
APPENDIX A

Environmental Compliance Approvals

Clean Harbors Canada, Inc.

2016 Annual Landfill Report

Ministry of the Environment
Environmental Assessment and
Approvals Branch
Floor 12A
2 St. Clair Ave W
Toronto ON M4V 1L5
Fax: (416) 314-8452
Telephone: (416) 314-8229

Ministère de l'Environnement
Direction des évaluations et des
autorisations environnementales
Étage 12A
2 av St. Clair O
Toronto ON M4V 1L5
Télécopieur: (416) 314-8452
Téléphone: (416) 314-8229



November 14, 2002

Clean Harbors Canada, Inc.
Rural Route, No. 1
Corunna, Ontario
N0N 1G0

Dear Sir/Madam:

**Re: Application for Approval of Change of Name Information
Waste Disposal Site Certificate of Approval No. A031806
Request to Change the Information regarding the Company Name from
Safety-Kleen Ltd. to Clean Harbors Canada, Inc.
St. Clair Township, County of Lambton
MOE Reference Number 2723-5GNNAN**

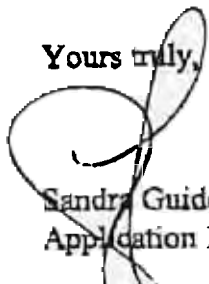
The Ministry of the Environment (the "Ministry") acknowledges receipt of your letter dated July 17, 2002 requesting a change in company name in accordance with the above noted Certificate of Approval.

By this letter, the Ministry advises you that your notification of change in company name has been registered in our records for the above noted Certificate of Approval No. A031806.

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

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

Yours truly,


Sandra Guido
Application Processor

c: District Manager, MOE Sarnia
Doug Thomson, McCarthy Tetrault LLP

Under the Environmental Protection Act and the regulations and subject to the limitations thereof, this Provisional Certificate of Approval is issued to:

Laidlaw Environmental Services (Sarnia) Ltd.
265 North Front Street, Suite 502
Sarnia, Ontario
N7T 7X1

for the use and operation of a landfill site with a total fill area of approximately 56 hectares which includes the pre-1985 fill area, the current operating 14.3 hectare fill area and the expansion fill area of 13.1 hectares and a landfill pretreatment system all within a total site area of 121.4 hectares.

all in accordance with the following plans and specifications:

As per Schedule "A"

Located: Lot 9, and Part of Lot 8, Concession 10
Township of Moore
County of Lambton

which includes the use of the site only for the processing and disposal of the following categories of waste (Note: Use of the site or additional categories of wastes requires a new application and amendments to the Provisional Certificate of Approval) as specified in conditions 3 and 4.

and subject to the following conditions:

1. For the purpose of this Provisional Certificate of Approval:
 - (a) "Director" means any Ministry employee appointed by the Minister pursuant to Section 5 of the Environmental Protection Act, R.S.O. 1990;
 - (b) "Company" means only Laidlaw Environmental Services (Sarnia) Ltd.;
 - (c) "District Manager" means the District Manager of the Ministry of Environment and Energy for the Sarnia District Office;
 - (d) "MOEE" means the Ontario Ministry of Environment and Energy;
 - (e) "Regional Director" means the Director of the Southwest Region of the Ontario Ministry of Environment and Energy; and
 - (f) "District Office" means the Ontario Ministry of Environment and Energy Sarnia District Office;
 - (g) "CL/AC" means Community Liaison/Advisory Committee.
 - (h) "Property" means the lands located as described above.

2. Except as otherwise provided by these conditions, the landfill site and the landfill pretreatment system shall be operated in accordance with the documents listed in Schedule "A".

3. Acceptable Wastes for Pretreatment System

Subject to the qualification provided in condition 5, the following Ministry of Environment and Energy waste classes may be accepted for processing and solidification at the landfill pretreatment system; 111-114 inclusive, 121, 122, 123, 131-135 inclusive, 141-150 inclusive, 211, 212, 213, 221, 222, 231, 232, 233, 241, 242, 251-254 inclusive, 261-270 inclusive, 281, 282, 311 and 321.

4. Acceptable Wastes for Landfill

Subject to the qualification provided in condition 5, the following categories of waste may be accepted for disposal at the landfill site:

- (a) non-hazardous solid industrial waste;
- (b) solidified wastes from the landfill pretreatment system;
- (c) the residues or contaminated materials from the clean-up of a spill that have a slump of less than 150 mm using the Test Method for the Determination of Liquid Waste ("slump test") as set out in Regulation 347; and
- (d) solid wastes having a slump of less than 150 mm (using the slump test), of the following Ministry of Environment and Energy waste classes; 111-114 inclusive, 121-123 inclusive, 131-135 inclusive, 141-150 inclusive, 211-213 inclusive, 221, 222, 231-233 inclusive, 241, 242, 251-254 inclusive, 261-270 inclusive, 281, 282, 311 and 321.

5. Waste Restrictions

Except with the prior approval of the District Manager, the following wastes as defined in Regulation 347 under the Environmental Protection Act shall not be accepted for processing and solidification at the landfill pretreatment system or for disposal at the landfill site:

- (a) ignitable wastes
- (b) radioactive wastes
- (c) pesticide wastes
- (d) reactive waste
- (e) waste streams containing greater than 2% by weight of:
 - i) halogenated and non-halogenated organic chemicals which in their pure state:
 - are non-solid, and
 - exhibit an equilibrium vapour pressure in excess of 10 mm of mercury at 25°C, and
 - have a molecular weight of less than 300 atomic mass units.

- ii) aromatic compounds which contain one or more nitrogen atoms and
 - a) have an equilibrium vapour pressure in their pure state greater than 10 mm of mercury at 25°C and have a molecular weight less than 300 atomic mass units and are non-solid at 25°C.

or

 - b) are listed dangerous goods in the Transportation of Dangerous Goods Act and have a primary or subsidiary designation of Class 1 (Explosives) or Class 4 (Flammable Solids).
 - iii) constituents contained in Schedule 2, Parts A and B of Ontario Regulation 347 which in their pure state:
 - are non-solid, and
 - exhibit an equilibrium vapour pressure in excess of 10 mm of mercury at 25°C, and
 - have a molecular weight of less than 300 atomic mass units.
- (f) The Company shall obtain the written concurrence of the District Manager prior to the pretreatment or disposal of any of the restricted wastes where the Company are proposing a change to the primary or secondary waste characterization as identified on a subject manifest by the generator. The analysis conducted in support of a proposed change to the waste class characterization shall be done consistent with the requirements under Regulation 347.

6. Analysis of Solidified Product and Neutralized Liquid Waste

For the landfill pretreatment system, each batch of neutralized liquid wastes and the solidified product are to be sampled and analyzed to ensure that the following specifications for moisture content and stability are met:

- i) the solidified waste product will have a moisture content of less than 35% weight/weight (w/w);
- ii) the solidified waste product will exhibit a slump (as measured by the standard test method defined in O. Reg. 347) of less than 50% as initially prepared and will exhibit a resistance to penetration of not less than 15 psi on 24 hours curing.

7. Changes to the Final Design and Operations (D&O) Report

- (a) The CL/AC shall receive copies of any documents relating to the approval, design and operations of the landfill site prior to the submission of any application for changes to the operation of the site or revised documentation that are subject to the Director's approval.
- (b) The Company shall submit the final revised D&O Report to the Director, for approval, within 90 days of the date of this approval.

8. Daily Records

Daily records shall be kept at the landfill site and the landfill pretreatment system of quantities and types of waste received including origin of the waste, the results of any analysis performed and the location in the cell where the wastes are deposited.

9. Monitoring Programs

- (a) The Site Monitoring Programs shall be conducted as described in the following Sections of the Design and Operations Report (D&O Report):
 - i) Groundwater, sections 6.4.1, 6.4.2 and 6.4.3
 - ii) Cap integrity, section 6.4.4
 - iii) Surface water, section 6.5
 - iv) Air Quality, section 6.6.1
 - v) Biomonitoring, section 6.6.2
- (b) Soil cores from the cap shall be sampled and analyzed as described in Section 6.4.4 of the D&O Report.
- (c) The Company shall carry out the monitoring program as approved and with any amendments as required or approved, in writing, from time to time by the Regional Director.
- (d) The results of all analyses performed pursuant to the program shall be submitted to the Regional Director within one month of each analysis being completed.
- (e) If the results of the monitoring program demonstrate that contaminants are moving away from the base of the waste cells and through the soils at a rate and concentration greater than those predicted by the diffusion model, then the operations of the landfill site and any additional mitigative measures are to be reviewed by the Approvals Director.
- (f) In addition to (a) i) above, the Company shall submit an enhanced groundwater monitoring program to the Regional Director, for approval, within 90 days after the date of issuance of this certificate.

10. Surface Water

- (a) The Company shall take all reasonable steps to ensure that liquid at the base of the active working face does not exceed a depth of 0.3 metres.
- (b) All liquid collected from the base of the active working face shall be incinerated or disposed of at a hazardous waste facility approved for the disposal of that type of waste.
- (c) All surface water collected from Area I and, as delineated Figure 4-8 of the D&O Report, shall be incinerated or disposed at a facility approved for the disposal of that type of waste.
- (d) Surface water collected from Areas II and III as delineated in Figure 4-8 of the D&O Report shall be treated by trickling filter, sand filter and carbon polishing and may only be discharged to the Telfer Road ditch if the following criteria are met:
 - i) total suspended solids shall not exceed 15 mg/L
 - ii) solvent extractables shall not exceed 15 mg/L
 - iii) total phenols shall not exceed 0.02 mg/L
 - iv) pH shall be in the range of 5.5 to 9.5
 - v) the water does not exhibit acute toxicity as measured by a standard test using a species like Rainbow Trout; or another equivalent test as may be approved by the Regional Director.
 - vi) no discharge may interfere with drainage in the ditch or be discharged at such a rate as to increase the turbidity in the ditch or cause erosion, and;
 - vii) all discharge must comply with the Objectives for Control of Industrial Discharges in Ontario and the approval No. 4-012-86-006 issued under the Ontario Water Resources Act.

11. Abandoned Wells

During the progress of landfilling, the company shall locate, remove and seal all wells in the area of the trench, including observation wells, old water wells and oil and gas test wells. A well decommissioning protocol shall be included in the revised D&O Report required by condition 7 (b).

12. Surficial Sand and Gravel

Any surficial sand and gravel deposits in the area between the cell and the outside of the perimeter berm shall be removed prior to berm construction to prevent underdrain conditions from occurring.

13. Access Roads

All access roads to the landfill site shall be maintained in accordance with procedures described in Section 4.8.3 of the D&O Report to minimize dust generation at the site.

14. Landfill Cap

The 5.1 metre cap over the waste shall be constructed as described in Section 4.4 of the D&O Report in order to minimize hydraulic conductivity to the degree that molecular diffusion is the dominant factor controlling the rate of contaminant migration.

Quality control of cap construction shall be monitored as described in Section 6.3 of the D&O Report.

15. Annual Report

The Company shall submit annual reports to the MOEE Regional Director on or before November 30th of each year. Such reports shall cover the year ending the previous August 31st and shall include the following information as required for the landfill site and landfill pretreatment system:

- (a) the results of an interpretive analysis of all monitoring programs as defined in conditions 9 and 10;
- (b) a summary of waste received for landfilling and pretreatment at the site including quantities, types and origin;
- (c) a list of all rejected vehicles together with reasons for any rejection;
- (d) a report on the progress of landfilling including total capacity used and the remaining site life, berm development, the extent and location of any gravel or sand lenses excavated and the location of any old wells discovered and plugged; and
- (e) a summary and discussion of past analytical data based on previous annual reports showing trends in data and potential future concerns.

16. Insurance and Securities for the Landfill Site

(a) Insurance

A policy of environmental liability insurance providing coverage of at least \$5,000,000 per occurrence with an annual aggregate of at least \$10,000,000 shall be kept in force at all times including after closure of the site, until the Approvals Director is satisfied that it is no longer necessary to do so. The policy shall cover sudden and non-sudden emissions of contaminants from the site and shall cover bodily injury and property damage. If such insurance becomes unavailable, the Director shall be notified immediately upon notice from the insurance institution and extra securities shall be deposited with the Director in order to maintain third party coverage.

(b) Immediate Response fund

The Company shall provide the sum of \$25,000 to the Township of Moore to be held in trust by the Township for emergency water supply, if necessary. The Company shall enter into an agreement with the Township respecting the administration of the trust fund including provisions for replenishment, payments and an administration fee.

(c) Closure and Post-Closure Security

Prior to the disposal of any waste at the landfill site, the Company shall provide to the Approvals Director financial security of type and form satisfactory to the Director in the amount of \$750,000 to ensure the completion of closure and post-closure activities at the site.

(d) Contingencies and Remedial Action Security

Prior to the disposal of any waste at the landfill site, the Company shall provide to the approvals Director financial security of a type and form satisfactory to the Director in the amount of \$1,500,000 to guarantee that appropriate contingency and remedial action measures will be implemented if and when required.

(e) The Company shall submit reports to the Approvals Director every five years updating the cost estimates on which the financial securities referred to in (c) and (d) above were based, taking into consideration any changes proposed in the operation and closure of the site and cost increases due to inflation.

(f) The amount of the financial securities referred to in (c) and (d) above shall be adjusted by the Approvals Director in accordance with the reports submitted, if accepted by the Director as satisfactory, and the Company shall provide any additional or replacement financial security as required by the Director.

(g) If, at any time, notice is received that an institution which has issued either of the financial security instruments referred to above, proposes to revoke or not renew the security instruments at a time when replacement security has not been furnished, the Company will immediately inform the Director and the security may be drawn upon and the amount placed in the Consolidated Revenue Fund of the Province of Ontario.

17. Prohibition/Registration on Title

(a) Pursuant to Section 197 of the Environmental Protection Act, neither the Owner nor any person having an interest in the Property shall deal with the Property in any way without first giving a copy of this Certificate to each person acquiring an interest in the Property as a result of the dealing.

(b) The Owner shall:

i) Within 60 days of the date of this Certificate, submit to the Director for the Director's signature two copies of a completed Certificate of Prohibition containing a registrable description of the Property, in accordance with Form 1 of O. Reg. 14/92.

- ii) Within 10 calendar days of receiving the Certificates of Prohibition signed by the Director, register the Certificate of Prohibition in the appropriate Land Registry Office on title to the Property and submit to the Director immediately following registration the duplicate registered copy.

18. Replacement of Previous Provisional Certificate of Approval

This Provisional Certificate of Approval revokes all previously issued Provisional Certificates of Approval issued under Part V of the Environmental Protection Act for the landfill site, Provisional Certificate of Approval No. A 031806 and the landfill pretreatment system Provisional Certificate of Approval No. A 031822. The approval given herein, including the terms and conditions set out, replaces all previously issued approvals and related terms and conditions under Part V of the Act for the aforementioned landfill site and pretreatment system.

19. Odour Control and Monitoring

A program shall be maintained to minimize and control odours, which may have an impact off-property, as described in Section 3.2.6.3 of the D&O Report.

20. Complaint Response Procedure

The Facility shall maintain the ability to receive and respond to complaints concerning off-property impacts on a 24 hour basis. Complaints impacts shall be recorded upon receipt and referred to the Shift Supervisor. The complaint shall be investigated by the Shift Supervisor as soon as possible after receipt and a direct response made to the complainant within 12 hours.

If the complaint resulted from an off-property impact caused by the facility, the Shift Supervisor shall take immediate steps to rectify the situation, including, if necessary, restricting Facility Operations until the impact ceases.

The Company shall forthwith notify the Ministry of all complaints that are received at the Facility.

21. Closure and Post Closure

Closure and Post Closure shall mean the phases outlined in Section 7 of the D&O Report. The Closure and Post Closure procedures, monitoring and maintenance shall be carried out as described in this Section.

22. Mitigation of Nuisance Effects

Programs shall be maintained to minimize and mitigate off-property impacts due to noise, sediment, dust, lighting and odour as described in Section 4.8 of the D&O Report.

SCHEDULE "A"

This Schedule "A" forms part of Provisional Certificate of Approval No. A 031806

1. Application for Approval of a Waste Disposal Site, dated May 8, 1996.
2. EA Document 3 - Site Assessment Report, Volumes 1 and 2, dated April 1996.
3. EA Document 4 - Design and Operations Report, dated April 1996.
4. Environmental Assessment Landfill Continuation, Technical Reports Volumes 1 and 2, dated April 1996.
5. EA Document 5 - Response to Environmental Assessment Review, dated January 1997.
6. Letter from the Company's, Mr. Eric Hunter, Director Special Projects, to the MOEE, dated February 28, 1997, correcting typographical errors in the application in item 1.
7. Copy, dated May 8, 1997, of an Order in Council made on May 7, 1997 regarding the approval, pursuant to the Environmental Assessment Act, to proceed with an undertaking subject to conditions.

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

1. The reason for condition 1 is to simplify the wording in the subsequent conditions and to define the specific meaning of the terms used in this Certificate.
2. The reason for condition 17 is that it was added pursuant to subsection 197(1) of the Environmental Protection Act, to provide that any persons having an interest in the Property are aware that the land has been approved and used for the purposes of waste disposal.
3. The reason for condition 18 is to ensure that the site is operated in accordance with this Provisional Certificate of Approval and not with previously issued certificates.
4. The reason for conditions 2 through 22 is that they ensure compliance with the Act and regulations or they are required, on probable grounds, to address potential nuisances, achieve the public interest, or avoid hazards to the health or safety of any person. Also, these conditions are in large measure the result of discussions between experts on behalf of the Company and the public, and Ministry staff. Due to those discussions, the precise rationale for each particular condition is well known to the parties involved.

The establishment, use and operation of this site without the above conditions may create a nuisance or result in a hazard to the health and safety of any person.

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

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

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

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

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

*PROVISIONAL CERTIFICATE OF APPROVAL
FOR A WASTE DISPOSAL SITE*

*NO. A 031806
Page 11 of 11*

This Notice must be served upon:

The Secretary,
Environmental Appeal Board,
2300 Yonge St., 12th Floor,
P. O. Box 2382,
Toronto, Ontario
M4P 1E4

AND

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

DATED AT TORONTO this 5th day of September, 1997.



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



Ontario

Ministry
of the
Environment

Ministère
de
l'Environnement

NOTICE
PAGE 1 OF 2

Safety-Kleen Ltd.
265 North Front Street, Suite 502
Sarnia, Ontario
N7T 7X1

You are hereby notified that Provisional Certificate of Approval No. A031806 for the use and operation of a 26 hectare landfill site with a total fill area of approximately 14.3 hectares and a landfill pretreatment system all within a total site area of 80 hectares located at Lot 9, and Part of Lot 8, Concession 10, Township of Moore, County of Lambton, dated October 20, 1994, and amended November 28, 1994, is hereby further amended as follows:

1. The name of the holder of the Provisional Certificate of Approval on the first page of the Certificate is amended to read:

To: Safety-Kleen Ltd.
265 North Front Street, Suite 502
Sarnia, Ontario
N7T 7X1

From: Laidlaw Environmental Services (Sarnia) Ltd.
265 North Front Street, Suite 502
Sarnia, Ontario
N7T 7X1

1. The reason for this amendment is to ensure the correct name of the holder of the Provisional Certificate of Approval is referenced in the Certificate.

Schedule "A" is hereby revised by adding the following:

11. Letter from Eric Hunter, Director of Compliance, Eastern Canada, Safety-Kleen Ltd. to Mr. Bill Gregson, Acting Director, Ministry of the Environment (MOE), requesting an amendment to reflect the name change, dated October 6, 1998.

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



Ontario

Ministry
of the
Environment

Ministère
de
l'Environnement

NOTICE
PAGE 2 OF 2

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

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

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

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

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

This Notice must be served upon:

The Secretary,
Environmental Appeal Board
P.O. Box 2382
2300 Yonge Street, 12th Floor
Toronto, Ontario
M4P 1E4

AND

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

DATED AT TORONTO this 16th day of November, 1998.

