

# NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT



## NORTH RENFREW LANDFILL OPERATIONS BOARD

Laurentian Hills Municipal Building  
34465 Hwy 17, R.R. #1, Deep River, Ontario KOJ 1P0

Telephone: 613-584-9194

Fax 613-584-3285

Email: [nrlob@town.laurentianhills.on.ca](mailto:nrlob@town.laurentianhills.on.ca)

Web: [www.magma.ca/~nrwmb/](http://www.magma.ca/~nrwmb/)

2006 ANNUAL STATUS REPORT

NORTH RENFREW LANDFILL SITE

PROVISIONAL CERTIFICATE OF APPROVAL NO. A 420010

Submitted to:

Senior Environmental Officer  
Ministry of Environment  
Ottawa District Eastern Region  
2435 Holly Lane  
Ottawa, Ontario K1V 7P2

Prepared by:

North Renfrew Landfill Operations Board

and

Robinson Consultants Inc.

March 2007

### DISTRIBUTION:

2 copies - Ministry of Environment, Ottawa  
1 copy - Robinson Consultants Inc.  
4 copies - North Renfrew Landfill Operations Board  
1 copy - Site Liaison Committee  
1 copy - AECL  
2 copies - Municipal Files  
3 copies - Libraries

# NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

## **Table of Contents - PART A**

	Page
<b>EXECUTIVE SUMMARY</b>	<b>5</b>
<b>1.0 INTRODUCTION</b>	<b>6</b>
<b>2.0 PURPOSE OF ANNUAL REPORT</b>	<b>7</b>
<b>3.0 SUMMARY OF SITE CONDITIONS</b>	<b>8</b>
3.1 GUIDELINES FOR OPERATIONS (CERTIFICATE OF APPROVAL AND AMENDMENTS)	8
3.2 2006 VARIANCES FROM ITEM 1 AND ITEM 7 IN APPENDIX "A"	26
3.3 WASTE LANDFILLED DURING 2006	29
3.4 SITE CAPACITY AND LANDFILL LAYOUT	29
3.5 REMAINING SITE CAPACITY AND SITE LIFE	29
3.6 SUMMARY OF LANDFILL OPERATIONS IN 2006	34
3.7 PROPOSED CHANGES TO LANDFILL OPERATIONS FOR 2007	35
<b>4.0 HYDROGEOLOGICAL MONITORING FOR 2006</b>	<b>35</b>

# **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

<b>5.0 WASTE DIVERSION AND WASTE REDUCTION</b>	<b>36</b>
5.1 LIST OF WASTE DIVERSION AND WASTE REDUCTION INITIATIVES	36
5.2 WASTE DIVERSION/RECYCLING DETAILS	36
5.3 STATUS OF WASTE DIVERSION INITIATIVES	38
5.4 WASTE DIVERTED AND RECYCLABLE MATERIALS RETAINED AT 2006 YEAR-END	39

---

<b>6.0 OTHER ISSUES</b>	<b>41</b>
6.1 SITE LIAISON COMMITTEE TERMS OF REFERENCE AND ANNUAL REPORT	41
6.2 PLANNING FOR FUTURE WASTE DISPOSAL	58
6.3 2006 COMPLAINTS AND COMPLAINTS PROCEDURE	58
6.4 MOE INSPECTIONS AND CORRESPONDENCE	61

---

<b>7.0 RECOMMENDATIONS</b>	<b>63</b>
----------------------------	-----------

---

<b>8.0 LIMITATIONS AND USE OF REPORT</b>	<b>64</b>
--	-----------

---

# NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

## LIST OF TABLES

TABLE 1	HISTORIAL WASTE QUANTITIES, REMAINING VOLUME AND YEARS TO CLOSURE	30
TABLE 2	LIFT CAPACITY	31
TABLE 3	CONDITION OF FACILITIES	32
TABLE 4	RECYCLING PROGRAMS - 2006	37
TABLE 5	WASTE DIVERSION INITIATIVES - 2006	38

---

## APPENDIX A: FIGURES

FIGURE A-1	Location Map showing the Site within the Service Area
FIGURE A-2	Site Map
FIGURE A-3	Facility Layout Plan
FIGURE A-4	Landfill Design Base Grade Contours
FIGURE A-5	Design Waste Contours
FIGURE A-6	Lift Development and Design Sections
FIGURE A-7	Waste Contours 2006
FIGURE A-8	Waste Sections 2006
FIGURE A-9	Waste Filling Concept
FIGURE A-10	Daily Landfilling Procedure

---

## **PART B: Baggs Road 2006 Monitoring Report - Robinson Consultants**

# NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

## EXECUTIVE SUMMARY

---

The Town of Deep River and the Town of Laurentian Hills are located in the northern portion of the County of Renfrew Ontario, in the Ottawa Valley. The North Renfrew Landfill Operations Board operates a 25.92-hectare landfill site property on Lot 5, Concession 11 in the Town of Deep River, Renfrew County, under the Ministry of the Environment (MOE) Certificate of Approval (C of A) No. A 420010. A condition of the C of A requires the Board to submit, by March 31 of each year, an annual status report for the previous year's operation of the site. The Landfill Site services a population of about 7,600.

The landfill design waste capacity including daily cover is a total of 191,250 m<sup>3</sup>, which was originally estimated to last 25 years. This is 7,650 m<sup>3</sup> per year. Approximately 6,600 m<sup>3</sup> of waste and daily cover was landfilled during 2006. The total volume of waste and daily cover deposited to date is 32,829 m<sup>3</sup>. The remaining capacity is 158,421 m<sup>3</sup>. From the average fill rate during 2004, 2005, 2006 and recent survey data, the estimated remaining life of the site is 24 years. A November 2005 survey of the landfilled area indicates that a small volume of waste had been placed outside of the approved footprint on the south side of Phase 1. The small volume of waste was examined in May 2006 and was determined to be a pile of native soil that was being temporarily stored adjacent to the landfilling area for use as future top cover.

Waste diversion has been increased during 2004, 2005 and 2006 by a weekly pickup of recyclable cardboard and by diversion of construction and demolition waste from the Baggs Road Site to the Miller Road Site, which is operated by the Town of Deep River.

An MOE Site Inspection was conducted on January 23, 2007. Four points of section 6.0 "OTHER INSPECTION FINDINGS" in the "Solid Non-Hazardous Waste Disposal Site Inspection Report" dated February 1, 2007 have been addressed by the Board and are included in this Annual Status Report.

From the same Site Inspection section 4.0, point five of the "Hazardous Waste Transfer Processing Inspection Report" states "The 2005 Annual Status Report does not provide sufficient information regarding the quantity of hazardous waste received and transferred from the HHW." Section 5.0 of that Report states "The 2006 Annual Status Report to be provided to the Ministry no later than March 31, 2007 must contain a detailed quantification of the hazardous waste received and transferred from the site in the previous reporting year." The Board has addressed this required action and directed the Coordinator to add the required information to the 2006 Annual Status Report. Details of these quantifications are presented in section 5.4 parts f., g., and h. of this Report.

# NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

## 1.0 Introduction

---

The Towns of Deep River and Laurentian Hills are located in the Ottawa Valley adjacent to the Ottawa River in the County of Renfrew. The combined population of both Towns is about 7,600.

The North Renfrew Landfill Operations Board serves the two Towns by operating a 25.92 hectare Landfill Site on Lot 5, Concession 11 in the Town of Deep River. The Site is operated under the Ministry of the Environment (MOE) Certificate of Approval No. A 420010.

## **2.0 Purpose of Annual Report**

---

The purpose of this annual report is to satisfy Condition 55 of the May 28, 1999 Provisional Certificate of Approval No. A 420010. It states that a status report on the monitoring of the Landfill during the previous calendar year should be submitted to the Regional Director by March 31<sup>st</sup> of each year.

The report should include a location map, a site plan which shows the Site Boundaries, the fill area and buffer areas, the benchmark for the contour elevation survey, existing contours of the Site, the areas of excavation in the previous year, the areas of the Site completed to final grade, areas still to be completed to final grade, areas with completed final cover, the portions of the interim and final cover which have been vegetated or seeded, all surface water bodies and works, all significant landmarks, all nearby dwellings and groundwater users, location of all monitoring points, details of any works installed in the previous calendar year, a cross section which includes the Site footprint area, an update on any operating difficulties encountered, a report on types and volumes of waste diverted from disposal in the footprint by recycling from the Site, a report on the variances from Item 1 and Item 7 in Schedule "A" and a summary of any complaints made regarding Site operations and the Board's response.

Activities relating to hydrogeology, groundwater and surface water monitoring and compliance issues are addressed by Robinson Consultants in Part B - Baggs Road 2006 Monitoring Report. The Monitoring Report includes an interpretation of the surface water monitoring results including an assessment of the surface water quality at the Site boundaries with respect to the Provincial Water Quality Objectives, an assessment of the adequacy of the Attenuation Zone, and an assessment of the physical condition of the surface water monitoring installations. Included is an interpretation of the monitoring results by an experienced hydrogeologist including text, maps and diagrams sufficient to characterize the Site hydrogeology, documentation of the ground water sampling protocol with a description of the quality assurance and quality control measures and a description of any problems encountered during the sampling runs which may have impacted the reliability of analytical results. Also included is a presentation of data in a format that is easy to follow including presentation of all analytical results from the reporting period and a summary of analytical results from previous sampling in a tabular form. There is also an assessment of whether or not the Board is operating the Site in a manner consistent with the conditions of the C of A, an assessment every fifth year of the contingency plan, and recommendations respecting any proposed changes to the surface water or ground water programs or any repairs required to the monitoring well network, the operation of the Site and the requirement for any remedial works or contingency actions based on the monitoring results or operation of the Site.

### **3.0 SUMMARY OF SITE CONDITIONS**

---

#### **3.1 GUIDELINES FOR OPERATIONS (CERTIFICATE OF APPROVAL AND AMENDMENTS)**

The North Renfrew Landfill Operations Board must operate the North Renfrew Landfill Site according to the conditions of the May 28, 1999 Certificate of Approval (C of A) and subsequent notices between 1999 and 2006. Clear direction on duties imposed by the MOE is thus given to the Board for operating the Landfill Site.

The following items summarise the five changes made to the 1999 certificate of Approval to December 31, 2006.

- July 9, 2001, the MOE amended the C of A - completed and revoked Condition 14 and letter and attachments added to Schedule A of the C of A.
- February 11, 2002, the MOE amended the C of A - Condition 9 and 10 were revoked and replaced to lower both the top and bottom contours by one metre.
- April 2, 2003, the MOE amended the C of A - Condition 26 was revoked and replaced to allow waste to be disposed of on statutory holidays.
- July 29, 2004, the MOE amended the C of A by changing the name of the Board to the North Renfrew Landfill Operations Board and by adding Conditions 65, 66, 67 and 68 to allow the use of Alternate Daily Cover at the Landfill. Items (9), (10) and (11) were added to Schedule "A".
- August 1, 2006, the MOE amended the C of A – Definition (j) and Conditions 17 were revoked and replaced to revise the waste types received at the on-site HHW Depot, and to revise the operations manual to reflect these changes and updates.

The following section describes the Conditions in the C of A that were relevant to the operations of the Landfill during 2006.

Condition 1. - *Definition of Terms* was understood in 2006 and item (c) that defines the Board's name has been changed to North Renfrew Landfill Operations Board according to the July 29, 2004 amendment to the C of A. Definition (j) was replaced to revise the HHW waste types received according to the August 1, 2006 C of A amendment.

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

Conditions 2. (i) and 2. (ii) were completed prior to 2006 and had no impact on Site operations in 2006.

Condition 3. - *Requirements of this Certificate of Approval are severable.*  
This Condition is understood.

Condition 4. - *In all matters requiring the interpretation and implementation of this Certificate, the decision of the Environmental Appeal Board shall take precedence followed in descending order by: the decision of the Environmental Assessment Board, the conditions of this Certificate, the documentation referred to the Environmental Assessment Board, the application entitled Application for Approval of a Landfill Site, and other supporting documentation included in Schedule "A" with the most recent documentation taking precedence.*

The order of precedence is and has been understood and respected.

Condition 5. - *The Board shall comply with the conditions and schedules in this Certificate. The requirements specified in this Certificate are minimum requirements and do not abrogate the need to take all reasonable steps to avoid violating the provisions of other applicable legislation.*

With guidance from the MOE, the Board complies with the conditions and schedules in this Certificate during 2006. Provisions of other applicable legislation are being respected. Actions required according to Site Inspection Reports from the January 23, 2007 Inspection are being addressed by the Board.

Condition 6. - *The Board shall allow MOE personnel, or a MOE authorized representative(s), upon presentation of credentials to:*  
*(a) carry out all inspections authorized by the Environmental Protection Act, The Ontario Water Resources Act, or the Pesticides Act, as amended from time to time, of any place to which this Certificate relates, and*  
*without restricting the generality of the foregoing, to:*  
*(b) i. enter upon the premises or the location where the records required by the conditions of this Certificate are kept;*  
*ii. have access to and copy, at any reasonable time, any records required by the conditions of this Certificate;*  
*iii. inspect at any reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations required by the conditions of this Certificate; and*  
*iv. sample and monitor, at reasonable times, for the purposes of assuring compliance with the conditions of this Certificate.*

The Board has been and will continue to be cooperative with MOE personnel during visits to the Site. The January 23, 2007 Site Inspection by Senior Environmental Officer Marc-Etienne Lesieur was very productive. Marc made several recommendations that are helping Site Operations to observe the C of A's conditions.

Condition 7. - *The Site shall not be transferred without prior notice to the Director.*

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

The Site was not and will not likely be transferred in the near future, but the required prior notice to the Director will be respected if the Board decides to address a transfer.

Condition 8. - *No water obtained from surface water or from a well constructed on the site shall be used for drinking purposes, and any water supply system obtaining water from these sources shall be clearly marked to indicate that the water is not potable.* Surface water and well water on Site was and is only being used for routine monitoring purposes. All monitoring wells on Site are kept locked.

Condition 9. - *The excavation of the Footprint shall not go below the depths indicated on Figure No 4 in Item 1 of Schedule A.* and Condition 10. - *The maximum amount of waste and cover material shall not exceed the final contours shown in Figure No. 5 in Item 1 of Schedule A.*

Conditions 9. and 10. were revoked and replaced to approve lowering the top and bottom contours by one metre by the Approved Amendment to the C of A dated February 11, 2002. Excavation has not, at any time, been below the amended depth and final contours have not yet been reached in any of the Landfill Phases.

