating week.

In 2010, 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. Leachate can be discharged from the lagoon with MOE approval, or, 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. The water stored in this lagoon is generally only slightly impacted by leachate and is not odorous. 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, provided 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 = 1m³.

TABLE 3.3
2010 Weekly Leachate Quantities

WEEK COMMENCING	TOTAL LEACHATE REMOVED - NAPANEE (m ³)	WEEK COMMENCING	TOTAL LEACHATE REMOVED - NAPANEE (m ³)
1/1/2010	0	7/4/2010	231.17
1/3/2010	280.70	7/11/2010	287.88
1/10/2010	222.13	7/18/2010	288.52
1/17/2010	391.28	7/25/2010	289.54
1/24/2010	396.24	8/1/2010	231.58
1/31/2010	384.76	8/8/2010	286.48
2/7/2010	328.44	8/15/2010	585.29
2/14/2010	338.08	8/22/2010	581.61
2/21/2010	341.99	8/29/2010	577.17
2/28/2010	402.13	9/5/2010	404.96
3/7/2010	338.43	9/12/2010	586.66
3/14/2010	464.80	9/19/2010	529.29
3/21/2010	405.82	9/26/2010	583.79
3/28/2010	214.50	10/3/2010	532.74
4/4/2010	450.89	10/10/2010	472.96
4/11/2010	564.48	10/17/2010	461.62
4/18/2010	527.88	10/24/2010	467.40
4/25/2010	585.44	10/31/2010	280.09
5/2/2010	462.08	11/07/2010	342.55
5/9/2010	289.25	11/14/2010	348.49
5/16/2010	229.80	11/21/2010	465.66
5/23/2010	225.89	11/28/2010	285.35
5/30/2010	463.77	12/5/2010	690.55
6/6/2010	528.99	12/12/2010	410.53
6/13/2010	403.49	12/19/2010	347.77
6/20/2010	407.96	12/26/2010	247.59
6/27/2010	347.03	TOTAL	20,813.49

3.14 Waste Tonnage Summaries

This Condition, listed under 9(b) of the former C of A, and 9(b) (xiv), requires the weekly, maximum daily, and total annual quantity (tonnes) of waste received at the site. Condition 9(b) of the former C of A also requires a list of all current commercial and industrial users.

Table 3.4 is an updated list of municipalities serviced by this landfill, as follows:

TABLE 3.4
Municipalities Presently Serviced

City of Belleville
Town of Deseronto
City of Quinte West

The Corporation of the County of Prince Edward
(Which used to include)

- Town of Picton
- Town of Sophiasburgh
- Village of Bloomfield
- Township of Athol
- Township of Hallowell
- Village of Wellington
- Township of North Marysburgh

Town of Greater Napanee
Newburgh Ward – of Stone Mills Township

The list of commercial/industrial waste users provided from the present landfill records is contained in **Appendix C.**

Tables 3.5 and **3.6** summarize weekly, monthly and total annual quantity of volumes in metric tonnes for the calendar year 2010. Weigh scale operators recorded the tonnages, as noted on the following pages:

TABLE 3.5
2010 Weekly Tonnage Totals

WEEK COMMENCING	TOTAL WASTE TONNAGE LANDFILLED (TONNES)	TOTAL CONTAMINATED SOIL RECEIVED (TONNES)	WEEK COMMENCING	TOTAL WASTE TONNAGE LANDFILLED (TONNES)	TOTAL CONTAMINATED SOIL RECEIVED (TONNES)
1/1/2010	0	0	7/4/2010	322.37	423.78
1/3/2010	130.79	1.68	7/11/2010	377.74	393.94
1/10/2010	116.97	0	7/18/2010	316.18	509.08
1/17/2010	118.44	0	7/25/2010	400.68	585.78
1/24/2010	102.95	0	8/1/2010	404.46	577.39
1/31/2010	119.97	0	8/8/2010	393.36	203.36
2/7/2010	116.74	0	8/15/2010	416.00	2,294.43
2/14/2010	93.55	0	8/22/2010	423.61	1,197.44
2/21/2010	101.55	0	8/29/2010	367.36	798.82
2/28/2010	119.34	0	9/5/2010	354.92	427.19
3/7/2010	159.93	67.57	9/12/2010	457.26	4,061.20
3/14/2010	115.20	0	9/19/2010	398.11	1,358.77
3/21/2010	116.78	17.35	9/26/2010	458.82	482.52
3/28/2010	197.84	0	10/3/2010	387.18	134.87
4/4/2010	235.86	169.53	10/10/2010	423.90	711.97
4/11/2010	197.52	2,131.08	10/17/2010	370.52	1,334.62
4/18/2010	300.50	1,211.59	10/24/2010	497.93	4,199.61
4/25/2010	270.52	0	10/31/2010	455.05	2,809.74
5/2/2010	328.42	129.76	11/07/2010	384.51	100.04
5/9/2010	350.82	4,068.54	11/14/2010	350.37	39.58
5/16/2010	273.87	2,679.21	11/21/2010	381.15	0
5/23/2010	295.86	352.61	11/28/2010	324.77	0
5/30/2010	342.35	507.35	12/5/2010	286.00	2,000.76
6/6/2010	416.64	633.46	12/12/2010	604.59	598.19
6/13/2010	368.52	406.44	12/19/2010	284.88	995.72
6/20/2010	354.25	542.92	12/26/2010	188.88	0
6/27/2010	235.43	173.16	TOTAL	15,611.21	39,331.05

TABLE 3.6
2010 Monthly Tonnage Totals

MONTH	COMPOST DIVERTED FROM LANDFILL SITE (TONNES)	TOTAL WASTE TONNAGE LANDFILLED (TONNES)	TOTAL CONTAMINATED SOIL RECEIVED (TONNES)
January	1.77	469.15	1.68
February	2.64	431.81	0
March	14.85	696.37	84.92
April	120.41	1,017.12	3,512.2
May	105.98	1,278.96	7,339.81
June	29.62	1,630.74	2,153.64
July	19.04	1,473.43	1,912.58
August	29.12	1,763.31	4,994.9
September	42.52	1,808.31	6,406.22
October	112.47	1,781.81	6,381.07
November	141.33	1,725.29	2,949.36
December	13.82	1,534.91	3,594.67
TOTAL	633.57	15,611.21	39,331.05

NOTE: The site is licensed for 125,000 tonnes/year.
Total tonnage shown does not include recyclable material.

The 2010 waste tonnage landfilled was 15,611.21 tonnes of waste and 39,331.05 tonnes of soil, which was compiled from the monthly summary of wastes received. The licensed tonnage is 125,000 tonnes/year. Tonnages listed include impacted soil that was received at the site for disposal.

The maximum daily tonnage received was on December 15, 2010 and was 243.36 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 633.57 tonnes of compostable material was diverted from the landfill site, and 45.72 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, 81.88 tonnes of recycled tires were diverted from the landfill, along with 28.05 tonnes of recyclable metal.

3.15 Summary of Complaints

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 2010, where a consultant measured surface emissions to identify areas of weak cap. This year, a surface emission survey was performed on October 26, 2010. Four (4) areas were identified above 500ppmv. It was noted in the consultant's report that the flare was down approximately three (3) hours before the survey was performed. The final cover system in the exceedance areas were inspected and repaired as needed. No new wells were installed in 2010, as it is believed that there is sufficient wellfield coverage in place.

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, there were two (2) 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 received as a result of the flare not operating due to maintenance of the mechanical system. The second odour complaint was also relayed from the MOE District office, but no source was detected at the site once the complaint was received by WM.

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

3.16 Operational Problems

This Condition, listed under 9(e) of the former C of A, and 9(b) (xvi) of the current C of A, 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 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. **Appendix E** contains the Provincial Officer's Order that was received as a result of the MOE inspection, along with the responses from WM.