Director
Section 39
Environmental Protection Act



Ontario

Ministry of the Environment
Ministère de l'Environnement

AMENDMENT TO PROVISIONAL CERTIFICATE OF APPROVAL
WASTE DISPOSAL SITE
NUMBER A031806
Notice No. 5
Issue Date: June 18, 2007

Clean Harbors Canada, Inc.
4090 Telfer Road, R.R. 1
Corunna, Ontario
N0N 1G0

Site Location: Lot 8,9, Concession 10
St. Clair Township, County of Lambton

You are hereby notified that I have amended Provisional Certificate of Approval No. A031806 issued on September 5, 1997 and subsequent Notices dated December 4, 1998, October 11, 2002 and June 17, 2004 for the use and operation of a landfill site with a total fill area of approximately 56 hectares which includes the pre-1985 fill area, previous operating 14.3 hectare fill area and the Cell 18 expansion fill area of 13.1 hectares and a landfill pretreatment system all within a total site area of 121.4 hectares, as follows:

I. The following definitions shall be added to this Certificate:

- i. "Certificate " means this entire provisional certificate of approval document, issued in accordance with section 39 of the EPA, and includes any schedules to it, the application and the supporting documentation listed in Schedule "A";
- j. "EPA " means Environmental Protection Act, R.S.O. 1990, c. E. 19, as amended;
- k. "LDR " means Lands Disposal Restrictions referring to sections 74 and sections 75, 76, 77, 79, 80, 81, 82, 83, 84 and 85 of Reg. 347 which is amended into Reg. 347 on August 31, 2007 and section 78 which is amended into Reg. 347 on December 31, 2009 which prohibit the disposal of listed and characteristic hazardous wastes on land until they have been treated to meet the treatment standards under Reg. 347.
- l. "Ministry " means Ministry of the Environment;
- m. "Operator " means any person, other than the Owner's employees, authorized by the Owner as having the charge, management or control of any aspect of the site and includes its successors or assignees;
- n. "Owner " means any person that is responsible for the establishment or operation of the Site being approved by this Certificate, and includes **Clean Harbors Canada Inc.**, its successors

and assignees;

- o. "OWRA " means the Ontario Water Resources Act, R.S.O. 1990, c. O-40, as amended from time to time;
- p. "PA " means the Pesticides Act, R.S.O. 1990, c. P-11, as amend from time to time;
- q. "Processing Facility " means the waste processing facility located at Lot 8 & 9, Concession 10, St. Clair Township, Ontario as described in Schedule "A" and as approved by this Certificate;
- r. "Reg 347 " means Regulation 347, R.R.O. 1990, made under the EPA, as amended from time to time;
- s. "Waste Analysis Plan " means the Owner that treats waste in accordance with sections 75, 76, 77, 78, 79, 82 and 83 of Reg. 347 shall develop and follow a written plan that requires regular and detailed chemical and physical testing of representative samples of waste.

II. The following condition is added to this Certificate:

- 3. a. Subject to the qualifications provided in Condition 5, the following Ministry waste classes may be accepted at this Site for processing at the Processing Facility for LDR: 111, 112, 113, 114, 121, 122, 123, 131, 132, 133, 134, 135, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150.

III. The establishment and operation of a Processing Facility to treat and process hazardous inorganic waste in accordance to LDR under Reg. 347 and treat and process subject waste as part of the approved landfill pretreatment system.

IV. The following new conditions shall be added to this Certificate:

Processing Facility

Build, etc. in Accordance

- 23. a. Except as otherwise provided by this Certificate, the Processing Facility shall be designed, developed, built, operated and maintained in accordance with the application for this Certificate, dated May 4, 2006, and the supporting documentation listed in Schedule "A".

Interpretation

- 23. b. i. Where there is a conflict between a provision of any document, including the application, referred to in this Certificate, and the conditions of this Certificate, the conditions in this Certificate shall take precedence.

- ii. Where there is a conflict between the application and a provision in any documents listed in Schedule "A", the application shall take precedence, unless it is clear that the purpose of the document was to amend the application and that the Ministry approved the amendment.
- iii. Where there is a conflict between any two documents listed in Schedule "A", other than the application, the document bearing the most recent date shall take precedence.
- iv. The requirements of this Certificate are severable. If any requirement of this Certificate, or the application of any requirement of this Certificate to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this certificate shall not be affected thereby.

Construction

- 23. c. A set of as-built drawings, including a Site Plan, showing the Processing Facility as constructed shall be kept up to date through periodic revisions and shall be submitted to the Director and the District Manager. An amendment to this Certificate shall be sought for changes requiring approval.

Operation

- 23. d. The Site shall be operated and maintained at all time including management and disposal of all waste in accordance with the EPA, Reg. 347 and the Conditions of this Certificate.

Vermin, etc.

- 23. e. The Processing Facility shall be operated and maintained such that vermin, vectors, dust, litter, odour, noise and traffic does not create an adverse effect.

Waste Type

- 23. f.
 - i. Subject to the qualifications provided in Condition 5, only the following waste classes shall be accepted at the Processing Facility for processing of hazardous inorganic waste subject to LDR and for processing and solidification as part of the approved landfill pretreatment system: 111, 112, 113, 114, 121, 122, 123, 131, 132, 133, 134, 135, 141, 142, 143, 144, 145, 146, 147, 148, 149, and 150 as described in the Ministry's "New Ontario Waste Classes" document dated January 1986 or as amended; and
 - ii. Subject to the qualifications provided in Conditions 5 and 23 s) v), the following waste classes shall be accepted at the Processing Facility for processing and solidification as part of the approved landfill pretreatment system: 211, 212, 213,

221, 222, 231, 232, 233, 241, 242, 251, 252, 253, 254, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 281, 282, 311 and 321 as described in the Ministry's "New Ontario Waste Classes" document dated January 1986 or as amended.

Waste Limits

- 23. g. i. The Owner shall maintain a minimum free board of 0.15 metres below finished concrete slab level at the sides of the mixing pit.
- ii. No storage of waste is allowed at the Processing Facility.

Hours of Operation

- 23. h. Waste shall only be accepted at the Processing Facility during the following time periods:
 - 24 hours a day, 7 days a week.

Waste Inspection

- 23. i. i. All waste shall be inspected by trained personnel prior to being accepted at the Site to ensure that the waste is of a type approved for processing under this Certificate.
- ii. In the event that a load of waste is refused, a record shall be made in the daily log of the reason the waste was refused and the origin of the waste, if known.

Facility Inspection

- 23. j. i. An inspection of the entire Processing Facility and all equipment (not to include transport/delivery trucks, excavators, monitoring and pressure washing equipment and generators) at the Processing Facility shall be conducted each day the Processing Facility is in operation to ensure that: the Processing Facility is secure; that the operation of the Processing Facility is not causing any nuisances; that the operation of the Processing Facility is not causing any adverse effects on the environment and that the Processing Facility is being operated in compliance with this Certificate. Any deficiencies discovered as a result of the inspection shall be remedied immediately, including temporary ceasing operations at the processing facility if needed.
- ii. A record of the inspections shall be kept that includes the following information:
 - 1. the name and signature of person that conducted the inspection;
 - 2. the date and time of the inspection;
 - 3. a list of any deficiencies discovered;
 - 4. list of any dust, litter, noise, odour or pests detected;
 - 5. a brief description of any maintenance procedures conducted;

6. any recommendations for remedial action; and
7. the date, time and description of actions taken.

Training Plan

23. k. i. A training plan shall be developed and maintained for all employees that operate the Processing Facility prior to acceptance and processing of any waste. Only trained personnel may operate the Processing Facility or carry out any activity required under this Certificate.
- ii. The Owner shall ensure that trained personnel are available at all times during the hours of operation of this Processing Facility. Trained personnel shall supervise all transfer and processing of waste material at the Processing Facility.

Complaint Response

23. l. If at any time, the Owner receives complaints regarding the operation of the Processing Facility, the Owner shall referred to Condition 20 of this Certificate for the complaint response procedure.

Emergency Response Plan

23. m. i. Prior to acceptance and processing of any waste at this Processing Facility, an Emergency Response Plan shall be developed and implemented for the Processing Facility. The Plan shall include, but is not necessarily limited to:
 1. emergency response procedures to be undertaken in the event of a spill or process upset, including specific clean up methods for each different type of waste the site is approved to accept;
 2. a list of equipment and spill clean up materials available in case of an emergency;
 3. notification protocol with names and telephone numbers of persons to be contacted, including persons responsible for the site, the Ministry's District Office and Spills Action Centre, the local Fire Department, the local Municipality, the local Medical Officer of Health, and the Ministry of Labour, and the names and telephone numbers of waste management companies available for emergency response;
 4. fire and explosion prevention;
- ii. The Emergency Response Plan shall be developed for this Processing Facility and reviewed annually, a copy shall be retained in a central location at the Processing Facility and shall be accessible to all staff at all times with copies to District Manager, local Municipality, and local Fire Department
- iii. Changes to the Emergency Response Plan at the Processing Facility shall be submitted to the Director and District Manager.

- iv. The equipment, materials and personnel requirements outlined in the Emergency Response Plan shall be immediately available at the Processing Facility at all times. The equipment shall be kept in a good state of repair and in a fully operational condition and should be appropriate for the waste types and volumes present on Site.
- v. All staff that operate the Processing Facility shall be fully trained in the use of the Emergency Response Plan, and in the procedures to be employed in the event of an emergency.
- vi. The Owner shall immediately take all measures necessary to contain and clean up any spill or leak which may result from the operation of this Processing Facility and immediately implement the Emergency Response plan if required.

Design and Operations Report

- 23. n. i. An updated Design and Operation Plan shall be submitted to the Director for approval within 60 (sixty) days after commissioning of the Processing Facility as detailed in item 15 of Schedule "A" of this Certificate.
- ii. The Design and Operations Report for the Processing Facility shall be retained at the Processing Facility; kept up to date through periodic revisions; and be available for inspection by Ministry staff. Changes to the Design and Operations Report shall be submitted to the Director for approval.

Segregation

- 23. o. i. Wastes shall be segregated from other incompatible wastes and materials at the Processing Facility.

Loading/Unloading Waste

- 23. p. During the unloading/loading of waste, all vehicles shall be positioned such that the waste are unloaded/loaded within the confines of the Processing Facility in accordance with item 14 b) of Schedule "A".

Incoming/Outgoing Waste

- 23. q. All in-coming and outgoing waste subject to LDR shall be inspected and/or tested by trained personnel in accordance with the Design and Operations Reports contained in items 13, 14 and 15 of Schedule "A", Reg. 347 and the Conditions of this Certificate prior to being received, processed, and transferred from the Processing Facility to ensure wastes are being managed and disposed of in accordance with EPA and Reg. 347.

Waste Analysis Plan

23. r. Within 60 (sixty) days after the commissioning of this Processing Facility, the Owner shall submit a Waste Analysis Plan to the Director and District Manager as a revision to the Design and Operation Report for all waste subject to LDR that is planned for receipt and treatment at the Processing Facility.

Processing Waste

23. s. i. Processing of waste carried out at the Processing Facility is limited to the processing as described in Schedule "A" and in accordance with Reg. 347 and the Conditions of this Certificate.
- ii. Hazardous inorganic waste accepted under Condition 3 a) at this Site shall be subject to the LDR under Reg. 347 if it becomes mixed with any other waste or material at this Site and results in a mixed waste.
- iii. All waste processing shall occur indoors at all times except the debris processing as detailed in items 18 and 19 of Schedule "A".
- iv. Notwithstanding the requirements of Condition 23. s) i) of this Certificate, all reasonable measures in the way of laboratory, compatibility and bench testing of waste and materials shall be taken to ensure that the processing of wastes at the Processing Facility will not result in uncontrollable reactions that could result in a fire or release of contaminants to the natural environment.
- v. Processing of waste classes as part of the landfill pretreatment system at this Processing Facility shall only occur if no waste subject to LDR is present at the Processing Facility.

Processed Waste

23. t. At a minimum requirement, each batch of processed waste must be in compliance with Reg. 347 and Condition 6 of this Certificate.

Record Keeping

23. u. A record for the Processing Facility shall be maintained and shall include the following information:
- i. date;
 - ii. types (class and primary characteristic), quantities and source of waste received;
 - iii. quantities of waste processed, and quantities and type of reagents used;
 - iv. quantities and destination of each type of waste transferred from the Processing Facility;

- v. the results of all analyses as required by this Certificate;
- vi. a record of daily inspections required by this Certificate;
- vii. a record of any spills or process upsets at the Processing Facility, the nature of the spill or process upset and the action taken for the clean up or correction of the spill, the time and date of the spill or process upset, and for spills, the time that the Ministry and other persons were notified of the spill in fulfilment of the reporting requirements in the EPA;
- viii. a record of any waste refusals which shall include, amounts, reasons for refusal and actions taken; and
- viv. the signature of the trained personnel conducting the inspection and completing the report.

Weekly Reporting

- 23. v. The Owner shall provide the District Manager with a weekly report that indicates where all waste subject to LDR will be temporary stored on Site as described in item 17 of Schedule "A".

Annual Report

- 23. w. The Owner shall prepare and including the following information in an annual report as described in Condition 15 of this Certificate
 - i. a detailed monthly summary of the type (by waste class and characteristic) and quantity of waste received at the Site for LDR and at the Processing Facility for LDR and landfill pretreatment system, total amount and type of reagents used in the process, and the total amount and destination of all outgoing wastes from the Processing Facility; and
 - ii. a descriptive summary of upgrades conducted during the previous calendar year.

V. The following items are hereby added to Schedule "A":

- 11. Letter dated May 9, 2006 to Mr. Greg Washuta (MOE) from Mr. Christopher Small (Clean Harbors) regarding the CofA amendment required to meet LDR with the following information included:
 - a. Amendment to the Design and Operation Report;
 - b. Application for a Provisional Certificate of Approval for a Waste Disposal Site signed by Mr. Frank Hickling, Director of Operation (Clean Harbors), dated May 4, 2006;
 - c. Verification of public consultation;
 - d. Verification of Legal Name;
 - e. Verification of Financial Assurance.
- 12. Letter dated May 26, 2006 to Ms. Gabriela Sadowska (MOE) from Christopher Small (Clean Harbors) regarding additional information related to the application, updated EBR abstract and adjacent landowner notification and list of names and addresses

13. Letter dated December 22, 2006 to Richard Saunders (MOE) from Christopher Small (Clean Harbors) regarding the modified drawings, project description and design of the Processing Facility including the following information:
 - a. Drawings:
 - i. 'Inorganic Waste Pre-treatment Plot Plan', drawing no. 050-ADA-662, rev. A, dated December 21, 2006;
 - ii. 'Inorganic Waste Pre-treatment Equipment Layout Plan', drawing no. 050-ADA-6632, rev. B, dated December 21, 2006;
 - iii. '1-144" Dia. X 354"S/S Silo M-10, Tricil Waste Plant, Corunna, Ontario', drawing no. T-D4470, rev. 1, dated March 21, 1986;
 - iv. '1-144" Dia. X 354"S/S Silo M-11, Tricil Waste Plant, Corunna, Ontario', drawing no. T-D4470.1, rev.1, dated March 21, 1986;
 - v. 'Tricil Samia Limited, Landfill Pre-treatment System, Silo Details', sheet no. M-24, dated November 11, 1985;
 - vi. 'Inorganic Waste Pre-treatment Mixing Tank, Plan, Sections & Details', drawing no. 050-NDD-663, rev.A, dated December 21, 2006;
 - b. Report entitled "Lambton Incineration Facility, Inorganic Waste Pretreatment Facility, Alternate LPS location" and subtitled "Project Description and Design Basis, Rev.2 December 19, 2006".

14. Letter dated March 15, 2007 to Richard Saunders (MOE) from Christopher Small (Clean Harbors) regarding additional information related to the Design and Operation Report and the following information:
 - a. Drawings:
 - i. 'Inorganic Waste Pre-treatment Plot Plan', drawing no. 050-ADA-662, rev. A, dated December 21, 2006,
 - ii. 'Inorganic Waste Pre-treatment Equipment Layout Plan', drawing no. 050-ADA-6632, rev. B, dated December 21, 2006;
 - iii. '1-144" Dia. X 354"S/S Silo M-10, Tricil Waste Plant, Corunna, Ontario', drawing no. T-D4470, rev. 1, dated March 21, 1986;
 - iv. '1-144" Dia. X 354"S/S Silo M-11, Tricil Waste Plant, Corunna, Ontario', drawing no. T-D4470.1, rev.1, dated March 21, 1986;
 - v. 'Tricil Samia Limited, Landfill Pre-treatment System, Silo Details', sheet no. M-24, dated November 11, 1985;
 - vi. 'Inorganic Waste Pre-treatment Equipment Layout Sections, drawing no. 050-NDD-664, rev.B, dated December 12, 2006;
 - vii. 'Inorganic Waste Pre-treatment Mixing Tank, Plan & Sections', drawing no. 050-NDD-663, rev.B, dated December 21, 2006.
 - b. Report entitled "Lambton Incineration Facility, Inorganic Waste Pretreatment Facility, Alternate LPS location" and subtitled "Project Description and Design Basis, Rev.3, February 20, 2007".

15. Letter dated April 17, 2007 to Richard Saunders (MOE) from Christopher Small (Clean Harbors) regarding additional information requested by the MOE and the information that will be submitted with an updated D&O report sixty days after the processing facility is commissioned.

16. Email dated May 7, 2007 to Richard Saunders (MOE) from Christopher Small (Clean Harbors)

regarding the treatment of waste streams as part of the approved landfill pretreatment system.

17. Email received on June 7, 2007 entitled "Commissioning of Facility - rev. 1" from Clean Harbors Canada regarding how the Commissioning phase of the Processing Facility will be in compliance with Reg. 347.
18. Email received June 13, 2007 to Richard Saunders (MOE) from Christopher Small (Clean Harbor Canada) regarding the exclusion of certain equipment from the inspection condition, the additional waste reagents to be used as binding reagent for LDR and a description involving the treatment of debris to meet LDR.
19. Email received June 14, 2007 to Richard Saunders (MOE) from Christopher Small (Clean Harbor Canada) regarding free board of the mixing vessel and the processing location of debris subject to LDR.

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

1. *The reason for Conditions 23 a), and 23 n) are to ensure that the Processing Facility is operated in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider.*
2. *The reason for Condition 23 b) is to clarify the legal rights and responsibilities of the Owner and Operator.*
3. *The reason for Condition 23 c) is to ensure the availability of record drawings for inspection and information purposes.*
4. *The reason for Conditions 23 d), 23 e), 23 j) i), 23 o), 23 p), and 23 s) iii) is to ensure that the Processing Facility is operated in a manner which does not result in a adverse effect or a hazard to the health and safety of the environment or people.*
5. *The reasons for Conditions 23 f) and 23 g) are to specify the types of waste that may be accepted at the Processing Facility and the waste limits based on the Owner's application and supporting documentation.*
6. *The reason for Condition 23 h) is to specify the hours of operation for the Processing Facility.*
7. *The reason for Conditions 23 i), 23 q), 23 r), 23 s) ii), 23 s) iv), 23 s) v), 23 t) is to ensure that all wastes are properly classified to ensure that they are managed, processed and disposed in accordance with Reg. 347, and in a manner that protects the health and safety of people and the public.*
8. *The reason for Condition 23 j) ii) is to ensure that detailed records of Processing Facility inspections are recorded and maintained for inspection and information purposes*
9. *The reason for Condition 23 k) is to ensure that the Processing Facility is operated by properly*

trained staff in a manner which does not result in a hazard or nuisance to the natural environment or any person.

10. *The reason for Condition 23 l) is to ensure that any complaints regarding Processing Facility's operations at the Site are responded to in a timely manner*
11. *The reasons for Condition 23 m) are to ensure that an Emergency Response Plan is developed and maintained at the Processing Facility and that staff are properly trained in the operation of the equipment used at the Processing Facility and emergency response procedures*
12. *The reason for Condition 23 s) i) is to identify the processes approved under this Certificate*
13. *The reason for 23 v) is that weekly record keeping of where waste will be temporary stored on Site is necessary to determine compliance with this Certificate, EPA and its regulations.*
14. *The reasons for Condition 23 u) is to provide for the proper assessment of effectiveness and efficiency of site design and operation, their effect or relationship to any nuisance or environmental impacts, and the occurrence of any public complaints or concerns. Record keeping is necessary to determine compliance with this Certificate of Approval, the EPA and its regulations.*
15. *The reasons for Condition 23 w) is to ensure that regular review of site development and operations and any possible improvements to Processing Facility design, operations or monitoring programs are identified. An annual report is an important tool used in reviewing site activities and for determining the effectiveness of site design.*

This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A031806 dated September 5, 1997

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

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

The Notice should also include:

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

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

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., Suite 1700
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

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

AND

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

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

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

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

DATED AT TORONTO this 18th day of June, 2007



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

RS/
c: District Manager, MOE Samia
Chris Small, Clean Harbors Canada, Inc.