Condition 11. - *Waste may only be disposed of within the 2.8-hectare footprint.*

A survey conducted by Robinson Consultants in November 2005 indicates that a small area on the south end of Phase 1 had exceeded the edge of the Footprint. The Site Contractor was notified in December 2005. Upon examination of the pile of material in question, in May 2006, it was determined that it was a pile of native soil that was being temporarily stored adjacent to the landfilling area for use as future top cover. No waste was placed outside of the Footprint.

Condition 12. - *Prior to any excavation or disposal of waste at the Site, the Site boundaries and Footprint area are to be marked and corner posts erected so as to be visible throughout the year, using proper surveying techniques.*

The Footprint area boundaries were surveyed, marked and corner posts were erected prior to excavation and disposal of waste. During a January 23, 2007 Site Inspection by the MOE's Marc-Etienne Lesieur, Senior Environmental Officer/Ottawa District, the positions of the corner posts were discussed. The corner posts were deemed to be not high enough and not as visible as they should be. In his Inspection Report dated January 24, 2007 Marc stated in section 2.3 of the Solid Non-Hazardous Waste Disposal Site Inspection Report "To prevent landfilling beyond approved limit adequate markings/posts must be installed in accordance with Condition 12. At the time of inspection, wood posts marked the corner limit of the approved landfilling footprint. To ensure continuous compliance with Condition 12, adequate posts must be erected and be visible throughout the year. This requires attention by the Board. In section 6.0 Other Inspection Findings, Marc stated "• Pursuant to Condition 12, install adequate posts clearly identifying the approved footprint."

In correspondence to Board Members, the Coordinator reported that he had acted on this issue and contacted the Site Contractor - Tracy Lance of K&T Trucking. He requested that the existing wood posts be replaced with higher painted steel posts that will be visible

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

throughout the year. Tracy agreed to install the new metal posts as required. They will be installed as soon as possible, which might have to be after the frost is out of the ground in April 2007.

Condition 13. - *The Site shall be constructed in accordance Item 1 and Item 7 in Schedule "A" and in accordance with all other documents listed in Schedule "A" to this Certificate.*

The Site was constructed in accordance with the documents in Schedule "A".

Condition 14. - *No waste shall be deposited at the Site until the Director provides a written indication of receipt of the proof of ownership of the Site and a signed agreement for access to the Attenuation Zone.*

On July 9, 2001, the MOE amended the C of A - completed and revoked Condition 14 and letter and attachments were added to Schedule "A" of the C of A.

Condition 15. - *Notwithstanding Conditions 2 and 14, detailed design of major works to be constructed at the Site shall be submitted to the Director for approval and no waste shall be deposited until approval of such works is obtained from the Director. The detailed design shall follow the conceptual design framework outlined in Item 1 and Item 7 in Schedule "A". Any significant design optimization or modification shall be clearly identified along with an explanation of the reasons.*

A detailed design was included in C of A "Schedule A" 9. Report entitled "North Renfrew Landfill Site" prepared by Robinson Consultants Inc. and dated November 2005, not including the section entitled "Existing Manual" in Appendix C.

Condition 16. - *The 30-metre Buffer adjacent to the Footprint shall not be used for waste disposal but may be used for receiving and recording waste arrivals, monitoring, surface water management, contingency measures, perimeter access road, and the operation of other approved ancillary waste management facilities to include, a scrap metal recycling pile, a tire recycling pile, recycling bins, a re-use area, a brush and wood chipping area, a yard and leaf waste composting area, a household hazardous wastes depot, and a heavy equipment bay, all in accordance with Item 1 and Item 7 in Schedule "A". All parts of the Buffer, other than roadways, parking areas, surface water management areas, and structures shall be maintained with a healthy vegetative cover or other appropriate surface treatment, which will minimize erosion.*

The Buffer has not been used for any unapproved purposes. The 30-meter Buffer adjacent to the Footprint is comprised of sand and this sand has not demonstrated any erosion problems during the time that the Site has been operated.

Condition 17. – An AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL

WASTE DISPOSAL SITE  
NUMBER A420010

Notice No. 4

Issue Date: August 1, 2006 is as follows:

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

I. This certificate has been amended to revise the waste types received at the on-site HHW Depot, and to revise the operations manual to reflect these changes and updates.

II. Definition (j) and Conditions 17 are hereby revoked and replaced by:

(j) “Household Hazardous Waste” means hazardous wastes which have been generated by domestic households, including waste motor oil. Automotive batteries, refrigerants, acid wastes, heavy metals, alkaline wastes, paints/pigments, aliphatic solvents, light fuels, waste oils & lubricants, organic laboratory chemicals, inorganic laboratory chemicals, waste compressed gas cylinders, and fluorescent lights.

17. (a) The operation of the Household Hazardous Waste depot is limited to the collection, processing, and storage of the materials set out in the definition of Household Hazardous Waste, (Definition (j) above).

(b) All refrigerants and batteries received at the Site shall be handled in accordance with Item 9 of schedule “A”.

(C.) All white goods received at the Site shall be handled in accordance with Item 9 of Schedule “A”.

Items 17. (d), (e), (f) and (g) remain unchanged and are as follows:

*(d) The amount of waste received at the Site, at any given time, shall not exceed 10 tonnes of Household Hazardous Wastes;*

*(e) All spills and upsets shall immediately be reported to the Ministry’s Spills Action Centre at (416) 325-3000 or 1-800-268-6060 and shall be recorded in the Site inspection record, referred to in Condition 32 of this Provisional Certificate of Approval, as to the nature of the spill or upset, and the action taken for clean-up, correction, and prevention of future occurrences;*

*(f) No PCBs shall be accepted at this Site. Oil and Oil-based paints which have been manufactured prior to 1972; or whose manufacturing date cannot be determined, may contain PCBs and shall be handled in the manner prescribed:*

*i. The oil and oil-based paints shall not be mixed (bulked) with other paints prior to testing. Paints which are lab-packed are not considered to be mixed under this Certificate;*

*ii. The oil and oil-based paints shall be tested for PCB content and shall be handled in the manner outlined in subcondition 17 (f) (iii) if found to contain PCB;*

*iii. If the oil and oil based paints are found to have PCBs at or above levels identified in subcondition 17 (f) (iv), it shall be forthwith reported to the District Manager and shall be managed in accordance with Ontario Regulation 363/92 and stored or removed from the Site to an approved PCB storage site, in accordance with written instructions from the District Manager; and*

*iv. The oil and oil-based paints shall not be distributed for reuse if they have any measurable PCB content. The oil and oil-based paint is considered to be a PCB waste, if measured levels are equal to or greater than 50 parts per million; and*

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

- v. *Except as specified in subcondition 17 (f) (iv), paints collected at the Site may be returned or sold to the general public for reuse provided all transactions are recorded by invoice. Information on the type and volume of paint returned to the public through this Site shall be recorded in the daily record specified in Condition 33; and*
- (g) *The local police and fire departments shall be informed of the existence of this Site and this Certificate. They shall also be notified in writing of operating hours and any changes to scheduled operating hours prior to the changes being made. In the event of an emergency change to operating hours there is no requirement for advance notification.*

During 2006, only approved HHW materials have been accepted, processed and stored according to Conditions 17 prior to the August 1, 2006 Issue Date of the C of A Amendment Notice No. 4 and according to the Amended Definition (j) and Conditions 17 after the Amendment was received.

Condition 18. - *The Attenuation Zone shall not be used for waste disposal but may be used for monitoring and needed contingency plan to prevent excessive environmental impacts. All parts of the Attenuation Zone, other than access roads, shall be maintained in their existing natural state of vegetation, or re-vegetated as soon as possible, if disturbed for any reason.*

The Attenuation Zone and its existing natural vegetation have been maintained in its natural state.

Condition 19. - *Final cover shall be applied progressively, as weather conditions permit, as each part of the Footprint reaches its final grades. The design of the final cover shall comply with the specifications contained in Item 1 in Schedule "A". Vegetation of completed final cover shall occur within three months of its placement and final grading. Final grades have not yet been reached.*

Condition 20. - *Petroleum-contaminated soil may be disposed of as waste at the Site provided it is not hazardous according to O. Reg. 347 and subject to the following:*

(a) *so long as it does not cause a complaint about odour problems and if a complaint is made then petroleum-contaminated soil shall no longer be received, the District Manager shall be notified, and the soils shall not be received until the District Manager provides permission; and*

(b) *minimize the working face of these materials and ensure that it is covered quickly.*

A letter was received from J. Robert Bruce of the Environmental Assessment and Approvals Branch dated January 25, 1999 re Second Draft Provisional Certificate of Approval No. A 420010. In it, he states the following: "A condition will be included to enable the use of hydrocarbon-contaminated soil as daily cover provided the soil is not classified as hazardous waste and the soil odour is not offensive."

There have been no complaints about odour problems from hydrocarbon-contaminated soil. 524 cubic metres of contaminated soil were accepted and used as top cover material to December 31, 2006.

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

During a January 23, 2007 Site Inspection by the MOE's Marc-Etienne Lesieur, Senior Environmental Officer/Ottawa District, the acceptance of hydrocarbon-contaminated soil was discussed. Marc requested the analysis results of the contaminated soil analysis. The analysis results were faxed to him the following day. The Board agreed that analysis of future contaminated soil cleanups be sent to the Senior Environmental Officer.

Enclosed in the package of Inspection Reports, Marc sent a copy of the document "PRINCIPLES OF SAMPLING AND ANALYSIS OF WASTE FOR TCLP UNDER ONTARIO REGULATION 347".

### **ACCESS ROAD**

*Condition 21. – Any proposed change to the location of the Landfill entrance or exit shall be submitted to the Director for approval.*

There have been no changes to the Landfill entrance or exit.

*Condition 22. – The Access Road shall be improved and hard-surfaced prior to the acceptance of any waste for disposal at the Landfill.*

The Access Road was improved and hard-surfaced prior to acceptance of wastes.

### **LITTER**

*Condition 23. – The Board shall take all practical steps to prevent the escape of litter from the Site. Periodic pick-up of litter at the Site and along the Access Road shall be carried out as required, or every two weeks as a minimum. Private property adjacent to the Landfill shall be inspected weekly and litter shall be collected if needed, with permission of access from the property owner.*

The operation of an electric fence around the area being landfilled has denied access to bears. When opened in 2002, the Site experienced bears digging nightly in the landfilled residential waste. This gave raise to large amounts of scattered and wind-blown litter. This electric fence has decreased litter in and from the Site.

Litter has been picked up at the Site and along the Access Road as required or every two weeks as a minimum. Private properties adjacent to the Landfill Site are inspected weekly and litter is removed when found, with permission of access from the property owner. During winter when deep snow makes walking difficult and most litter is snow covered, cleanups are done on accessible areas as required. A thorough cleanup is done in the spring after the snow has melted. Illegally dumped materials on Landfill Site access roads are removed immediately by Site workers when found or reported.

### **TRAINING**

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

Condition 24. – *The Board shall ensure that prior to acceptance of waste at the Site that ongoing training of all Site supervisors be initiated with respect to the following:*

- (a) the terms, conditions, and operating requirements of this Certificate and the content of the schedules attached to the Certificate;*
- (b) the Design and Operations Report (Item 1 and Item 7 on Schedule “A”);*
- (c) relevant waste management regulations and legislation;*
- (d) environmental concerns related to the waste and other materials being handled at the Site;*
- (e) occupational health and safety concerns pertaining to the waste being handled at the Site;*
- (f) emergency procedures and contingency plans in the event of fire, off-site impacts, and other emergency situations; and*
- (g) visual monitoring of Site conditions with respect to the potential for creation of dust impacts.*

The Landfill Site Contractor is experienced in the operations of landfill sites. The Site Attendants have been and continue to be instructed in the listed items of Condition 24. In 2006 the Board prepared, approved and issued a HHW Health and Safety Guide for the Site.

### **SITE OPERATIONS**

Condition 25. – *Notwithstanding conditions number 4 and 39 the Site shall be operated in accordance with Item 1 and Item 7 in Schedule “A” and in accordance with all other documents listed in Schedule “A” to this Certificate.*

The Landfill Site Contractor is experienced in the operations of landfill sites. The Site Attendants have been and continue to be instructed in the listed items of Condition 25.

*Condition 26. - The maximum waste disposal operating hours have been amended. The amendment dated April 2, 2003 allows waste to be disposed of at the Site on statutory holidays, if necessary.*

The amendment to the C of A states:

*I Condition (26) is hereby revoked and replaced with:*

*(26) The maximum waste disposal operating hours of the Landfill shall be 7:00 a.m. to 7:00 p.m., Monday to Saturday. The Landfill shall be closed on Sundays. During days when the Landfill is open, on-site activity other than waste disposal may occur an hour before 7:00 a.m. or two hours after 7:00 p.m. or both. The Board may determine the actual hours of operation within these approved limits providing that the actual hours are posted at the landfill entrance gates. Equipment maintenance and administrative functions may occur at any time.*

*II The following is hereby amended to Schedule “A”;*

*(8) Application for a Provisional Certificate of Approval for a Waste Disposal Site dated December 18, 2002 and signed by James Leon, Waste Management Coordinator,*

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

*North Renfrew Waste Management Board including attached supporting information and cover letter.*

*The reason for this amendment to the Certificate of Approval is as follows:*

*To allow waste to be disposed of at the Site on statutory holidays, if necessary.*

The Site has and is being operated according to Condition 26, as amended.

### **SUPERVISION AND SECURITY**

*Condition 27. – No waste materials shall be accepted, placed, or removed from the Site unless a Site supervisor is present to oversee the operations.*

A Site Attendant is present for acceptance and placing of approved waste including removal of reusable materials from the Reuse Area.

*Condition 28. – During non-operating hours, the Landfill entrance and exit gates will be locked to secure against access by unauthorized persons.*

The Board is in compliance.

### **WASTES NOT ACCEPTABLE FOR LANDFILLING**

*Condition 29. – The Board shall not allow liquid industrial wastes or hazardous wastes as defined under Ontario Regulation 347, as amended from time to time, to be disposed of at the Landfill. Only solid, nonhazardous residential, industrial, commercial, and institutional wastes from within the Service Area shall be disposed of at the Site.*

Only approved wastes from within the Service Area are disposed of at the Site. Liquid industrial wastes and hazardous wastes are not accepted for landfilling. Liquid industrial wastes and hazardous wastes that are placed in and thus hidden in with regular garbage destined for landfilling might be a problem that should be addressed.

### **DAILY RECORDS OF REFUSED WASTE**

*Condition 30. – Daily records shall be maintained, for all waste refused at the Site, which shall include the following:*

- (a) the date of refusal;*
- (b) time of arrival;*
- (c) name of hauler*
- (d) vehicle license plate number of hauler;*
- (e) type of waste or fill;*
- (f) quantity (by volume) of each load refused; and*
- (g) reason for refusal.*

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

The required records for waste refused are maintained in the Daily Logs.