3.17 Refusal of Waste

This Condition, listed under 9(b) (xvii) of the current C of A, 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.

On August 16, 2010, a refrigerator was refused for disposal at the landfill. The refrigerator was not tagged certifying that Freon had been removed which would allow disposal. The resident left the site with the refrigerator, and WM completed a Waste Discrepancy Form, which can be found in **Appendix F** of the report.

3.18 Leachate Collection System Cleaning and Inspection

This Condition, listed under 9(b) (xviii) of the current C of A, requires a summary of the leachate collection system cleaning and inspection activities.

In 2010, WM regularly inspected the leachate pumps and system each day that hauling of leachate occurred. On April 15th and 16th, 2010, the leachate lines were flushed and cleaned. No blockages or issues were reported from this activity.

3.19 Financial Assurance Summary

This Condition, listed under 9(b) (xix) of the current C of A, requires an update summary of the amount of financial assurance which has been provided to the Director.

Currently, the financial assurance amount of \$11,557,385 has been provided to the Director for the Richmond Landfill.

As a condition of the amended C of A, a revised financial assurance plan was submitted to the MOE on June 30, 2010. Upon receiving approval from the MOE, WM will provide the Director with an updated financial assurance amount.

3.20 Monitoring Well Status and Compliance

This Condition, listed under 9(b) (xx), requires a report on the status of all monitoring wells and a statement as to compliance with Ontario Regulation 903.

A report addressing this condition has been prepared by WESA under separate cover to satisfy this requirement.

3.21 Statement of Compliance

This Condition, listed under 9(b) (xxii) of the current C of A, requires a statement of compliance with all conditions of this Certificate of Approval and other relevant Ministry groundwater and surface water requirements.

As a result of the inspections completed in 2010, to the best of our knowledge, GENIVAR certifies that WM has complied with the conditions outlined in the various Certificates of Approval for the site, with respect to site operations. WESA will certify the monitoring portion of this requirement.

3.22 Confirmation of Site Inspection Program

This Condition, listed under 9(b) (xxiii), requires confirmation that the site inspection program as required by this Certificate has been complied with by the Owner.

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

3.23 Operations, Equipment, or Procedures Changes

This Condition, listed under 9(e) of the former C of A, and 9(b) (xxiv) of the current C of A, requires documentation of any changes in operations, equipment, or procedures employed at the site.

No changes in operations, equipment or procedures were employed at the site, other than those that were outlined in the C of A amendment that was received March 31, 2010.

3.24 Recommendations

This Condition, listed under 9(b) (xxv) of the current C of A, requires recommendations regarding any proposed changes in operations of the site be listed in this report.

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

4.0 REPORTING REQUIREMENTS – CERTIFICATE OF Approval No. 5268-7E8LJW

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 is 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 C of A 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 2010. Letters of approval for alternate leachate treatment sites can be found in **Appendix G** of this report.

4.1.1 Leachate Quantities

This Condition, listed under 10(4) (b) of the current C of A, 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 2010. The average rate of removal for treatment was 57.02 m³/day.

TABLE 4.1
2010 Monthly Leachate Quantities

Month	Napanee (m³)
January	1,290.35
February	1,393.27
March	1,766.60
April	2,187.77
May	1,264.79
June	2,038.85
July	1,151.73
August	1,920.21
September	2,331.91
October	2,049.43
November	1,663.46
December	1,755.12
Total	20,813.49

4.1.2 Operational Problems and Corrective Actions

This Condition, listed under 10(4) (c) of the current C of A, requires a description of any operating problems encountered and corrective actions taken.

In 2010, 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

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

In 2010, regular inspection of the leachate pumps and system took place each day that leachate was hauled from the site. On April 15th and 16th, 2010, the leachate lines were flushed and cleaned. No blockages or issues were reported.

4.1.4 Calibration and Maintenance of Leachate Monitoring Equipment

This Condition, listed under 10(4) (e) of the current C of A, requires a summary of the calibration and maintenance carried out on all leachate monitoring equipment.

In 2010, a high level alarm installed was installed in the north leachate chamber to alert the operator of leachate levels exceeding 0.66 metres, as required by Conditions 86 and 87 of the amended C of A No. 371203 issued March 31, 2010. The high level alarms in the south chamber were replaced.

4.1.5 Summary of Complaints Received

This Condition, listed under 10(4) (f) of the current C of A, requires a summary of any complaints received during the reporting period, and any steps taken to address the complaints.

Two complaints were received in 2010. Both complaints were for odour, which were immediately addressed by WM (following the complaints procedures previously described in **Section 3.15**) 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

This Condition, listed under 10(4) (g) of the current C of A, requires a summary of all By-pass, spill, or abnormal discharge events.

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 C of A No. 5268-7E8LJW, which outlines the operation of three (3) sedimentation ponds located on the landfill site property. This section is intended to satisfy the requirements outlined in Condition 10(4) (a), (c), (d), (f) and (g) of the C of A.

4.2.1 Summary of Stormwater Monitoring Data

This Condition, listed under 10(4) (a) of the current C of A, 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 C of A, under separate cover. The reader is directed to this document for this information.

4.2.2 Operating Problems and Corrective Actions

This Condition, listed under 10(4) (c) of the current C of A, requires a description of any operating problems encountered and corrective actions taken.

In 2010, an unplanned release from the south sedimentation pond occurred due to frost heaving around and along the outlet structure and pipe. The outlet structure was repaired to correct the construction

issues, and improved to ensure no further problems are encountered. A steel sheet pile wall was installed in the outlet berm, to prevent any additional seepage, and the outlet structure and pipe was replaced.

4.2.3 Summary of Maintenance Activities

This Condition, listed under 10(4) (d) of the current C of A, 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 C of A, and no remedial work was required in 2010.

In 2008, WMCC applied to the MOE for approval to upgrade the south sedimentation pond, to create a wetland area, and to improve the aesthetics of the front entrance. Approval was received from the MOE, and construction was completed on the south sedimentation pond in March 2009. On April 27, 2009, the southerly berm of the sedimentation pond failed, due to frozen material becoming weak after thawing. The pond was sampled and dewatered, and the material in the berm was removed and replaced with dry clay till material from the on-site borrow area. Work began in mid-July 2009 and was completed in late September 2009. Seeding was completed in 2010.

In January 2010, the outlet control berm on the south pond failed, due to frost heave along the outlet pipe. The existing rip rap and geotextile were removed along with the outlet pipe and control structure. Sheet piles were installed through the centre of the berm along its entire length to ensure no further water would exit the berm. The control structure was relocated to the north toe of the outlet berm, and the outlet pipe was reinstalled through the sheet pile. Additional clay was brought in from an offsite source to bring the berm back to design height, and geotextile and riprap were placed over the clay. Work began in early September 2010, and was completed one week later.

4.2.4 Summary of Complaints Received

In 2010, there were no complaints received regarding the ponds.

4.2.5 Summary of By-Pass, Spill or Abnormal Discharge Events

The stormwater certificate of approval requires toxicity, chemical testing and MOE approval prior to any discharge event. Listed below in the table are the MOE approved discharge events that occurred in 2010. Volumes were calculated based on water level drop in the ponds.

TABLE 4.2
2010 Pond Discharge Volumes

Date of Discharge	Pond Identification	Volume Discharged (m³)
February 8, 2010	Northwest Pond	2,802 m ³
	Southwest Pond	5,724 m ³
March 24, 2010	Northwest Pond	3,500 m ³
	Northeast Pond	2,600 m ³
	Southwest Pond	13,967 m ³
May 19 to June 10 th	Leachate holding lagoon	16,245 m ³
November 23, 2010	Southwest Pond	4,134 m ³

Prior to all discharge events, toxicity testing was completed to ensure the water was safe to discharge.