Ontario

Ministry of the Environment
Ministère de l'Environnement

CERTIFICATE OF APPROVAL
AIR

NUMBER 5688-74BJFW
Issue Date: August 29, 2007

Clean Harbors Canada, Inc.
4090 Telfer Road, Rural Route No. 1
Corunna, Ontario
N0N 1G0

Site Location: Clean Harbours Hazardous Waste Disposal Facility
4090 Telfer Road, Rural Route No. 1
St. Clair Township, County of Lambton, Ontario

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

one (1) pre-treatment facility, used for the stabilization of the waste class codes 111, 112, 113, 114, 121, 122, 123, 131, 132, 133, 134, 135, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 211, 212, 213, 221, 222, 231, 232, 233, 241, 242, 251, 252, 253, 254, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 281, 282, 311 and 321, consisting of the following processes and equipment:

- three (3) outdoor storage silos, for the storage of drying reagents including cement kiln dust, Portland cement and fly ash from coal fired power plant(s), each for each drying reagent; and
- one (1) mixing vessel which is a below grade steel lined pit, where the wastes are unloaded and mixed with the drying reagents and are thus stabilized;

the vents of the silos and the building air of the facility being exhausted to one (1) baghouse dust collector, for control of particulate matter emissions, equipped with an induced draft fan, reverse-air pulse cleaning mechanism, teflon filter bags having a total filtering area of 394 square metres, discharging into the atmosphere at a maximum volumetric flow rate of 14 cubic metres per second, through a stack, having an exit diameter of 0.74 metre, extending 18 metres above grade;

all in accordance with the Application for Approval (Air & Noise), dated June 7, 2007 and signed by Tim Bechard, Clean Harbors Canada, Inc., and all supporting information associated with the application including additional information provided by Clean Harbors Canada, Inc., dated July 6, 2007 and signed by Chris Small, and the additional information provided by ORTECH Environmental on behalf of Clean Harbors Canada, Inc., dated July 27, 2007 and signed by Hong Liu; and the Acoustic Assessment Report, prepared by Aercoustics Engineering Limited, dated August 20, 2007.

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

1. "Acoustical Consultant" means a person currently active in the field of environmental acoustics and noise/vibration control, who is familiar with Ministry noise guidelines and procedures and has a combination of formal university education, training and experience necessary to assess noise emissions from a Facility.
2. "Acoustic Audit" means an investigative procedure consisting of measurements and/or acoustic modelling of all sources of noise emissions due to the operation of the Facility, assessed to determine compliance with the Performance Limits for the Facility regarding noise emissions, completed in accordance with the procedures set in Publication NPC-103 and reported in accordance with Publication NPC-233.
3. "Acoustic Audit Report" means a report presenting the results of an Acoustic Audit, prepared in accordance with Publication NPC-233.
4. "Act" means the *Environmental Protection Act*;
5. "Certificate" means this Certificate of Approval issued in accordance with Section 9 of the Act, and includes Schedule "A";
6. "Company" means Clean Harbors Canada, Inc.;
7. "District Manager" means the District Manager, Sarnia District Office, Southwestern Region of the Ministry;
8. "Equipment" means the one (1) baghouse dust collector described in the Company's application, this Certificate and in the supporting documentation submitted with the application, to the extent approved by this Certificate;
9. "Facility" means the entire operation including the Equipment as listed in the Certificate;
10. "Fugitive Dust Control Plan" means a document or a set of documents that provides written instructions to staff of the Company;
11. "Independent Acoustical Consultant" means an Acoustical Consultant who is not representing the Company and was not involved in preparing the Noise Report or in the design/implementation of Noise Control Measures for the Facility and/or Equipment. The Independent Acoustical Consultant shall not be retained by the Acoustical Consultant involved in preparing the Noise Report or in the noise impact assessment or the design/implementation of Noise Control Measures for the Facility and/or Equipment.
12. "Landfill Equipment" means equipment used for land filling purposes such as tractors, excavators, dozers and off-highway haulers and trucks;

13. "Manager" means the Manager, Technology Standards Section, Standards Development Branch of the Ministry, or any other person who represents and carries out the duties of the Manager, as those duties relate to the conditions of this Certificate;
14. "Manual" means a document or a set of documents that provide written instructions to staff of the Company;
15. "Ministry" means the Ontario Ministry of the Environment;
16. "Noise Abatement Action Plan" means a noise abatement program developed by the Company to achieve compliance with the sound level limits set in Publication NPC-205 and/or Publication NPC-232, as applicable.
17. "Noise Control Measures" means measures to reduce the noise emissions from the Facility and/or Equipment including, but not limited to, silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers, described in Schedule "A" of this Certificate and in the Noise Report;
18. "Noise Guidelines for Landfill Sites", means the Ministry draft guideline Noise Guidelines for Landfill Sites, October 1998;
19. "Noise Report" means the Acoustic Assessment Report, prepared by Aercoustics Engineering Limited, dated August 20, 2007;
20. "Point of Impingement" means any point in the natural environment. The point of impingement for the purposes of verifying compliance with the Act shall be chosen as the point located outside the Company's property boundaries at which the highest concentration is expected to occur, when that concentration is calculated in accordance with the Appendix to Regulation 346 written under the Act, or any other method accepted by the Director;
21. "Pre-Test Information" means the information outlined in Section 1 of the Source Testing Code;
22. "Publication NPC-103" means the Ministry Publication NPC-103 of the Model Municipal Noise Control By-Law, Final Report, August 1978, published by the Ministry as amended.
23. "Publication NPC-205" means Ministry Publication NPC-205 "Sound level Limits for Stationary Sources in Class 1 & 2 Areas (Urban)", October 1995;
24. "Publication NPC-232" means Ministry Publication NPC-232 "Sound Level Limits for Stationary Sources in Class 3 Areas (Rural)", October 1995.
25. "Publication NPC-233" means Ministry Publication NPC-233 "Information to be Submitted for Approval of Stationary Sources of Sound" , October 1995;

26. "Source Testing Code" means the Source Testing Code, Version 2, Report No. ARB-66-80, dated November 1980, prepared by the Ministry, as amended;
27. "Source Testing" means sampling and testing to measure the rates of emissions of the Test Contaminants as required under this Certificate from the Equipment exhaust under process conditions which represent a maximum operating range within the approved operating range of the Facility; and
28. "Test Contaminants" means suspended particulate matter, iron, calcium oxide, silica and sodium hydroxide.

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

TERMS AND CONDITIONS

OPERATION AND MAINTENANCE

1. The Company shall ensure that the Facility is properly operated and maintained at all times. The Company shall:
 - (1) prepare, not later than three (3) months after the date of this Certificate, and update, as necessary, a Manual outlining the operating procedures and a maintenance program for the Facility, including:
 - (a) routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;
 - (b) emergency procedures,
 - (c) procedures for any record keeping activities relating to operation and maintenance of the Facility and the Equipment;
 - (d) all appropriate measures to minimize noise and dust emissions from all potential sources;
 - (e) the frequency of inspection and replacement of the filter material in the Equipment; and
 - (f) a Fugitive Dust Control Plan, identifying potential fugitive dust emission sources from the operation of the Facility and outlining the physical and procedural controls such as policies and standard operating procedures required in order to prevent or mitigate fugitive dust emissions from the operation of the Facility;
 - (2) implement the procedures and recommendations of the Manual.

SOURCE TESTING

2. The Company shall perform Source Testing to determine the rates of emission of the Test Contaminants from the Equipment exhaust. The Source Testing shall be conducted in accordance with the following schedule:
 - (1) Source Testing for suspended particulate matter, iron and silica when the Facility is processing electric arc furnace dust with fly ash as the drying reagent; and
 - (2) Source Testing for suspended particulate matter, calcium oxide and sodium hydroxide when the Facility is processing Clean Harbors baghouse dust with Portland cement as the drying reagent;
3. The Company shall submit, not later than three (3) months after the date of this Certificate, to the Manager a test protocol, including the Pre-Test Information for the Source Testing required by the Source Testing Code. The Company shall finalize the test protocol in consultation with the Manager.
4. The Company shall not perform Source Testing required under this Certificate until the Manager has accepted the test protocol.
5. The Company shall complete the Source Testing not later than three (3) months after acceptance of the test protocol by the Manager, or within a period as directed by the Manager or the District Manager.
6. The Company shall notify the District Manager and the Manager in writing of the location, date and time of any impending Source Testing required by this Certificate at least fifteen (15) days prior to the Source Testing.
7. The Company shall submit a report on the Source Testing to the District Manager and the Manager not later than two (2) months after completing the Source Testing. The report shall be in the format described in the Source Testing Code, and shall also include, but not be limited to the following:
 - (1) an executive summary;
 - (2) an updated emission inventory;
 - (3) records of all operating conditions of the Facility including the type and quantity of wastes received and processed in the Facility, at times of Source Testing;
 - (4) the results of dispersion calculations indicating the maximum 30-minute average concentrations for the Test Contaminants at the Point of Impingement;
 - (5) an assessment on the change to the 30-minute average concentration for silica at the Point of Impingement if the Source Testing is conducted with Clean Harbors baghouse dust instead of electric arc furnace dust, and an assessment on the change to the 30-minute average concentration for sodium hydroxide at the Point of Impingement if the Source Testing is conducted with cement kiln instead of Portland cement.

8. The Director may not accept the results of the Source Testing and may require re-testing if:
- (1) the Source Testing Code or the requirements of the Manager were not followed; or
 - (2) the Company did not notify the District Manager and the Manager of the Source Testing; or
 - (3) the Company failed to provide a complete report on the Source Testing.

RECORD RETENTION

9. The Company shall retain, for a minimum of two (2) years from the date of their creation, all records and information related to or resulting from the recording activities required by this Certificate, and make these records available for review by staff of the Ministry upon request. The Company shall retain:
- (1) all records on the maintenance, repair and inspection of the Equipment; and
 - (2) all records of any environmental complaints; including:
 - (a) a description, time and date of each incident to which the complaint relates;
 - (b) wind direction at the time of the incident to which the complaint relates; and
 - (c) a description of the measures taken to address the cause of the incident to which the complaint relates and to prevent a similar occurrence in the future.

NOISE

10. The Company shall ensure that the noise emissions from the Facility comply with the limits set in Publication NPC-205, Publication NPC-232 or Noise Guidelines for Landfill Sites, as applicable;
11. The Company shall implement the Noise Abatement Action Plan in accordance with Schedule "A".

ACOUSTIC AUDIT

- 12.1 In accordance with the provisions of the plan in Schedule "A", the Company shall:
- (1) carry out acoustic audit measurements on the actual noise emissions due to the operation of the Facility, in accordance with the procedures in Publication NPC-103;
 - (2) submit a report on the results of the acoustic audit, prepared by an Independent Acoustical Consultant, in accordance with the requirements of Publication NPC-233, to the District Manager and the Director;
- 12.2 The Director may:

- (1) not accept the results of the acoustic audit if the requirements of Publication NPC-233 were not followed;
- (2) require the Company to repeat the acoustic audit if the results of the acoustic audit are found unacceptable to the Director.

Schedule "A"

Noise Abatement Action Plan

Item	Description	Deadline
1	During evening and night-time hours (19:00 – 23:00), limit the Landfill Equipment operation to 8 pieces of equipment	November 1, 2007
2	Construct 7 metre high acoustic barrier or berm (Note 2), located north of entrance driveway, as described in Figure 6 of the Noise Report	July 31, 2008
3	Conduct additional noise assessment to substantiate noise mitigation requirements	August 30, 2008
4	Based on the acoustical specifications for the incinerator stack silencer contained in the Noise Report (Note 2) or Item 3 above, install an incinerator stack silencer	November 30, 2008
5	Perform Acoustic Audit and submit an Acoustic Audit Report to the Ministry	June 31, 2009

NOTES:

1. The barrier or berm shall be continuous without holes, gaps and other penetrations, and having surface mass at least 20 kilograms per square metre;
2. One (1) silencer for the incinerator stack, capable of providing the following values of Insertion-Loss in 1/1 octave frequency bands:

Centre Frequency (Hertz)	63	125	250	500	1000	2000	4000	8000
Dynamic Insertion-Loss (decibel)	5	12	17	17	15	12	-	-

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

1. Condition No. 1 is included to emphasize that the Facility must be maintained and operated according to a procedure that will result in compliance with the Act, the Regulations and this Certificate.
2. Conditions No. 2 to 8, inclusive, are included to require the Company to gather accurate information so that compliance with the Act, the regulations and this Certificate can be verified.
3. Condition No. 9 is included to require the Company to keep records and to provide information to staff of the Ministry so that compliance with the Act, the Regulations and this Certificate can be verified.
4. Conditions No. 10 and 11 are included to provide the minimum performance requirement considered necessary to prevent an adverse effect resulting from the operation of the Facility;
5. Condition No. 12 is included to require the Company to gather accurate information so that the environmental noise impact and subsequent compliance with the Act, the regulation and this Certificate can be verified and to ensure that the acoustic audit is carried out in accordance with procedures set in the Ministry's Noise Guidelines.

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

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

The Notice should also include:

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

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

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., Suite 1700
P.O. Box 2382
Toronto, Ontario
M4P 1B4

AND

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

AND

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

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

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

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

DATED AT TORONTO this 29th day of August, 2007



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

RW/

c: District Manager, MOE Samia District Office



Ontario

Ministry of the Environment
Ministère de l'Environnement

AMENDED CERTIFICATE OF APPROVAL
INDUSTRIAL SEWAGE WORKS
NUMBER 0598-76DK8Q
Issue Date: September 4, 2007

Clean Harbors Canada, Inc.
4090 Telfer Rd
Rural Route, No. 1
Corunna, Ontario
N0N 1G0

Site Location: 4090 Telfer Road
4090 Telfer Road, Corunna
St. Clair Township, County of Lambton
N0N 1G0

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

The establishment of sewage works for the collection, treatment and disposal of stormwater runoff from the capped waste disposal cells and office buildings of Lambton Facility located at 4090 Telfer Road consisting of the following:

PROPOSED SEWAGE WORKS:

The establishment of stormwater management facility to service a 0.6 ha drainage area consisting of roof drainage from the administration building, laboratory and operations building, a gravel parking lot, paved surface area, and grassed area, designed to convey stormwater runoff from storm events with up to 1:50 year return frequency to the Telfer Road Drain, consisting of the following:

- a roof drainage collection system collecting roof drainage from the garage building and discharging through a drain pipe to a drainage ditch described below;
- one (1) V-shaped drainage ditch with approximate length of 290 m, minimum depth of 300 mm, maximum depth of 500 mm, minimum top width of 1.3 m, and a maximum top width of 2 m, extending from the administration building in a southerly direction and then westerly direction discharging to the Telfer Road Drain;
- one (1) approximately 50 m long concrete curb installed along the south side of the above described drainage ditch to segregate potential contaminated stormwater runoff from Process Area-I located on the east and south side of the subject 0.6 ha drainage area; and
- all associated controls and appurtenances.

all in accordance with an Application for Approval of Industrial Sewage Works submitted by Clean Harbors Canada Inc. dated November 14, 2006, and design specifications and drawings prepared by Gartner Lee Limited, Markham, Ontario and the following document:

1. "Lambton Facility - Stormwater Management Plan in Support of Amendment to Certificate of Approval" dated July 2007, prepared by Gartner Lee Limited, Markham, Ontario.

SEWAGE WORKS APPROVED ON OR BEFORE AUGUST 26, 2005:

Upgrade/Modifications to the existing sewage works for the collection, treatment and disposal of stormwater runoff during storm events of up to 1:100 year return frequency from closed and capped waste disposal cells located at Part Lot 8, Lot 9, Concession 10, Telfer Side Road, St. Clair Township, County of Lambton, Ontario, consisting of:

- **East Pond** approximately measuring 175 m long, 73.5 m wide, and 4.0 m deep, providing a total storage volume of 68,600 m³ (including the East Ditch and Center Ditch) for stormwater runoff collected from a total drainage area of 52.3 ha through the East Ditch and Center Ditch, equipped with a spillway to the South Ditch at an elevation of 200 m, and discharging through two (2) 250 mm diameter pipes into a stormwater pumping station described below;
- **Pumping Station** consisting of a heated pumping station building, one (1) pump with a rated capacity of 16.0 L/s @ 5.6 m TDH and a similar spare pump to be stored on-site, discharging into the South Ditch and eventually into the West Pond described below;
- **West Pond** approximately measuring 195 m long, 45 m wide, 4.0 m deep, providing a total storage volume of 48,500 m³ (including South Ditch) for stormwater runoff collected from a total drainage area of 42.7 ha through the South Ditch, discharging into a wastewater treatment plant described below;
- **Wastewater Treatment Plant** with a rated treatment capacity of 4,500 m³/day treating stormwater runoff from the West pond, consisting of:
 1. two (2) influent pumps (one on standby) each with rated capacity of 22.7 L/sec at 310 kPa (300 IGPM at 45 psig);
 2. two (2) sand filters, each 3.6 m outside diameter and 1.8 m high, containing 6.4 m³ of 0.3 mm silica sand and 3.2 m³ of 1.0 mm anthracite, equipped with a backwash pump rated 49.3 L/sec at 138 kPa (650 IGPM at 20 psig);
 3. one (1) activated carbon filter consisting of a concrete above-ground basin with overall dimension of 2.4 m high, 4.3 m long and 1.8 m wide, containing 1.2 m³ of 20 mm clear crushed stone and 14.2 m³ of granulated activated carbon (G.A.C.); and

4. one (1) equalization pond with a storage volume of 4,500 m³ and overall dimensions of 37 m long, 26 m wide, and 6.7 m deep, discharging treated effluent into the Telfer Side Road drainage ditch.

all in accordance with the Applications for the Approval of Industrial Sewage Works including drawings and design specification submitted by Safety-Kleen Ltd. dated April 12, 2001 and November 15, 2001, and the following supporting documentation:

1. "Notice of Approval to Proceed with the Undertaking (and Order Under Subsection 12.4(3) - Hazardous Waste Landfill Expansion - Order in Council 960/97"
2. "Landfill Service Continuation Environmental Assessment - Executive Summary" Laidlaw Environmental Services Ltd. - 1996.
3. "Landfill Service Continuation Environmental Assessment - Surface Water Technical Report" Laidlaw Environmental Services Ltd. - April 1996.
4. "Appendix G - 2000 Annual Landfill Report, Safety-Kleen Ltd., Lambton Facility" - Prepared in accordance with the requirements of Condition 15 of Provisional Certificate of Approval No. A031806, dated September 5, 1997.
5. A letter from Safety-Kleen sent to the attention of Mr. Stefanos Habtom, MOE, dated November 8, 2001, regarding the changes made to the pumping station.
6. A letter from Dean Edwardson, Clean Harbors Canada Inc., dated July 4, 2005 providing supporting documentation for the deletion of Condition 3.2 of the existing Certificate of Approval regarding the dilution requirements for discharges to the Telfer Side Road drainage ditch.

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

"certificate" means this entire certificate of approval document, issued in accordance with Section 53 of the *Ontario Water Resources Act* , and includes any schedules;

"Director" means any Ministry employee appointed by the Minister pursuant to section 5 of the *Ontario Water Resources Act* ;

"District Manager" means the District Manager of the Sarnia District Office of the Ministry;

"Ministry" means the Ontario Ministry of the Environment;

"Regional Director" means the Regional Director of the Southwestern Region of the Ministry;

"Owner" means Clean Harbors Canada, Inc. and includes its successors and assignees; and

"Previous Works" means those portions of the sewage works previously constructed and approved under a certificate of approval;

"Proposed Works" means the sewage works described in the Owner's application, this Certificate and in the supporting documentation referred to herein, to the extent approved by this Certificate;

"works" means the sewage works described in the Owner's application, this certificate and in the supporting documentation referred to herein, to the extent approved by this certificate.