### **SITE INSPECTION**

Condition 31. – (a) *A site supervisor shall inspect the Site each day that fill is received or regraded at the Site for any situation which may cause an adverse effect and to ensure that the Site is being operated in accordance with this Certificate. The Board shall initiate remedial measures to remedy any situation which is causing or may cause an adverse effect; and*

The Site Attendant/Supervisor completes the required inspections of the areas of the Site including the Landfilling area according to Condition 31. - (a).

(b) *Following completion of final cover construction, the surface water management system shall be inspected, by a Site supervisor, and maintained as described in the closure plan.*

No area of the Landfill has yet reached final grade.

Condition 32. – *The Board shall maintain, at the Site, a written record of Site inspections including:*

- (a) *time and date of the inspection;*
- (b) *name, title, and signature of trained personnel conducting the inspection;*
- (c) *listing of all general site areas, fencing, gates, and systems inspected and all deficiencies observed;*
- (d) *assessment of the potential for creation of off-site dust impacts; and*
- (e) *recommendations for remedial action and the date that any recommended remedial action was taken.*

Condition 32. is being met with the completion of a daily Site Inspection form.

### **DAILY RECORDS**

Condition 33. – *Daily records shall be maintained, for all waste received at the Site, which shall include the following:*

- (a) *all complaints from the public received by the Board and an indication of the action taken by the Board in response;*
- (b) *results of any tests done to determine the acceptability of waste or fill at the Site;*  
*and*
- (c) *calculation of the total volume of fill received at the Site for each day.*

The Board is in compliance with the requirements of Condition 33.

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

Condition 34. – *Each daily record and Site inspection record shall be retained by the Board in fire-proof storage for at least five years following the date of the record or inspection. The Board shall make all daily records and site inspection records available for inspection by the MOE or the SLC upon request.*

The Board is in compliance with the requirements of Condition 34.

### **WASTE COMPACTION AND COVER**

Condition 35. – *Waste shall be deposited in a manner that minimizes the area of exposed waste at the Landfill working face.*

The Board is in compliance with this condition.

Condition 36. – *At the end of each day on which waste is received at the Site or existing waste is regarded, the Board shall ensure that the waste placed that day is compacted before cover material is applied.*

Waste is compacted daily with the Board-owned Liebherr compacting crawler/loader.

Condition 37. – *At the end of each working day, and within two hours of the entrance gate closure, weather permitting, cover material consisting of a minimum of 0.15m thickness of soil or a mixture of composted leaves and wood chips shall be applied to all exposed waste. Any proposed alternative cover material must first be submitted to the Regional Director for approval.*

The Board is in compliance with this condition. An amendment to the C of A dated July 29, 2004 allows alternative daily cover material including asphalt roofing shingles.

Condition 38. – *In landfilling areas where waste placement is below the final approved contours and landfilling is to be suspended for one month or more in these areas, an interim cover consisting of a minimum of 0.30 m thickness of soil or a mixture of composted leaves and wood chips shall be applied.*

A minimum of 0.30 m of interim cover material is being placed over the areas as specified in Condition 38. No areas of the Landfill have yet reached final contours.

During a January 23, 2007 Site Inspection by the MOE's Marc-Etienne Lesieur, Senior Environmental Officer/Ottawa District, noted that interim cover was lacking along the area near the tipping face. Interim cover was replaced immediately and is being closely monitored for correct thickness as the tipping face progresses.

Condition 39. – *The Board shall ensure that an interim cover material of at least 0.30 m depth is applied as soon as reasonably possible on all side slope areas where waste contours have been reached, and all areas where no waste is to be deposited for at least 180 days. Final cover shall be applied as soon as reasonably possible on all side slope*

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

*areas. These areas should be seeded as soon as practical but not later than 9 months from the time of final cover application.*

Interim cover is placed over previously landfilled areas as specified in Condition 39. No areas of the Landfill, including side slope areas have yet reached final contours.

Condition 40. – *Where existing cover material has eroded such that waste is exposed, the cover material shall be promptly replaced.*

The Board is in compliance with this condition.

### **WASTE BURNING AND FIRE ACTIONS**

Condition 41. – *The burning of wastes at the Landfill is prohibited except for natural wood products in accordance with the MOE Guidance Manual for Landfill Sites Receiving Municipal Waste, November 1993 as amended from time to time.*

The Board has not authorized any burning since the Site began operations.

Condition 42. – *Should any fires occur at the Site, remedial action shall be taken immediately in accordance with the procedures as shown in Item 7 and on page 34 of Item 1 in Schedule “A”.*

The Board is in compliance with this condition.

### **WASTE SCAVENGING**

Condition 43. – *Scavenging at the Landfill is prohibited, except at the designated reuse area and under the supervision of the Site supervisor.*

The Board is in compliance with this condition.

### **NOISE**

Condition 44 – *In addition to the general noise control measure contained in Item 1 of Schedule “A”, the Board shall abide by the applicable municipal noise control by-laws, if any. In case of a noise complaint, the Board shall verify that the above measures are being complied with and shall instigate measures deemed to be needed. If despite these efforts the complaint persists, the Board shall comply with the sound level limits for construction equipment as contained in the Ministry Model Municipal Noise Control By-Law as amended from time to time.*

The Board is in compliance with this condition. There have been no complaints about noise at or from the Site.

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

Condition 45. – *Noise from or related to the operation of the facility shall be kept to a minimum and in any event, the Board shall comply with the criteria set out in Item 4 of Schedule “A”.*

The Board is in compliance with this condition.

### **DUST CONTROL**

Condition 46. – *The Board shall take all reasonable steps to mitigate dust impacts from the Site including the measures outlined in Item 1 and Item 7 of Schedule “A”.*

The Board is in compliance with this condition.

Condition 47. – *If dust, odour, litter, traffic, or vermin associated with the operation of the Site must, in the opinion of the District Manager, be reduced or otherwise controlled to prevent adverse impacts, the Board shall implement reasonable contingency measures as approved by the District Manager.*

An electric fence was installed in 2003 to keep bears out of the areas being landfilled. An extension was added to the electric fence in 2005 so that the entire landfilling area is surrounded. Keeping out bears has reduced litter and dust at the Site. The Board is in compliance with Condition 47.

### **LANDFILL GAS**

Condition 48. – *Any enclosed structure on the landfill Site shall be passively vented or equipped with a methane gas detector and an active venting system.*

Enclosed structures are passively vented. The Board is in compliance with this condition.

### **MONITORING**

Condition 49. – *The Board shall monitor ground water and surface water according to Schedule “B” as may be amended with the prior written consent of the Regional Director.*

The 2005 Monitoring Report in Appendix B of this Report satisfies this condition.

Condition 50. – *All monitoring wells, which form part of any monitoring program shall be properly capped, locked, and protected from damage. Any ground water monitoring wells that are damaged shall be repaired or replaced forthwith in a manner that ensures that no more than one regular sampling event is missed. Prior written notification is required from the Regional Director to abandon a ground water monitoring well.*

The Board is in compliance with this condition.

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

Condition 51. – *All monitoring wells which are no longer required as part of the groundwater monitoring program, and which have been approved by the Regional Director for abandonment, shall be decommissioned in accordance with Ontario Regulation 903, R.R.O. 1990, in a manner which will prevent contamination through the abandoned monitor. A report on the abandonment of the monitor shall be included in the annual report.*

All monitoring wells are still required.

Condition 52. – *In the event that the results of the monitoring programs listed in Schedule “B” indicate that an off-site exceedance of the PWQO or Reasonable Use Criteria has occurred as a result of the operation of the Site, the Board shall immediately implement the contingency plan, notify the Regional Director, and the SLC and shall specify the following in a report, submitted within 30 days of the exceedance, to the Regional Director for approval:*

- (a) Details of the off-site exceedance, confirmatory monitoring requirements, and the potential off-site impacts to surface water and ground water users;*
- (b) The extent and timing of contingency measures implemented;*
- (c) Modifications, if any, which should be made to the monitoring program; and*
- (d) Other mitigation measures, if any, which may be needed to reduce or prevent off-site impacts.*

The Board is in compliance with this condition.

Condition 53. – *In the event that the results of the monitoring programs listed in Schedule “B” are such that an off-site exceedance of the PWQO can be predicted to occur, the Board shall include in the annual status report:*

- (a) The details of any such predicted off-site exceedance, including the assumptions upon which the prediction is based;*
- (b) A discussion of the modifications, if any, to operations which would be needed to prevent the predicted off-site exceedance;*
- (c) A discussion of the modifications, if any, which should be made to the monitoring program; and*
- (d) A discussion of other mitigation measures or contingency actions, if any, which may be needed to prevent off-site impacts.*

The Board is in compliance with this condition.

Condition 54. – *Commencing from five years after the initial year of operation of the landfill Site and at every subsequent five year interval, the Board shall include in the status report an assessment and if appropriate an update of the groundwater contingency plan.*

The Site has not yet been operating for five years after the initial year of operations.

# NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

## STATUS REPORT

Condition 55. – *By March 31, 1999 and by March 31<sup>st</sup> of each subsequent year, the Company shall submit to the Regional Director, a status report on the monitoring of the Landfill during the previous calendar year. The status report shall be submitted annually for at least the first five (5) years following the year in which waste is first received for disposal. Thereafter, the frequency of the report may be reduced only with the prior written permission of the District Manager, and provided that the Board demonstrates to the District manager that the Site operations and monitoring results have become routine and consistent and the SLC has been consulted on the matter. Notwithstanding any approved change in reporting frequency, the District Manager may at any time require the Board to return to annual submission of the Status Report if there is reasonable evidence to conclude that the Site operations or monitoring results are no longer routine or consistent. This report shall include:*

- (a) *a location map which locates the Site within the boundaries of the Service Area;*
- (b) *a Site plan (s) which shows:*
  - i. *the Site boundaries;*
  - ii. *the fill area and buffer areas;*
  - iii. *the location of the benchmark for the contour elevation survey;*
  - iv. *existing contours of the Site;*
  - v. *areas of excavation in the previous year;*
  - vi. *the areas of the Site completed to final grade in the previous year;*
  - vii. *the areas of the Site still to be completed to final grade;*
  - viii. *the areas of the Site with completed final cover;*
  - ix. *the portions of the interim and final covers which have been vegetated or seeded;*
  - x. *all surface water bodies and works;*
  - xi. *all significant landmarks (roads, escarpment edge, etc.);*
  - xii. *all nearby dwellings and ground water users;*
  - xiii. *location of all monitoring points; and*
  - xiv. *details of any works installed in the previous calendar year.*
- (c) *a cross section which includes the Site footprint area;*
- (d) *an update on any operating difficulties encountered;*
- (e) *a report on the types and volumes of waste diverted from disposal in the footprint by recycling from the Site;*
- (f) *a report on the variances from Item 1 and Item 7 in Schedule “A”;*
- (g) *a summary of any complaints made regarding Site operations and the Board’s response;*
- (h) *an interpretation of the surface water monitoring results including:*
  - i. *an assessment of the surface water quality at the Site boundaries with respect to PWQO;*
  - ii. *an assessment of the adequacy of the Attenuation Zone; and*

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

- iii. *an assessment of the physical condition of the surface water monitoring installations;*
- (i) *an interpretation of the monitoring results by an experienced hydrogeologist including:*
  - i. *text, maps, and diagrams sufficient to characterize the Site hydrogeology;*
  - ii. *documentation of the ground water sampling protocols, including a description of the quality assurance and quality control measures and a description of any problems encountered during the sampling runs which may have impacted the reliability of analytical results;*
  - iii. *presentation of data in a format that is easy to follow, including: presentation of all analytical results from the reporting period and a summary of analytical results from previous sampling in a tabular form;*
  - iv. *conclusions and recommendations with respect to future sampling parameters, frequency, and protocols;*
- (j) *an assessment of whether or not the Board is operating the Site in a manner consistent with the conditions of this Certificate;*
- (k) *an assessment every fifth year of the contingency plan; and*
- (l) *recommendations respecting any proposed changes to:*
  - i. *the surface water or ground water monitoring programs or any repairs required to the monitoring well network;*
  - ii. *the operation of the Site; and*
  - iii. *the requirement for any remedial works or contingency actions based on the monitoring results or operation of this Site.*

This Annual Status Report was compiled to satisfy this condition.

### CLOSURE

Condition 56. – *At least five years before it is expected that waste will no longer be disposed of at the Site, the Board, following consultation with the SLC, shall submit for approval to the Director a complete plan for the closure, long term maintenance, long term monitoring, and after closure use of the Site. The plan shall include, but not be limited to, the following:*

- (a) *Plans for fencing and access control;*
- (b) *Details of any additional cover required;*
- (c) *Details of any vegetative cover required;*
- (d) *Post-closure land use plans, including any further grading, filling or landscaping and the need for any structures;*

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

- (e) *The need for any municipal or provincial approvals that would be required to implement the proposed closure plan and the schedule for obtaining such approvals;*
- (f) *Plans for the continued maintenance, operation, and monitoring of the storm water management system, and landfill gas collection or destruction system (if implemented);*
- (g) *Plans for the continued monitoring of landfill gas, surface water and ground water;*
- (h) *Updated contingency plans to mitigate potential impacts from landfill gas, leachate, storm water, and ground water contingency; and*
- (i) *Details of post-closure ownership of the Site.*

The Site is expected to operate for an additional 24 years, thus Condition 56 will be addressed five years prior to the expected closure.

*Condition 57. – The Board shall continue to be responsible for the operation, maintenance and monitoring of the Site until such time as the Board can demonstrate to the Director’s satisfaction that the leachate and gas being produced at the Site would not cause an exceedance of the PWQO, ODWO, Reasonable Use Guideline, or any other relevant statutes and policies respecting ground water, surface water, and air as may be in effect at that time.*

The Site is expected to operate for an additional 24 years.

*Condition 58. – Closure of the Site, including post-closure care, shall be carried out in accordance with the conditions of this Certificate and the provisions of the Closure Plan.*

The Site is expected to operate for an additional 24 years.

### **SITE LIAISON COMMITTEE**

*Condition 59. –The Board shall organize, support, and participate in a Site Liaison Committee (SLC) composed of the members of the public appointed by the Board following advertisement. Participation from neighbours of the Site will be encouraged. The public membership shall include, if available, two or more neighbours of the Site. The SLC shall serve as the focal point for public dissemination, review, and exchange of information relevant to municipal and local concerns on the operation of the landfill Site.*

The Board is in compliance with this condition.