5.0 General

In 2010, WM completed ongoing maintenance and operation of the landfill site, with additional work completed on the south sedimentation pond outlet structure and berm. Landfill operations progressed smoothly throughout the year 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. Litter control is well managed, and 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 have been contained to the upper extents, and south face of the landfill site and within the final contours approved for the landfill site. Grades are controlled to ensure compliance with the final contours.

Leachate extraction and treatment continues at the landfill site, and 20,813.49 m³ of leachate has been removed during the past year, or approximately 57.02 m³/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 landfill 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 as landfilling progresses and final cap is constructed at higher elevations.

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

Site operations are progressing smoothly. We conclude the landfill operation is operating in an environmentally sound and orderly manner.

Respectfully submitted:

GENIVAR Inc.

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

Appendix A

Certificates of Approval

Appendix A.1

Provisional Certificate of Approval No.
A371203



Ontario

Ministry of the Environment
Ministère de l'Environnement

Provisional Certificate of Approval for a Waste Disposal Site

Certificat provisoire d'autorisation du lieu d'élimination des déchets

Provisional Certificate of Approval No. A 371203
Certificat provisoire d'autorisation no

Page 1 of 7
page de

Under the Environmental Protection Act and the 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 y afférents et sous réserve des restrictions qui s'y appliquent, ce Certificat provisoire d'autorisation est délivré à:

Tricil Limited
89 Queensway West, Suite 800
Mississauga, Ontario L5B 2V2

for the use and operation of a 16.2 hectare waste disposal (landfilling) site 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, Concession 4
Township of Richmond
County of Lennox & Addington

which includes the use of the site only for the disposal of the following categories of waste (NOTE: Use of the site for additional categories of wastes requires a new application and amendments to the provisional Certificate of Approval) domestic, commercial, non-hazardous solid industrial and institutional waste

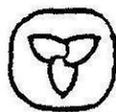
and subject to the following conditions:

1. By March 31, 1988, Tricil Limited ("the Company") shall complete all hydrogeological works and evaluations necessary to establish the groundwater flow regime in order to finalize the design of the clay liner and submit the report outlining the hydrogeological findings to the Director of the Environmental Approvals and Land Use Planning Branch of the Ministry of the Environment ("the Director").
2. (a) By October 31, 1988, the Company shall prepare a design report with final plans and specifications detailing the site development and operation program. The requirements of the final design report are to be implemented once written approval is given by the Director. In the interim, the site shall be developed in accordance with Section 4.3 of the report entitled, "Sutcliffe Sanitation Services Limited Landfill Site Expansion, Development and Operations Report" prepared by Henderson, Paddon and Associates Limited, dated September, 1985.

(b) By October 31, 1989, the Company shall prepare a design, construction and testing protocol for the placement of the clay liner and submit it for approval of the Director. No liner construction shall take place without prior approval of the Director and as directed by the Director.
3. Only domestic, commercial, non-hazardous solid industrial waste and institutional waste limited to a reasonable number of uninfected animal carcasses from the Township of Richmond's animal shelter may be disposed of at the site. No hazardous waste or liquid industrial waste from off-site sources as currently defined or as may be defined by the Ministry of the Environment in the future shall be disposed of on the site.

30th March 88

Given this _____ day of _____ 19 _____



Ontario

Ministry
of the
Environment

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 grade, 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 the 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 amount of leachate collected, stored and spray irrigated.



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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 A 371203 dated March 30, 1988

- 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.
- (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 for 4 consecutive weeks, and the analyses results provided to the Regional Director as soon as available.

Table 1

Ammonia	.02 mg/l as un-ionized ammonia to be determined from temperature and pH table on page 32 of the "Water Management Goals, Policies, Objectives and Implementation Procedures of the Ministry of the Environment; revised May 1984" "Blue Book"		
Aluminium	not to exceed	0.1	mg/l
Arsenic	not to exceed	0.1	mg/l
Cadmium	not to exceed	.0002	mg/l
Chromium	not to exceed	.1	mg/l
Copper	not to exceed	.005	mg/l
Cyanide	not to exceed	.005	mg/l
Dissolved Oxygen	minimum of	4.0	mg/l at all times
Iron	not to exceed	.3	mg/l
Lead	not to exceed	the following based on alkalinity	
	.005 mg/l	0-20	mg/l as CaCO ₃
	.010 mg/l	20-40	mg/l as CaCO ₃
	.020 mg/l	40-80	mg/l as CaCO ₃
	.025 mg/l	G 80	mg/l as CaCO ₃
Mercury	not to exceed	.0002	mg/l
Nickel	not to exceed	.025	mg/l
pH	6.5 - 8.5		
Phenols	not to exceed	.001	mg/l
Phosphorus (total)	not to exceed	.03	mg/l
Selenium	not to exceed	.1	mg/l
Silver	not to exceed	.0001	mg/l
Zinc	not to exceed	.03	mg/l



Ontario

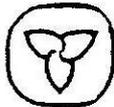
Ministry
of the
Environment

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

- (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 registered 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 opinion 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 Fund.



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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 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 tonne 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 out 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 updating 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.



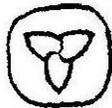
Ministry
of the
Environment

Ontario

PROVISIONAL CERTIFICATE OF APPROVAL WASTE DISPOSAL SITE

The following conditions are additional to the conditions shown on Provisional Certificate
of Approval Number 371203 dated 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 fails 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 required to be retained in the Special Account in order to satisfy 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.



Ontario

Ministry
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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 dated March 30, 1988

26. Any letter of credit provided hereunder shall be issued by a chartered bank doing business in Toronto on such terms and conditions as the Director approves and shall include provision for automatic renewal without further documentation unless the issuing bank has given 60 days notice that it will not be renewed.
27. Whenever the total amount of letters of credit held hereunder is greater than the stated amount which would be held in the Consolidated Revenue Fund required at the time of final close-out as adjusted under these or subsequent conditions, the Director may release such letters of credit or portions thereof as would bring the amount of the letters of credit down to the amount which would be held in the Consolidated Revenue Fund.
28. By December 31, 1988 the Company shall install and use weigh scales to calculate all incoming wastes delivered in a vehicle approved as part of a waste management system.

SCHEDULE "A"

This Schedule "A" forms part of Provisional Certificate of Approval No. A 371203 dated March 30, 1988.

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 & 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.
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.

NOTICE

TO: Tricil Limited
89 Queensway West, Suite 800
Mississauga, Ontario
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:

1. Conditions 1 through 22 and condition 28 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 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
40 St. Clair Ave. West
6th Floor
Toronto, Ontario M4V 1M2

AND

The Director
Section 38, E.P.A.
Ministry of the Environment
135 St. Clair Ave. W.,
Toronto, Ontario M4V 1P5

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



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

Appendix A.1.1

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



Ministry
of the
Environment

Ministère
de
l'Environnement

RECEIVED SEP 11 1991

APPROVALS BRANCH

250 Davisville Avenue
Toronto, Ontario
M4S 1H2

250, avenue Davisville
Toronto (Ontario)
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.

.../2

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.

.../2

Appendix A.1.2

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



TO: NAPANEE
Ontario

Ministry of
Environment
and Energy

Ministère de
l'Environnement
et de l'Énergie

250 Davenport Avenue
Toronto ON M4B 1H8

250, avenue Davenport
Toronto ON M4B 1H8

RECEIVED sep 12 1994

APPROVALS BRANCH
3rd Floor
Tel. (416) 440-3544
Fax (416) 440-6073

September 2, 1994

Laidlaw Waste Systems (Richmond) Ltd.
3410 South Service Road
Burlington, Ontario
L7R 3X8

ATTENTION: Mr. Michael J. Pullen
Regional Manager, Engineering & Compliance

Dear Sir:

Re: Provisional Certificate of Approval No. A 371203

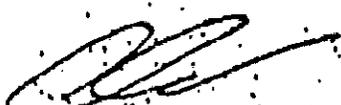
Enclosed is a Notice of amendment of the certificate for the Richmond Township landfill. The certificate has been amended to recognize the operation of a leaf and yard waste composting site within the landfill buffer area.