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

TERMS AND CONDITIONS

1. GENERAL CONDITION

- (1) Except as otherwise provided by these Conditions, the Owner shall design, build, install, operate and maintain the works in accordance with the description given in this Certificate, the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this Certificate.
- (2) Where there is a conflict between a provision of any submitted document referred to in this Certificate and the Conditions of this Certificate, the Conditions in this Certificate shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

2. CHANGE OF OWNER

- (1) The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within 30 days of the change occurring:
 - (a) change of Owner or operating authority, or both;
 - (b) change of address of Owner or operating authority or address of new owner or operating authority;
 - (c) change of partners where the Owner or operating authority is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Partnerships Registration Act* ;
 - (d) change of name of the corporation where the Owner or operator is or at any time becomes a corporation, and a copy of the most current "Initial Notice or Notice of Change" (Form 1, 2 or 3 of O. Reg. 189, R.R.O. 1980, as amended from time to time), filed under the *Corporations Informations Act* shall be included in the notification to the District Manager;

- (2) In the event of any change in ownership of the works, the Owner shall notify in writing the succeeding owner of the existence of this certificate, and a copy of such notice shall be forwarded to the District Manager.
- (3) The Owner shall ensure that all communications made pursuant to this condition will refer to this certificate's number.

3. OPERATIONS MANUAL

- (1) By August 26, 2006, the Owner shall prepare an operations manual, that includes, but not necessarily limited to, the following information:
 - (a) operating procedures for routine operation of the works;
 - (b) inspection programs, including frequency of inspection, for the works and the methods or tests employed to detect when maintenance is necessary;
 - (c) repair and maintenance programs, including the frequency of repair and maintenance for the works;
 - (d) contingency plans and procedures for dealing with potential spill, bypasses and any other abnormal situations and for notifying the District Manager; and
 - (e) complaint procedures for receiving and responding to public complaints.
- (2) The Owner shall maintain the operations manual up to date through revisions undertaken from time to time and retain a copy at the location of the sewage works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.

4. EFFLUENT LIMITS

- (1) The Owner shall design, construct and operate the works such that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the works being allowed to be discharged from the equalization pond into Telfer Side Road drainage ditch.

Table 1 - Effluent Limits	
Effluent Parameter	Concentration Limit (milligrams per litre unless otherwise indicated)
Column 1	Column 2
Total Suspended Solids	15.0
Solvent Extractables	15.0
Phenols	0.02
pH of the effluent maintained between 5.5 to 9.5, inclusive, at all times	

- (2) For the purposes of determining compliance with and enforcing subsection (1):
 - (a) non-compliance with respect to a Concentration Limit is deemed to have occurred when any single grab sample analyzed for a parameter named in Column 1 of subsection (1) is greater

than the corresponding maximum concentration set out in Column 2 of subsection (1);

- (b) non-compliance with respect to pH is deemed to have occurred when any single measurement is outside of the indicated range.

5. EFFLUENT - VISUAL OBSERVATIONS

Notwithstanding any other condition in this certificate, the Owner shall ensure that the effluent from the works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen or foam on the receiving waters.

6. EFFLUENT MONITORING AND RECORDING

The Owner shall carry out the following monitoring program:

- (1) All samples and measurements taken for the purposes of this certificate are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
- (2) Samples shall be collected and analyzed at the following sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed:

Table 2 - Effluent Monitoring - Equalization Pond	
Frequency	Every discharge event
Sample Type	Grab
Parameters	Total Suspended Solids, Solvent Extractables, Phenols and pH

- (3) The methods and protocols for sampling, analysis, toxicity testing, and recording shall conform, in order of precedence, to the methods and protocols specified in the following:
 - (a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (August 1994), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions;
 - (b) the publication "Standard Methods for the Examination of Water and Wastewater" (20th edition) as amended from time to time by more recently published editions; and,
- (4) A continuous flow measuring device(s) shall be installed and maintained to measure the flowrate of the effluent from the sewage works, with an accuracy to within plus or minus fifteen (15) per cent of the actual flowrate for the entire design range of the flow measuring device and the Owner shall measure, record and calculate the total volume of effluent discharged from the equalization pond into Telfer Side Road drainage ditch.
- (5) The Owner shall retain for a minimum of three (3) years from the date of their creation, all records

and information related to or resulting from the monitoring activities required by this certificate.

7. OPERATION AND MAINTENANCE

- (1) The Owner shall not allow the discharge of wastewater from the equalization pond if any grab sample collected from works fails to meet any of the effluent quality limits set in Table 1 under Condition 4. The wastewater contained in the equalization pond that failed to meet the effluent limits set in Table 1 shall be returned to the approved storage pond for further treatment.
- (2) The modified sewage works approved herein shall be used for the collection, treatment and disposal of stormwater runoff from the landfill disposal area only as approved under Provisional Certificate of Approval Waste Disposal Site No. A301806 dated July 15, 1980 and specifically shall not be used for the collection, treatment and disposal of stormwater runoff from those areas used for the processing of waste materials.
- (3) Under no circumstances shall untreated stormwater runoff be discharged from the property.

8. REPORTING

- (1) The Owner shall report to the District Manager or designate, any exceedance of any parameter specified in Condition 4 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedance.
- (2) The Owner shall prepare and upon request submit a performance report to the District Manager on an annual basis by November 30 of each year covering the reporting period from September 1 to August 31. The reports shall contain, but shall not be limited to, the following information:
 - (a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 4, including an overview of the success and adequacy of the sewage works;
 - (b) a tabulation of volumes of effluent discharged from the works into the receiving municipal drain during the reporting period;
 - (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the sewage works;
 - (d) an account of any environmental and operating problems encountered at the site and the mitigative measures taken during the reporting period.

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

1. Condition 1 is imposed to ensure that the works are built and operated in the manner in which they

were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Certificate and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.

2. Condition 2 is included to ensure that the Ministry records are kept accurate and current with respect to approved works and to ensure that subsequent owners of the works are made aware of the certificate and continue to operate the works in compliance with it.
3. Condition 3 is included to ensure that a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the Ministry. Such a manual is an integral part of the operation of the works. Its compilation and use should assist the owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the owner's operation of the work.
4. Conditions 4 and 5 are imposed to ensure that the effluent discharged from the works to the Telfer Side Road drainage ditch meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.
5. Condition 6 is included to require the owner to demonstrate on a continual basis that the quality and quantity of the effluent from the approved works is consistent with the effluent limits specified in the certificate and that the approved works does not cause any impairment to the receiving watercourse.
6. Condition 7 is included to ensure that the works will be operated and maintained in a manner enabling compliance with the terms and conditions of this certificate, such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
7. Condition 8 is included to provide a performance record for future references and to ensure that the Ministry is made aware of problems as they arise, so that the Ministry can work with the Owner in resolving the problems in a timely manner.

This Certificate of Approval revokes and replaces Certificate(s) of Approval No. 1277-6FAQT6 issued on August 26, 2005

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

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

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;

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

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

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., Suite 1700
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

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

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

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 4th day of September, 2007



Mohamed Dhalla, P.Eng.
Director
Section 53, *Ontario Water Resources Act*

SH/

c: District Manager, MOE Sarnia
Christopher Small, Clean Harbors Canada, Inc.

**AMENDMENT TO PROVISIONAL CERTIFICATE OF
APPROVAL
WASTE DISPOSAL SITE
NUMBER A031806
Notice No. 7
Issue Date: August 6, 2010**

Clean Harbors Canada, Inc.
4090 Telfer Rd R.R. #1, Township of Moore
St. Clair, Ontario
N0N 1G0

Site Location: Lot 8 & 9, Concession 10
Lot 8,9, Concession 10
St. Clair Township, County of Lambton

You are hereby notified that I have amended Provisional Certificate of Approval No. A031806 issued on September 5, 1997 and subsequent Notices dated, December 4, 1998, October 11, 2002, June 17, 2004, June 18, 2007 and August 29, 2007 for the use and operation of a landfill site with a total fill area of approximately 56 hectares which includes the pre-1985 fill area, previous operating 14.5 hectare fill area and the Cell 18 expansion area of 13.1 hectares and a landfill pre-treatment system all within the total site area of 121.4 hectares, , as follows:

The following Conditions are added to this Certificate:

Thermal Desorber Unit

24. This amendment approves the installation and operation of a Thermal Desorber Unit (TDU) for the pre-treatment of organic hazardous solid and liquid (sludge) wastes, including non-hazardous solid and sludge wastes to meet current Landfill Disposal Restrictions (LDR) under Reg. 347. These solid wastes can be landfilled after confirmatory testing and documenting that the LDR standards have been met.
- a) The TDU shall be installed, operated and maintained in accordance with the Application for this Amendment and its supporting documentation, Design and Operations Report, listed in Schedule "A" of this Certificate. The approved waste treatment rate for this equipment is 36 tonnes per hour.
 - b) The TDU, at all times, shall be operated, maintained and monitored as approved by its Certificate

of Approval (Air), issued under section 9, EPA.

- c) Wastes received for pre-treatment, which are analyzed and determined to require the same treatment process may be mixed for purposes of creating a batch to ensure consistent operation of the TDU. The treated wastes shall be analyzed for the regulated constituents to ensure LDR standards are achieved, as per O.Reg. 347.
- d) Untreated wastes shall be stored under cover to prevent wind blown particles from creating potential environmental or safety concerns on or off the Site. Treated wastes shall also be stored under cover, as appropriate due to Site conditions, in its designated area and misted with water to prevent wind blown particles from creating a potential environmental or safety concerns on or off the Site.
- e) Wastes accepted pursuant to Condition 5 (e) shall be received and stored in covered containers until they are ready to be processed. Once these wastes are ready to be processed in the designated processing area, additional odour monitoring shall be implemented until they are completely processed through the TDU. The wastes prepared and awaiting processing shall not be stored in the waste processing area for more than 5 consecutive days.
- f) Within 30 days of starting the TDU operation, the existing Standard Operating Procedures (SOP) for the Site shall be modified and developed, in consultation with the District Manager and approved by the Director, for the control of dust and odours from wastes received for treatment and treated wastes, including the additional odour monitoring procedures for the waste processing described above.
- g) Treated wastes that do not meet LDR standards and cannot be landfilled can be reprocessed or they shall be transferred from the Site for disposal or further processing at an approved facility.
- h) Uncondensed vapours from the operation of the TDU shall be directed to the on-site incinerator for disposal.
- i) During periods when the on-site incinerator is shut down as a result of regular maintenance or in the event of an emergency, the TDU shall not be operated.

On-Site Environmental Inspector

25. The Company shall provide funding to the Ministry of the Environment for the provision of an Environmental Inspector to inspect the Site, at any reasonable time on such terms and conditions, as deemed appropriate by the District Manager of the District Office and outlined in a written agreement with the Company. Within the agreement, the Company shall commit to providing, as a minimum, the following:
- a) Adequate office facilities, communication equipment, and means of transportation for the Environmental Inspector; and,

- b) Reimbursement to the MOE semi-annually for the costs and associated expenses of the Environmental Inspector.
- c) The Environmental Inspector's duties may, in consultation with the Company, be increased, reduced, suspended or terminated on such terms and conditions as deemed appropriate by the District Manager and, for greater certainty, the District Manager may require an Environmental Inspector to be on-Site for up to seven days per week in cases of apparent significant non-compliance with the conditions of any approval issued for the Site under the EPA and the OWRA until such non-compliance is resolved.

The following Items are added to Schedule "A" of this Certificate of Approval:

- 22. Application for a Provisional Certificate of Approval for a Waste Disposal Site, dated July 20, 2009. This application is for amending the current approval to meet LDR requirements.
- 23. The supporting documentation to the above Application titled, "Landfill Design and Operations Report, Revised - Section 4", dated March 29, 2010.

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

- 1. The reason for Condition 24 is to ensure that the Company complies with existing legislative requirements and operates and maintains the Site as approved by the Director after considering its application and supporting documents as well as the concerns expressed by all interested parties to minimize the potential of creating environmental or safety concerns on or off the Site.
- 2. The reason for Condition 25 is to ensure that there is a person, reporting directly to the ministry, with associated costs reimbursed by the Company, who is responsible for inspecting the Site, based on the requirements in this Certificate of Approval to ensure that the Site is operated and maintained in an environmentally acceptable manner.

This Notice shall constitute part of the approval issued under Provisional Certificate of Approval No. A031806 dated September 5, 1997, as amended

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

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

The Notice should also include:

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

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

This Notice must be served upon:

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

AND

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

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

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

DATED AT TORONTO this 6th day of August, 2010



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

JG/
c: District Manager, MOE Sarnia
Chris Small, Clean Harbors Canada, Inc.

CERTIFICATE OF APPROVAL**AIR**

NUMBER 3286-87QRUQ

Issue Date: August 6, 2010

Clean Harbors Canada, Inc.
4090 Telfer Rd
Rural Route, No. 1
Township of Moore, Ontario
N0N 1G0

Site Location: 4090 Telfer Rd R.R. #1, Township of Moore
St. Clair Township, County of Lambton
N0N 1G0

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

A thermal desorption system used for the treatment of up to 36 tonnes per hour of hazardous wastes, consisting of the following:

- one (1) partially enclosed hazardous waste material preparation area, equipped with an odour suppression system to control odorous emissions, used for the preparation of wastes for feeding into the thermal desorption system;
- one (1) low-temperature, nitrogen blanketed, indirect fired rotary Thermal Desorber Unit (TDU), equipped with:
 - one (1) natural gas or No. 2 fuel oil fired heater (TDU heater), having a maximum heat input of 76,000,000 kilojoules per hour, discharging products of combustion through two stacks, identified as DES-1 and DES-2, each discharging to the atmosphere at a volumetric flow rate of 15.62 cubic metre per second, through a stack measuring 1.2 metres in diameter, and extending 10.0 metres above grade;
 - one (1) condensor system, used to recover condensable organics from the TDU, consisting of primary and secondary scrubbers;
 - one (1) carbon adsorber, having a minimum contaminant capture efficiency of 95%, serving emissions from four (4) condensate storage tanks each having a maximum liquid storage capacity of 75.7 cubic metres, venting to the atmosphere through a stack, identified as DES-3, measuring

0.2 metre in diameter, and extending 5.0 metres above grade;

- one (1) emergency bypass stack, equipped with a carbon filter having a minimum contaminant capture efficiency of 90%, identified as OSS or "Operational Shutdown Stack", to be used to vent emissions from the TDU for a period of no more than 20 minutes during which time the TDU is being shutdown, discharging to the atmosphere at a volumetric flow rate of 0.10 cubic metre per second, through a stack measuring 0.3 metre in diameter, and extending 19.8 metres above grade;
- one (1) baghouse dust collector, serving emissions from the TDU pugmill, discharging to the atmosphere through a stack, identified as TDUBH, having a maximum volumetric flow rate of 0.75 cubic metre per second, measuring 0.3 metre in diameter, and extending 10.7 metres above grade;

all in accordance with the Application for Approval (Air) submitted by Clean Harbors Canada, Inc., dated September 15, 2009 and signed by Christopher Small, Senior Compliance Manager; and the supporting information, including the Emission Summary and Dispersion Modelling (ESDM) Report, submitted by Conestoga-Rovers & Associates Ltd., dated September 22, 2009 and signed by Gordon Reusing; the revised ESDM report submitted by Conestoga-Rovers & Associates Ltd., dated March 2010 and prepared by Gordon Reusing; and the Acoustic Assessment Report prepared by Conestoga-Rovers & Associates, dated December 21, 2009 and signed by Tim Wiens.

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

1. "Acoustic Assessment Report" means the report, prepared in accordance with Publication NPC-233 by Conestoga-Rovers & Associates, dated December 21, 2009 and signed by Tim Wiens, submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present at the Facility;
2. "Acoustic Audit" means an investigative procedure consisting of measurements and/or acoustic modelling of all sources of noise emissions due to the operation of the Facility, assessed to determine compliance with the Performance Limits for the Facility regarding noise emissions, completed in accordance with the procedures set in Publication NPC-103 and reported in accordance with Publication NPC-233;
3. "Acoustic Audit Report" means a report presenting the results of an Acoustic Audit, prepared in accordance with Publication NPC-233;
4. "Acoustical Consultant" means a person currently active in the field of environmental acoustics and noise/vibration control, who is familiar with Ministry noise guidelines and procedures and has a combination of formal university education, training and experience necessary to assess noise emissions from a Facility;
5. "Act" means the Environmental Protection Act;

6. "Best Management Practices Plan" means a document or a set of documents which describe measures to minimize dust and odorous emissions from the Facility and/or Equipment;
7. "Certificate" means this Certificate of Approval, issued in accordance with Section 9 of the Act;
8. "Company" means Clean Harbors Canada, Inc.;
9. "Compliance Verification Plan" means a comprehensive sampling and analysis program, and recording procedures, which the Company shall implement to ensure that waste processed by the Equipment does not result in emissions from the Facility that may contravene O.Reg. 419/05 requirements, and to ensure that the Equipment is operated in accordance with the requirements in this Certificate;
10. "Director" means any Ministry employee appointed by the Minister pursuant to Section 5 of the Act;
11. "District Manager" means the District Manager, Sarnia District Office, Southwestern Region of the Ministry;
12. "Equipment" means the thermal desorption system described in the Company's application, this Certificate and in the supporting documentation submitted with the application, to the extent approved by this Certificate;
13. "ESDM Report" means the Emission Summary and Dispersion Modelling Report prepared by Dana Arkilander, Conestoga-Rovers & Associates, and dated September 22, 2009 submitted in support of the application, including any amendments, and any updates to the ESDM Report prepared as required by this Certificate and O.Reg. 419/05;
14. "Facility" means the entire operation located on the property where the Equipment is located;
15. "Guideline A-9" means the Ministry guideline document titled "NOx Emissions from Boilers and Heaters", dated March 2001, as amended;
16. "Independent Acoustical Consultant" means an Acoustical Consultant not representing the Company, and not involved in the noise impact assessment or the design/implementation of noise control measures for the Facility/Equipment. The Independent Acoustical Consultant shall not be retained by the consultant involved in the noise/vibration impact assessment or the design/implementation of noise/vibration control measures for the Facility/Equipment;
17. "Log Book" means a log book or an equivalent electronic record keeping system;
18. "Manager" means the Manager, Technology Standards Section, Standards Development Branch, or any other person who represents and carries out the duties of the Manager, Technology Standards Section, Standards Development Branch, as those duties relate to the conditions of this Certificate;
19. "Manual" means a document or a set of documents that provide written instructions to staff of the

Company;

20. "Ministry" means the Ontario Ministry of the Environment;
21. "Noise Control Measures" means measures to reduce the noise emission from the Facility and/or Equipment including, but not limited to silencers, acoustic louvres, enclosures, absorptive treatment, plenums and barriers;
22. "Noise Guidelines for Landfill Sites" means Ministry draft publication Noise Guidelines for Landfill Sites, October 1998, as amended;
23. "O. Reg. 419/05" means Ontario Regulation 419/05, Air Pollution - Local Air Quality;
24. "Pre-Test Plan" means a plan for the Source Testing including the information required in Section 1.1 of the Source Testing Code;
25. "Publication NPC-103" means Publication NPC-103, Measurement Procedures, August 1978;
26. "Publication NPC-232" means Publication NPC-232, Sound Level Limits for Stationary Sources in Class 3 Areas (Rural), October, 1995, as amended;
27. "Publication NPC-233" means Publication NPC-233, Information To Be Submitted For Approval of Stationary Sources Of Sound, October, 1995, as amended;
28. "Source Testing" means sampling and testing to measure emissions resulting from operating the Equipment at a level of typical maximum production within the approved operating range of the Equipment which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05;
29. "Source Testing Code" means the Source Testing Code, Version 2, Report No. ARB-66-80, dated November 1980, prepared by the Ministry, as amended;
30. "Targeted Sources" means the exhaust system serving emissions from the TDU and discharging these emissions to the existing onsite incinerator, at a location in the exhaust system immediately downstream of the TDU;
31. "Test Contaminants" means the contaminants listed in Schedule "B"; and
32. "Township" means the Corporation of the Township of St. Clair.

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

TERMS AND CONDITIONS

OPERATION AND MAINTENANCE

1. The Company shall ensure that the Equipment is properly operated and maintained at all times. The Company shall:
 - (1) not operate the TDU if the onsite incinerator is not in operation;
 - (2) notify the District Manager, in writing, each time emissions are discharged from the Operational Shutdown Stack, within two (2) business days of the discharge or an alternate time period agreed to in writing by the District Manager;
 - (3) prepare, before commencement of operation of the Equipment, and maintain up to date a Manual outlining the operating procedures and a maintenance program for the Equipment, including:
 - (a) routine operating and maintenance procedures in accordance with good engineering practices and as recommended by the Equipment suppliers;
 - (b) emergency procedures, including spill clean-up procedures;
 - (c) procedures for any record keeping activities relating to operation and maintenance of the Equipment;
 - (d) the frequency of inspection and replacement of the filter material in the Equipment; and
 - (e) all appropriate measures to minimize noise, fugitive dust and odorous emissions from all potential sources; and
 - (4) implement the recommendations of the Manual.