*Condition 60. – The Board shall prepare a Terms of Reference for the SLC, prior to waste being deposited at the Site, and document any amendments to the Terms. The Terms of Reference shall include, but not be limited to, specification of the term of office and the basis for election or appointment to the SLC. The SLC is to function within the Terms of Reference. The Board shall submit a copy of the Terms of Reference for establishing the SLC to the Regional Director and ensure that the approved terms of*

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

*Reference and any amendments are maintained in the office of the Board, the Municipal office, and the Public Library.*

The Board is in compliance with this condition.

*Condition 61. – The Board shall provide for the administrative costs to establish and to operate the SLC, including the cost of meeting places and clerical services.*

The Board is in compliance with this condition.

*Condition 62. – The Board shall provide the SLC with access to all records, final reports, and, consistent with the Freedom of Information and Privacy Act, communication with the Ministry relation to the landfill Site. The Terms of Reference for the SLC shall include protocols to govern such access.*

The Board is in compliance with this condition.

*Condition 63. – After notifying the Board, the SLC shall have reasonable access to inspect the Site during construction, operations, and closure.*

The Board is in compliance with this condition.

### **PUBLIC COMPLAINT PROCEDURE**

- Condition 64. –The Board shall establish a public complaints procedure that includes:*
- (a) Within 60 days of the date of this Certificate, posting and maintaining a copy of the landfill complaints procedures at the Site office, the Board office, and at each of the municipal offices comprising the Board;*
  - (b) Within 60 days of the date of this Certificate: placing a public notice containing the complaints procedures in local newspapers; and distributing a copy of the complaints procedures to all residences and commercial establishments within 500 m of the Landfill, and adjacent to Baggs Road and Plant Road;*
  - (c) Designating a person to receive any complaints and to respond within ten working-days and with a written notice of action;*
  - (d) Recording the name and address of the complainant, and the date, time, and nature of complaint; and*
  - (e) Reviewing at least twice annually with SLC, all complaints about the operations of the Landfill and the Board's response and action.*

The Board is in compliance with Condition 64. The Board did not receive any complaints during 2006.

### **Alternative Daily Cover Material**

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

Condition 65. - *The Board is hereby permitted to use the alternative daily cover material at the Site and shall take all precautions and mitigative measures regarding dust control, surface run-off, vermin, odour and vector control as outlined in Items (9) and (11) of Schedule "A".*

The Board is in compliance with this condition.

Condition 66. - *No final contours, capacity volumes or fill rates shall be affected by the use of alternative daily cover material.*

The Board is in compliance with this condition.

Condition 67. - *The stockpiling of waste to be processed into the alternative daily cover material shall be segregated from the other waste and stored in the location as outlined in Item (9) of Schedule "A".*

The Board is in compliance with this condition.

Condition 68. - *The waste that is to be processed into alternative daily cover material shall not exceed a volume of 6,000 cubic metres and shall be processed a minimum of once per year or more frequently as the volume of waste approaches the maximum allowed amount.*

The Board is in compliance with this condition.

### **3.2 2005 VARIANCES FROM ITEM 1 AND ITEM 7 IN APPENDIX "A"**

Item 1 and Item 7 in Appendix "A" of the Certificate of Approval were assessed to determine variances from Site operations.

Item 1 is the DESIGN & OPERATIONS REPORT - PROPOSED NORTH RENFREW LANDFILL SITE.

Prepared For: THE NORTH RENFREW WASTE MANAGEMENT BOARD

Prepared By: GARTNER LEE LIMITED

Dated FEBRUARY, 1997.

Sections 1.0 INTRODUCTION, 2.0 DESIGN BASIS AND 3.0 WASTE STREAM were examined and no variances were found.

Section 4.0 SITE DESIGN, part 4.1 BASE GRADES was examined and an Amendment to the C of A dated February 11, 2002 approves the request of the Board to excavate one (1) metre below the approved Footprint in order to obtain additional soil cover.

Sections 4.1 through 4.8.6 also had no variances. Section 4.8.7 Layout of Other Facilities at the Site was examined and updated in Figures No. 6 and 7 of Item 7 of Appendix "A" of the C of A - Addenda Design and Operations Report - Proposed North Renfrew

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

Landfill Site. A 2005 updated Site Plan that includes the current locations of Site Facilities was prepared and included in a 2005 submission to amend the C of A. The approved Amendment dated August 1, 2006 from the MOE was received by the Board in August 2006.

Sections 4.9 and 4.10 had no variances.

Section 5.1 HOURS OF OPERATION was examined and Amendment to the C of A dated April 2, 2003 approves waste disposal on statutory holidays, if necessary.

Section 5.2 LANDFILL PHASING AND TRENCH DEVELOPMENT was examined. In 2006, the Board has not varied from the specifications of Section 5.2.

Sections 5.3 through 5.6 were found to have no variances.

Section 5.7 OPERATION OF OTHER SITE WASTE MANAGEMENT FACILITIES was examined. The updated Site Plan that includes the current locations of Site Facilities was included in a 2005 submission to amend the C of A and the MOE approved Amendment dated August 1, 2006 was received by the Board in August 2006.

Section 5.8 had no variances.

Section 5.9 PEST CONTROL was addressed in 2003 and 2005 to eliminate the problems from bears. An electric fence was installed in 2003 to keep bears out of the areas being landfilled. An extension was added to the electric fence in 2005 so that the entire approved landfilling area is surrounded. Keeping out bears and other large pests has reduced litter and dust problems at the Site.

Sections 5.10, 5.11, 5.12 and 6.0 were examined and there were no variances.

Sections 7.0 ENVIRONMENTAL MONITORING parts 7.1, 7.2 and 7.3. This section was examined and determined to have no variances from Site operations.

Section 8.0 RECORD KEEPING AND REPORTING. The first section of 8.0 which stated that clear and consistent record keeping will be in place, parts a) through f) are followed and there have been no variances. The second section re the Annual Status Report parts a) through j) is addressed in this current Report.

9.0 CONTINGENCY PLANS section 9.1 Triggering Mechanism and 9.1.2 Feasible Contingency Options are addressed in the 2006 Monitoring Report in Appendix B of this Report, where applicable.

9.2 CONTINGENCY PLANS RELATED TO LANDFILL GAS. This section was examined and there were no variances.

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

9.3 OTHER CONTINGENCIES. This section was examined and there were no variances.

10.0 SITE CLOSURE AND END USE. The Site's current estimated life is 24 years. Site closure and end use will be addressed in a formal closure plan at the specified time prior to closure.

**Item 7 in Appendix "A"** of the Certificate of Approval was then assessed to determine variances from Site operations.

Item 7 is the Addenda to the DESIGN & OPERATIONS REPORT - PROPOSED NORTH RENFREW LANDFILL SITE.

Prepared For: THE NORTH RENFREW WASTE MANAGEMENT BOARD

Prepared By: GARTNER LEE LIMITED

Dated FEBRUARY, 1997.

The Foreword states, "The addenda are organized (and referenced) according to the specific sections of the Design and Operations Report, and, therefore, are meant to be read in conjunction with that report."

Section 4.8.3 Site Access, Site Entrance and traffic levels. This section was examined and determined to have no variances from Site operations.

Section 4.8.7 Layout of Other Facilities at the Site. An updated Site Plan that includes the current locations of these Site Facilities was included in a 2005 submission to amend the C of A. The MOE approved Amendment dated August 1, 2006 was received by the Board in August 2006.

Section 5.7.1 Scrap Metal Pile. An updated Site Plan that includes the current location of the Scrap Metal Pile/Bin was included in a 2005 submission to amend the C of A. It is located such that it is easily monitored by the Site Attendant from the office. The MOE approved Amendment dated August 1, 2006 was received by the Board in August 2006.

Section 5.7.4 Recycling Area. This section was examined and determined to have no variances from Site operations.

Section 5.7.4.2 Household Hazardous Waste Area.

On November 28, 2005 a submission to amend the C of A regarding Household Hazardous Waste Depot/Area operations was made by Robinson Consultants on behalf of the Board. The MOE approved Amendment dated August 1, 2006 was received by the Board in August 2006. In 2006, January to August, the Board has operated the HHW Area with no variances from D&O Section 5.7.4.2. After the approved Amendment was received in August 2006, the Board has operated the HHW Area according to the C of A as Amended.

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

5.7.5 Composting Area. This section was examined and determined to have no variances from Site operations.

9.1.1 Triggering Mechanism. Details of this section are addressed in the 2006 Monitoring Report in Appendix B of this Report.

Appendices. This section was examined and determined to have no variances from Site operations.

### **3.3 WASTE LANDFILLED DURING 2006**

Robinson Consultants completed a survey of waste including top cover and interim cover deposited in 2006 on November 9, 2006. This survey provided information to help estimate the volume deposited in 2006. The estimated volume of waste and top cover deposited in the Landfill area in 2006 was 6,600 cubic metres. 2006 and historic volumes are included in TABLE 1 - HISTORICAL WASTE QUANTITIES, REMAINING VOLUME, YEARS TO CLOSURE AND PERCENT FILLED.

Figure A-4 identifies Landfill Design Base Grade Contours. Figure A-5 identifies Landfill Design Final Contours. Figure A-6 shows the Waste Contours 2006. Figure A3 is the SITE PLAN. Note that no waste was placed outside of the Footprint since Site operations began in July 2002.

### **3.4 SITE CAPACITY AND LANDFILL LAYOUT**

Item 1 of Schedule "A" of the C of A is "Report entitled Design and Operations Report, Proposed North Renfrew Landfill Site dated February 1997 and prepared by Gartner Lee Limited." Section 4.3 on page 14 of that 1997 Report is SITE CAPACITY. The total Site capacity including waste and top cover but excluding final cover is 192,250 cubic meters. This value is included in TABLE 1 - HISTORICAL WASTE QUANTITIES, REMAINING VOLUME, YEARS TO CLOSURE AND PERCENT FILLED.

FIGURE A-3 Site Plan shows the layout of the Landfill Site - November 2006. This figure was prepared by Robinson Consultants.

### **3.5 REMAINING SITE CAPACITY AND SITE LIFE**

Robinson Consultants completed a survey of waste including top cover and interim cover deposited in 2006 on November 9, 2006. This survey provided the information to estimate the volume deposited in 2006. From estimates of waste and top cover landfilled, the remaining Site capacity and Site life were estimated. The estimated remaining Site capacity is 158,421 cubic metres and the estimated years to closure is 24 years. This information is presented in TABLE 1 - HISTORICAL WASTE QUANTITIES, REMAINING VOLUME, YEARS TO CLOSURE AND PERCENT FILLED.

---

**NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

**TABLE 1 - HISTORICAL WASTE QUANTITIES,  
REMAINING VOLUME AND YEARS TO CLOSURE**

YEAR	ESTIMATED VOLUME USED in m <sup>3</sup>	ESTIMATED REMAINING VOLUME m <sup>3</sup>	ESTIMATED YEARS TO CLOSURE	ESTIMATED PERCENT FILLED
Pre Development	0	192,250	25	0
2002 (0.5 year)	4,350	187,900	20	2.3
2003	9,473	178,427	19	7.2
2004	5,406	173,021	23	10.1
2005	7,000	166,021	26	13.7
2006	6,600	158,421	24	17.2
Total to December 31, 2006	32,829			

# NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

TABLE 2 - LIFT CAPACITY

Phase #	Lift #	Height in Metres	Length in Metres	Width in Metres	Area in m <sup>2</sup>	Volume in m <sup>3</sup>	Service Ends	Service Years
1	2	1.6	115	60	6900	11040	2005	2
1	1	2.74	116	60.5	7018	19229	2004	2.5
2	1	2.0	56	59	3304	6608	2007	1.5

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

**TABLE 3 - CONDITION OF FACILITIES**

<b>Description of Item</b>	<b>Status or condition in Dec 2006</b>	<b>Work to be done in 2007</b>
Grading on cover	Lift 2 on Phase 1 was covered with interim cover and then used for storage of the excavated soil from Phase 2. Lift 1 on Phase 2 is covered with interim cover as landfilling progresses.	The thickness of interim cover should continue to be closely monitored and replaced as required. Interim cover on previous lifts should be removed before waste placement.
Grade/survey control	Grade depth is set by survey and wooden stakes mark the corners of the phases being filled.	The location of stakes will be monitored to assure correct placement during 2007.
Site office/shelter	The office is a 30' construction trailer on concrete pillars.	Ongoing maintenance and cleaning.
Recycling Area	Cardboard is stored in a steel bin. Other blue box materials are stored in plastic containers. 14,470 cubic metres of recyclables were diverted from the Landfill Area in 2006.	Continue recycling at the Site and in the two Towns.
Household Hazardous Waste (HHW) Area	After a June 2005 MOE Site Inspection, wastes that were accepted but not approved in the C of A were required to no longer be accepted and removed from the HHW Area. Operations and inspection procedures were upgraded. An application was made and approved to allow the return to accepting most HHW.	Continue to receive, handle, store and recycle approved HHW materials.
Tire Area	240 cubic metres of tires were accepted and recycled during 2006.	Continue accepting and recycling tires.
Scrap Metal	1,925 cubic metres of scrap metal were recycled during 2006.	Continue accepting and recycling scrap metal.
Re-Use Area	An estimated volume of 154 cubic metres of reusable materials was taken from the Re-Use Area by residents during 2006.	Continue accepting reusable materials in this area.
Brush and Wood Chipping Area	All Brush and wood accepted at the Chipping Area was chipped and added the compost piles in the adjacent Compost Area.	Continue to operate the Chipping area.
Compost Area	Chipped brush and wood are mixed	Continue to operate the Compost

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

	with lawn and garden waste and composted in this area. 225 cu m of compost material was diverted from the landfill in 2006. Compost is occasionally used as top cover.	area.
Entrance gates and signs	Status - good condition.	Minor changes to signs as required.
Access road	Good condition.	Routine maintenance in 2007.
Visual barriers	Trees planted in 2001 continue to show increased growth.	Continue to monitor the trees.
Surface drainage	There were no signs of erosion.	Continue to monitor for erosion.
Security and fences	Fences surrounding the Landfill Site are adequate	Continue inspections of the fences.
Traffic/disposal signs	The signs were in place in December 2006.	Inspect signs in the spring of 2007 and repair or replace as required.
Trafficability on landfill cover	Problems are occasionally addressed during the spring and alternate gravelled routes are prepared as required.	Continue to inspect and improve roads as required.
Soil cover thickness and compaction of landfilled waste	The Site Attendant/Machine Operator compacts the waste at the end of each day with a compacting Liebherr LR-622 crawler/loader. 15 cm of cover material is then applied.	Continue to compact and cover the waste daily.
Waste side slopes	Waste side slopes have not yet been reached as of December 2006.	Add final cover and vegetation when waste side slopes reach Design level.
Wind blown litter	Waste exposure by animals has been minimized by erecting an electric fence to keep bears out of the landfill area. Litter is freed by birds digging up the waste. Litter is collected regularly on landowners' properties, where permission is given, weather permitting.	Continue to monitor and collect litter as required.
Vegetation	Vegetation on Landfill Site property is in healthy condition.	No work required in 2007.
Waste types accepted for landfilling	Only solid non-hazardous residential, commercial, industrial and institutional wastes generated in the Towns of Deep River and Laurentian Hills are accepted for disposal.	There will be no changes to wastes accepted for landfilling in 2007.

