

CERTIFICATE OF APPROVAL

AIR

NUMBER 4873-7N5TS4

Issue Date: June 11, 2009

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

Site Location: 4090 Telfer Road
St. Clair Township, County of Lambton

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

- one (1) waste processing unit, processing spent pot liner waste from the primary aluminum smelting industry, identified as source S-1, with dimensions of 7.3 metres by 6.7 metres, and venting to the atmosphere at a height of 1.8 metres above grade.

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

1. "Act" means the Environmental Protection Act;
2. "Best Management Practices Plan" means a document or a set of documents which describe measures to minimize dust emissions from the Facility and/or Equipment;
3. "Certificate" means this Certificate of Approval, issued in accordance with Section 9 of the Act, including all the Schedules;
4. "Company" means Clean Harbors Canada, Inc.;
5. "Director" means any Ministry employee appointed by the Minister pursuant to Section 5 of the Act;
6. "District Manager" means the District Manager, Sarnia District Office, Southwestern Region of the Ministry;

7. "Emergency Response Plan" means a document or a set of documents which describe measures to address emergency situations that may occur due to the operation of the Equipment;
8. "Equipment" means the spent pot liner waste processing unit 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 located on the property where the Equipment is located;
10. "Manager" means the Manager, Technology Standards Section, Standards Development Branch, or any other person who represents and carries out the duties of the Manager, as those duties relate to the conditions of this Certificate;
11. "Manual" means a document or a set of documents that provide written instructions to staff of the Company;
12. "Ministry" means the Ontario Ministry of the Environment;
13. "O. Reg. 419" means Ontario Regulation 419, Air Pollution – Local Air Quality, as amended, made under the Act;
14. "Point of Impingement" is as defined by s.2 of O. Reg. 419;
15. "Pre-Test Information" means the information outlined in Section 1 of the Source Testing Code;
16. "Publication NPC-205" means the Ministry Publication NPC-205, "Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban)", October, 1995 as amended;
17. "Publication NPC-232" means the Ministry Publication NPC-232, "Sound Level Limits for Stationary Sources in Class 3 Areas (Rural)", October, 1995 as amended;
18. "Source Testing" means sampling and testing in accordance with the Source Testing Code to measure emissions resulting from operating the Equipment at a level of maximum production within the approved operating range of the Equipment which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419;
19. "Source Testing Code" means the Source Testing Code, Version 2, Report No. ALB-66-80, dated November 1980, prepared by the Ministry, as amended; and
20. "Test Contaminants" means those contaminants set out in Schedule "A" attached to this Certificate of Approval.

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

TERMS AND CONDITIONS

GENERAL

1. The Company shall ensure that all applicable certificates of approval required under the Act and the regulations are obtained prior to the operation of the Equipment.
2. The issuance of, and compliance with the conditions of, this Certificate does not:
 - (1) relieve the Company of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement; or
 - (2) limit in any way the authority of the Ministry to require certain steps to be taken or to request that any further information related to compliance with this Certificate be provided to the Ministry.

PERFORMANCE

3. The Company shall ensure that the noise emissions from the Equipment comply with the limits set in Publications NPC-205 or NPC-232, as applicable.

OPERATION AND MAINTENANCE

4. The Company shall ensure that the Equipment is properly operated and maintained at all times. The Company shall:
 - (1) prepare, before commencement of operation of the Equipment, and update, as necessary, 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; and
 - (d) all appropriate measures to minimize noise, odorous and fugitive dust emissions from all potential sources.
 - (2) implement the recommendations of the Manual.

RECORD RETENTION

5. The Company shall retain, for a minimum of two (2) years from the date of their creation, all records and information related to or resulting from the 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.

NOTIFICATION OF COMPLAINTS

6. 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; and
 - (2) the time and date of the incident to which the complaint relates;

FUGITIVE DUST CONTROL

- 7.1 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 emissions. This Best Management Practices Plan shall include, but not be limited to:
 - (1) identification of the main sources of fugitive dust 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; and
 - (i) general work areas.
 - (2) potential causes for high dust emissions and opacity resulting from these sources;
 - (3) preventative and control measures in place or under development to minimize the likelihood of high dust emissions and opacity from the sources of fugitive dust emissions 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; and/or

(c) the frequency of occurrence of periodic preventative activities, including material application rates, as applicable.

(4) an implementation schedule for the Best Management Practices Plan, including training of facility personnel;

(5) inspection and maintenance procedures and monitoring initiatives to ensure effective implementation of the preventative and control measures; and

(6) 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.

7.2 The Company shall submit the Best Management Practices Plan to the Director and the District Manager not later than six months 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. 7.1 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 nine months after the date of this Certificate;

7.3 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 fugitive dust emissions to provide effective dust suppression measures to any potential sources of fugitive dust emissions resulting from the operation of the Facility.