FUGITIVE DUST AND ODOUR CONTROL

2. The Company shall develop, in consultation with the District Manager and acceptable to the Director, a Best Management Practices Plan for the control of fugitive dust and odorous emissions from the TDU and all associated processes and activities. This Best Management Practices Plan shall include, but not be limited to:
 - (1) an assessment of odorous emissions from the TDU and all associated processes and activities, including the loading/unloading and storage of wastes to be processed by the TDU;
 - (2) an odour management approach to control odorous emissions from the TDU and all associated processes and activities, including the loading/unloading and storage of wastes to be processed by the TDU;
 - (3) an approach to monitor, evaluate and record the effectiveness of the odour management approach, and a description of the actions to be taken by the Company to modify and/or improve the odour management approach based on results of monitoring and evaluating the effectiveness

of the odour management approach;

- (4) identification of the main sources of fugitive dust and odorous emissions such as:
 - (a) on-site traffic;
 - (b) paved roads/areas;
 - (c) unpaved roads/areas;
 - (d) material stock piles;
 - (e) loading/unloading areas and loading/unloading techniques;
 - (f) material spills;
 - (g) material conveyance systems;
 - (h) exposed openings in process and storage buildings;
 - (i) general work areas;
 - (j) the partially enclosed hazardous waste material preparation area described in this Certificate; and
 - (k) the Operational Shutdown Stack (OSS);
- (5) potential causes for high dust and odorous emissions, and opacity resulting from these sources;
- (6) preventative and control measures in place or under development to minimize the likelihood of high dust emissions, odorous emissions and opacity from the sources identified above. Details of the preventative and control measures shall include:
 - (a) a description of the control equipment to be installed;
 - (b) a description of the preventative procedures to be implemented;
 - (c) the frequency of occurrence of periodic preventative activities, including material application rates, as applicable; and
 - (d) a description of the monitoring program that will be implemented by the Company to ensure that the carbon adsorber and the carbon filter continue to operate at the minimum contaminant capture efficiencies identified in the Company's application and this Certificate.
- (7) an implementation schedule for the Best Management Practices Plan, including training of facility personnel;
- (8) inspection and maintenance procedures and monitoring initiatives to ensure effective implementation of the preventative and control measures;
- (9) a description of all actions and measures to be implemented by the Company during the shut-down of the onsite incinerator, to minimize emissions from the TDU during the shut-down of the onsite incinerator; and
- (10) a list of all Ministry comments received, if any, on the development of the Best Management Practices Plan, and a description of how each Ministry comment was addressed in the Best Management Practices Plan.

3. The Company shall submit the Best Management Practices Plan to the Township, the Director and the

District Manager not later than thirty (30) days after the date of this Certificate.

- (1) The Director may not accept the Best Management Practices Plan if the minimum requirements described in Condition No. 2 were not included in the Best Management Practices Plan.
 - (2) If the Best Management Practices Plan is not accepted by the Director, the Company shall submit a Best Management Practices Plan acceptable to the Director not later than three (3) months after the date of this Certificate;
4. Upon acceptance of the Best Management Practices Plan by the Director, the Company shall immediately implement the Best Management Practices Plan for the control of odorous emissions, and fugitive dust emissions to provide effective dust suppression measures to any potential sources of fugitive dust emissions resulting from the operation of the Facility.
5. The Company shall not make changes to the Best Management Practices Plan, unless changes are requested in writing by the District Manager or proposed changes are accepted in writing by the District Manager. The Company shall submit the Best Management Practices Plan, incorporating the changes, to the Township and the Director and the District Manager, not later than thirty (30) days from the date of the District Manager's request to make changes, or from the date of the District Manager's acceptance of the proposed changes, to the Best Management Practices Plan.
- (1) The Director may not accept the Best Management Practices Plan if the minimum requirements described in this Certificate and described in the District Manager's request were not included in the Best Management Practices Plan, or if the Best Management Practices Plan does not incorporate the changes proposed by the Company and accepted by the District Manager.
 - (2) If the Best Management Practices Plan is not accepted by the Director, the Company shall submit a Best Management Practices Plan acceptable to the Director not later than three (3) months after the date of this Certificate.
 - (3) Upon acceptance of the Best Management Practices Plan by the Director, the Company shall immediately implement the Best Management Practices Plan for the control of odorous emissions, and fugitive dust emissions to provide effective dust suppression measures to any potential sources of fugitive dust emissions resulting from the operation of the Facility.

DOCUMENTATION REQUIREMENTS

6. The Company shall record, in a Log Book, each time a specific preventative and control measure described in the Best Management Practices Plan is implemented. The Company shall record, as a minimum:
- (1) the date when each emission control measure is installed, including a description of the control measure;
 - (2) the date when each new preventative measure or operating procedure to minimize emissions is

implemented, including a description of the preventative measure or operating procedure; and

- (3) the date, time of commencement, and time of completion of each periodic activity conducted to minimize emissions, including a description of the preventative measure/procedure and the name of the individual performing the periodic activity.

RECORD RETENTION

7. The Company shall retain, for a minimum of two (2) years from the date of their creation, all records and information related to or resulting from the recording activities required by this Certificate, and make these records available for review by staff of the Ministry upon request. The Company shall retain:
 - (1) all records on the maintenance, repair and inspection of the Equipment;
 - (2) the Log Book which contains all records on the preventative and control measures implemented for each source of fugitive dust and odorous emission identified in the Best Management Practices Plan
 - (3) all records on the environmental complaints; including:
 - (a) a description, time, date and location of each incident;
 - (b) wind direction and other weather conditions at the time of the incident;
 - (c) the name(s) of Company personnel responsible for handling the incident;
 - (d) the cause of the incident;
 - (e) the Company response to the incident; and
 - (f) a description of the measures taken to address the cause of the incident and to prevent a similar occurrence in the future, and the outcome of the measures taken.

NOTIFICATION OF COMPLAINTS

8. The Company shall notify the District Manager, in writing, of each environmental complaint within two (2) business days of the complaint. The notification shall include:
 - (1) a description of the nature of the complaint;
 - (2) the time, date and location of the incident;
 - (3) the wind direction and other weather conditions at the time of the incident; and
 - (4) the name(s) of Company personnel responsible for handling the incident.

NOISE

9. The Company shall ensure that the noise emissions from the Facility comply with the limits set in Publication NPC-232.
10. The Company shall ensure that the noise emissions from the landfill site operations at the Facility comply with the limits set in Noise Guidelines for Landfill Sites.
11. The Company shall carry out acoustic audit measurements on the actual noise emissions due to the operation of the Facility, in accordance with the measurement procedures in Publication NPC-103.
12. The Company shall submit an acoustic audit report, prepared by an Independent Acoustical Consultant, in accordance with Publication NPC-233, to the District Manager and the Director not later than two (2) years after the date of this Certificate.
13. The Director may not accept the results of the acoustic audit if the requirements of Publication NPC-233 were not followed. If the Director does not accept the results of the acoustic audit the Director may require the Company to repeat the acoustic audit.

COMPLIANCE VERIFICATION PLAN

14. The Company shall develop, in consultation with the District Manager and acceptable to the Director, a Compliance Verification Plan for the operation of the Equipment.
15. The Compliance Verification Plan shall, at a minimum, require the Company, for each class of waste to be processed by the Equipment at any given time, to:
 - (1) record the date, time, quantity and class of waste to be processed by the Equipment;
 - (2) perform detailed laboratory analysis on the waste prior to being processed by the Equipment, and record the results in a Log Book. These results shall include, at a minimum, a list of the individual contaminants tested and their measured concentrations;
 - (3) identify, and record in a Log Book, the maximum allowable concentration for each contaminant in the waste, prior to the processing of the waste by the Equipment, that will not result in a contravention of O.Reg. 419/05 requirements if the waste is processed by the Equipment;
 - (4) ensure that the concentrations of the individual contaminants in the waste to be processed by the Equipment do not exceed their applicable maximum allowable concentrations;
 - (5) record the amount of the waste processed by the Equipment;
 - (6) perform detailed laboratory analysis on the waste after being processed by the Equipment, and

record the results in a Log Book. These results shall include, at a minimum, a list of the individual contaminants tested and their measured concentrations;

- (7) perform detailed laboratory analysis on the condensate, recovered by the condenser, due to the processing of the waste by the Equipment, and record the results in a Log Book. These results shall, at minimum, include:
 - (a) a list of the individual contaminants tested and their measured concentrations;
 - (b) the concentration of mercury in the condensate; and
 - (c) the concentration of Polychlorinated biphenyls (PCBs); and
 - (8) record the amount of condensate recovered due to the processing of the waste by the Equipment.
16. The Compliance Verification Plan shall also include a plan to monitor and maintain the carbon adsorber, such that the carbon adsorber is operated, at all times, in accordance with the minimum contaminant capture efficiency specified in this Certificate. This plan shall include, but not be limited to:
- (1) a frequency and method of sampling and testing the amount of organics upstream of the carbon adsorber, to be performed only when contaminants are flowing through the carbon adsorber;
 - (2) a frequency and method of sampling and testing the amount of organics downstream of the carbon adsorber, to be performed only when contaminants are flowing through the carbon adsorber;
17. The Company shall submit the Compliance Verification Plan to the Township, the Director and the District Manager not later than thirty (30) days after the date of this Certificate.
- (1) The Director may not accept the Compliance Verification Plan if the minimum requirements described in Conditions Nos. 15 and 16 of this Certificate were not included in the Compliance Verification Plan.
 - (2) If the Compliance Verification Plan is not accepted by the Director, the Company shall submit a Compliance Verification Plan acceptable to the Director not later than three (3) months after the date of this Certificate;
18. Upon acceptance of the Compliance Verification Plan by the Director, the Company shall immediately implement the Compliance Verification Plan.
19. The Company shall not make changes to the Compliance Verification Plan, unless changes are requested in writing by the District Manager or proposed changes are accepted in writing by the District Manager. The Company shall submit the Compliance Verification Plan, incorporating the changes, to the Township and the Director and the District Manager, not later than thirty (30) days from the date of the District Manager's request to make changes, or from the date of the District Manager's acceptance of the

proposed changes, to the Compliance Verification Plan.

- (1) The Director may not accept the Compliance Verification Plan if the minimum requirements described in this Certificate and described in the District Manager's request were not included in the Compliance Verification Plan, or if the Compliance Verification Plan does not incorporate the changes proposed by the Company and accepted by the District Manager.
- (2) If the Compliance Verification Plan is not accepted by the Director, the Company shall submit a Compliance Verification Plan acceptable to the Director not later than three (3) months after the date of this Certificate.
- (3) Upon acceptance of the Compliance Verification Plan by the Director, the Company shall immediately implement the Compliance Verification Plan for the control of odorous emissions, and fugitive dust emissions to provide effective dust suppression measures to any potential sources of fugitive dust emissions resulting from the operation of the Facility.

EMISSIONS OF OXIDES OF NITROGEN (NO_x)

20. The emission limits and requirements set out in Guideline A-9 shall be deemed to apply to the TDU heater, and the Company shall comply with the emission limits and requirements set out in Guideline A-9, if at any time modifications are made to the TDU heater that would result in the TDU heater being considered a modified heater as referred to in Guideline A-9.

SOURCE TESTING

21. The Company shall perform Source Testing every calendar year, in accordance with the procedures in Schedule "A" to determine the rate of emission of the Test Contaminants from the Targeted Sources.
22. The Company shall perform the Source Testing required by Condition 21 at the same time as the annual source testing requirements that apply to the onsite incinerator.

SCHEDULE "A"
Source Testing Procedures

1. The Company shall submit to the Manager a test protocol, including the Pre-Test Plan for the Source Testing required by the Source Testing Code not later than six (6) months after commencement of operation of the Equipment. The Company shall finalize the test protocol in consultation with the Manager.
2. The Company shall not commence the Source Testing required under this Certificate until the Manager has approved the Pre-Test Plan.
3. The Company shall complete the Source Testing not later than three (3) months after the Manager has approved the Pre-Test Plan.
4. The Company shall notify the Manager, the District Manager and the Director in writing of the location, date and time of any impending Source Testing required by this Certificate, at least fifteen (15) days prior to the Source Testing.
5. The Company shall submit a report (hardcopy and electronic format) on the Source Testing to the Manager, the District Manager and the Director not later than four (4) months after completing the Source Testing. The report shall be in the format described in the Source Testing Code, and shall also include, but not be limited to:
 - (1) an executive summary;
 - (2) an identification of the applicable North American Industry Classification System code (NAICS) for the facility;
 - (3) records of operating conditions at the time of Source Testing;
 - (4) results of Source Testing, including the emission rate, emission concentration, and relevant emission factor of the Test Contaminants from the Targeted Sources; and
 - (5) a tabular comparison of Source Testing results for the Targeted Sources and Test Contaminants to original emission estimates described in the Company's application and the ESDM Report.
6. The Director may not accept the results of the Source Testing if:
 - (1) the Source Testing Code or the requirements of the Manager were not followed;
 - (2) the Company did not notify the Manager, the District Manager and Director of the Source Testing; or
 - (3) the Company failed to provide a complete report on the Source Testing.
7. If the Director does not accept the results of the Source Testing, the Director may require re-testing. If re-testing is required, the Pre-Test Plan strategies need to be revised and submitted to the Manager for approval. The actions taken to minimize the possibility of the Source Testing results not being accepted by the Director must be noted in the revised Pre-Test Plan submission to the Manager.
8. If the Source Testing results indicate the emission estimates are higher than the original emission estimates described in the Company's application and the ESDM Report, the Company shall update their ESDM Report in accordance with Section 26 of O. Reg. 419/05 with the emission estimates from the source testing report and make these records available for review by staff of the Ministry upon request. The updated Emission Summary Table from the updated ESDM Report shall be submitted with the report on the Source Testing.

SCHEDULE "B"
Source Testing Test Contaminants

metals
total hydrocarbons (THC)
polychlorinated biphenyls (PCB)
heptachlor
chlorodane
cyanide (total)
hexachlorophene
toxaphene
tributyltin

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

1. Condition Nos. 1, 2, 3, 4 and 5 are included to emphasize that the Equipment must be maintained and operated according to a procedure that will result in compliance with the Act, the Regulations and this Certificate; and to provide the minimum performance requirement considered necessary to prevent an adverse effect resulting from the operation of the Facility.
2. Condition Nos. 6 and 7 are included to require the Company to keep records and to provide information to staff of the Ministry so that compliance with the Act, the Regulations and this Certificate can be verified.
3. Condition No. 8 is included to require the Company to notify staff of the Ministry so that compliance with the Act, the Regulations and this Certificate can be verified.
4. Conditions Nos. 9 and 10 are included to provide the minimum performance requirement considered necessary to prevent an adverse effect resulting from the operation of the Facility.
5. Conditions Nos. 11 and 12 are included to require the Company to gather accurate information so that the environmental impact and subsequent compliance with the Act, the regulations and this Certificate can be verified.
6. Condition No. 13 is included to ensure that the acoustic audit is carried out in accordance with procedures set in the Ministry's Noise Guidelines.
7. Conditions Nos. 14, 15, 16, 17, 18 and 19 are included to require the Company to gather and retain accurate information on an ongoing basis so that compliance with the Act, the regulations and this Certificate can be verified.
8. Condition No. 20 is included to provide the minimum performance requirement considered necessary to prevent an adverse effect resulting from the operation of the Facility.
9. Conditions Nos. 21 and 22 are included to require the Company to gather and retain accurate information so that compliance with the Act, the regulations and this Certificate can be verified.

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

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

The Notice should also include:

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

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

This Notice must be served upon:

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

AND

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

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

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

DATED AT TORONTO this 6th day of August, 2010



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

SH/
c: District Manager, MOE Sarnia
Christopher Small, Clean Harbors Canada, Inc.

AMENDED ENVIRONMENTAL COMPLIANCE APPROVALNUMBER 4876-8RZLXL
Issue Date: January 31, 2013

Clean Harbors Canada, Inc.
4090 Telfer Rd
Rural Route, No. 1
Corunna, Ontario
N0N 1G0

Site Location: Clean Harbors Lambton Facility
4090 Telfer Rd
St. Clair Township, County of Lambton
N0N 1G0

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

The establishment of sewage works for the collection, treatment and disposal of contact stormwater and process wastewater from the Clean Harbors Lambton Facility located at Part Lot 8, Lot 9, Concession 10, Telfer Side Road, St. Clair Township, County of Lambton, Ontario, consisting of:

PROPOSED WORKS:

Establishment of 272 m³/day *Rated Capacity* process wastewater treatment system as part of the Leachate Abatement Plan to handle excess process wastewater contaminated with petroleum hydrocarbons, polyaromatic hydrocarbons, chlorinated solvents and/or volatile organic compounds, and metals generated at the Clean Harbors Lambton Facility and collected in the North Process Water Pond, housed in a secure trailer/shipping container, consisting of the following:

- one (1) 189 L/min @ 22.9 TDH rated capacity submersible pump, equipped with a flow control valve, conveying process wastewater from process wastewater ponds (North Process Water Pond) to an oil/water separator described below;
- one (1) 549 L/min maximum treatment capacity oil/water separator, equipped with coalescing media, designed to remove non-aqueous phase liquids (NAPL) and fast settling

particulates, equipped with 170 L capacity recovered NAPL and sediment storage tank (drum), discharging to a bag filtration feed intake tank described below;

- one (1) 455 L capacity bag filtration feed tank with one (1) 227 L/min capacity submersible pump equipped with flow control valve and flow meter conveying wastewater to a bag filtration system described below;
- one (1) 1.64 m² capacity bag filtration system consisting of two(2) 10 micron bag filters placed inside two (2) filter vessels and two (2) 1 micron filter bags placed inside two (2) filter vessels operating in series, discharging to activated carbon units described below;
- one (1) 189 L/min maximum treatment capacity activated carbon system consisting of two (2) dual pressure vessels operating in series as a lead and lag units, each filled with liquid phase activated carbon with a minimum empty bed contact time of 10 minutes, discharging to an activated alumina filter described below;
- one (1) 189 L/min maximum treatment capacity activated liquid phase alumina filtration system consisting of two (2) dual pressure vessels operating in series as a lead and lag units, each filled with activated liquid phase alumina filter media with a minimum empty bed contact time of 10 minutes, discharging to an ultra-filtration influent feed tank (if ultrafiltration system is installed) described below or to the pH adjustment tank described below;
- one (1) 455 L storage capacity ultra-filtration feed tank equipped with one (1) 227 L/min capacity submersible pump discharging to a pH adjustment tank or an ultra-filtration feed tank described below; (if ultrafiltration system is installed)
- five (5) ultra-filtration modules using membrane filters (to be installed to polish effluent further if required), each with 37.85 L/min treatment capacity, discharging to a pH adjustment system described below;
- two (2) 9,460 L capacity pH adjustment tanks equipped with CO₂ tank equipped with one (1) 397 L/min capacity backwash supply pump, discharging to an effluent holding tank described below;
- one (1) drain pipe receiving backwash water from bag filters, reject stream water from the alumina and ultrafiltration systems, returning collected backwash water and effluent overflow by gravity to the North Process Water Pond at a location at least 10 m from the process wastewater intake pump;
- two (2) 158 m³ capacity effluent storage tank (Frac Tank) discharging to Telfer Side Road drainage ditch or to process water ponds as required; and
- including instrumentation, piping, valves and appurtenances.

All in accordance with the documentation listed in Schedule 'A'.

SEWAGE WORKS APPROVED ON SEPTEMBER 4, 2007 CofA No. 0598-76DK8Q:

The establishment of sewage works for the collection, treatment and disposal of stormwater runoff from the capped waste disposal cells and office buildings of Lambton Facility located at 4090 Telfer Road to service a 0.6 ha drainage area consisting of roof drainage from the administration building, laboratory and operations building, a gravel parking lot, paved surface area, and grassed area, designed to convey stormwater runoff from storm events with up to 1:50 year return frequency to the Telfer Road Drain, consisting of the following:

- a roof drainage collection system collecting roof drainage from the garage building and discharging through a drain pipe to a drainage ditch described below;
- one (1) V-shaped drainage ditch with approximate length of 290 m, minimum depth of 300 mm, maximum depth of 500 mm, minimum top width of 1.3 m, and a maximum top width of 2 m, extending from the administration building in a southerly direction and then westerly direction discharging to the Telfer Road Drain;
- one (1) approximately 50 m long concrete curb installed along the south side of the above described drainage ditch to segregate potential contaminated stormwater runoff from Process Area-I located on the east and south side of the subject 0.6 ha drainage area; and
- all associated controls and appurtenances.