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

### 3.6 SUMMARY OF LANDFILL OPERATIONS IN 2006

The 2006 hours of operation were: Winter hours during Standard Time - Tuesday through Saturday 9:00 a.m. to 4:00 p.m. and Summer hours during Daylight Savings Time - Tuesday 9:00 a.m. to 6:00 p.m. and Wednesday through Saturday 9:00 a.m. to 4:00 p.m. These hours of operation are within the times permitted in C of A Condition 26 as amended.

On April 2, 2003, the MOE amended the C of A - Condition 26 was revoked and replaced to allow waste to be disposed of on statutory holidays.

The amendment states:

*I Condition (26) is hereby revoked and replaced with:*

*The maximum waste disposal operating hours of the Landfill shall be 7:00 a.m. to 7:00 p.m., Monday to Saturday. The Landfill shall be closed on Sundays. During days when the Landfill is open, on-site activity other than waste disposal may occur an hour before 7:00 a.m. or two hours after 7:00 p.m. or both. The Board may determine the actual hours of operation within these approved limits providing that the actual hours are posted at the landfill entrance gates. Equipment maintenance and administrative functions may occur at any time.*

Item 1 of Schedule "A" of the C of A is "Report entitled Design and Operations Report, Proposed North Renfrew Landfill Site dated February 1997 and prepared by Gartner Lee Limited." Section 5.0 of this report - Site Operations, part 5.2 Landfill Phasing and Trench Development states: "The landfill will be generally filled in a sequence from southwest to northeast." From the Site's opening date of July 6, 2002 to December 31, 2004 Phase 1, which is the southwest Phase of the Landfill has been used and the first lift was completed. The first lift to the edges of Phase 1 was an average of 2.74 m in depth. During 2005 a second lift was begun over this Phase and this lift was an average of 1.4 m in depth. During 2006, most of Phase II was excavated and landfilling of this Phase was started. The Waste Filling Concept and the Daily Landfilling Procedures that are used at the Landfill Site are presented as FIGURES A-9 and A-10. Temporary roads and/or ramps were prepared as required for access to the tipping face.

As seen in FIGURE A-9, the compacting crawler/loader was used to push the waste up on to the sloping face and the waste is compacted with several passes up and down the face. At the end of each day when compacting of the waste is complete, a minimum of 0.15 m of daily cover was applied over all exposed waste. Areas that are to be left inactive for more than one month are covered with 0.3 m of interim cover.

Most of the daily top cover and interim cover material consists of soil/sand from the excavation and development of Phases 1 and 2. Occasionally, on-site composed material or hydrocarbon contaminated soil is used or mixed with the native soil and used as top cover material. Final grades have not yet been reached in the area landfilled to the end of 2006.

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

### **3.7 PROPOSED CHANGES TO LANDFILL OPERATIONS FOR 2007**

In 2006 most of the excavation of Phase 2 was completed and landfilling the first lift of Phase 2 was begun. Excavated soil is being stored on Phase 1. The landfilling of Phase 2 will continue in 2007.

Top cover and interim cover will be more closely monitored to assure compliance to the C of A and minimize animal and wind carried litter. The Board will investigate the possible use of a tarp for daily cover to save landfill volume. The Coordinator has recently been requested to visit another landfill site to observe tarp use, gather information and report to the Board.

The 2007 Site Liaison Committee (SLC) will take a more active role in recycling and other forms of waste diversion by advertising and educating.

The SLC might continue to suggest that the Board recommend that the Towns consider an alternate to landfilling grass clippings, leaves and garden waste during the growing season. One solution could be a weekly or biweekly pickup. Increased residential composting should also be encouraged. This kind of compostable material should not be landfilled as landfill volume province-wide is and will continue to be at a premium.

Increased recycling and other forms of waste diversion should be considered to help meet the MOE's 60% waste diversion target in 2008. The Towns might have to consider measures to increase recycling such as garbage bag limits, pay per bag/tag, using clear bags and refusing the landfilling of recyclable materials and/or a mandatory recycling by-law.

---

### **4.0 HYDROGEOLOGICAL MONITORING FOR 2006**

**Hydrogeological Monitoring for 2006 is addressed in PART B of this Report.**

---

# NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

## 5.0 WASTE DIVERSION AND WASTE REDUCTION

### 5.1 LIST OF WASTE DIVERSION AND WASTE REDUCTION INITIATIVES

- The Towns of Deep River and Laurentian Hills both collect curbside blue box materials for recycling
- The Town of Deep River operates the Miller Road Landfill Site for C&D waste which helps extend the life of the Baggs Road Landfill Site
- The Baggs Road Landfill Site has the following waste diversion areas:
  - a) Composting Area
  - b) Recycling Area
  - c) Reuse Area
  - d) Household Hazardous Waste Area
  - e) Brush Chipping Area
  - f) Scrap Metal Area
  - g) Tire Area
- The North Renfrew Landfill Operations Board has a contract for the pickup of recyclable cardboard in both Towns and at the Baggs Road Landfill Site.

### 5.2 WASTE DIVERSION/RECYCLING DETAILS

#### 5.2.1 Recycling in both Towns and at the Landfill Site

The North Renfrew Landfill Site began operations on July 6, 2002 and its design allows the segregation, storage and removal of several types of materials for diversion/recycling. The Site's areas for these materials are: recycling/blue box, reuse, metal, tires, household hazardous waste, brush chipping and compost. The Board has a contract with a private contractor to pickup and recycle cardboard from both Towns and the Landfill Site. The cardboard pickup has had a positive impact on the volume of waste landfilled and on the life expectancy of the Landfill Site.

In addition to recycling at the Landfill Site, both Towns have implemented curbside collection of blue box recycling. The Town of Deep River and the Town of Laurentian Hills have been curbside recycling blue box materials for several years. Table 4 - Recycling Programs - 2006 identifies the types and estimated volumes of recyclable materials collected at the Landfill Site, the cardboard pickup and the Towns' blue box programs in 2006.

**NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

**TABLE 4 - RECYCLING PROGRAMS - 2006**

<b>Material</b>	<b>Recycling Volume m<sup>3</sup> Deep River (Note 1)</b>	<b>Recycling Volume m<sup>3</sup> Laurentian Hills (Note 1)</b>	<b>Recycling Volume m<sup>3</sup> Cardboard Contract(Note2)</b>	<b>Total m<sup>3</sup> of each Material</b>
Tin/Aluminium and Plastic (not segregated)	577	320		897
Clear Glass	325	203		528
Coloured Glass	306	138		444
Fibres	2598	937	9065	12,601
<b>TOTAL</b>	<b>3,806</b>	<b>1,598</b>	<b>9065</b>	<b>14,470</b>
<b>Total Recyclables</b>	-----	-----	-----	<b>14,470</b>

Note 1: Includes Bluebox materials collected at the Landfill Site and in the Towns. Weight to m<sup>3</sup> was determined using total truck load weight to truck volume.

Note 2: Includes cardboard collected in both Towns and at the Landfill Site.

**5.2.2 Household Hazardous Waste**

A Household Hazardous Waste (HHW) Area has operated at the Baggs Road Landfill Site since operations began on July 6, 2002. The 2006 volume of HHW materials that were removed from the HHW Area was 13.4 cubic metres. Of this 13.4 cubic meters 3.4 cubic meters of this was left over 2005 HHW. Thus, the actual volume of HHW material from 2006 that was removed in 2006 was  $13.4 - 3.4 = 10.0$  cubic meters. The 2006 volume of HHW materials that were accepted during 2006 but not removed at year-end was 3.51 cubic meters. The total volume of HHW material accepted in 2006 was  $10.0 +$

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

3.51 = 13.51 cubic meters. Determination of HHW volumes is seen in section 5.4 f., g. and h. of this Report.

On November 28, 2005 a submission to the MOE was made by Robinson Consultants on behalf of the Board to expand the list of materials in the C of A to allow their acceptance, storage and removal. The approved amendment to the C of A was received in August 2006. Additional HHW materials are again being accepted in the HHW Area.

### **5.3 STATUS OF WASTE DIVERSION INITIATIVES**

The North Renfrew Landfill Operations Board, formerly the North Renfrew Waste Management Board, has operated the Baggs Road Landfill Site since 2002 with areas for recycling, reusable materials, white goods, household hazardous wastes, scrap metal, tires, brush chipping and composted yard and garden wastes. Since 2004, the Board has had a contract to recycle cardboard in the two Towns.

The Towns of Deep River and Laurentian Hills have contracts to collect curbside blue box recycling materials. TABLE 4 identifies volumes of recyclable/blue box materials collected in the Towns and at the Site. The results of 2005 Waste Diversion Initiatives are summarized in TABLE 5.

# NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

**TABLE 5 - WASTE DIVERSION INITIATIVES - 2006**

Description	Waste Diverted in 2006 M <sup>3</sup>	% of Total Waste
Recycling from Site and Both Towns	14,470	58.3
Tires	240	0.97
Scrap Metal	1,925	7.8
Reuse	154	0.62
Compost	225	0.91
Household Hazardous Waste	10.0	0.04
Total Waste Diverted	17024	-----
Landfilled Waste plus Material Stored at Year-End	= (6,600 plus 1,214) 7,814	31.5
Total Waste Stream	24,838	100
Diversion Rate	17,024/24,838 = 0.685 = <b>68.5%</b>	

## 5.4 WASTE DIVERTED AND RECYCLABLE MATERIALS RETAINED AT 2006 YEAR-END

The total landfill volume used in 2006 was 6,600 cubic meters. Description of waste diverted from disposal in the footprint, waste types and percentages for re-use and recycling in 2006 are as follows:

- a. Scrap Metal at 100%.
- b. Composted clean chipped wood and brush, leaves and garden waste diverted from disposal in the footprint.
- c. Tires at 100%.
- d. Reuse Area material at 65%.
- e. Recycling Area material from the service area at 100%.
- f. Household Hazardous Waste (HHW) material at 100%.

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

NOTE: Large volumes of C&D waste have been diverted to the Town of Deep River's Miller Road Site for the purpose of saving landfill volume at the Baggs Road Site and to act as fill to complete the Millers Road Site to final grade.

2006 quantities of diverted and retained materials in cubic meters are as follows:

- a. 2006 Scrap Metal recycled from the Site and the Towns was 1,925 cubic meters. Volume stored at the Site at year-end 2006 was 10 cubic meters.
- b. The 2006 compost volume diverted was 225 cubic meters. Volume stored at the Site at year-end 2006 was 1,125 cubic meters.
- c. The 2006 volume of tires that were removed from the Site was 240 cubic meters. Volume stored at the Site at year-end 2006 was 70.45 cubic meters.
- d. 2006 Reuse Area material collected at Site was 237 cubic meters and of this, 154 cubic meters was diverted. Volume stored at the Site at year-end 2006 was 3 cubic meters.
- e. 2006 Recycling including Board's cardboard recycling contract and other contracts for recyclable materials in the service area was 14,470 cubic meters. Volume stored at the Site at year-end 2006 was 2 cubic meters.
- f. Total 2006 HHW materials removed from HHW Area was determined as follows:

Engine Oil(#252L): 10,169 L  
Paint (#145L): 2200 L  
Automotive Batteries (112C): 1053 L  
Refrigerant (263A): 3.2 L

Total of HHW materials removed in 2006 was, @ 1000 L/cu m =  $10.169 + 2.2 + 1.053 + .0032 = 13.425 = 13.4$  cu m. The total of 2006 materials less the 2005 left over materials (see g. below) was  $13.4 - 3.4 = 10.0$  cubic meters.

- g. Household Hazardous Waste left over from 2005 and removed in 2006 was:

Engine Oil (#252L): 3,000 L  
Paint (#145L): 400 L

Total volume left over from 2005 = 3.4 cubic meters

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

h. Household Hazardous Waste (HHW) material received in 2006 but not removed by December 31, 2006 was determined as follows:

Engine oil (#252L): 1,528 L.

Paint (#145L): 800 L.

Light fuels (221I): 67 L

Antifreeze (212L): 70 L

Acid Waste (112C): 20 L

Aerosols, Flammables (263A): 40 L

Automotive Batteries (112C): 787.5 L.

Alkaline Waste (122C): 200 L

Refrigerant (263A): 1 L

Total of additional HHW material accepted during 2006 but not removed at year-end in cu m @ 1000 L/cu m = 3.51 cu m.

**h. The Total of 2006 HHW materials in cu m = 10.0 + 3.51 = 13.51 cubic meters.**

3. Total cubic metres of 2005 waste diverted, excluding C&D waste:

- a. 1,925
- b. 225
- c. 240
- d. 154
- e. 14,470
- f. 10.0

Total waste diverted for 2006 = 17,024 m cu.

4. Volume of materials that can be diverted that were stored at the Site at year-end 2006 was:

- a. 10
- b. 1,125
- c. 70.45
- d. 3
- e. 2
- f. 3.51

Total volume of materials that can be diverted that are stored at the Site at year-end 2006 was 1,214 cubic meters.

4. Total waste volume landfilled in 2006 was **6,600** cu m plus recyclable materials stored at year-end were 1,214 cu m = 7,814 cu m.

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

5. Total volumes of wastes diverted, landfilled and retained in 2006 = 16,802 + 7,814 = 24,616 cu m.

6. **2006 Waste Diversion %** =  $16,802 / 24,616 = 0.683 * 100 = 68.3\%$

7. Conclusions and Recommendations:

a. The 2006 total Waste Diversion percentage was **68.5%**. This is a slight improvement over the 2005 diversion rate of 66.9%.

b. Continued efforts to increase recycling are necessary to maintain a 60 + % waste diversion rate as in future years it might be difficult to divert C&D waste and there could be some uncertainties in obtaining contracts for recycling.