7.4 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.

EMERGENCY RESPONSE PLAN

8.1 The Company shall, before commencement of operation of the Equipment, prepare an Emergency

Response Plan to prepare for dealing with spills, fires, process upsets, and other emergency situations that may occur at the Facility. The Emergency Response Plan shall include, but not necessarily be limited to:

- (1) a map of the Facility clearly showing the location of the Equipment;
- (2) emergency response procedures to be followed in the event of spills, fires, process upsets, equipment malfunctions, potential disruptions to the operation of the Equipment, and other emergency situations;
- (3) a list of equipment and materials required for the implementation of the Emergency Response Plan;
- (4) a list of personnel responsible for the implementation of the Emergency Response Plan and various emergency response tasks;
- (5) notification protocol with names and telephone numbers of persons to be contacted, including persons responsible for the Facility, the Ministry's District Office and Spills Action Centre, the local municipal fire department, the local municipal authority, the local Medical Officer of Health, the Ministry of Labour, and the names and telephone numbers of waste management companies available for emergency response.

8.2 The Company shall, before commencement of operation of the Equipment, submit the Emergency Response Plan to the local municipal authority and the local fire services authority for their acceptance. Within thirty (30) days of acceptance by the local municipal authority and the local fire services authority, the Company shall:

- (1) submit the Emergency Response Plan to the District Manager;
- (2) ensure that the Emergency Response Plan is kept at the Facility at all times in a prominent location and be available to all personnel.

8.3 The Company shall, at least annually, review the Emergency Response Plan and update the plan if necessary. The Company shall ensure that:

- (1) any changes to the Emergency Response Plan are acceptable to the local municipal authority and to the local fire services authority prior to instituting the modifications.
- (2) within thirty (30) days of acceptance of the changes to the Emergency Response Plan by the local municipal authority and the local fire services authority, the Company shall submit the updated Emergency Response Plan to the District Manager.
- (3) all contact names and telephone numbers are up-to-date, and that these numbers are prominently displayed and immediately available to all staff and emergency response personnel.

MONITORING

Source Testing

- 9.1 The Company shall monitor the emissions from the operation of the Equipment as follows:
- (a) The Company shall perform Source Testing, once after the commencement of the operation of the Equipment and once every two (2) calendar years thereafter, to determine the rate of emission of the Test Contaminants from the Equipment.
 - (b) The Company shall submit, not later than twelve (12) months after the commencement of operation of the Equipment, to the Manager a test protocol, including the Pre-Test Information for the Source Testing required by the Source Testing Code.
 - (c) The Company shall finalize the test protocol in consultation with the Manager.
 - (d) The Company shall not commence the Source Testing until the Manager has accepted the test protocol.
 - (e) The Company shall complete the Source Testing not later than three (3) months after the Manager has accepted the test protocol.

Notification of Upcoming Source Testing

- 9.2 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 ten (10) business days prior to the Source Testing.

Report on Source Testing

- 9.3 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:
- (a) an executive summary;
 - (b) records of all operating conditions; and
 - (c) the results of dispersion calculations in accordance with Ontario Regulation 419/05 indicating the maximum concentration of the Test Contaminants at the Point of Impingement.

Refusal of Source Testing

- 9.4 The Director may not accept the results of the Source Testing if:
- (a) the Source Testing Code or the requirements of the Manager were not followed;
or
 - (b) the Company did not notify the District Manager and the Manager of the Source Testing;
or
 - (c) the Company failed to provide a complete report on the Source Testing.
- 9.5 If the Director does not accept the results of the Source Testing, the Director may require re-testing.

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

1. Conditions No. 1 and 2 are included to clarify the legal rights and responsibilities of the Company under the Certificate.
2. Condition No. 3 is included to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Facility.
3. Condition No. 4 is 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.
4. Condition No. 5 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.
5. Condition No. 6 is included to require the Company to notify staff of the Ministry so as to assist the Ministry with the review of the site's compliance.
6. Condition No. 7 is 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 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.
7. Condition No. 8 is included to require the Company to develop and implement emergency response procedures.
8. Condition No. 9 is 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.

SCHEDULE "A"
Test Contaminants

Acetylene;

Arsine;
Ammonia;
Hydrogen;
Hydrogen Cyanide;
Hydrogen Fluoride (gaseous);
Methane;
Phosphine;
Stibine; and
Total Reduced Sulphur (TRS) compounds.

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
655 Bay Street, 15th Floor
Toronto, Ontario
M5G 1E5

AND

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

AND

The Director
Section 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 11th day of June, 2009



Ian Greason, P.Eng.
Director
Section 9, *Environmental Protection Act*

SH/

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