SEWAGE WORKS APPROVED ON OR BEFORE AUGUST 26, 2005:

Upgrade/Modifications to the existing sewage works for the collection, treatment and disposal of **contact stormwater runoff** during storm events of up to 1:100 year return frequency from closed and capped waste disposal cells located at Part Lot 8, Lot 9, Concession 10, Telfer Side Road, St. Clair Township, County of Lambton, Ontario, consisting of:

- **East Pond** approximately measuring 175 m long, 73.5 m wide, and 4.0 m deep, providing a total storage volume of 68,600 m³ (including the East Ditch and Centre Ditch) for stormwater runoff collected from a total drainage area of 52.3 ha through the East Ditch and Centre Ditch, equipped with a spillway to the South Ditch at an elevation of 200 m, and discharging through two (2) 250 mm diameter pipes into a stormwater pumping station described below;
- **Pumping Station** consisting of a heated pumping station building, one (1) pump with a rated capacity of 16.0 L/s @ 5.6 m TDH and a similar spare pump to be stored on-site, discharging into the South Ditch and eventually into the West Pond described below;
- **West Pond** approximately measuring 195 m long, 45 m wide, 4.0 m deep, providing a

total storage volume of 48,500 m³ (including South Ditch) for stormwater runoff collected from a total drainage area of 42.7 ha through the South Ditch, discharging into a wastewater treatment plant described below;

- **Wastewater Treatment Plant** with a rated treatment capacity of 4,500 m³/day treating stormwater runoff from the West pond, consisting of:
 1. two (2) influent pumps (one on standby) each with rated capacity of 22.7 L/sec at 310 kPa (300 IGPM at 45 psig);
 2. two (2) sand filters, each 3.6 m outside diameter and 1.8 m high, containing 6.4 m³ of 0.3 mm silica sand and 3.2 m³ of 1.0 mm anthracite, equipped with a backwash pump rated 49.3 L/sec at 138 kPa (650 IGPM at 20 psig);
 3. one (1) activated carbon filter consisting of a concrete above-ground basin with overall dimension of 2.4 m high, 4.3 m long and 1.8 m wide, containing 1.2 m³ of 20 mm clear crushed stone and 14.2 m³ of granulated activated carbon (G.A.C.); and
 4. one (1) equalization pond with a storage volume of 4,500 m³ and overall dimensions of 37 m long, 26 m wide, and 6.7 m deep, discharging treated effluent into the Telfer Side Road drainage ditch.

All in accordance with the documentation listed in Schedule 'A'.

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

"Approval" means this entire document and any schedules attached to it, and the application;

"Daily Concentration" means the concentration of a contaminant in the effluent discharged over any single day, as measured by a composite or grab sample, whichever is required;

"Director" means a person appointed by the Minister pursuant to section 5 of the *EPA* for the purposes of Part II.1 of the *EPA*;

"District Manager" means the District Manager of the Sarnia District Office;

"EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;

"Ministry" means the ministry of the government of Ontario responsible for the *EPA* and *OWRA* and includes all officials, employees or other persons acting on its behalf;

"Owner" means Clean Harbors Canada Inc. and includes its successors and assignees; and

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;

"*Previous Works*" means those portions of the sewage works previously constructed and approved under an *Approval* ;

"*Proposed Works* " means the sewage works described in the *Owner's* application, this *Approval*, and to the extent approved by this *Approval* ; and

"*Works* " means the sewage works described in the *Owner's* application and this *Approval* and includes both *Previous Works* and *Proposed Works* .

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

TERMS AND CONDITIONS

PART I - GENERAL

1. GENERAL PROVISIONS

- (1) The *Owner* shall ensure that any person authorized to carry out work on or operate any aspect of the *Works* is notified of this *Approval* and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (2) Except as otherwise provided by these Conditions, the *Owner* shall design, build, install, operate and maintain the *Works* in accordance with the description given in this *Approval* , the application for approval of the *Works* and the submitted supporting documents and plans and specifications as listed in this *Approval* .
- (3) Where there is a conflict between a provision of any submitted document referred to in this *Approval* and the Conditions of this *Approval*, the Conditions in this *Approval* shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.
- (4) Where there is a conflict between the listed submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.
- (5) The requirements of this *Approval* are severable. If any requirement of this *Approval*, or the application of any requirement of this *Approval* to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this *Approval* shall not be affected thereby.

2. EXPIRY OF APPROVAL

The approval issued by this *Approval* will cease to apply to those parts of the *Proposed Works* which have not been constructed within five (5) years of the date of this *Approval*.

3. CHANGE OF OWNER

- (1) The *Owner* shall notify the *District Manager* and the *Director*, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - (a) change of *Owner*;
 - (b) change of address of the *Owner*;
 - (c) change of partners where the *Owner* is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B17 shall be included in the notification to the *District Manager*;
 - (d) change of name of the corporation where the *Owner* is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C39 shall be included in the notification to the *District Manager*;
- (2) In the event of any change in ownership of the *Works*, other than a change to a successor municipality, the *Owner* shall notify in writing the succeeding owner of the existence of this *Approval*, and a copy of such notice shall be forwarded to the *District Manager* and the *Director*.

4. CHANGES IN PROCESSES OR PROCESS MATERIALS

The *Owner* shall give written notice to the *District Manager* of any plans to change the processes or process materials in the *Owner's* enterprise serviced by the works where the change may not significantly alter the quantity or quality of the influent to or effluent from the works, and no such change(s) shall be made unless with the written concurrence or approval of the *District Manager*.

PART II - CONTACT STORMWATER MANAGEMENT (*PREVIOUS WORKS*)

5. EFFLUENT LIMITS

- (1) The *Owner* shall design, construct and operate the works such that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the works being allowed to be discharged from the equalization pond into Telfer Side Road drainage ditch.

Table 1 - Effluent Limits	
Effluent Parameter	Concentration Limit (milligrams per litre unless otherwise indicated)
Column 1	Column 2
Total Suspended Solids	15.0
Solvent Extractables	15.0
Phenols	0.02
pH of the effluent maintained between 5.5 to 9.5, inclusive, at all times	

- (2) For the purposes of determining compliance with and enforcing subsection (1):
- (a) The *Daily Concentration* of a parameter named in Column 1 of subsection (1) shall not exceed the corresponding maximum concentration set out in Column 2 of subsection (1).
 - (b) The pH of the effluent shall be maintained between 5.5 to 9.5 at all times.

6. EFFLUENT - VISUAL OBSERVATIONS

Notwithstanding any other condition in this certificate, the *Owner* shall ensure that the effluent from the works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen or foam on the receiving waters.

7. EFFLUENT MONITORING AND RECORDING

The *Owner* shall carry out the following monitoring program:

- (1) All samples and measurements taken for the purposes of this certificate are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
- (2) Samples shall be collected and analyzed at the following sampling point(s), at the sampling frequencies and using the sample type specified for each parameter listed:

Table 2 - Effluent Monitoring - Equalization Pond	
Frequency	Every discharge event
Sample Type	Grab
Parameters	Total Suspended Solids, Solvent Extractables, Phenols and pH

- (3) The methods and protocols for sampling, analysis, toxicity testing, and recording shall

conform, in order of precedence, to the methods and protocols specified in the following:

- (a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (August 1994), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions;
 - (b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition) as amended from time to time by more recently published editions; and,
- (4) A continuous flow measuring device(s) shall be installed and maintained to measure the flow rate of the effluent from the sewage works, with an accuracy to within plus or minus fifteen (15) per cent of the actual flow rate for the entire design range of the flow measuring device and the *Owner* shall measure, record and calculate the total volume of effluent discharged from the equalization pond into Telfer Side Road drainage ditch.
 - (5) The *Owner* shall retain for a minimum of three (3) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this certificate.

8. OPERATION AND MAINTENANCE

- (1) The *Owner* shall not allow the discharge of wastewater from the equalization pond if any grab sample collected from works fails to meet any of the effluent quality limits set under Condition 5. The wastewater contained in the equalization pond that failed to meet the effluent limits set under Condition 5 shall be returned to the approved storage pond for further treatment.
- (2) The modified sewage works approved herein shall be used for the collection, treatment and disposal of stormwater runoff from the landfill disposal area only as approved under Provisional Certificate of Approval Waste Disposal Site No. A031806 dated July 15, 1980 and specifically shall not be used for the collection, treatment and disposal of stormwater runoff from those areas used for the processing of waste materials.
- (3) Under no circumstances shall untreated stormwater runoff be discharged from the property.
- (4) By August 26, 2006, the *Owner* shall prepare an operations manual, that includes, but not necessarily limited to, the following information:
 - (a) operating procedures for routine operation of the works;
 - (b) inspection programs, including frequency of inspection, for the works and the methods or tests employed to detect when maintenance is necessary;
 - (c) repair and maintenance programs, including the frequency of repair and maintenance for the works;

- (d) contingency plans and procedures for dealing with potential spill, bypasses and any other abnormal situations and for notifying the *District Manager* ; and
 - (e) complaint procedures for receiving and responding to public complaints.
- (5) The *Owner* shall maintain the operations manual up to date through revisions undertaken from time to time and retain a copy at the location of the sewage works. Upon request, the *Owner* shall make the manual available for inspection and copying by *Ministry* personnel.

9. REPORTING

- (1) The *Owner* shall report to the *District Manager* or designate, any exceedence of any parameter specified in Condition 5 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedence.
- (2) The *Owner* shall prepare and upon request submit a performance report to the *District Manager* on an annual basis by November 30 of each year covering the reporting period from September 1 to August 31. The reports shall contain, but shall not be limited to, the following information:
 - (a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 5, including an overview of the success and adequacy of the sewage works;
 - (b) a tabulation of volumes of effluent discharged from the works into the receiving municipal drain during the reporting period;
 - (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the sewage works;
 - (d) an account of any environmental and operating problems encountered at the site and the mitigative measures taken during the reporting period.

PART III - PROCESS WASTEWATER TREATMENT (*PROPOSED WORKS*)

10. EFFLUENT LIMITS

- (1) The *Owner* shall design and construct the *Works* (Process Wastewater Treatment) and operate and maintain the *Works* such that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the *Works* .

TABLE 3 - Effluent Limits			
General Chemistry		Metals	
Column 1	Column 2	Column 1	Column 2
Effluent Parameters	Effluent Concentration (milligrams per litre unless otherwise indicated)	Effluent Parameters	Effluent Concentration (micrograms per litre unless otherwise indicated)
Chemical Oxygen Demand (COD)	40	Antimony (total)	20.0
Cyanide (total)	0.005	Arsenic (total)	5.0
Dissolved Organic Carbon (DOC)	10	Beryllium (total)	11.0 @ Hardness < 75 mg/L 1100 @ Hardness > 75 mg/L
pH (field)	6.5 -8.5	Boron	200
pH (lab)	6.5 - 8.5	Cadmium (total)	0.22
Phenolics (total)	0.001	Chromium (Hexavalent)	1.0
Phosphorus (total)	0.1	Cobalt (total)	0.9
Total Suspended Solids (TSS)	15	Copper (total)	5.0
Un-ionized Ammonia	0.02	Iron (total)	400.0
		Lead (total)	5.0
		Mercury	0.2
		Molybdenum (dissolved)	40
		Nickel (total)	25.0
		Selenium	100.0
		Silver	0.1
		Thallium	0.3
		Vanadium	6.0
		Zinc	30.0

TABLE 4 - Effluent Limits			
Volatile Organic Compounds		Semi-Volatile Organic Compounds	
Column 1	Column 2	Column 1	Column 2
Effluent Parameters	Effluent Concentration (micrograms per litre unless otherwise indicated)	Effluent Parameters	Effluent Concentration (micrograms per litre unless otherwise indicated)
1,1,1,2-Tetrachloroethane	20	1,2,4-Trichlorobenzene	0.5
1,1,1-Trichloroethane	10	1,2-Dichlorobenzene	2.5
1,1,2,2-Tetrachloroethane	70	1,3-Dichlorobenzene	2.5
1,1,2-Trichloroethane	800	1,4-Dichlorobenzene	4
1,1-Dichloroethane	200	1-Methylnaphthalene	2
1,1-Dichloroethene	40	2,4-Dichlorophenol	0.2
1,2-Dibromoethane	5	2,4-Dimethylphenol	10
1,2-Dichlorobenzene	2.5	2,4-Dinitrotoluene	4
1,2-Dichloroethane	100	2,6-Dinitrotoluene	6
1,2-Dichloropropane	0.7	2-Methylnaphthalene	2
1,3-Dichlorobenzene	2.5	3,3'-Dichlorobenzidine	0.6
1,4-Dichlorobenzene	4	Anthracene	0.0008
2-Butanone	400	Benzo(a)anthracene	0.0004
Benzene	100	Benzo(g,h,i)perylene	0.00002
Bromodichloromethane	200	Benzo(k)fluoranthene	0.0002
Bromoform	60	bis(2-Chloroethy)ether	200
Bromomethane	0.9	bis(ethylhexy)phthalate	0.6
Chlorobenzene	15	Chrysene	0.0001
cis-1,2-Dichloroethene	200	Dibenz(a,h)anthracene	0.002
Dibromochloromethane	40	Fluoranthene	0.0008
Ethylbenzene	8	Fluorene	0.2
Methyl tert butyl ether (MTBE)	200	Hexachlorobenzene	0.0065
Methylene chloride	100	Hexachlorobutadiene	0.009
o-Xylene	40	Naphthalene	7
Styrene	4	Pentachlorophenol	0.5
Tetrachloroethene	50	Perylene	0.00007
Toluene	0.8	Phenanthrene	0.03
trans-1,2-Dichloroethene	200		
trans-1,3-Dichloropropene	7		
Trichloroethene	20		
Vinyl Chloride	600		

- (2) For the purposes of determining compliance with and enforcing subsection (1):
 - (a) The *Daily Concentration* of a parameter named in Column 1 of subsection (1) shall not exceed the corresponding maximum concentration set out in Column 2 of subsection (1).
 - (b) The pH of the effluent shall be maintained between 6.5 to 9.0 at all times.
- (3) The effluent limit set out in subsection (1) shall apply upon the commencement of operation of the *Works* ;

11. MONITORING AND RECORDING

The *Owner* shall, upon commencement of operation of the *Works*, carry out the following monitoring program:

- (1) All samples and measurements taken for the purposes of this *Approval* are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
- (2) For the purposes of this condition, the following definitions apply:
 - (a) Daily means once each day;
 - (b) Weekly means once each week;
 - (c) Monthly means once every month;
- (3) Samples shall be collected at the following sampling points, at the frequency specified, by means of the specified sample type and analyzed for each parameter listed and all results recorded:

Table 5 - Influent Monitoring
Sampling Location: Wastewater Intake Pump

Frequency	Weekly (when the Works is in use)
Sample Type	Grab
General Chemistry Parameters	Alkalinity (total as CaCO ₃), Ammonia-N, Bromide (dissolved), Chemical Oxygen Demand (COD), Chloride (dissolved), Conductivity (umhos/cm), Cyanide (total), Dissolved Organic Carbon (DOC), Fluoride, Hardness, Nitrate (as N), Nitrite (as N), pH (field), pH (lab), Phenolics (total), Phosphorus (total), Sulfate (dissolved), Temperature (field), Total Dissolved Solids (TDS), Total Kjeldahl Nitrogen (TKN), Total Suspended Solids (TSS), Un-ionized Ammonia
Metals (Total and Dissolved) Parameters	Aluminium, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium (Hexavalent), Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Strontium, Thallium, Tin, Vanadium, Zinc
VOCs Parameters	1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2-Dibromoethane (Ethylene dibromide), 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2-Butanone (Methyl ethyl ketone), 4-Methyl-2-pentanone (Methyl isobutyl ketone), Acetone, Benzene, Bromodichloromethane, Bromoform, Bromomethane (Methyl bromide), Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform (Trichloromethane), cis-1,2-Dichloroethene, cis-1,3-Dichloropropene, Dibromochloromethane, Dichlorodifluoromethane (CFC-12), Ethylbenzene, Hexane, m&p-Xylenes, Methyl tert butyl ether (MTBE), Methylene chloride, o-Xylene, Styrene, Tetrachloroethene, Toluene, trans-1,2-Dichloroethene, trans-1,3-Dichloropropene, Trichloroethene, Trichlorofluoromethane (CFC-11), Vinyl Chloride, Xylenes (total)
Semi-VOCs Parameters	1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1-Methylnaphthalene, 2,3,4,5-Tetrachlorophenol/2,3,4,6-Tetrachlorophenol, 2,3,6-Trichlorophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chlorophenol, 2-Methylnaphthalene, 3,3'-Dichlorobenzidine, 4-Chloroaniline, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene/Benzo(j)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, bis(2-Chloroethoxy)ether, bis(ethylhexy)phthalate (DEHP), Chrysene, Dibenz(a,h)anthracene, Diethyl phthalate, Dimethyl phthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Indeno(1,2,3-cd)pyrene, Naphthalene, Pentachlorophenol, Perylene, Phenanthrene, Pyrene

Table 6 - Effluent Monitoring Sampling Location: Effluent Storage Tanks	
Frequency	Before Every Discharge Event from Effluent Storage Tank
Sample Type	Grab
General Chemistry Parameters	Alkalinity (total as CaCO ₃), Ammonia-N, Bromide (dissolved), Chemical Oxygen Demand (COD), Chloride (dissolved), Conductivity (umhos/cm), Cyanide (total), Dissolved Organic Carbon (DOC), Fluoride, Hardness, Nitrate (as N), Nitrite (as N), pH (field), pH (lab), Phenolics (total), Phosphorus (total), Sulfate (dissolved), Temperature (field), Total Dissolved Solids (TDS), Total Kjeldahl Nitrogen (TKN), Total Suspended Solids (TSS), Un-ionized Ammonia
Metals (Total and Dissolved) Parameters	Aluminium, Antimony, Arsenic, Barium, Beryllium, Bismuth, Boron, Cadmium, Calcium, Chromium (Hexavalent), Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silicon, Silver, Sodium, Strontium, Thallium, Tin, Vanadium, Zinc
VOCs Parameters	1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,2-Dibromoethane (Ethylene dibromide), 1,2-Dichlorobenzene, 1,2-Dichloroethane, 1,2-Dichloropropane, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2-Butanone (Methyl ethyl ketone), 4-Methyl-2-pentanone (Methyl isobutyl ketone), Acetone, Benzene, Bromodichloromethane, Bromoform, Bromomethane (Methyl bromide), Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform (Trichloromethane), cis-1,2-Dichloroethene, cis-1,3-Dichloropropene, Dibromochloromethane, Dichlorodifluoromethane (CFC-12), Ethylbenzene, Hexane, m&p-Xylenes, Methyl tert butyl ether (MTBE), Methylene chloride, o-Xylene, Styrene, Tetrachloroethene, Toluene, trans-1,2-Dichloroethene, trans-1,3-Dichloropropene, Trichloroethene, Trichlorofluoromethane (CFC-11), Vinyl Chloride, Xylenes (total)
Semi-VOCs Parameters	1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1-Methylnaphthalene, 2,3,4,5-Tetrachlorophenol/2,3,4,6-Tetrachlorophenol, 2,3,6-Trichlorophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chlorophenol, 2-Methylnaphthalene, 3,3'-Dichlorobenzidine, 4-Chloroaniline, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene/Benzo(j)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, bis(2-Chloroethoxy)ether, bis(ethylhexy)phthalate (DEHP), Chrysene, Dibenz(a,h)anthracene, Diethyl phthalate, Dimethyl phthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Indeno(1,2,3-cd)pyrene, Naphthalene, Pentachlorophenol, Perylene, Phenanthrene, Pyrene

- (4) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

- (a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions;
 - (b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions;
- (5) The temperature and pH of the effluent from the *Works* shall be determined in the field at the time of sampling for Total Ammonia Nitrogen. The concentration of un-ionized ammonia shall be calculated using the total ammonia concentration, pH and temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended, for ammonia (un-ionized).
 - (6) The measurement frequencies specified in subsection (3) in respect to any parameter are minimum requirements which may, after one (1) year of monitoring in accordance with this Condition can be modified by the *District Manager* in writing from time to time based on the *Owner*'s request and supporting documentation submitted by the *Owner*.
 - (7) The *Owner* shall install and maintain (a) continuous flow measuring device(s), to measure the flow rate of the effluent from the *Works* with an accuracy to within plus or minus 15 per cent (+/- 15%) of the actual flow rate for the entire design range of the flow measuring device, and record the flow rate at a daily frequency when the *Works* are operating.
 - (8) The *Owner* shall retain for a minimum of three (3) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this *Approval*.