---

### **6.0 OTHER ISSUES**

#### **6.1 SITE LIAISON COMMITTEE TERMS OF REFERENCE AND ANNUAL REPORT**

##### **6.1.1 SITE LIAISON COMMITTEE TERMS OF REFERENCE**

The Site Liaison Committee (SLC) Terms of Reference are as follows:

# NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

## NORTH RENFREW LANDFILL OPERATIONS BOARD

Laurentian Hills Municipal Building  
34465 Hwy 17, R.R. #1, Deep River, Ontario KOJ 1P0

Telephone: (613) 584-9194

Fax (613) 584-3285

Email: nrwmb@magma.ca

## SITE LIAISON COMMITTEE

### TERMS OF REFERENCE

This document describes the terms of reference for the Site Liaison Committee referred to in the Provisional Certificate of Approval No. A420010 dated 28 May 1999 Item 60 for the North Renfrew Landfill Site.

1. The purpose of the SLC shall be to:
  - monitor the site operation, post-closure and post-care, including waste haulage traffic within the vicinity of the site, and pollution abatement strategy issues;
  - provide a forum for direct exchange between surrounding landowners, business interests, the M.O.E., and the North Renfrew Landfill Operations Board concerning landfill site operation and closure;
  - monitor annual reports;
  - monitor groundwater and surface water analysis;
  - monitor complaints and action taken;
  - monitor regulatory actions.
2. The SLC will act in an advisory role to the Board and will make formal recommendations to the Board. Additionally, the SLC will make a brief annual report to the Board outlining its activities for the previous period and any of its concerns relative to SLC function.
3. The public shall be advised by the Board of the formation of the SLC and requested to express interest in membership. The membership of the SLC shall be selected by the Board from interested residents of the Town of Deep River and the Town of Laurentian Hills in accordance with the following priorities:
  - previous membership on the SLC.
  - proximity of their principal residence to the landfill site.
  - proximity of their property to the landfill site.
  - employed in AECL's Waste Management Department
  - representative of the municipal waste haulage department/contractor.
  - representative of the Board (no voting privileges)
4. The maximum number of members on the SLC shall be no greater than six (6).
5. The MOE shall be notified of any SLC meeting as soon as the meeting is called and may attend any meeting in an advisory capacity.
6. Non-member observers and the press shall be welcome at all meetings. Seating room shall be provided. All observers shall be provided the opportunity to make a

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

presentation or otherwise be heard if they so wish. The Board shall provide meeting rooms as available.

7. The Chairperson of the SLC established during the North Renfrew Waste Management Master Plan study will chair the initial meeting. A chairperson shall be elected by the membership of the SLC from voting members.
8. A summary of each meeting will be documented and circulated to all members and observers. The Board will provide reasonable secretarial/clerk services to the SLC.
9. The Board will make available background information, as required by the SLC.
10. The SLC will review all information that is provided to it.
11. The SLC will meet on a quarterly basis or as required.
12. The Board shall supply the SLC with a reasonable annual budget for the purposes of informing the public.
13. SLC Members will be entitled to compensation for mileage for SLC business and meetings as authorized by the Board at the current mileage rate paid by the Board.
14. The SLC is encouraged to develop a consensus about any proposed recommendations to the Board. Alternatively, a vote of the majority attending will carry the recommendation.
  - The SLC will establish an appropriate schedule of meetings.
  - Meetings will normally not last for more than three hours.
  - Notice shall be provided by mail or other suitable form at least seven (7) days in advance of any scheduled meeting.
  - SLC members will be appointed for a period of one year, effective January 1<sup>st</sup>.
15. Amendments to this Terms of Reference may only be made upon the recommendation of the SLC or the Board. No changes to this Charter shall be undertaken without approval of the North Renfrew Landfill Operations Board or its successor.

### **6.1.2 SITE LIAISON COMMITTEE ANNUAL REPORT**

The Site Liaison Committee (SLC) 2006 Annual Report is as follows:

# NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT



**North Renfrew Site Liaison Committee**  
Laurentian Hills Municipal Building  
34465 Highway 17  
R.R. # 1 Deep River, Ontario K0J 1P0  
Telephone: (613) 584-9194

## 2006 ANNUAL STATUS REPORT

**Date:** December 29, 2006  
**Prepared by:** 2006 Site Liaison Committee and James Leon, North Renfrew Landfill Operations Board Coordinator

### 1. Appointment of 2006 SLC Membership:

Extract from the January 30<sup>th</sup>, 2006 Board Meeting:

“Update from the Site Liaison Committee.

- a. Response from SLC Member application ad and possible appointments of SLC applicants for 2006 Membership.

In the absence of the SLC Chair, James reported that the ad for SLC Members had been run in a Friday edition of The News and had been run twice in the NRT. There was one additional applicant for SLC membership. The applicant is Anne Oesinghaus and James briefly reviewed her letter of application. The 2005 SLC Members that have agreed to reapply for 2006 membership are Earl Gust, Susan Farr, Susan McBride and Gary McAnulty. Board Members discussed the applicants and the following motion was made.

Moved By: Jim Boulanger  
Seconded By: Paul Rochefort

That the Board appoint the five applicants as 2006 SLC members. Carried.”

The five appointed 2006 SLC Members were: Earl Gust, Susan Farr, Susan Mc Bride, Gary McAnulty and Anne Oesinghaus.

Extract from the May 24<sup>th</sup>, 2006 Board Meeting:

“Update from the Site Liaison Committee.

- b. Possible SLC appointment of sixth 2006 applicant.

James stated that there has been another 2006 SLC applicant. Nora Waddell has recently applied to be an SLC Member. She said that if there were any openings she would like to

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

be appointed for 2006. She added that if not, to please keep her application for future reference. James stated that Nora is a resident of Deep River and an AECL employee. She is interested in being involved in SLC issues. James has known her for 16 years and has worked with her in the Health Physics Branch CRL. He recommended that the Board consider appointing her as a Member.

Moved by: Dave Ethier  
Seconded by: Paul Rochefort

That Nora Waddell be appointed as an SLC Member for 2006. Carried.”

### **2. Highlights of March 6, 2006 SLC meeting.**

#### “1. Election of 2006 SLC Chair and Vice Chair.

A call for nominees for 2006 SLC Chair was made and Susan Farr nominated Earl Gust as 2006 Chair. No further nominations for the position of Chair were made and Earl Gust was thus appointed 2006 Chair.

A call for nominees for 2006 SLC Vice Chair was made and Susan McBride nominated Susan Farr. No further nominations were made and Susan Farr was thus appointed 2006 Vice Chair.

#### 4. Advertising.

The SLC ad that was prepared in November 2005 was distributed and discussed. Susan Farr suggested that it would be better presented if some of the information were eliminated. Members discussed this and recommended several changes. It was requested that James edit the ad and have it reviewed by Susan Farr. The updated ad would be sent to the other SLC Members for suggestions and changes. It should be run after daylight saving time begins.

#### 5. Business Arising from Previous Meetings.

- a. Letters to the MOE from Robinson Consultants dated November 7, 2005 and February 21, 2006 re iron value exceeding the 75<sup>th</sup> percentile during the September 2005 and February 2006 sampling events and access problems to SW-6.

The two letters to the MOE about iron values and the access problem were discussed. James noted that a January 2005 application had been sent to the MOE to modify the 75<sup>th</sup> percentile requirements of the C of A. Access to the SW-6 sampling point has recently become difficult and at times dangerous, due to beaver activity. Samples were then collected at the nearest upstream location.

- b. Reply from MOE's Andrew Polley re the two letters.

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

The MOE's Andrew Polley had replied to the recent letter re iron and access problems. He requested that these issues be included in the 2005 Annual Status Report with recommendations to alter the monitoring program accordingly. Andrew added that the report could then be submitted to the Regional Technical Support Section for review with subsequent approval of the modified program by the District and/or EAAB as required. James said that the issues were being addressed as Andrew had requested.

### 6. Other Business.

#### a. Total 2005 costs for Liebherr repairs and refrigerant removal.

The amounts paid for Liebherr repairs in 2005 and for refrigerant removal were presented. In January 2005 Deep River Council had directed the Board to invoice the both Towns for their share for necessary repairs to the Liebherr that are above the budgeted amount. This amount was split and invoiced to the two Towns in December 2005. The 2006 Budget included \$10,000 for the Liebherr but the Town of Deep River Council would prefer if this was reduced to \$1,000 and treated the same as in 2005. The 2005-budgeted amount for Liebherr repairs was \$1,000 and the actual amount paid in 2005 was \$15,825.

Refrigerant removal costs for 2005 totalled \$2,790 while the budgeted amount was \$300. During the 2005 MOE inspection, James was instructed to include the weights or volumes of refrigerants removed during 2005 in the Annual Status Report. Upon requesting refrigerants weights or volumes from Bee Line Disposal Inc., he was informed that they would no longer be accepting refrigerant containing appliances until the refrigerant was removed. James stated that he received three quotes from local refrigeration technicians and accepted the lowest of the three quotes for the completion of the job. In 2006, a lower quote for refrigerant removal per unit from a local technician might be accepted.

#### b. Status of application to amend the C of A including updated Site Plan and HHW expansion.

The application was discussed. It had been sent to the MOE on November 28<sup>th</sup>, 2005 and would likely take several months before the approval was granted. SLC Members recommended that James pursue an interim agreement with the MOE to allow the acceptance of most HHW materials or at least have the amendments approved as soon as possible.

#### c. Details of unauthorized burning of brush in clearing at Site and report to MOE.

The issue of brush that was burned on phase 3 and 4 during December was presented. A letter was sent to the MOE explaining that the Board did not authorize the burning. The Contractor had contacted the Deep River Fire Chief and had consulted the C of A. After trying to contact the Coordinator, he went ahead and burned the brush. He has since been instructed to not burn anything in the future without approval from the Board.

#### d. Details of contract with Waste Care Services for HHW and tires removal.

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

Copies of the contract with Waste Care Services were distributed. Waste Care had had the lowest costs for the removal HHW materials and waste tires. The Board had recently approved a further two-year contract with Waste Care Services.

Susan Farr suggested that Members discuss recycling in local schools. There should be a recycling project leader in each school. James stated that he had contacted St. Anthony's School and St. Mary's School and they both have an active recycling program. Each class in St Anthony's School collects their recyclables and the blue boxes are put out for the bi-weekly pickup with the assistance of the caretaker. In St Mary's School the grade 8 teacher champions the blue box program and the grade 8 students do most of the work.

SLC Members discussed recycling at Mackenzie High School. A good first step would be having blue boxes by the pop machines. Susan McBride and Susan Farr agreed that it recycling should be part of the curriculum. High School students have to do a number of hours of community work and recycling activities could be part if this. Also, adult clubs using the gym also generate recyclable materials that should be collected. A larger blue box outside the gym would be helpful. James was asked to gather information by contacting the Mackenzie High School Principal and Beaumen Waste Management.

Anne Oesinghaus stated that not having a recycling program at the high school concerns her. Anne's high school had a great recycling program. She noted that in November 2005 she was talking with a janitorial staff person at Mackenzie High School and she was told that they don't recycle at the High School. The janitorial person said that the students aren't involved in any recycling program and the janitorial staff did not want to do the extra work. Anne said that she had applied to be an SLC Member to try and do something about this by helping to get a recycling program started. Shortly after Anne had initially discovered this problem, James had been informed that the issue was brought up at a Tri Council Meeting. The High School was approached and had agreed to begin a recycling program. Although Anne's concern had been heard, the High School should still be contacted for an update on the progress of the recycling program. Recycling at Keys and Morison Schools should also be checked.

### **3. Highlights of June 5, 2005 SLC meeting.**

#### **“3. Advertising.**

##### **a. Review of Spring 2006 SLC Site Features ad and discussion of next 2006 ad.**

Copies of the ad were distributed to Members. It was agreed that copies be placed on local bulletin boards and Members volunteered to post them. James stated that Susan Farr had reviewed the ad prior to its being run and that the only change was the additions of scissors and a dotted line around the ad to encourage residents to retain it for future reference.

##### **b. Review of Composting brochure and possible revising for distribution.**

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

Copies of a brochure titled “COMPOSTING Here’s How To Get Started” originally prepared by the Waste Management Office in Pembroke in the 1990’s were distributed to SLC Members. James stated that he had been given permission to use the information in the brochure for the creation of an SLC composting brochure. Members discussed this idea and agreed that the SLC prepare a brochure to be made available to local residents. Anne Oesinghaus volunteered to assist with the preparation of the brochure.

- c. May 17, 2005 NRT article in Outdoors column “Preaching the garbage gospel”

Copies of the column were distributed. The Article in Wayne Thompson’s column was about garbage problems in the GTA. The end of the column states:

“Here in North Renfrew, we should not be singing a hallelujah chorus at the landfill gate. We must embark upon a crusade to encourage more recycling, composting, and green cart yellow bin programs in the interest of our own waste reduction before a crisis looms locally.”

Members agreed that these statements reflect many of the SLC’s interests.

#### 4. Business Arising from Previous Meetings.

- a. Discussion with and information from Vice Chair Farr re recycling electronic equipment and disposal of fluorescent tubes and light bulbs.

James stated that the topic of treating spent fluorescent tubes and small fluorescent light bulbs as hazardous wastes was discussed at the May 15, 2006 Board Meeting. An article in the April 12, 2005 Ottawa Citizen titled “Lightbulbs to be treated as hazardous” was distributed to SLC Members. James added that in our Towns, these wastes are currently being handled as regular garbage, but when the current HHW materials C of A Amendment is approved, these wastes will be treated as hazardous.

The Board directed James to contact the local CTC and Home Hardware to determine if they accept spent fluorescent lights for proper disposal. He spoke to the managers of the two stores and was informed that they do not currently have a program for handling and disposing of spent fluorescent bulbs and tubes. Also, these two businesses place their spent fluorescent lights out with regular garbage for removal by the garbage contractor. James had also called Fleury’s and they dispose of their tubes in the same manner. AECL disposes of their tubes on-site.

During a recent conversation with Susan Farr, she informed him that she had some information about a product called The Bulb Eater. It is a controlled crushing unit that captures the mercury in fluorescent tubes of varying lengths and sizes. The unit connects to an approved HHW open top drum. The drum will hold up to 1,350 crushed lamps. She added that the cost of the unit is about \$12,000 US. Susan presented the SLC with a hard copy of information about this product. SLC Members discussed this topic and agreed

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

that public education and methods for the collection and disposal of these lights will have to be addressed.