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 site must be done in accordance with Ontario Regulation 101/94.

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

Yours truly,


A. Dominicki, P.Eng., Acting Supervisor
Waste Sites & Systems Approvals Unit
Industrial Approvals Section

Encl.

cc: J. Bishop - Kingston District Office



TO: Laidlaw Waste Systems (Richmond) Ltd.
3410 South Service Road
P. O. Box 5057
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 waste 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 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.



Ontario

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 management system/waste disposal site is located;*

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

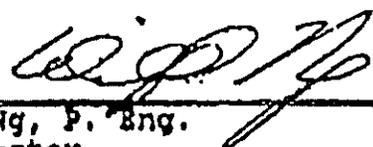
This Notice must be served upon:

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

AND

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

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



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

Doc
Faord
001-9

Ministry of
Environment
and Energy

Ministère de
l'Environnement
et de l'Énergie

250 Davisville Avenue
Toronto ON M4S 1H2

250, avenue Davisville
Toronto, ON M4S 1H2

APPROVALS BRANCH
3rd Floor
Tel. (416) 440-3544
Fax (416) 440-6973

September 11, 1996

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

RECEIVED SEP 20 1996

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

Dear Mr. Pullen:

Re: Provisional Certificate of Approval
No. A 371203

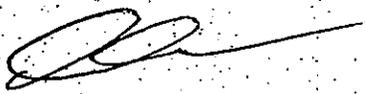
Attached is a Notice of Amendment of the above-noted certificate.

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.

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
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 Environmental Protection Act, R.S.O. 1990, Chapter E-19, you may by written notice served upon me, the Environmental Appeal Board and the Environmental Commissioner, Environmental Bill of Rights, S.O. 1993, Chapter 28, 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.*



Ministry of
Environment
and Energy

Ministère de
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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
M5S 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 Environmental Bill of Rights, 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 handwritten signature in black ink, appearing to read "A. Dominski", written over a horizontal line.

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

Appendix A.1.3

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



Ministry of
Environment
and Energy

Ministère de
l'Environnement
et de l'Énergie

250 Davieville Avenue
Toronto ON M4S 1H2

250, avenue Davieville
Toronto ON M4S 1H2

APPROVALS BRANCH

3rd Floor

Tel. (416) 440-3544

Fax (416) 440-6973

August 1, 1995

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.

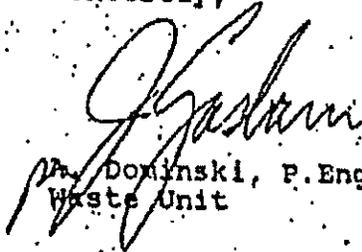
Please note that the Ministry is not satisfied that the recirculation of leachate back into Phases 2 and 3 is an acceptable method of leachate disposal. Therefore, a condition has been imposed which prohibits this and requires Laidlaw to pursue alternative methods of short term leachate management. Please 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.

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,



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

IP/es

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



Ministry of
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and Energy

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":

7. Application for Approval of a Waste Disposal Site, dated May 24, 1995 and signed by Michael Pullen, Director, Environmental Management, Laidlaw Waste Systems (Richmond) Ltd.
8. Letter from Jeff Armstrong, Henderson, Paddon & Associates Limited to I. Parrott, MOEE dated May 30, 1995 re: Development of Landfill Base of Phases IV and V (including attached drawings 8570D-400 to 406, inclusive and 8570D-94-Site).



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and Energy

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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:

4. *The name of the appellant;*
5. *The address of the appellant;*
6. *The Certificate of Approval number;*
7. *The date of the Certificate of Approval;*
8. *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.

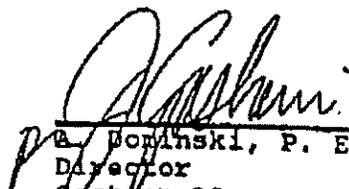
This Notice must be served upon:

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

AND

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 1st day of August, 1995.



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

IP/es

Appendix A.1.4

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



Ministry of the Environment
Ministère de l'Environnement

AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL
WASTE DISPOSAL SITE
NUMBER A 371203
Notice No. 1

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.

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 Environmental Protection Act, R.S.O. 1990, Chapter E-19, as ended, you may by written Notice served upon me, the Environmental Appeal Board and in accordance with section 47 of the Environmental Bill of Rights, 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 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 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 Appeal Board
2300 Yonge St., 12th Floor
Box 2382
Toronto, Ontario
M5S 1E4

AND

The Environmental Commissioner
1075 Bay Street, 6th Floor
Suite 605
Toronto, Ontario
M5S 2B1

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 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 Environmental Bill of Rights, 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



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

TG/

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

Appendix A.1.5

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

CONTENT COPY OF ORIGINAL



Ontario

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 *Site* appearance after closure including side slopes and final contours of the *Site*;
- b. a description of the proposed end use of the *Site*;
- c. 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;
 - 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 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 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 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., Suite 1700
P.O. Box 2382
Toronto, Ontario
M4P 1E4

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 21st day of March, 2007

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

GW/
c: District Manager, MOE Kingston - District
Michael Pullen, Waste Management of Canada Corporation
Michael Walters, Waste Management of Canada Corporation

Appendix A.1.6

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

APR 13 2010 JEA

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 from 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,



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 ✓
 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

**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
Napanea, Ontario
K7R 3L1

Site Location: Richmond Landfill Site
Lot Pt 1, 2, 3, Concession 4, Former Township of Richmond
Town of Greater Napanea, 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 1×10^{-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 be 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 3rd growing season shall be established over the entire landfill cover to control erosion and minimize evapotranspiration. 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
2055	M48-2	M64-2	M97
M3A-1	M48-3	M65-1	M98
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	M101
M4-3	M50-2	M67-2	M102
M5-1	M50-3	M68-1	M103
M5-2	M51-1	M68-2	M104
M5-3	M51-2	M68-3	OW1
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	OW55-i
M12	M54-3	M73	OW55-s
M14	M54-4	M74	OW56-d
M15	M55-1	M75	OW56-i
M16	M55-2	M76	OW56-s
M18	M55-3	M77	OW57
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	
M43-2	M60-4	M89-1	
M43-3	M61-1	M89-2	
M45-1	M61-2	M90-1	
M45-2	M61-3	M90-2	
M45-3	M61-4	M91-1	
M46-1	M62-1	M91-2	
M46-2	M62-2	M93	
M47-1	M62-3	M94-1	
M47-2	M62-4	M94-2	
M47-3	M63-1	M95-1	
	M63-2	M95-2	

Groundwater samples shall be taken from the following wells:

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

2054	B	A, B, E	Semi-annual
2055	B	A, B, E	Semi-annual
M28	O	A	Annual
M29	O	A	Annual
M58-2, M58-3, M58-4	B	A	Annual
M3A-1, M3A-2, M3A-3	B	A	Annual
M4-1, M4-3	B	A	Annual
M4-2	B	A, E	Annual
M42-3	B	A	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	C	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, potassium
METALS: Aluminium, cadmium, chromium, copper, iron, silver
NUTRIENTS: Nitrate, nitrite, Total Organic Carbon, COD, BOD, Ammonia, TKN
OTHER: Mercury, phenols
VOLATILE ORGANIC COMPOUNDS (VOC's): Benzene, toluene, ethylbenzene, xylenes

LIST B:

SELECTED VOC'S:
1,1-dichloroethylene, 1,1-dichloroethane, 1,1,1-trichloroethane, tetrachloroethylene, 1,4-dichlorobenzene
POLYCYCLIC AROMATIC HYDROCARBONS (PAH's):
naphthalene, acenaphthylene, acenaphthene, flourene, anthracene, phenanthrene, flouranthene, pyrene, benzo[a]anthracene, chrysene, 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:

S2, S3, S4R, S5, S7, S8R and S9

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 Kjeldahl
Nitrogen
Total phosphorus, Biochemical Oxygen Demand, Chemical
Oxygen Demand.
OTHER: Cyanide, Mercury, phenols, turbidity, colour, temperature, Total
Suspended Solids.
Total Dissolved Solids
VOLATILE ORGANIC COMPOUNDS: Benzene, toluene, ethylbenzene, xlyenes

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 Environmental Protection Act, 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 Environmental Bill of Rights, 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 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
M5G 1E5

AND

The Environmental
Commissioner
1075 Bay Street, 6th Floor
Suite 605
Toronto, Ontario
M5S 2B1

AND

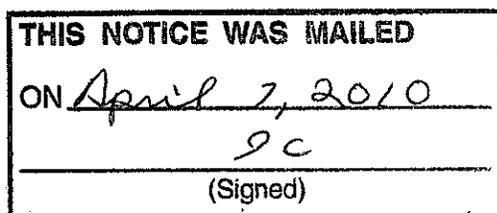
The Director
Section 39, *Environmental Protection Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

* 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

This instrument is subject to Section 38 of the Environmental Bill of Rights, 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



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

GW/

c: 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
Randy Harris, WMCC, Richmond Landfill
Tim Murphy, WMCC
Jeff Armstrong, Henderson Paddon and Associates ✓
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

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



Ministry
of the
Environment

Ministère
de
l'Environnement

RECEIVED SEP 11 1991

APPROVALS BRANCH

250 Davisville Avenue
Toronto, Ontario
M4S 1H2

250, avenue Davisville
Toronto (Ontario)
M4S 1H2

September 4, 1991

Laidlaw Waste Systems (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
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. 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 Protection 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. Region
J.D. Bishop - District Officer, Kingston District Office



Whereas / *Attendu que* LAIDLAW WASTE SYSTEMS (RICHMOND) LTD.

of / *d* BURLINGTON, ONTARIO

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 loi 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:
 - a) "Company" means Laidlaw Waste Systems (Richmond) Ltd., its successors or assignees;
 - b) "Director" means the Director of Approvals Branch, Ministry of the Environment.
2. The Company shall establish and maintain a buffer zone of 150 meters from 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.
3. Spray irrigation shall be carried out in a manner to ensure that spray 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 4th day of September, 1991
DATÉ À TORONTO ce jour d

JC/ec

Director / Directeur



5. The Company shall provide and maintain a fence around the entire land area which will be spray irrigated with leachate.
6. The perimeter fences and gates shall be provided with appropriate signs 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:
 - a) initial pre-irrigation analysis of soil properties and subsequent 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
 - g) chemical characteristics of the spray irrigation effluent
 - h) air quality during spray irrigation events; and
 - i) effects of the effluent on the vegetation.
8. Until the monitoring program required under Condition 7 above is approved 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.
9. Results of all monitoring undertaken in accordance with Condition 7 above 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.



Ontario

Ministry
of the
Environment

Ministère
de
l'Environnement

Notice Avis

TO: Laidlaw Waste Systems (Richmond) Ltd.
3410 South Service Road
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 not occur off-site, that access to the site is restricted and that surface water bodies 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.

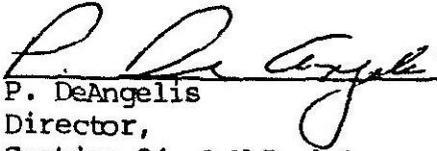
This Notice should be served upon:

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

AND

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.


P. 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.

1. 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.).



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. 3-1720-90-916, dated September 4, 1991, for the construction of a landfill leachate collection, treatment and disposal system at the Laidlaw Landfill located in part of Lots 1, 2, and 3, Concession 4 in the Township of Richmond is hereby amended to indicate compliance with Condition No. 7 of the Certificate as specified below.

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.

The proposed program for monitoring of the effects of leachate application, as outlined in the above documents, has now been reviewed and found acceptable.

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

This Notice shall constitute part of the approval issued under Certificate of Approval 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 Ontario Water Resources Act, R.S.O. 1990, Chapter O.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.



ntario

Ministry of
Environment
and Energy

Ministère de
l'Environnement
et de l'Énergie

NOTICE
Page 2 of 2

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 appellants.

This Notice must be served upon:

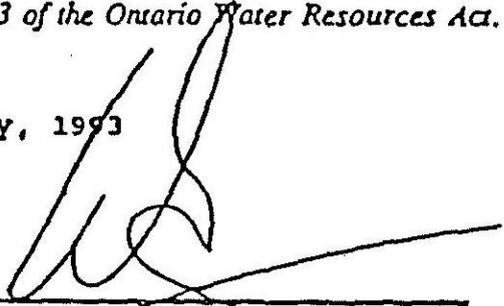
The Secretary,
Environmental Appeal Board,
12 St. Clair Avenue West,
Suite 502,
Toronto, Ontario.
M4V 1N3

AND

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.

WEL AT TORONTO this 23rd day of July, 1993



W. Gregson, P. Eng.
Director
Section 53
Ontario Water Resources Act

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

/fn

Appendix A.3

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

RECEIVED MAR 16 1992

APPROVALS BRANCH

Tel. (416) 440-3573
Fax. (416) 440-6973

250 Daviville Avenue
Toronto, Ontario
M4S 1H2

250, avenue Daviville
Toronto (Ontario)
M4S 1H2

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: Certificate 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 308 under the Environmental Protection Act.

However, while implementation of the spray irrigation contingency 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 3Y8

Located at: Part of Lots 1, 2 and 3
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.

SIGNED AT TORONTO this 11th *day of* March, 1992

THIS IS A TRUE COPY OF
THE ORIGINAL CERTIFICATE
SIGNED BY
P. DEANGELIS, P. ENG.

MAILED ON MAR 12 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

The 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.
2. 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

Certificate of Approval for Industrial
Sewage Works No. 5268-7E8LJW

RECEIVED

AUG 22 2008

55706



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 m³ between the elevations of 122.4 m ASL and 124.4 m ASL and active storage capacity of 7,620 m³ between the elevations of 124.4 m ASL and 124.73 m ASL (overall total storage capacity of 27,262 m³);
- 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:

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.

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 m³ 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 m³ 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 m³ 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 disposed 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 m³ 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 m³ 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.

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.
7. 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.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

"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. GENERAL PROVISIONS

- (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 Business Names Act, 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 Corporations Information Act, 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. BY-PASSES

- (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:

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 Daphnia 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 *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

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	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	
Acute Lethality - Daphnia magna	Zinc	
Acute Lethality - Rainbow Trout		

9. OPERATION AND MAINTENANCE

- (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
- (c) the volume of contaminated stormwater disposed off-site, the date, and the name of the receiving sewage treatment plant;

IV - GENERAL

10. REPORTING

- (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 *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.

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 *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 Ontario Water Resources Act, 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 Ontario Water Resources Act, 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.

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*
Environmental Review Tribunal
655 Bay Street, 15th Floor
Toronto, Ontario
M5G 1E5

AND

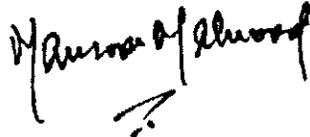
The Director
Section 53, *Ontario Water Resources Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

* 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

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

THIS CERTIFICATE WAS MAILED
ON <u>Aug. 19, 2008</u>
<u>N.P.</u>
(Signed)



Mansoor Mahmood, P.Eng.
Director
Section 53, Ontario Water Resources Act

SHV

c: District Manager, MOE Kingston - District
Jeff Armstrong, P.Eng., Henderson Paddon & Associates Limited ✓

Appendix A.5

Certificate of Approval No. A710003 (Soil
Recycling)



CERTIFICAT D'AUTORISATION PROVISOIRE
DE DÉCHARGE

Provisional Certificate Number A710003
Certificat provisoire no.