12. OPERATION AND MAINTENANCE

- (1) The *Owner* shall **NOT** use the *Works* (Process Wastewater Treatment) to treat leachate generated from the landfill and collected in the leachate ponds.
- (2) The *Owner* shall ensure that the *Works* is operated with the effluent storage tank in a "**normally closed position**" and shall allow discharge of effluent from the effluent storage tank to the Telfer Road side drainage ditch **ONLY** if the effluent batch stored in the effluent storage tank complies with the effluent limits of all the parameter listed under Condition 10 (1).
- (3) The *Owner* shall return any batch of effluent stored in the effluent storage tank which failed to comply with the requirements of Condition 10 (1) to the North Process Water Pond for further treatment
- (4) The *Owner* shall exercise due diligence in ensuring that, at all times, the *Works* and the related equipment and appurtenances used to achieve compliance with this *Approval* are

properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate funding, adequate operator staffing and training, including training in all procedures and other requirements of this *Approval* , adequate laboratory facilities, process controls and alarms and the use of process chemicals and other substances used in the *Works*.

- (5) The *Owner* shall prepare an operations manual prior to the commencement of operation of the *Works* , that includes, but not necessarily limited to, the following information:
 - (a) operating procedures for routine operation of the *Works*;
 - (b) inspection programs, including frequency of inspection, for the *Works* and the methods or tests employed to detect when maintenance is necessary;
 - (c) repair and maintenance programs, including the frequency of repair and maintenance for the *Works*;
 - (d) procedures for the inspection and calibration of monitoring equipment;
 - (e) a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the *District Manager*; and
 - (f) procedures for receiving, responding and recording public complaints, including recording any follow up actions taken.
- (6) The *Owner* shall maintain the operations manual current and retain a copy at the location of the *Works* for the operational life of the *Works* . Upon request, the *Owner* shall make the manual available to *Ministry* staff.

13. RECEIVING SURFACE WATER IMPACT ASSESSMENT MONITORING

- (1) Before commencement of operation of the *Proposed Works* , the *Owner* shall submit for approval to the *District Manager* a Terms of Reference for a surface water impact assessment of Bear Creek which establishes monitoring locations upstream and downstream of the effluent discharge point from the *Proposed Works* (Process Wastewater Treatment Plant) to Bear Creek and outline monitoring parameters and monitoring frequency for each monitoring location that will be established.
- (2) Upon approval of the Terms of Reference submitted under subsection (1) by the *District Manager* and commencement of operation of *Proposed Works* , the *Owner* shall conduct the approved surface water monitoring program and complete a surface water impact assessment of Bear Creek.
- (3) The *Owner* shall submit a surface impact assessment report based on the monitoring data

collected under subsection (2) showing if any of the observed downstream impact is associated with the effluent discharge from the *Proposed Works* .

- (4) The *Owner* shall notify the *District Manager* and Walpole Island First Nations if any surface water impact assessment completed under this Condition is found to be associated with the *Proposed Works* and submit a contingency plan that can be implemented to mitigate the observed impact;

14. REPORTING

- (1) One week prior to the start up of the operation of the *Proposed Works* , the *Owner* shall notify the *District Manager* (in writing) of the pending start up date.
- (2) The *Owner* shall report to the *District Manager* or designate, any exceedence of any parameter specified in Condition 10 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedence.
- (3) In addition to the obligations under Part X of the Environmental Protection Act, the *Owner* shall, within ten (10) working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the *District Manager* describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.
- (4) The *Owner* shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to *Ministry* staff.
- (5) The *Owner* shall prepare and submit to the *District Manager* a performance report, on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the *Works* and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:
 - (a) a summary and interpretation of all monitoring data and a comparison to the effluent limits outlined in Condition 10, including an overview of the success and adequacy of the *Works* ;
 - (b) a description of any operating problems encountered and corrective actions taken;
 - (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the *Works* ;
 - (d) a summary of any effluent quality assurance or control measures undertaken in the

reporting period;

- (e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- (f) a summary of any complaints received during the reporting period and any steps taken to address the complaints;
- (g) any other information the *District Manager* requires from time to time.

15. SPECIAL CONDITION

- (1) The *Owner* shall operate the approved *Works* (Process Wastewater Treatment System) in batch operation mode and collect performance data to assess if the *Works* can consistently comply with the effluent limits stipulated under Condition 10. After obtaining a performance data showing the approved *Works* consistently complied with the effluent limits stipulated under Condition 10 for at least eight consecutive batch discharges, the *Owner* shall apply for an amendment of this *Approval* for the operation of the *Works* (Process Wastewater Treatment System) in a continuous discharge mode.

SCHEDULE 'A'

I. **PREVIOUS WORKS APPROVED ON OR BEFORE SEPTEMBER 4, 2007:**

all in accordance with the Applications for the Approval of Industrial Sewage Works including drawings and design specification submitted by Safety-Kleen Ltd. dated April 12, 2001 and November 15, 2001, and the following supporting documentation:

1. "Notice of Approval to Proceed with the Undertaking (and Order Under Subsection 12.4(3) - Hazardous Waste Landfill Expansion - Order in Council 960/97" .
2. "Landfill Service Continuation Environmental Assessment - Executive Summary" Laidlaw Environmental Services Ltd. - 1996.
3. "Landfill Service Continuation Environmental Assessment - Surface Water Technical Report" Laidlaw Environmental Services Ltd. - April 1996.
4. "Appendix G - 2000 Annual Landfill Report, Safety-Kleen Ltd., Lambton Facility" - Prepared in accordance with the requirements of Condition 15 of Provisional Certificate of Approval No. A031806, dated September 5, 1997.
5. A letter from Safety-Kleen sent to the attention of Mr. Stefanos Habtom, MOE, dated November 8, 2001, regarding the changes made to the pumping station.
6. A letter from Dean Edwardson, Clean Harbors Canada Inc., dated July 4, 2005 providing supporting documentation for the deletion of Condition 3.2 of the existing Certificate of Approval regarding the dilution requirements for discharges to the Telfer Side Road drainage ditch.

II. **PREVIOUS WORKS APPROVED ON SEPTEMBER 4, 2007 UNDER CofA No. 0598-76DK8Q:**

all in accordance with an Application for Approval of Industrial Sewage Works submitted by Clean Harbors Canada Inc. dated November 14, 2006, and design specifications and drawings prepared by Gartner Lee Limited, Markham, Ontario and the following document:

1. "Lambton Facility - Stormwater Management Plan in Support of Amendment to Certificate of Approval" dated July 2007, prepared by Gartner Lee Limited, Markham, Ontario.

III. **PROPOSED WORKS (Process Wastewater Treatment System):**

1. Application for Environmental Compliance Approval submitted by Clean Harbors Canada Inc., dated February 16, 2012 and engineering drawings and design brief prepared by Conestoga-Rovers & Associates, Waterloo, Ontario.

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

1. Condition 1 is imposed to ensure that the *Works* are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the *Approval* and the practice that the *Approval* is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the owners their responsibility to notify any person they authorized to carry out work pursuant to this *Approval* the existence of this *Approval*.
2. Condition 2 is included to ensure that the *Works* are constructed in a timely manner so that standards applicable at the time of *Approval* of the *Works* are still applicable at the time of construction, to ensure the ongoing protection of the environment.
3. Condition 3 is included to ensure that the *Ministry* records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the *Works* are made aware of the *Approval* and continue to operate the *Works* in compliance with it.
4. Condition 4 is included to ensure that the works is operated in accordance with the information submitted by the *Owner* relating to the process and materials which are served by the works, and to ensure that any contemplated changes in them which could potentially affect the characteristics of effluent from the works will be properly reviewed and approved.
5. Conditions 5, 6, and 10 are imposed to ensure that the effluent discharged from the *Works* to the Telfer Road Drain meets the *Ministry* 's effluent quality requirements thus minimizing environmental impact on the receiver and to protect water quality, fish and other aquatic life in the receiving water body.
6. Conditions 7, 11, and 13 are imposed to ensure that the effluent discharged from the *Works* to the Telfer Road side road ditch meets the *Ministry* 's effluent quality requirements thus minimizing environmental impact on the receiver and to protect water quality, fish and other aquatic life in the receiving water body. included to enable the *Owner* to evaluate and demonstrate the performance of the *Works* , on a continual basis, so that the *Works* are properly operated and maintained at a level which is consistent with the effluent limits specified in the *Approval* and that the *Works* does not cause any impairment to the receiving watercourse.
7. Conditions 8, 12, and 15 are included to require that the *Works* be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the *Owner* and made available to the *Ministry*. Such a manual is an integral part of the operation of the *Works*. Its compilation and use should assist the *Owner* in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a

benchmark for *Ministry* staff when reviewing the *Owner's* operation of the work.

8. Conditions 9 and 14 are included to provide a performance record for future references, to ensure that the *Ministry* is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this *Approval*, so that the *Ministry* can work with the *Owner* in resolving any problems in a timely manner.

**Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s).
0598-76DK8Q issued on April 9, 2007**

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the Environmental Bill of Rights, 1993, S.O. 1993, c. 28 (Environmental Bill of Rights), the Environmental Commissioner, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Environmental Commissioner will place notice of your appeal on the Environmental Registry. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

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

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

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

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

This Notice must be served upon:

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

AND

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

AND

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

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 314-4506 or www.ert.gov.on.ca**

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

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

DATED AT TORONTO this 31st day of January, 2013



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

SH/

c: District Manager, MOE Sarnia
Gregory D. Ferraro, Conestoga-Rovers & Associates


AMENDMENT TO ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A031806

Notice No. 8

Issue Date: May 3, 2013

Clean Harbors Canada, Inc.
 4090 Telfer Rd
 Corunna, Ontario
 N0N 1G0

Site Location: 4090 Telfer Road
 Lots 8 and 9, Concession 10
 St. Clair Township, County of Lambton
 N0N 1G0

You are hereby notified that I have amended Approval No. A031806 issued on September 5, 1997 and subsequent Notices dated, December 4, 1998, October 11, 2002, June 17, 2004, June 18, 2007 and August 6, 2010 for the use and operation of a landfill site with a total fill area of approximately 56 hectares which includes the pre-1985 fill area, previous operating 14.5 hectare fill area, the Cell 18 expansion area of 13.1 hectares and a landfill pre-treatment system all within the total site area of 121.4 hectares, as follows:

Condition 1. (t) is hereby added to this approval;

1. (t) "**Certificate**", "**Approval**", "**Environmental Compliance Approval**" or "**ECA**" means this entire provisional Environmental Compliance Approval document, issued in accordance with Section 20.2 of the *EPA*, and includes any schedules to it, the application and the supporting documentation listed in Schedule "A";

Condition 7. (d) to (i) is hereby added to this Approval;

7. (d) Pursuant to Condition 7(a) and (b) the Site shall be developed as outlined in the Application and its supporting documentation dated March 8, 2013 and now listed as Item 24 in Schedule "A", of this Approval. These documents pertain to the approved landfill capacity recovery construction and operation details to be located in Cell 15.

(e) Leachate at the base of the working face shall be removed on a daily basis on operating days.

(f) The Owner shall take reasonable steps to ensure leachate levels at the base of the working face does not exceed a depth of 0.3 m.

(g) Odours at the Site shall be kept at a minimum by implementing the following measures:

- i. Reducing the size of the open waste footprint;
- ii. Collection and transfer of leachate to the covered leachate retention ponds; and
- iii. The Owner shall ensure Conditions 7. (d) to (f) are implemented at the Site.

(h) All existing Site monitoring programs and operational protocols shall remain in effect during this approved operational change to ensure environmental impacts are controlled.

(i) In addition, Item 21 in Schedule "A", shall be updated to reflect the above amendments and submitted to the Director for inclusion in this Approval.

The following new Item is added to Schedule "A" of this Approval:

24. Environmental Compliance Approval Application, dated March 8, 2013 and its supporting letters, reports and drawings.

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

This Amending Notice is being issued to approve the recovery of approved landfill capacity pursuant to the documentation reviewed and considered by the Director.

This Notice shall constitute part of the approval issued under Approval No. A031806 dated September 5, 1997

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

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

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

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

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

This Notice must be served upon:

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

AND

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

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at:
Tel: (416) 212-6349, Fax: (416) 314-3717 or www.ert.gov.on.ca**

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

DATED AT TORONTO this 3rd day of May, 2013

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

JG/
c: District Manager, MOE Sarnia
Michael Parker, Clean Harbors Canada, Inc.



AMENDMENT TO ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A031806

Notice No. 9

Issue Date: October 19, 2015

Clean Harbors Canada, Inc.
4090 Telfer Rd
Rural Route, No. 1
Corunna, Ontario
N0N 1G0

Site Location: 4090 Telfer Road
4090 Telfer Rd Lot 8 and 9, Concession 9 and 10, R.R. #1, Corunna, ON
St. Clair Township, County of Lambton
N0N 1G0

You are hereby notified that I have amended Approval No. A031806 issued on September 5, 1997, and amended on December 4, 1998, October 11, 2002, June 17, 2004, June 18, 2007, August 6, 2010, and May 3, 2013 for the use and operation of a landfill site with a total fill area of approximately 61 hectares, which includes the pre-1986 fill area, previous operating 14.5 hectare fill area, the Cell 18 expansion area of 13.1 hectares and a landfill pre-treatment system (including processing), and temporary storage and transfer activities, all within the total site area of 140 hectares, as follows:

This Notice of Amendment approves the landfill expansion, temporary storage and transfer of wastes, and includes new buffer lands on the Site.

The following Definitions are added to this Approval:

"BMP" means best management plan;

"Compliance Verification Plan" means a comprehensive sampling and analysis program, and recording procedures, dated October 1, 2014, as amended from time to time, which the Owner shall implement to ensure that waste processed by the Thermal Desorption Unit does not result in emissions from the Site that may contravene Ontario Regulation 419/05 requirements, and to ensure that the Thermal Desorption Unit is operated in accordance with Ministry requirements.

"ESDM Report" means the most current Emission Summary and Dispersion Modelling Report that describes the Site. The updates to the ESDM Report are based on the Original ESDM Report, is prepared after the issuance of this Approval in accordance with section 26 of Ontario Regulation 419/05 and the Procedure Document by the Owner or its consultant;

"Ministry" means Ministry of the Environment and Climate Change;

"Ministry Standard" means a limit listed in either Schedule 2 or Schedule 3 of Ontario Regulation 419/05 as applicable;

"Procedure Document" means Ministry guidance document titled "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" dated March 2009, as amended;

"Property" or "Site" means the landfill site and associated buffer lands located at: Part of Lots 8 & 9 Concession 10 and part of Lots 8 & 9 Concession 9, formerly Township of Moore and now part of Township of St. Clair, County of Lambton Province of Ontario and being all of PINS 43293- 0053, 43293- 0055 ,43293-0056, 43293- 0065 & 43293-0066;

"QA/QC" means quality assurance/quality control;

"Unused Tonnage" means the amount of waste, measured by weight (tonnage), that, if added to the amount of waste received at the Site in a previous calendar year, will sum to a maximum of 170,000 tonnes;

"Upper Risk Threshold" means a threshold listed in Schedule 6 of Ontario Regulation 419/05.

Terms and Conditions

The following Conditions are added:

3. (b) The Site is approved for temporary storage and transfer activities as follows:

i) Wastes approved for temporary storage and transfer are limited to the following waste classes: 111-114 inclusive, 121-123 inclusive, 131-135 inclusive, 141-150 inclusive, 211, 212, 213, 221, 222, 231, 233, 241, 242, 251-254 inclusive, 261-270 inclusive, 281, 282, 311, 321

ii) Wastes stored outside must be stored in covered, leak-proof containers where surface water drainage is captured by the site's process water retention pond's, as described in section 2.7.7 of the Design and Operations report, item 26 of Schedule "A".

iii) The Owner may transfer a maximum of 450 tonnes of waste off Site per day.

iv) Wastes intended for transfer shall only be temporarily stored at the Site for a maximum of ninety (90) calendar days.

v) On the first working day of each week the company shall provide the District Manager with a report outlining the following:

- location of the waste temporarily stored on Site
- receiving manifest number
- container number
- generator number
- date received
- date shipped
- shipping manifest number

vi) On or before December 15, 2015 and annually thereafter, the Owner shall provide:

- the estimated maximum quantities of wastes temporarily stored at the Site;
- a scaled plan showing the storage location(s);
- numbers of storage containers for the various wastes; and
- a financial assurance estimate as defined in Section 131 of the EPA;
- all to the Director, for approval.

Change of Owner

26. (a) The Owner shall notify the Director in writing of any of the following changes within thirty (30) days of the change occurring:

(i) change of Owner or Operator of the Site or both;

(ii) change of address or address of the new Owner/Operator;

(iii) change of partners where the Owner or Operator is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, 1991 shall be included in the notification to the Director;

(iv) any change of name of the corporation where the Owner or Operator is or at any time becomes a

corporation, and a copy of the most current "Initial Notice or Notice of Change" (form 1 or 2 of Ontario Regulation 182, Chapter C-39, R.R.O.1990 as amended from time to time), filed under the Corporations Information Act shall be included in the notification to the Director; and

(v) change in directors or officers of the corporation where the Owner or Operator is or at any time becomes a corporation, and a copy of the most current "Initial Notice or Notice of Change" as referred to in 25 (a) (iv).

(b) No portion of this Site shall be transferred or encumbered prior to or after closing of the Site unless the Director is notified in advance and sufficient financial assurance is deposited with the Ministry to ensure that these conditions will be carried out. In the event of any change in ownership of the Site, the Owner shall notify the successor of and provide the successor with a copy of this Approval, and the Owner shall provide a copy of the notification to the District Manager and the Director.

(c) In the event of any change in ownership of the Site, other than change to a successor municipality, the Owner shall notify the successor of, and provide the successor with a copy of this Approval, and the Owner shall provide a copy of the notification to the District Manager and the Director.

Service Area

27. The Site is approved to accept waste from Canada and the United States.

Buffer Lands

17 (c) The new buffer lands added to the Site are as follows:

- Part Lot 9 Concession 9, and West half Lot 8, Concession 9, Township of St. Clair

Certificate of Requirement

17 (d) (i) For the new buffer lands that will be included as part of the Site, two (2) copies of a completed Certificate of Requirement, containing a revised registerable description of the Site, shall be submitted to the Director for the Director's signature within sixty (60) calendar days of a notice being issued for the Site that incorporates the land into the Approval.

(ii) The Certificate of Requirement shall be registered in the appropriate land registry office on title to the Site and a duplicate registered copy shall be submitted to the Director within ten (10) calendar days of receiving the Certificate of Requirement signed by the Director.

Expansion Landfill Development

7. (j) The Site shall be developed in accordance with the report entitled "Revised Design and Operations Report-Lambton Landfill Expansion, Clean Harbors Canada Inc." by Tetra Tech, dated October 8, 2015, and the documents in Schedule "A".

(k) The Owner shall ensure that only an area not exceeding 19,600 m² is open at any time for landfilling.

Hydraulic Control Layer

(l) The hydraulic control layer for the expansion landfill shall consist of a 0.3 m thick layer of 50 mm clear stone, underlain by a woven geotextile and overlain by a non-woven geotextile.

Expansion Landfill Capacity

28. The landfill expansion of 3.87 million cubic meters of additional volumetric waste capacity is hereby approved. This capacity excludes the volume of the interim cover, and excludes the volume of the final cover.

(a) No waste shall be landfilled outside of the Limit of Waste area as shown on Drawing 13, Landfill Expansion Subcell Fill Progression Plan, in the Revised Design and Operations Report, Item 26 of Schedule "A"

(b) No waste shall be landfilled below the base grades, as shown in Drawing 2, Expansion Base Contours, in the Revised

Design and Operations Report, Item 28 of Schedule "A", with the exception of the leachate sumps.

(c) No waste shall be landfilled outside the limits of the final waste contours shown in Drawing 19, Top of Waste Contours, in the Revised Design and Operations Report, Item 26 of Schedule "A".

(d) The maximum elevation of the expansion landfill, including final cap, shall be 212 mASL.