Susan Farr and James had also earlier discussed a bulletin titled “Help Us By Donating Your Used Cell Phones and Empty Laser and Inkjet Cartridges!” General Panet High School’s Gary Serviss prepared this bulletin. The drop-off locations are the three Moncion Markets in Pembroke and Petawawa. James had called Gary and discussed the possible posting of this bulletin locally. Gary suggested that Mackenzie High School (MHS) should consider a similar program for fundraising and he would provide them with the necessary contacts. James contacted MHS’ Principle Kinghorn with this information and she agreed to look into this initiative.

Susan Farr also provided the SLC with a cell phone, an inkjet cartridge and a laser cartridge rebate list from Greentec International. The rebate amount for cell phones is from \$0.50 to \$39.90. The rebate for inkjet cartridges ranges is from \$0.48 to \$3.70 and the range for laser cartridges is from \$0.36 to \$14.30.

Susan Farr noted that waste cell phones and rechargeable batteries could be dropped off at Office Depot. She added that the Canadian Diabetes Association also collects ink cartridges. Susan McBride suggested that collection bins could be placed in the two Towns for some of these materials. Susan Farr recommended that we look into the current disposal methods of these cartridges.

### 5. Other Business.

a. Status of application to amend the C of A including updated Site Plan and HHW expansion.

In a recent email to SLC Members, James stated, “I called the MOE several times about the progress of the amendments. The MOE’s Andrew Neil replied that he has the Draft ready with the requested changes and he will send it to us and to Robinson Consultants for comments. Once he gets approval from us, he will finalize it. The District has no objections to it. We should see it shortly.”

A letter to the last two sets of Councillors in November 2003 was very instrumental in obtaining Municipal agreements for the Board to handle the Cardboard Recycling Contract. Members discussed and agreed to the drafting of a letter to the two new Councils requesting that the SLC be permitted to educate residents on recycling and advertise the benefits of the three R’s.

Members discussed ways to increase waste diversion including recycling and composting. Susan Farr noted that 2005 SLC Member Jim Ungrin had some good ideas to help increase waste diversion. Some of his and other 2005 SLC Members ideas attempted to address the landfilling of yard waste/grass clippings. James then passed around photos of a Deep River residence that put out several large orange bags of grass clippings weekly that were taken by the garbage contractor for landfilling. One estimate

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

of the yard waste that was being landfilled from this residence alone, during the growing months, was in excess of 400 cubic metres over the 25-year life of the Landfill Site. This does not include the regular garbage from the same address. This is equivalent to the volume from about ten average households. Many other residents in Deep River also put their yard waste out with their regular garbage for landfilling. Unfortunately, the Board and the SLC were not able to rectify that problem during 2005. Members agreed that this problem be again addressed in 2006.

Jim Ungrin had another suggestion seen in the following 2005 email:

“There have been various discussions on diverting material from the landfill sites. Often the argument, for instance on cardboard, centers on increased lifetime of the sites. A similar argument has been proposed for yard waste and composting. I am wondering if the argument should not in fact turn to one of cost. How much does putting a cubic meter of material into a waste management site cost? We should be able to estimate costs to date for the existing site, plus annual costs to operate times number of remaining years and divide by volume. This should give us a reasonable number - checking with other sites in Ontario should give us a "normalizing factor".

If this cost turns out to be 50 cents per cubic meter, then we will have one response from the public - if it turns out to be 100\$ per cubic meter clearly we will get another. I think actually giving people a \$ cost translates to more meaning than a reduction in closing date from 2040 to 2035 for instance.

James - are these numbers available?

Jim Ungrin”

James did an estimation of the cost and the amount was \$70.00/cubic metre. He was not able to get any replies from other Towns or Twps that he had contacted about their costs.

SLC Members discussed the diversion of yard waste. Suggestions included: the Town could make a weekly or bi-weekly pickup of these compostable materials. The material could be taken to a Town owned compost facility or to the Landfill Site's Composting Area. Susan McBride suggested that James check with Deep River to determine if they have a leaf and garden waste composting area. If so, residents could be encouraged to take their yard waste to the area, if the Town agrees to allow this.

Nora Waddell suggested that the wasteful landfilling of plastic grocery bags is a problem that should be addressed. The use of reusable fabric or plastic shopping bags would save landfill volume and reduce costs for the consumer and the merchants. Members discussed this issue and agreed that this is another issue to be addressed. All worthwhile waste diversion will extend the life of the Site and save money in an earlier search and opening of a new Landfill Site. Locating and opening a new Site is becoming very difficult or impossible in many areas.

c. Details of issue re Biohazardous waste/sharps in container discovered in garbage at Site.

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

James stated that the Site Attendant had reported this incident to him. The Attendant was concerned about this waste being in the regular garbage as a worker at the OVWRC had recently received a puncture to his skin from a medical needle that was in the regular garbage. That worker had had to receive shots for several weeks to address any possible infection. The Board had discussed this problem and had directed James to send the information to the NRT and to send a letter to local medical facilities and doctors. The NRT printed a news article titled "Medical Waste found in landfill site". A copy of the news article and the letter was distributed to SLC Members."

### **5. Highlights of September 11, 2006 SLC meeting.**

#### **“3. Advertising.**

##### **a. Discussion of fall 2006 SLC Site Features ad.**

Copies of the draft ad were distributed to Members. James pointed out the additions that were not included in the spring ad. Members examined the draft fall ad and agreed that it be emailed to them for comments. It would be edited as required and run in the November 1, 2006 edition of the NRT. Scissors would again be added to the boarder of the ad to encourage residents to retain the information for future reference.

##### **b. Review of Composting brochure and possible modes of distribution.**

The draft of the Board/SLC composting brochure was prepared by James and Laurentian Hills' Sherry Batten. The draft was recently sent to Anne Oesinghaus for review and editing. Anne emailed her recommendations to James and he agreed with the changes; but did not have time to update the brochure. Anne distributed copies of the original draft to Members.

Possible modes of distribution were discussed. Brochures could be made available in both Municipal Buildings. It was deemed that distribution as unaddressed admailings was expensive and would bring the SLC 2006 advertising amount over budget. Nora Waddell suggested that the Deep River Horticultural Society could be contacted for advice and possible help with the distribution. Nora agreed to make the inquiry.

#### **4. Business Arising from Previous Meetings.**

##### **a. Update on disposal of fluorescent tubes and light bulbs.**

James stated that traditionally, mercury containing materials including fluorescent tubes and small fluorescent light bulbs have been treated as regular garbage and landfilled. Now that the recent Amendment to the C of A re the HHW materials that we can now accept is approved, the Baggs Road HHW Depot can accept these tubes and bulbs as

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

HHW, but only from household/residential sources. Spent fluorescent tubes and bulbs from business and institutional sources cannot be accepted.

This topic was discussed at the July 24, 2006 Board Meeting and it was noted that although the Board does not have authority outside of the Landfill Site, it does have the duty, responsibility and authority to not allow hazardous materials to be landfilled. Waste loads with hazardous materials mixed in with garbage could be turned away. It is the Board's intent to stop accepting mercury containing wastes. Options for disposal of these materials from other than household sources will have to be examined.

One option presented earlier by Susan Farr was the currently available "Bulb Eater" that AECL is considering. OVWRC was contacted about this device to determine if they have one or have considered purchasing one for fluorescent tube disposal/recycling. OVWRC had considered the "Bulb Eater" but after speaking to the MOE, has put it on the back burner because of approvals that are required. The Board will again address this issue during the next Board Meeting.

Copies of an article from Solid Waste & Recycling titled "Mercury Madness – Mercury product management in Canada" were distributed to SLC Members.

### **c. Information from Vice Chair Farr re recycling film plastic bags.**

James reported that he and Susan Farr have been corresponding by email about recycling grocery bags. She had first sent a message to OVWRC's Elizabeth Kenrick asking for a web site/contact for companies that they use for recycling grocery bags. Elizabeth replied that OVWRC does accept grocery bags in their expanded blue box program. They deal through brokers and she provided Susan with two brokers' web sites. Elizabeth added that if the Board is interested in sending these recyclable bags to the OVWRC, that they should feel free to contact her. Elizabeth said that if we send our waste to the OVWRC, the bags would be accepted.

James replied to Susan saying that Beaumen does collect film plastic bags in blue boxes in Deep River but not in Laurentian Hills. We do not know if Beaumen actually has this material recycled or has it landfilled. The OVWRC option might be one of the better ones for recycling in both Towns. The Towns' current agreements will end in 2008.

### **d. Item from Nora Waddell re article "Loeb to recycle plastic grocery bags".**

The article was discussed. Nora displayed an example of a reusable shopping bag that is available for \$1.00 each at the local Giant Tiger store. James stated that he had also looked into availability of reusable shopping bags and determined that two other two businesses sell these bags for about \$5.00 each. One grocery store in Pembroke also sells reusable bags for \$1.00.

Moved by: Anne Oesinghaus

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

Seconded by: Nora Waddell

That the Board be informed that the SLC recommends that the Board or the SLC promote the use of reusable grocery bags and inform residents of the businesses that sell them. Carried.

Chair McBride suggested that the Giant Tiger Manager be contacted about promoting these bags. Perhaps he would consider giving one reusable bag to each family.

e. Results of query into if Deep River has a leaf and garden composting area that residents could use.

During the last SLC Meeting, Susan McBride requested that James determine if Deep River has a leaf and garden waste area that Town residents could use. James reported that he had contacted Councillor Hank van der Horn and asked that he find out. Hank looked into this issue and informed James that Deep River does not have a leaf and yard waste area for residents to use.

f. Results of check into current disposal methods of ink cartridges in the Towns.

James stated that he had contacted both towns about their disposal practices for ink cartridges. Ginette Brindle looked into this and replied that Deep Rover sends their spent cartridges back to Xerox. The Town of Laurentian Hills disposes of them in with regular garbage. He asked Laurentian Hills Office workers to bring waste cartridges to the SLC office so that they will be recycled.

SLC Members continued the discussion about disposal of ink cartridges and cell phones. Nora Waddell stated that two local businesses accept these materials for recycling. They are Figaro's Hair Stylists and Digital Copy Express. Figaro's donates the proceeds from recycling these materials to the Food Bank.

Moved by: Nora Waddell  
Seconded by: Anne Oesinghaus

That the Board be requested to advertise or ask the SLC to advertise that ink cartridges and cell phones can be brought to local businesses for recycling. Carried.

Susan McBride suggested that a press release with a photo could be printed in the NRT. The photo could be an NRT employee dropping off a cartridge to Figaro's with the caption "Recycling profits are donated to the local Food Bank".

5. Other Business.

a. Presentation of approved Amendment to the C of A and ad in the NRT re HHW materials now accepted.

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

Copies of the approved Amendment and the ad were given to SLC Members. It was briefly reviewed and Members agreed with the expanded list of HHW materials that are now accepted.

b. Discussion of format and content of possible letters from the SLC to new Councillors after the November 2006 Municipal Elections.

James noted that at the last SLC Meeting, Members discussed and agreed to the drafting of a letter to the two new Councils requesting that the Board and the SLC be permitted to educate residents about recycling, waste diversion and advertise the benefits of the three R's. A letter to the last sets of newly elected Council Members in November 2003 was very instrumental in obtaining Municipal agreements for the Board to develop and handle the Cardboard Recycling Contract.

The letter should suggest the SLC Terms of Reference have the following addition: "To publicly advertise, and to provide education and promotion of, the advantages of waste diversion, including reduction, re-use and recycling or any other acceptable activity that will, in an environmentally acceptable manner and within the mandate of the landfill site operation, extend the useful life of the landfill site."

It should be noted that the Intermunicipal Agreement would not have to be reopened for this approval. The Intermunicipal Agreement is totally silent with regard to the SLC, the SLC is mentioned nowhere in the agreement, and as such there is absolutely no need whatsoever to modify, open or alter the agreement for the proposed purposes. It simply requires the approval of both Councils.

Members requested that James prepare a draft of the letter, have it reviewed and then signed by the SLC Chair. A copy would then be sent to each Council Member in both Towns after the elections.

c. Presentation of CBC article: "Town puts 3 cent levy on plastic bags".

The article was discussed. Members agreed that although putting a levy on plastic bags would be a good idea; it would be a difficult idea to sell in our Towns. An earlier attempt to have local businesses charge 5 cents per plastic shopping bag at the checkouts was not successful. One local Manager stated that this might discourage customers from shopping in Deep River. Educating the public to use reusable shopping bags should help. Giving a reusable shopping bag to each family or to each school child might be the best next step. A Motion to the Board to advertise the availability of these bags was made earlier in the Meeting."

### **7. Highlights of the November 20, 2006 SLC meeting.**

"a. Discussion of fall 2006 SLC Site Features ad in NRT and discussion of if a possible final 2006 ad should be prepared and run.

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

The fall ad was briefly examined and discussed. Members agreed that a winter/Christmas ad might be worthwhile. It could be run in mid December and remind residents of materials that should be recycled. Residents would be requested to recycle and not landfill extra holiday packaging. Chair Farr suggested that information be added about the options for disposing of Christmas trees, pesticides and herbicides. Gift wrapping might not be accepted by the Town's recycler and Beaumen should be contacted. The ad would be best if it were run in the middle of December.

Scissors should again be added to the boarder of the ad to encourage residents to retain the information for future reference.

b. Update on printing and distribution of SLC Composting Brochure.

The updated/completed SLC composting brochure was discussed. Color printing and distribution by unaddressed ad mailings of the Brochure was deemed to be too expensive. Brochures in black ink only could be made available in both Municipal Buildings. James stated that he would look into having both Towns insert a copy of the Brochure into the first 2007 tax bills. Nora Waddell had suggested earlier that the Deep River Horticultural Society could be contacted for advice and possible help with the distribution. She will make an inquiry in the spring.

c. Suggestion to discuss if an ad for an additional SLC Member should be run in the NRT.

After a brief discussion, Members decided that an ad should be run this December.

d. The Board's October 18, 2006 Press Release in the NRT " Province approves expanded list of HHW", which includes recommendations re promoting reusable shopping bags and recycling ink cartridges and cell phones as suggested by the SLC.

Members examined ad discussed the ad. A Press Release is an excellent and economical way to get messages out to the Public.

e. October 11<sup>th</sup> photo in NRT of Compost Area pumpkins.

The photo was discussed and Members greed that it is good PR for our Compost Area.

#### 4. Business Arising from Previous Meetings.

a. Update on 75<sup>th</sup> percentile exceedences and access problems.

James reported that although he had again called the Robinson Consultants for an update on these issues, they have not yet received a reply from the MOE.

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

b. Letter to Editor from Nora Waddell “Keep recycling” re article “How tough can this garbage stuff be?”.