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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

..ll in accordance with the plans and specifications:

1. Application for a Certificate of Approval for a Waste Disposal Site (Processing) dated August 30, 1993.
2. 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.

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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.
6. 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.
7. 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.

8. Ontario Ministry of Environment and Energy Provisional Certificate of Approval for a Waste Management System A840681 dated March 18, 1992, or as amended.
9. Ontario Ministry of Environment and Energy Certificate of Approval (Air) Number 8-3212-88-919 dated April 23, 1992, or as amended.

located in: Township of Richmond
Part of Lot 2, Concession IV
(Beechwood Road)

and is subject to the following definitions and conditions:

Definitions:

"Certificate" means the entire certificate of approval including its schedules, if any, issued in accordance with Section 27, Part V of the Environmental Protection Act;

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"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, employees, 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

1. 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.

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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:

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- (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.

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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.

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(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.

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(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.

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- (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.
13. 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:

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- i) 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.

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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.
6. Condition 11 is to provide both the operator and the Ministry of Environment and Energy with an assessment of the waste recycling site.
7. 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.
8. 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.

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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; and 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 days 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;
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 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.

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This notice should be served upon:

The Secretary
Environmental Appeal Board
112 St. Clair Avenue West
5th Floor
TORONTO, Ontario
M4V 1N3

AND

The Director
Section 39, E.P.A.
Ministry of Environment and Energy
133 Dalton Avenue, Box 820
KINGSTON, Ontario
K7L 4X6

ated at Kingston this 20th 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.6

Certificate of Approval (Air) No. 8-4078-
99-006 (Flare System)



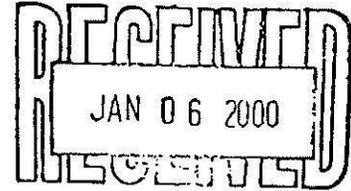
Ministry
of the
Environment

Ministère
de
l'Environnement

*Jack Vanette
Landfill Operating Record.*

CERTIFICATE OF APPROVAL
AIR
NUMBER 8-4078-99-006
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Canadian Waste Services Inc.
R.R. #6 Beechwood Road
Napanee, Ontario
L5C 1T7



Located at:

Part of Lots 1, 2 and 3, Concession 1V
Town of Greater Napanee (formerly the Township of Richmond)
County of Lennox and Addington, Ontario

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

one (1) enclosed flare system, used to incinerate the landfill gases from a landfill gas collection system at a maximum volumetric gas flow rate of 0.28 standard cubic metre per second with the combustible gas levels ranging from 30 to 55 percent by volume. The flare has a maximum heat input of 19 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., signed by Michael Walters, dated June 11, 1999; an acoustical report prepared by Hugh Williamson, dated November 26, 1999. and the other supporting information prepared by Comcor Environmental.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

DEFINITIONS

1. For the purpose of this Certificate of Approval:

- (1) "Act" means the Environmental Protection Act;
- (2) "Certificate" means this Certificate of Approval, including Schedule "A", issued in accordance with Section 9 of the Act;
- (3) "Company" means Canadian Waste Services Inc.;
- (4) "CEM System" means the continuous monitoring and recording system used to optimize the operation of 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;

- (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.

- 2. The Company shall ensure that the noise emissions from the Equipment comply with the limits set in Publication NPC-232.
- 3. 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.

The Company shall ensure that the Equipment, including CEM, is properly operated and maintained at all times. The Company shall, as a minimum:

- (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 suppliers;
 - (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
 - (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

5. 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 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;
 - (c) a description of the measures taken to address the cause of the incident and to prevent a similar occurrence in the future; and
 - (d) 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 No. 1 is included to define the special terms that are used throughout the Certificate.
2. Condition No. 2 is included to provide the minimum performance requirement considered necessary to prevent an adverse effect resulting from the operation of the Equipment.
3. Condition Nos. 3 and 4 are included on the Certificate to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the Act, the regulations and this Certificate.



4. Condition No. 5 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 be verified.

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, the Environmental Appeal Board and in accordance with Section 47 of the Environmental Bill of Rights, 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 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 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*,
Environmental Appeal Board,
2300 Yonge St., 12th Floor,
P.O. Box 2382,
Toronto, Ontario.
M4P 1E4

The Environmental Commissioner,
1075 Bay Street,
Suite 605,
6th Floor,
Toronto, Ontario.
M5S 2B1

The Director,
Section 9, Environmental Protection Act,
Ministry of the Environment,
2 St. Clair Avenue West, 12A Floor,
Toronto, Ontario.
M4V 1L5

* 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 Web Site: www.ert.gov.on.ca



Ministry of the Environment
Ministère de l'Environnement

CERTIFICATE OF APPROVAL

AIR

NUMBER 8-4078-99-006

Page 5 of 5

Ontario

This instrument is subject to Section 38 of the Environmental Bill of Rights, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek to appeal within 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.

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

DATED AT TORONTO this 21st day of December, 1999.

S. Klose, P. Eng.,
Director,
Section 9,
Environmental Protection Act.

AK/an

c:-District Manager, MOE Kingston District Office

SCHEDULE "A"

This Schedule "A" forms part of
Certificate of Approval (Air) No. 8-4078-99-006

PARAMETER: TEMPERATURE

LOCATION:

The sample point for the Continuous Temperature Monitor shall be located 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 Temperature Monitor shall meet the following minimum performance specifications for the following parameters.

<u>PARAMETERS</u>	<u>SPECIFICATION</u>
1. Type:	shielded "K" type thermocouple, or equivalent
2. Accuracy:	± 1.5 percent of the minimum gas temperature

DATA RECORDER:

The data recorder must be capable of registering continuously the measurement of the monitor without a significant loss of accuracy and with a time resolution of 1 minute or better.

RELIABILITY:

The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 95 percent of the time for each calendar quarter.

Appendix B

Drawing 8570-2010
November 2010 Existing Conditions

Appendix C

Commercial and Industrial Accounts

COMMERCIAL AND INDUSTRIAL ACCOUNTS - 2010

Strathcona Paper
Kimco Steel
Eugene Craig
Drain-All Limited
Curran Recycle
1610107 Ontario Limited
Don Hart Construction
Jensen Building Limited
Gheran Maintenance
Con-Tank Installations
Gheran Maintenance
Sendex Environmental
Kiley Paving Ltd.
Brander Environmental
North Key Construction
Dafoe Roofing Ltd
Teddington Ltd
E.I. Dupont Canada Co
AME Environmental Inc
Suncor Energy
Westendorp Demolition
Cambium Environmental
Clean Harbors
Gordon Barr Ltd
Quantum Remediation Dv
K. Mulrooney Trucking
Drain-All Ltd
Focus Environmental
Dekeyser Excavating Ltd
AME Environmental Inc
Concord Carriers

Appendix D

Complaint Forms

2010 Complaint Summary

	Date	Type
1	9-Jun	Odour
2	10-MAR	Odour
3		
4		

COMPLAINT LOG (FO-02)

A. ADMINISTRATIVE

2010-01

Complaint Number (year-number, Ex. 2001-001):

Certificate of Approval/Permit Number for site:
(if none, go to Section 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	MAR 10 2010 11:11 AM
2. Name of Complainant	CRAIG DOBIECH
3. Address of Complainant	MOE KINGSTON
4. Telephone Number of Complainant	613-549-4000 EXT 2670
5. Relationship of Complainant	
6. Employee receiving complaint (name):	RANDY HARRIS
7. Type of complaint	(Odour) Noise / Litter / Dust / Vermin / Other:
8. Nature of complaint (details):	MULTIPLE ODOUR COMPLAINTS
9. Precipitation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	10. Wind Direction:
11. Precipitation Type & Amount:	12. Wind Speed:

C. INVESTIGATION

1. Were there any unusual events/occurrences around the time of the complaint that may have contributed to the complaint? Yes No

2. If yes, describe (Ex. high winds creating litter, unusual waste stream creating odours, etc):

3. If the site-specific nuisance control equipment/procedures were not operational describe the problem and when it was corrected: *FLARE DOWN DUE TO SYSTEM PROBLEMS*

4. Where the complaint was for odours, was:

- a) An odour suppression system available for use at the site? Yes No
- b) The suppression system operational? Yes No

Waste Management of Canada Corporation		Page 1 of 2
Document Name: Complaint Log		Document No.: FO-02
Controlled by: Environmental Protection Canada	Effective Date: January 1, 2010	Revision number: 02
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

D. CORRECTIVE ACTION

1. What actions were taken to resolve the source of the complaint. Describe: <i>INSTALLING PARTS TO FLARE</i>
2. When were these actions taken (date/time): <i>AT TIME OF COMPLAINT</i>
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:	<i>MAR 10/2010</i>
Who contacted the complainant (name/title):	<i>RANDY HARRIS</i>
How was the complainant contacted?	Person / Telephone / Letter (attach copy)
Complainant Response:	<i>EMAIL</i>

F. FORM COMPLETION

Form completed by: Name:	<i>L BLACKBURN</i>
Title:	<i>SCALE OPERATOR</i>
Date completed:	<i>MAR 08/2011</i>

Waste Management of Canada Corporation		Page 2 of 2
Document Name: Complaint Log		Document No.: FO-02
Controlled by: Environmental Protection Canada	Effective Date: January 1, 2010	Revision number: 02
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

Harris, Randy - BEN

From: Dobiech, Craig (ENE) [Craig.Dobiech@ontario.ca]
Sent: Wednesday, March 10, 2010 11:11 AM
To: Harris, Randy - BEN
Subject: RE: Multiple odour complaint

Please let me know when the flare is down, so I know, thanks.

Craig Dobiech
Senior Environmental Officer
Ministry of the Environment
Kingston District Office, Eastern Region
1259 Gardiners Road, Unit 3
Kingston, Ontario K7M 5S8
ph. (613)549-4000 ext. 2670
fx. (613)548-6920
craig.dobiech@ontario.ca
Spills Action Centre 1(800)268-6060

From: Harris, Randy - BEN [mailto:rharris@wm.com]
Sent: March 10, 2010 11:06 AM
To: Dobiech, Craig (ENE)
Subject: RE: Multiple odour complaint

Craig...We have had the flare down on numerous occasions during this time period due to system problems...We have just received additional parts and are installing them at this time.....I'm sorry I did not e-mail this info to you earlier but I was lead to believe the problem was soon corrected. My apologies.....As soon as the problem is definitely corrected I will inform you...thanks

Randy Harris
Site Manager

W Richmond Landfill
1271 Beechwood Rd
Napane, ON
K7R 3L1

613-388-1057

From: Dobiech, Craig (ENE) [mailto:Craig.Dobiech@ontario.ca]
Sent: Wednesday, March 10, 2010 10:42 AM
To: Harris, Randy - BEN
Subject: Multiple odour complaint

Randy. Over the past week (May 5th and 9th specifically, in the evening and early morning), I have received a number of odour complaints from a number of different people. Some on Selby Road, Deseronto Road, and near the 401. Can you please review, and provide me with an update on the operation of the gas flare, collection system, and any other areas of the operation that may be causing these odours? Thank you.

Craig Dobiech
Senior Environmental Officer
Ministry of the Environment
Kingston District Office, Eastern Region

1259 Gardiners Road, Unit 3
Kingston, Ontario K7M 5S8
ph. (613)549-4000 ext. 2670
fx. (613)548-6920
craig.dobiech@ontario.ca
Spills Action Centre 1(800)268-6060

Waste Management recycles enough paper every year to save 41 million trees. By not printing this email, you can help save even more.

COMPLAINT LOG (GM-12-F)

2010 - 02

A. ADMINISTRATIVE

Complaint Number (year-number, Ex. 2001-001):
Certificate of Approval/Permit Number for site: (If none, go to Section 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)
<i>Note: it is the Site Manager's responsibility to ensure compliance with C. of A./Permit conditions.</i>

B. SUMMARY

1. Date and Time of Complaint	June 9/2010
2. Name of Complainant	Craig Dobiech
3. Address of Complainant	MOE Kingston
4. Telephone Number of Complainant	549-7006
5. Relationship of Complainant	
6. Employee receiving complaint (name):	Randy Harris
7. Type of complaint	Odour Complaint
8. Nature of complaint (details):	Odour complaint to the SW of Landfill.
9. Precipitation: <input checked="" type="radio"/> Yes <input type="radio"/> No	10. Wind Direction: SW
11. Precipitation Type & Amount:	12. Wind Speed:
<i>Note: Where the Complaint is from a Regulatory Agency complete a WM Environmental Incident Alert (GM-11-F1) (See Reporting Procedure (GM-11-P) for details.)</i>	

C. INVESTIGATION

1. Were there any unusual events/occurrences around the time of the complaint that may have contributed to the complaint?	Yes <input type="radio"/> No <input checked="" type="radio"/>
2. If yes, describe (Ex. high winds creating litter, unusual waste stream creating odours, etc):	
3. If the site-specific nuisance control equipment/procedures were not operational describe the problem and when it was corrected:	
4. Where the complaint was for odours, was	
a) there an odour suppression system available for use at the site?	<input checked="" type="radio"/> Yes <input type="radio"/> No
b) the suppression system operational?	<input checked="" type="radio"/> Yes <input type="radio"/> No

Waste Management of Canada Corporation		Page 1 of 2
Document Name: Complaint Log		Document No.: GM-12-F
Controlled by: T. Murphy	Effective Date: January 1, 2005	Revision number: 005
Approved by: T. Murphy	Expiry Date: December 31, 2007	Next Review Date: by December 31, annually

D. CORRECTIVE ACTION

1. What actions were taken to resolve the source of the complaint. Describe: <i>Randy Harris investigated and all systems were functioning 100%</i>
2. When were these actions taken (date/time): <i>June 9/2010</i>
3. What measures have been employed or will be employed to prevent any future reoccurrence? Describe:

E. FOLLOW-UP

<i>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.</i>	
Date and time complainant was contacted to provide details of the investigation and to describe any corrective and/or preventative measures:	<i>June 9/10</i>
Who contacted the complainant (name/title):	<i>R. Harris</i>
How was the complainant contacted?	<i>Email</i>
Complainant Response:	

F. FORM COMPLETION

Form completed by: Name:	<i>L. Blackburn</i>
Title:	<i>Scale Operator</i>
Date completed:	<i>June 10/2010</i>

Waste Management of Canada Corporation		Page 2 of 2
Document Name: Complaint Log		Document No.: GM-12-F
Controlled by: T. Murphy	Effective Date: January 1, 2005	Revision number: 005
Approved by: T. Murphy	Expiry Date: December 31, 2007	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

Did you call?

Page 1 of 2

Blackburn, Linda - NAP

From: Harris, Randy - BEN
Sent: Wednesday, June 09, 2010 3:36 PM
To: Dobiech, Craig (ENE)
Cc: Blackburn, Linda - NAP
Subject: RE: Odour complaint

Complaint investigated by R Harris
All systems were functioning 100%
No gas leaks noted on Monday June 7th
Inquired of other neighbours to SW and no landfill odours noted by them on Sunday
All trash was covered, no composting windrows are active
It was a cloudy low pressure day so other non landfill odours may have been noted
Winds were to the SW
We will report any mal function to gas collection system

(Linda, please record, tx)

Randy Harris
Site Manager

WM
Richmond Landfill
Beechwood Road Environmental Centre

613-388-1057

From: Dobiech, Craig (ENE) [mailto:Craig.Dobiech@ontario.ca]
Sent: Wednesday, June 09, 2010 2:04 PM
To: Harris, Randy - BEN
Subject: Odour complaint

Sunday, June 6th, time unknown, winds to the SW. Please follow-up, thanks.