Waste Fill Rate

29. (i) The maximum rate at which the Site may accept waste is 200,000 tonnes per calendar year.

Tonnage Increase

(ii) If required in a given calendar year, the Owner may receive additional waste above the stated maximum rate as follows:

(iii) if, for any of the five previous calendar years, the annual tonnage received at the Site was less than 170,000 tonnes, the Owner may apply the Unused Tonnage for the given year.

(iv) The Owner may apply Unused Tonnage from a maximum of the previous two (2) calendar years.

(v) Unused Tonnage from a previous year once used, is no longer available to increase the maximum annual waste acceptance rate in a subsequent year.

(vi) The Owner shall notify the District Manager in writing, ten (10) business days before using Unused Tonnage.

(vii) Notification shall include the total additional tonnage applied to the given year, and the Unused Tonnage used for each individual previous year(s).

Cover

30. (a) Cover, consisting of low porosity, non-odorous waste, or clean fill, temporary membranes, or contaminated (non-hazardous) fill, shall be placed over the relevant portion of the active landfilling area on a given operating day, if:

(i) two or more off Site odour complaints are received by the Owner and/or the ministry on the same day; and

(ii) the landfilling is considered to be the sole cause or a contributing cause of the complaints, by the Owner and/or the Ministry, following consultation with the Owner.

(b) Interim cover, consisting of a clay layer 0.6 m thick, shall be progressively placed where landfilling has reached waste design contours or where landfilling has not occurred for a period of one (1) year.

(c) Final Cover shall be placed when final design contours are reached. The final cover shall consist of:

- 0.15 m thick topsoil/vegetative layer;
- 0.35 m thick protective soil layer;
- Geocomposite drainage blanket (GSE TenDrain 7.6mm or equivalent)
- HDPE (80-mil textured) geomembrane;
- Geosynthetic clay liner (terrafix - bentofix CNSL or equivalent);
- Geocomposite drainage blanket (GSE TenDrain 7.6mm or equivalent).

(d) The landfill shall be progressively capped.

Slopes

31. The final side slopes of the landfill expansion shall be a maximum of 4H:1V, with minimum 50H:1V top slope.

Subgrade Cells Geotechnical Monitoring

32. Geotechnical monitoring shall be conducted during excavation of all cells with a bottom elevation of 182 mASL, as described in Section 3.4 of the Revised Design and Operations Report, Item 26 of Schedule "A".

Major Works

33. (a) The following engineered design elements are considered to be Major Works:

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- interim clay cap
- hydraulic control layer
- final cover including all elements, HDPE liner geosynthetic liner and geocomposite
- perimeter leachate collection trench

(b) The Owner shall implement the quality assurance/quality control plans, as described in the Revised Design and Operations report, Item 26 of Schedule "A" for the Major Works.

(c) Each major work shall be constructed in accordance with the approved final detailed design and the QA/QC procedures shall be implemented as proposed by the Owner. Any significant variances from the final design for the Site shall be subject to approval by the Director.

(d) As-built drawings for all Major Works, excluding the interim clay cap, shall be stamped by a Professional Engineer, and retained on Site and made available to Ministry staff for inspection.

Waste Compatibility

34. (a) Within six (6) months of the date of issue of this Approval, the Owner shall submit, to the satisfaction of the District Manager, a Standard Operating Procedure for waste compatibility testing prior to landfilling.

(b) Should the Standard Operating Procedure for waste compatibility testing be deemed not acceptable by the District Manager, the Owner shall revise same and submit another Standard Operating Procedure for waste compatibility testing to the District Manager for approval, not later than three (3) months after the date of the District Manager's decision in accordance with Condition 34 (a), above.

(c) Upon acceptance of the Standard Operating Procedure for waste compatibility by the District Manager, the Owner shall immediately implement the waste compatibility testing.

Waste Restrictions

Condition 5 (g) and (h) are added:

5. (g) The Owner does not require prior approval of the District Manager to accept waste streams listed in condition 5 (e), provided that:

- i. The Owner has implemented the Compliance Verification Plan (CVP) for those wastes; and
- ii. The CVP output predicts that the waste processing will not result in emissions from the Site that may contravene Ontario Regulation 419/05 requirements; and
- iii. The CVP output has been provided with notification to the District Manager five (5) working days before the waste load arrives at the Site.

(h) The Owner shall not alter or amend the CVP without the prior authorization of the District Manager.

Leachate Management

39. If, the use of an existing storage tank for leachate storage, as described in section 6.2.1.3 of the revised Design and Operations report, Item 26 of Schedule "A", shall include any alterations or additions to piping to the incinerator, the Owner shall apply to amend the incinerator Approval and obtain authorization from the Director, prior to implementation.

Site Monitoring

Condition 9 (a) (i), (iii), (iv) and (v) are revoked and replaced:

9. (a) (i) The Owner shall submit an updated groundwater monitoring program, surface water monitoring program, and biomonitoring program to the Regional Director for approval, on or before December 15, 2015.

Gas

9. (a) (iii) The Owner shall submit a gas assessment program for the Site, to the Director for Approval, on or before December 15, 2015.

Perimeter Trench Performance Monitoring

the following conditions are added:

9. (g) On or before December 15, 2015, the Owner shall submit a trench performance monitoring program to the Regional Director, designed to monitor and confirm the performance of the perimeter collection trench.

9. (h) The perimeter trench performance monitoring program shall include measurements of leachate levels within the trench and the volume of leachate that is extracted at each of the sumps. The monitoring program shall include proposed trigger and contingency measures.

Sub-Cell 3

35. On or before December 15, 2015, the Owner shall submit a revised procedure for monitoring the operation of the pumping system in the hydraulic control layer of Sub-Cell 3, including actions to be taken in the event of system shut-downs or pump failure.

Decommissioned Wells

Conditions 11 (a) and (b) are added:

11. (a) No wells at the Site shall be decommissioned without the written authorization of the District Manager.

(b) All wells that are authorized for removal shall be decommissioned in accordance with Regulation 903.

Pump Maintenance

40. (a) The Owner shall develop a pump operations and maintenance plan, which shall include: operating and maintenance requirements, inspection frequency and a maintenance schedule.

(b) The plan shall include all stormwater, leachate and groundwater pumps in operation or planned for the Site (once selected).

(c) The plan shall be updated when changes are implemented to the pumps or pump operation and maintained on Site for review by the Ministry, if required.

Air/Noise/Dust/Odour

36. The Owner shall implement the Fugitive Dust, Odour, & Noise Best Management Plan, dated September 30, 2015.

37. (a) On or before December 15, 2015, the Owner shall submit an updated:

- i. air monitoring program;
- ii. a dust, noise and odour Best Management Plan (BMP); and an
- iii. ESDM Report for the Site reflective of the anticipated max. annual waste volume.

all for acceptance by the Regional Director.

(b) The updated air monitoring program shall:

- o include a revised north sampler location at the top of the north berm, or at a location at a distance of at least twice the height of the berm (from the bottom of it);
- o conform to all siting guidance laid out in the Operations Manual for Air Quality Monitoring in Ontario, and;
- o be acceptable to the Regional Director.

(c) Should the updated air monitoring program and/or the BMP and/or the ESDM Report be deemed unacceptable by the

Regional Director, the Owner shall revise same and submit another for approval by the Regional Director not later than three (3) months after the date of the Regional Director's decision in accordance with Condition 37 (a), above.

(d) Upon acceptance of the updated air monitoring program and the dust, noise and odour BMP by the Regional Director, the Owner shall immediately implement the programs.

Air Monitoring Reporting Trigger

38. (a) The following air monitoring reporting trigger is established for the Site: an exceedance of a Ministry Air Standard, or Upper Risk Threshold;

(b) In the event that an air monitoring reporting trigger is exceeded, the Owner shall notify the Ministry within one (1) business day of obtaining monitoring results, and shall:

- i. undertake to determine the source of the emission(s); and
- ii. provide a report in writing to the District Manager within ten (10) business days of notification, detailing the results of this study and discussing what steps were or shall be taken to address the cause(s).

Stormwater

100. Within six (6) months of the date of issue of this Approval, the Owner shall submit to the Director for Approval, and copy to the District Manager:

- i. An assessment of anticipated runoff generated from recent storm events (within past 10 years or more);
- ii. A discussion of capacity of proposed storm water management ponds compared to the recent storm events;
- iii. A discussion of the size of the storm event that the proposed ponds can hold;
- iv. A discussion of whether the proposed ponds are adequate to contain runoff from recent storm events.

Financial Assurance

Condition 16 is revoked and replaced as follows:

16.1 Within thirty (30) days of issuance of this Notice, the Owner shall submit to the Director, Financial Assurance, as defined in Section 131 of the Act, for the amount of twelve million, three hundred and sixty seven thousand, six hundred and eighty two dollars \$(12,367,682.00). This Financial Assurance shall be in a form acceptable to the Director and shall provide sufficient funds for the analysis, transportation, Site clean-up, monitoring and disposal of all quantities of unlandfilled or undisposed of waste on the Site at any one time.

16.2 Commencing on March 31, 2018 and at intervals of three (3) years thereafter, the Owner shall submit to the Director, a re-evaluation of the amount of Financial Assurance to implement the actions required under Condition 16.1. The re-evaluation shall include an assessment based on any new information relating to the environmental conditions of the Site and shall include the costs of additional monitoring and/or implementation of contingency plans required by the Director upon review of the closure plan and annual reports. The Financial Assurance must be submitted to the Director within ten (10) days of written acceptance of the re-evaluation by the Director.

16.3 Commencing on March 31, 2017, the Owner shall prepare and maintain at the Site an updated re-evaluation of the amount of Financial Assurance required to implement the actions required under Condition 16.1 for each of the intervening years in which a re-evaluation is not required to be submitted to the Director under Condition 16.2. The re-evaluation shall be made available to the Ministry, upon request.

16.4 The amount of Financial Assurance is subject to review at any time by the Director and may through an amending notice to this Approval be amended at his/her discretion. If any Financial Assurance is scheduled to expire or notice is received, indicating Financial Assurance will not be renewed, and satisfactory methods have not been made to replace the Financial assurance at least sixty (60) days before the Financial Assurance terminates, the Financial Assurance shall forthwith be replaced by cash.

16.5 The Owner shall provide the sum of \$25,000 to the Township of St. Clair to be held in trust by the Township for emergency water supply, if necessary. The Owner shall enter into an agreement with the Township respecting the

administration of the trust fund including provisions for the replenishment, payments and an administration fee.

Annual Landfill Report

Condition 23 w. is revoked.

Condition 15 is revoked and replaced as follows:

15.0 (a) By April 1st of each year, an annual monitoring report must be submitted to the District Manager reporting the results of the monitoring carried out during the previous calendar year.

(b) The Annual Report shall include but not be limited to the following information:

- i. the results and an interpretive analysis of the results of all Site monitoring programs, including an assessment of the need to amend the monitoring programs;
- ii. a summary of any drilling programs, geotechnical monitoring programs, and the results of any soil testing.
- iii. an assessment of the operation and performance of all Major Works, the need to amend the design or operation of the Site, and the adequacy of and need to implement the contingency plans;
- iv. Site plans showing the existing contours of the Site; areas of landfilling operation during the reporting period; areas of intended operation during the next reporting period; areas of excavation during the reporting period; any encountered gravel or sand lenses, the progress of final cover, vegetative cover, and any intermediate cover application; facilities existing, added or removed during the reporting period; and Site preparations and facilities planned for installation during the next reporting period;
- v. calculations of the volume of waste, daily and intermediate cover, and final cover deposited or placed at the Site during the reporting period and a calculation of the total volume of Site capacity used during the reporting period;
- vi. a calculation of the remaining capacity of the Site and an estimate of the remaining Site life;
- vii. a summary of the monthly, maximum daily and total annual quantity (tonnes) of waste received at the Site for landfilling and pretreatment, including types and origin;
- viii. any Unused Tonnage applied to the current year;
- ix. a summary of any complaints received and the responses made;
- x. a discussion of any operational problems encountered at the Site and corrective action taken;
- xi. any changes to the Design and Operations Report and the Closure Plan that have been approved by the Director since the last Annual Report;
- xii. a report on the status of all monitoring wells and a statement as to compliance with Ontario Regulation 903;
- xiii. Site plan showing the location of the storage for the unacceptable waste;
- xiv. a list of all rejected loads, including reasons for any rejection;
- xv. a summary of quantities and types of wastes temporarily stored and transferred from the Site; and
- xvi. any other information with respect to the Site which the District Manager may require from time to time.
- xvii. **for QC Results:** a summary of all quality control sampling in accordance with the quality assurance/quality control plans for the Major Works, including interpretation and discussion of compliance with those plans.
- xviii. **for LDR:** a detailed monthly summary of the type (by waste class and characteristic) and quantity of waste received at the Site for LDR and at the Processing Facility for LDR and landfill pretreatment system, total amount and type of reagents used in the process, and the total amount and destination of all outgoing wastes from the Processing Facility; and
- xix. **for LDR:** a descriptive summary of upgrades conducted during the previous calendar year.

Schedule "A"

The following Items are added to Schedule "A".

CONTENT COPY OF ORIGINAL

25. Application for an Environmental Compliance Approval, dated 2014/04/16, signed by Mike Parker, vice president, Canadian Environmental Compliance
26. Report entitled "Revised Design and Operations Report - Lambton Landfill Expansion, Clean Harbours Canada Inc., including volumes 1 and 2, by Tetra Tech, dated October 8, 2015
27. Report entitled "Fugitive Dust, Odour & Noise Best Management Plan, prepared for Ontario MOECC Environmental Compliance Approval 8687-9MVRJ9 Condition 2", dated September 30, 2015
28. Drawing 2, "Expansion Base Contours", rev C, 2015.10.15, prepared by Tetra Tech
29. Drawing G-07, "Perimeter Leachate Collection Details", Rev D, October 15, 2015, prepared by Tetra Tech
30. Drawing 22, "Pre-1986 Landfill Area Construction Cross Section", Rev A, 2015.10.15, prepared by Tetra Tech

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

The reasons for condition 3 are to ensure transfer operations are done in a manner which does not result in a nuisance or a hazard to the health and safety of the environment or people, and to ensure that the Ministry has sufficient funds for the clean-up and disposal of wastes at the Site, in the event that the Owner is unable or unwilling to do so.

The reasons for condition 26 are to ensure that the Site is operated under the corporate name which appears on the application form submitted for this Approval and to ensure that the Director is informed of any changes.

The reason for condition 27 is to clarify the approved areas from which waste may be accepted at the Site.

The reason for condition 17 c) is to specify the new buffer lands that are added to the Site.

The reason for condition 17 d) is to ensure that, pursuant to section 197 of the EPA, any persons having an interest in the Site are aware that the land has been approved and used for the purposes of waste disposal.

The reasons for conditions 7 j) to l), 31 and 32 are to ensure that the Site is developed in accordance with the application and the documents approved by the Director, and not in another manner, and to minimize potential impacts from active landfilling activities.

The reason for condition 28 is to specify the approved new waste volume, and the limits of the landfilling area, to ensure the Site is developed in accordance with the approved design.

The reason for condition 29 is to specify the maximum rate at which waste may be received at the Site, to ensure the Site is developed in accordance with the approved operational plan, and to provide a procedure to accommodate reasonable fluctuations in receiving rates.

The reasons for condition 30 is to establish a procedure for the application of cover material when required, and to specify interim and final cover material, to minimize potential environmental effects or nuisance from the Site.

The reason for condition 33 is to recognize that the key role that certain engineered elements of the landfill design plays in environmental protection, and to ensure that appropriate quality assurance is completed during construction, and that qualified persons oversee their construction.

The reason for condition 34 is to ensure a procedure is developed for improved landfilling operations.

The reason for condition 5 g) and h) is to provide an updated approach for acceptance of certain wastes at the Site, that reflect current methods used for environmental protection, and to ensure that no changes are done to the methods without Ministry approval.

The reason for condition 39 is to ensure that the appropriate approval is obtained for the proposed alterations to the Site.

CONTENT COPY OF ORIGINAL

The reason for conditions 9 a), g), and h) 35, and 37 is to ensure that updated monitoring and assessment programs are developed and approved by the Ministry, for ongoing environmental protection.

The reason for condition 11 is to ensure the Ministry approves removal of any wells at the Site (related to environmental protection), and that their removal is done in accordance with Ministry requirements.

The reason for condition 36 is to ensure that a procedure is in place to ensure best management practices are applied at the Site, to minimize nuisance and provide improved environmental protection.

The reason for condition 40 is to ensure that stormwater, groundwater and leachate pumps at the Site are inspected and maintained, for proper Site operation and protection of the environment.

The reason for condition 38 is to establish an air reporting trigger, and to ensure the Owner follows a plan with a set of procedures for identifying and responding to unexpected but possible problems at the Site, and to ensure the Ministry is informed.

The reason for condition 100 is to ensure that the Site stormwater design will adequately protect the Site and has accounted for recent storm events in the Site area.

The reason for condition 16 is to ensure that funds are available to the Ministry for proper closure and long-term maintenance and monitoring of the Site, in the event that the Owner is unable or unwilling to do so.

The reason for condition 15 is to ensure that a regular review of Site development, operations and monitoring data is documented and any possible improvements to Site design operations or monitoring programs are identified. The annual Site report is an important tool used in reviewing Site operation and determining the effectiveness of Site design.

This Notice shall constitute part of the approval issued under Approval No. A031806 dated September 5, 1997

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

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

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

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

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

This Notice must be served upon:

CONTENT COPY OF ORIGINAL

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

AND

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

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at:
Tel: (416) 212-6349, Fax: (416) 314-3717 or www.ert.gov.on.ca**

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

DATED AT TORONTO this 19th day of October, 2015

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

LM/
c: District Manager, MOECC Sarnia
Michael Parker/ John Muller, Clean Harbors Canada, Inc./ Tetra Tech WEI Inc.

AMENDMENT TO ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A031806

Notice No. 10

Issue Date: October 20, 2016

Clean Harbors Canada, Inc.
4090 Telfer Rd
Rural Route, No. 1
Corunna, Ontario
N0N 1G0

Site Location: 4090 Telfer Road
4090 Telfer Rd
St. Clair Township, County of Lambton
N0N 1G0

You are hereby notified that I have amended Approval No. A031806 issued on September 5, 1997, and amended on November 1, 1998, December 4, 1998, October 11, 2002, June 17, 2004, June 18, 2007, August 29, 2007, September 23, 2008, August 6, 2010, May 3, 2013 and October 19, 2015 for the use and operation of a landfill site with a total fill area of approximately 61 hectares, which includes the pre-1986 fill area, previous operating 14.5 hectare fill area, the Cell 18 expansion area of 13.1 hectares and a landfill pre-treatment system (including processing), and temporary storage and transfer activities, all within the total site area of 140 hectares , as follows:

Condition 7 (k) is revoked and replaced as follows:

7. (k) The Owner shall ensure that only an area not exceeding 39,200 m² (up to two sub cells) is open at any time for landfilling.

Condition 10 (b) is revoked and replaced as follows:

- 10 (b) All liquid collected within the leachate collection trench and the base of the active working face shall be incinerated or disposed of at a hazardous waste facility approved for the disposal of that type of waste.

The following is added to Schedule "A"

31. Environmental Compliance Approval Application, signed by Michael Parker, Director, Environmental Compliance, and dated 2015/12/17, with Attachment: Supporting Documentation, Clean Harbors Landfill, Rationale to Amend ECA Condition 7(k)

The reasons for this amendment to the Approval are to allow the landfill to operate with a larger active face, if needed, during operation, and to make a clarification regarding leachate that is to be managed.

This Notice shall constitute part of the approval issued under Approval No. A031806 dated September 5, 1997

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:

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

Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.

The Notice should also include:

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

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

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal

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

655 Bay Street, Suite 1500
Toronto, Ontario
MSG 1E5

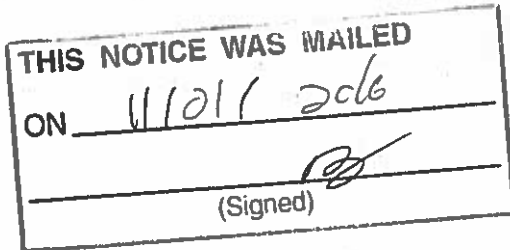
AND

Ministry of the Environment and Climate Change
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

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

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

DATED AT TORONTO this 20th day of October, 2016



Dale D. Gable

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

LM/

c: District Manager, MOECC Sarnia
Larry Fedec, HDR Corporation ✓

