



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 1E4

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 Sarnia District Office

AMENDMENT TO ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 5688-74BJFW

Notice No. 1

Issue Date: April 18, 2012

Clean Harbors Canada, Inc.
4090 Telfer Road
Rural Route, No. 1
Township of Moore, 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. 5688-74BJFW issued on August 29, 2007 for the pre-treatment Facility, used for the stabilization of waste , as follows:

The following Condition is revoked:**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.

All other Terms and Conditions remain the same.

The reason for this amendment to the Approval is to address information provided in the Acoustic Audit Report prepared by Conestoga-Rovers & Associates, dated July 9, 2008 and signed by Gordon Reusing, P.Eng.

This Notice shall constitute part of the approval issued under Approval No. 5688-74BJFW dated August 29, 2007.

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) 314-4506 or www.ert.gov.on.ca

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

DATED AT TORONTO this 18th day of April, 2012



Ian Greason, P.Eng.

Director

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

HM/

c: District Manager, MOE Sarnia
Gordon Reusing, Conestoga-Rovers & Associates