Nora’s letter was discussed and Members agreed that a letter to the editor was another very good and inexpensive way to encourage recycling. These letters are usually read by residents that get a copy of the NRT.

c. Possible recommendation by the SLC to the Board to amend the SLC Terms of Reference re publicly advertising and educating.

SLC Members discussed the Terms of Reference and noted that item 15. of the Terms state: “Amendments to this Terms of Reference may only be made upon the recommendation of the SLC or the Board. No changes to this Charter shall be undertaken without approval of the North Renfrew Waste Management Board or its successor.” Additionally, The C of A section 59. states in part: “The SLC shall serve as the focal point for public dissemination, review and exchange of information relevant to municipal and local concerns on the operation of the landfill Site.”.

The addition to the Terms, as discussed at previous meetings, could be: “To publicly advertise, and to provide education and promotion of, the advantages of waste diversion, including reduction, re-use and recycling or any acceptable activity that will, in an environmentally acceptable manner and within the mandate of the landfill site operation, extend the useful life of the landfill site.”

Members agreed that the SLC should recommend that the Board make this addition to the Terms. Details of having the two Town Councils agree to allowing the Board to advertise and educate the public about the above merits of waste diversion could be addressed during future Board and Councils meetings.

Moved by: Anne Oesinghaus  
Seconded by: Susan Farr

That the Board be requested to accept the SLC’s recommendation and add the above term to the SLC Terms of Reference. Carried.

James was instructed to present this motion to the Board at the next meeting.

### 5. Other Business.

a. Memo to HHW Attendants re HHW materials storage designations.

The memo containing instructions for HHW storage was briefly reviewed.

b. Update re upholstered furniture being redirected to Baggs Road Site.

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

James reported that this change to the C&D materials that must now be accepted at the Baggs Road Site was discussed at the last Town of Laurentian Hills Council Meeting. Mayor Gutzman was not aware of this change and he stated that he would contact Deep River's Mayor Aikens to determine if anything should be done about this matter. The Mayors decided that it should be discussed at the next tri-Council Meeting.

Deep River's Larry Simons had originally requested that James prepare the list of C&D waste materials that could be accepted at the Miller Road Site. James had then prepared the list and had it reviewed by Robinson Consultants before sending it to Larry. Hank van der Horn stated that he does not believe that it was presented to Council for approval.

c. Discussion of draft letter from the SLC to members of the new Towns' Councils.

James noted that at the last SLC Meeting, Members discussed and agreed to the drafting of a letter to Members of the two new Councils requesting that the Board and the SLC be permitted to educate residents about recycling, waste diversion and advertise the benefits of the three R's. A draft letter was prepared and discussed.

Moved by: Anne Oesinghaus  
Seconded by: Susan Farr

That the draft letter be accepted, signed by the SLC Chair and sent to Members of the two new Councils. Carried.

d. Second 2006 illegal dumping event of carpet in the Baggs Road ditch as reported by Wayne Blimkie.

James stated that Baggs Road is inspected by a Site Attendant and by himself weekly for litter and illegally dumped material. Wayne Blimkie had left a phone message on October 26<sup>th</sup> and reported that he discovered a rug in the Baggs Road ditch adjacent to his property. James contacted the Site Attendant and the rug was removed immediately. Baggs Road and ditches had been inspected on October 25<sup>th</sup> and the Attendant would have found and removed it had it been dumped prior to October 25<sup>th</sup>. Someone must have placed it there later on October 25<sup>th</sup> or 26<sup>th</sup>. Members deemed the inspection and cleanup process to be acceptable.

e. Discussion of Daily Observer article: "Recycling – the way to go".

Copies of the article were distributed and it was discussed. The theme of reducing, reusing and recycling must be impressed upon the public. Change begins with ourselves. The Baggs Road Site only composts lawn and garden wastes and composting other/food wastes is too expensive an undertaking for small Sites like ours. People should be encouraged to bring their lawn and garden wastes to our composting area if they do not compost at home. The article also presents the benefits of the pay per use – bags or tags issue. These issues should be discussed at length, during future SLC Meetings.

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

g. Suggestion that 2006 SLC Members reapply for 2007 Membership.

Susan Farr stated that she will not be applying for 2007 SLC Membership. Anne Oesinghaus stated that she will reapply. James added that he will contact the other 2006 participating SLC Members to determine if they will be applying for 2007 Membership. 2007 SLC Members will be appointed during the January 22, 2007 Board Meeting.”

This ends the 2006 SLC Annual Report. The Board thanks 2006 SLC Members for their participation as SLC Members. Their efforts have been beneficial to the Landfill Site and to residents of both Towns.

James Leon  
Waste Management Coordinator

### **6.2 PLANNING FOR FUTURE WASTE DISPOSAL**

During 2006, The Board did not undertake any planning with regard to future waste disposal capacity as the remaining life of the Baggs Road Site was expected to exceed twenty years. The estimate based on survey results and historic fill rates. The data suggests that the Site will last another 24 years. Planning for future waste disposal should be addressed about ten years prior to closure of this Site. At that time, the Board should explore the various waste disposal options.

The life of the Landfill Site will depend on the success rate of future waste diversion including the diversion of Construction and Demolition Waste, Blue Box Recycling and Composting of lawn and garden wastes. Assistance from the SLC should prove to be beneficial.

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

### **6.3 2006 COMPLAINTS AND COMPLAINTS PROCEDURE**

There were no complaints regarding the operations of the Baggs Road Landfill Site during 2006. Illegally dumped materials discovered near the Landfill Site were removed immediately by Site workers.

The operation of an electric fence around the area being landfilled has denied access to bears. When opened in 2002, the Site experienced bears digging nightly in the landfilled residential waste. This gave raise to large amounts of scattered and wind-blown litter. This electric fence has decreased litter in and from the Site.

Litter has been picked up at the Site and along the Access Road as required or every two weeks as a minimum, with the exception of winter months when deep snow conditions make walking and finding litter very difficult. After the snow melts the cleanup is addressed.

Private properties adjacent to the Landfill Site are inspected weekly and litter is removed when it is found, with permission of access from the property owner.

The Complaints Procedure is as follows:

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

### **NORTH RENFREW LANDFILL OPERATIONS BOARD**

Laurentian Hills Municipal Building  
34465 Hwy 17, R.R. #1, Deep River, Ontario K0J 1P0  
Telephone: (613) 584-9194  
Fax (613) 584-3285  
Email: nrwmb@magma.ca

## **NORTH RENFREW LANDFILL SITE, BAGGS ROAD**

### **COMPLAINTS PROCEDURE**

**April 28, 2003**

1. All complaints regarding the operations of the landfill site will be directed to the Waste Management Coordinator/Operations Manager.
2. A complaint log will be maintained in which the name of the complainant as well as the date and nature of the complaint and the action taken will be recorded.
3. The Waste Management Coordinator/Operations Manager will respond to the complainant within ten working days of receiving the complaint with a written notice of action.
4. The Waste Management Coordinator/Operations Manager will report all complaints to the Chairperson of the North Renfrew Landfill Operations Board as soon as possible.
5. The Waste Management Coordinator/Operations Manager will report all complaints to the North Renfrew Landfill Operations Board at its regular meetings.
6. If the person making the complaint is not satisfied with the action taken, he/she may appeal to the North Renfrew Landfill Operations Board. If the person is still unsatisfied with the action taken, he/she may appeal to the Ministry of Environment and Energy.
7. The Board will review all complaints about the operations at the Landfill Site with the Site Liaison Committee twice annually.
8. This Complaints Procedure will be posted at the gate to the North Renfrew Landfill Site and at all municipal offices in the area served by the North Renfrew Landfill Site.
9. This Complaints Procedure will be published in a local newspaper.

**Waste Management Coordinator James Leon 584-9194**

## NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT

### 6.4 MOE INSPECTIONS AND CORRESPONDENCE

On June 16, 2005 Mr. Andrew Polley, the Ministry of the Environment's former Senior Environmental Officer of the Ottawa District conducted the first Site Inspection of the North Renfrew Landfill Site since the Site began operation on July 6, 2002. He recommended that a submission be made to the MOE to update and add to the C of A. A November 28, 2005 submission was made by Robinson Consultants on behalf of the Board. The submission included expanding the list of HHW materials to help keep these wastes from being landfilled. The Approved Amendment was received in August 2006.

The MOE's Senior Environmental Officer, Marc-Etienne Lesieur conducted a Site inspection on January 23, 2007. The cover letter and the Solid Non-Hazardous Waste Disposal Site Inspection Report and the Hazardous Waste Transfer Processing Inspection Report were received on February 8, 2007. In both Inspection Reports section 1.0 Introduction, Marc stated "A previous inspection (June 2005) performed by the Ministry has outlined non-compliance issues regarding the operation of the Site and a Voluntary Abatement Plan (VAP) was initiated to resolve the issues. In response to the VAP, the Board submitted several correspondences outlining actions addressing the operational problems. The Ministry was satisfied with the actions taken by the Board."

The five parts of 4.0 Summary of Inspection Findings (Health/Environmental Impact) in the Waste Disposal Report stated that no problems were indicated. Section 5.0 Action(s) Required stated "None at this time."

Section 6.0 Other Inspection Findings stated "This Inspection Report contains issues which are underlined in the report which could potentially result in environmental compliance issues.

As such, the following actions are to be implemented by the Board. Results of the actions taken by the Board to address these issues must be included in the Annual Report to be provided to the Ministry no later than March 31, 2007 in accordance with Condition 55.

- As recommended in the 2005 Monitoring Report, resurvey for vertical control monitors requiring such action.
- Pursuant to Condition 12, install adequate posts clearly identifying the approved footprint.
- Pursuant to Condition 38, apply interim cover along the area of exposed waste near the tipping face.
- Include in the Annual Report a summary of the quantity of contaminated soil received at the Site along with a confirmation that TCLP analysis was received by the Board indicating the non-hazardous condition of the soil.

The Board is currently addressing these issues. The first one "resurvey vertical control of four bore hole monitors that do not yet have survey elevation is being acted on as follows: The Board's engineering consultant, Robinson Consultants' Frank Hendriksen, was informed that this problem would have to be solved. Bore Hole (BH) #s

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

5 I and 5 II will be surveyed for vertical control during the 2007 Site Survey. The surveyor had earlier been asked to survey these two BHs and the other BHs that were on Site Property but BH 5 I and 5 II were overlooked. The other BHs on Site were surveyed. The remaining two unsurveyed BHs are BH 8 and BH 9 are deep in the AECL swamps. They would be more difficult to survey as there are no survey lines cut to them. Frank Hendriksen has agreed to make suggestions in the 2006 Monitoring Report to solve the vertical control issue of BH 8 and BH 9.

The adequate posts clearly identifying the approved footprint issue is being addressed. The existing posts are 2 x 2 wood, are not high enough if the snow gets deep and they require fresh paint. The Board's contractor has agreed to replace them with higher steel painted posts in the spring of 2007.

Interim cover was more than adequate in all areas except for a small area at the top of the tipping face. This area was immediately covered after the inspection. The Site contractor has assured the Board that his workers will monitor and cover areas as required. The Coordinator will check the cover frequently.

Regarding the quantity and leachate extraction analysis (TCLP) under Ontario Regulation 347, during the inspection Marc requested the analysis for the contaminated soil hauled from a local property during December 2006 be faxed to him. The analysis results were faxed to him the following day. The total volume of soil was 524 cubic meters.

Included with the Inspection Reports, Marc Lesieur sent a copy of "PRINCIPLES OF SAMPLING AND ANALYSIS OF WASTE FOR TCLP UNDER ONTARIO REGULATION 347". The document was dated February, 2002.

During the January 23, 2007 Site Inspection, Marc Lesieur was asked if there was a small amount volume limit that could be accepted without an analysis. He was not aware of a small amount that could be accepted but he said that he would look into this and let us know.

After receiving the Inspection Reports, the Board has contacted both Towns and reminded them that contaminated soil must first be sampled and analyzed prior to the load(s) being taken to and accepted at the Baggs Road Landfill Site. In the future, results of the analysis will be sent to the Senior Environmental Officer.

Section 4.0 "Summary of Inspection Findings" of the Hazardous Waste Transfer Processing Inspection Report, part five states "Was there any indication of minor administrative non-compliance? Yes.

Specifics: The following summarized items require attention by the Board.

- The 2005 Annual Status Report does not provide sufficient information regarding the quantity of hazardous waste received and transferred from the HHW.

And section 6.0 "Action(s) Required" states:

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

The 2006 Annual Status Report to be provided to the Ministry no later than March 31, 2007 must contain a detailed quantification of the hazardous waste received and transferred from the site in the previous reporting year.”

The Coordinator has informed the Board that HHW materials received and transferred in 2006 will be quantified in detail and included in the 2006 Annual Status Report. Details of 2006 HHW materials are addressed in section 5

---

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

### **7.0 RECOMMENDATIONS**

It is recommended that Inspections, Reports and discussions with the former and the current Senior Environmental Officers ensure that the conditions of the C of A are respected. The site contractor has since been instructed to review the C of A, the D&O and the Operations Manual with his employees.

Site Liaison Committee efforts with advertising and educating residents about the three Rs and following up earlier efforts in composting of lawn and garden wastes. As recommended in 2005, the Board might ask the Towns to consider an alternate to landfilling grass clippings, leaves and garden waste during the growing season. One solution would be a weekly or biweekly pickup. Increased residential composting should also be encouraged. This kind of compostable material should not be landfilled as landfill volume province-wide is and will continue to be at a premium.

Increased recycling and other forms of waste diversion should be encouraged to continue to meet the MOE's 60% waste diversion requirement in 2008. The life of the Landfill Site will depend on the success rate of future waste diversion including the diversion of Construction and Demolition Waste and Blue Box Recycling. Accepting Construction and Demolition Waste, when the Miller Road Site is filled, will likely decrease the waste diversion percentage to below 60%. The Board might request that the Towns consider measures to increase recycling such as garbage bag limits, using clear bags, pay per bag or tag and/or a mandatory recycling by-law.

---

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

## **NORTH RENFREW LANDFILL SITE 2006 ANNUAL STATUS REPORT**

### **8.0 LIMITATIONS AND USE OF REPORT**

This Annual Status Report has been prepared by the following parties: Robinson Consultants Inc. and the North Renfrew Landfill Operations Board. It was prepared with the benefit of the parties' professional judgement and experience.

This report has been prepared for the exclusive use of the North Renfrew Landfill Operations Board, the Town of Deep River and the Town of Laurentian Hills. Any use that a third party makes of this report, or any reliance on or decisions to be made on it, are the responsibility of such third parties. The participants that prepared this report accept no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Respectfully submitted by,

James W. Leon  
Waste Management Coordinator

---