Craig Dobiech
Senior Environmental Officer
Ministry of the Environment
Kingston District Office, Eastern Region
1259 Gardiners Road, Unit 3
Kingston, Ontario K7M 5S8
ph. (613)549-4000 ext. 2670
fx. (613)548-6920
craig.dobiech@ontario.ca
Spills Action Centre 1(800)268-6060

From: Harris, Randy - BEN [mailto:rharris@wm.com]
Sent: June 09, 2010 1:46 PM
To: Dobiech, Craig (ENE)
Subject: Did you call?

6/10/2010

Appendix E

Provincial Officer's Order and WM
Response

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

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

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 **Compliance Date** 2011/01/28
(YYYY/MM/DD)

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** ~~2011/01/11~~
(YYYY/MM/DD)

Upon the receipt of the Provincial Officer's approval, implement the recommendations in the approved Written Report.

Item No. 3 **Compliance Date** ~~2011/01/11~~
(YYYY/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 valve 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:
 1. mail
 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

and

Director (Provincial Officer Orders)
Ministry of the Environment
Kingston District Office
1259 Gardiners Rd, Unit 3
PO Box 22032
Kingston, ON
K7M 8S5
Tel: (613)549-4000

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 Tribunal by:

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.
- 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.

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
(YYYY/MM/DD)

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 valve 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



WASTE MANAGEMENT

1271 Beechwood Road
Napanea, ON K7R 3L1
(613) 388-1057
(613) 388-2785 Fax

Date: January 28, 2011

To: Craig Dobiech
Senior Environmental Officer
1259 Gardiners Rd, Unit 3
Kingston, Ontario

From : Randy Harris
Site Manager
Waste Management of Canada Corporation
1271 Beechwood Rd
Napanea, Ontario, K7R 3L1

Re: Provincial Officer's Order, Order Number 7430-8CYPVP, Incident Report No. 7048-8CUL2A

I am writing to you in response to the above mentioned Provincial Officer's Order dated, January 11, 2011.

Item #1

- Steps to be taken to improve the frequency and efficiency of the inspections of the discharge control structure.
 - The discharge structure will be checked each work day to verify the status of discharge from the pond.
 - No discharge.
 - Approved discharge.
 - Unapproved discharge.
 - Inspection report will be sent to the MOE the same day the inspection is performed.
 - Effective date: January 12, 2011
 - Corrective action will be taken to stop any unapproved discharge.
 - Three staff members are assigned the full responsibility for this inspection.
- Review of the effectiveness of the current maintenance and inspection program of the storm water management facility, was completed January 20, 2011.
- Proposed recommendations for improvements to the maintenance and inspection program of the storm water management facility.

*From everyday collection to environmental protection, Think Green® Think Waste Management.
Cueillette quotidienne et protection de l'environnement : pensez vert® penzez Waste Management.*

- Install a sensor / warning light system in the discharge structure to identify when the structure is discharging.
 - Monitor the warning light daily (visible from the scale house)
 - 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.
- 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.
 - Effective January 28, 2011.

Item #2

- 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.

Item #3

- 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.

Item #4

- By February 28th, 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,

A handwritten signature in black ink that reads "Randy Harris". The signature is written in a cursive, flowing style.

Randy Harris
Site Manager
Waste Management
Richmond Landfill

Appendix F

Waste Refusal Form

WASTE DISCREPANCY FORM (CGW-02)

Discrepancy Number (Year-Number):

A. WM SITE INFORMATION

Address:

Contact Name: R HARRIS	Title: LF MANAGER
Phone No.: 613-388-1057	Fax:

B. GENERATOR &/OR WASTE HAULER INFORMATION

Name of Waste Stream:

Waste Profile Number (if applicable):

Address of Generator:

Contact Name:	Title:
Phone No.:	Fax:

Name of Hauler:

Address of Hauler:

Contact Name:	Title:
Phone No.:	Fax:

C. DISCREPANCY INFORMATION

Date Waste Received:

Date Discrepancy Noted: **AUG 16 / 10 2:30**

Discrepancy Identified by (name): **REFRIGERATER REJECTED**

Reason for Discrepancy:

**BREY Pw customer did not want to pay min charge
 fuz was not tagged in fuon
 Ok did not appear angry
 he just drove away**

Waste Management of Canada Corporation		Page 1 of 2
Document Name: Waste Discrepancy Form		Document No.: CGW-02
Controlled by: T. Murphy	Effective Date: January 1, 2006	Revision number: 01
Approved by: T. Murphy	Expiry Date: December 31, 2009	Next Review Date: by December 31, annually

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D. PERSONS CONTACTED	
Contact Name:	Title:
Company/Ministry Name:	
Phone No.:	Fax:
Comments:	
Contact Name:	Title:
Company/Ministry Name:	
Phone No.:	Fax:
Comments:	

E. CORRECTIVE ACTION TAKEN
<i>Andrew Martin called witness guy pu going into quarry & returning empty & called police</i>

F. PREVENTATIVE MEASURES (if applicable)
<i>Police came to Richmond LF went to quarry with Randy</i>

G. RESOLUTION AND REVIEW	
Date Situation Resolved:	
Form completed by:	
Title:	
Form completion date:	
Form reviewed by:	
Title:	
Form review date:	

Waste Management of Canada Corporation		
Document Name: Waste Discrepancy Form		Page 2 of 2 Document No.: CGW-02
Controlled by: T. Murphy	Effective Date: January 1, 2006	Revision number: 01
Approved by: T. Murphy	Expiry Date: December 31, 2009	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

Appendix G

Letters of Approval for Alternate Leachate Treatment Sites



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: wpcc@eagle.ca

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 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 to.

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,

Robert Landry

Cc	Jan Roger P.eng	Director of Operations
	Ted MacDonald P.eng	Manager of Engineering & Environmental Services
	Ray Davis	Environmental Technician
	Plant File	

TELEPHONE 613-968-6481
FAX 613-967-3262



PUBLIC WORKS DEPARTMENT
CITY HALL
169 FRONT STREET
BELLEVILLE, ONTARIO
K8N 2Y8

FILE NO.

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

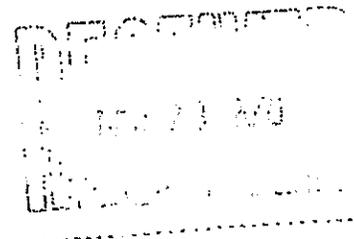
Dear Mr. Ford:

**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 its 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.

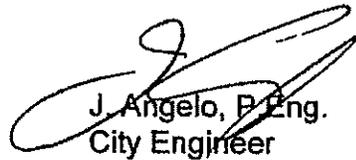
... 2



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. Eng.
City Engineer

JA:dh

cc Mr. Jeff DeMarsh

Ministry of the
Environment

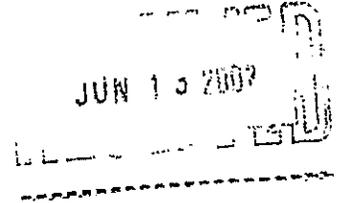
Bay View Mall
470 Dundas St E
Belleville ON K8N 1G1
Telephone: (613) 962-9208
Fax: (613) 962-6809

Ministère de
l'Environnement

Centre commercial Bay View
470 rue Dundas est
Belleville ON K8N 1G1
Téléphone: (613) 962-9208
Télécopieur: (613) 962-6809



85706
Ontario



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,

A handwritten signature in cursive script, appearing to read "D.E. Graham".

D.E. Graham
Senior Environmental Officer
Abatement Section
Eastern Region

