

Ministry of the Environment Ministère de l'Environnement

AMENDED CERTIFICATE OF APPROVAL

AIR

NUMBER 3843-856P53 Issue Date: October 27, 2011

Integrated Municipal Services Inc. 2800 Thorold Townline Road Thorold, Ontario

L2V 3Y8

Site Location: Organics Composting Facility

3879 Thorold Townline Road

Thorold City, Regional Municipality of Niagara, Ontario

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

one (1) organics composting facility, with a maximum capacity of 90,000 tonnes of *Waste Materials* received and processed by the GORE TM Cover Composting System or the open windrow system, to produce finished compost, consisting of the following processes and ancillary equipment:

- one (1) Receiving Building, inside which the *Waste Materials* including but not limited to source separated organics and commercial food waste and leaf and yard waste delivered to the site in trucks are unloaded, ground and/or mixed to provide the appropriate carbon to nitrogen ratio. The air inside the building is drawn by two (2) exhaust fans to two (2) biofilters, one (1) on the north side and one (1) on the south side of the building, for treatment. Each biofilter is an open top, upflow biofilter, having dimensions of 19.2 metres in length and 6.35 metres in width, filled with a media comprising a mixture of compost and wood chip to a depth of 1.2 metres, equipped with surface water irrigation system, exhausting into the atmosphere at a maximum volumetric flow rate of 4.75 cubic metres per second, at 2 metres above grade;
- one (1) Cover-All Structure, attached to the Receiving Building described above, within which composted materials are screened, at a minimum, during inclement weather conditions;
- one (1) GORETM Cover Composting System on a solid base, with a processing capacity of a minimum of 40,000 tonnes per year and a maximum of 90,000 tonnes per year of *Waste Materials*, consisting of a minimum of sixteen (16) windrows and a maximum of thirty-six (36) windrows, each windrow equipped with aeration channels and/or pipes and aerated with a blower, and directly monitored with temperature and oxygen probes to control the on/off of the blower, and covered with a GORETM cover in the first 6 weeks of the 8-week composting cycle;
- one (1) open windrow system, with a processing capacity of a maximum of 50,000 tonnes per year of *Waste Materials*, consisting of traditional open windrows and using front end loaders, windrow turner or equivalent for turning for oxygenation;
- outdoor final screening and processing areas, where the materials from the GORE^{TM} Cover Composting System and/or the open windrow system are screened and finished compost stockpiled for final sale;
- ancillary equipment including but not limited to grinders, front end loaders, screening plants, stacking conveyors and odour misting systems as described in the *ESDM Report*;

all for the composting operations approved under the Amended Provisional Certificate of Approval (Waste Disposal Site) number 5029-7SQPGU, as amended.

All in accordance with:

• Application for a Certificate of Approval (Air), dated August 13, 2003 and signed by Ed English, Terratec Environmental

- Ltd., and all supporting information associated with the application including additional information provided by Niagara Waste Systems Limited, dated January 20, 2004 and signed by Mike Deprez.
- Application for Approval (Air & Noise), dated January 15, 2009 and signed by Alison Braithwaite, Niagara Waste Systems Limited, and all information associated with the application including additional information provided by RWDI Air Inc. on behalf of Niagara Waste Systems Limited, dated March 11, 2009 and March 13, 2009 and signed by Brad Bergeron.
- Application for Approval (Air & Noise), dated November 26, 2009 and signed by Greg Robles, Integrated Municipal Services Inc., and all information associated with the application including additional information provided by Kim Moore of RWDI Air Inc. on behalf of Niagara Waste Systems Limited on July 6, 2010, and the revised Emission Summary and Dispersion Modelling (ESDM) Report prepared by RWDI Air Inc., dated May 27, 2011 and signed by Brad Bergeron, and received by the Ministry on June 22, 2011, and additional information contained in an email sent October 12, 2011 from Brad Bergeron of RWDI Air Inc. to Rudolf Wan, P.Eng. of the Ministry.

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) "Biofilters" means the two (2) biofilters described in this Certificate and in the supporting documentation referred to herein, to the extent approved by this Certificate.
- (3) "Certificate" means this Certificate of Approval issued in accordance with Section 9 of the Act.
- (4) "Company" means Integrated Municipal Services Inc.
- (5) "District Manager" means the District Manager, Niagara District Office, West Central Region of the Ministry.
- (6) "ESDM Report" means the Emission Summary and Dispersion Modelling Report prepared by RWDI Air Inc. and dated May 27, 2011, submitted to support the Application for Approval (Air & Noise) dated November 29, 2009 and signed by Greg Robles of the Company.
- (7) "Facility" means the composting facility described in this Certificate and in the supporting documentation referred to herein, to the extent approved by this Certificate.
- (8) "Fugitive Odour Management Plan" means a document or a set of documents that provide written instructions to staff of the Company, for the purpose of meeting the requirements of terms and conditions 2(1)(e) in this Certificate.
- (9) "Manual" means a document or a set of documents that provide written instructions to staff of the Company.
- (10) "Ministry" means the Ontario Ministry of the Environment.
- (11) "Sensitive Receptor" means any location where routine or normal activities occurring at reasonably expected times would experience adverse effect(s) from odour discharges from the Facility, including one or a combination of:
- (a) private residences or public facilities where people sleep (e.g.: single and multi-unit dwellings, nursing homes, hospitals, trailer parks, camping grounds, etc.),
- (b) institutional facilities (e.g.: schools, churches, community centres, day care centres, recreational centres, etc.),
- (c) outdoor public recreational areas (e.g.: trailer parks, play grounds, picnic areas, etc.), and
- (d) other outdoor public areas where there are continuous human activities (e.g.: commercial plazas and office buildings).
- (12) "Waste Materials" means the approved waste types and their quantities in Condition 13.0 of the Amended Provisional Certificate of Approval (Waste Disposal Site) number 5029-7SQPGU issued to the *Company*, as amended.

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

TERMS AND CONDITIONS

MONITORING

1. The *Company*shall monitor the operational parameters of the *Biofilters*, either as specified by the *Biofilters* manufacturer in the operational and maintenance manual, or as deemed necessary in accordance with site operational conditions, or in accordance with the operation and maintenance *Manual*. The results of monitoring of these parameters shall be recorded in a log.

OPERATION AND MAINTENANCE

- 2. 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, including procedures to minimize environmental impacts in case of power failure and no air flow to the *Biofilters*;
 - (c) procedures to monitor and record the performance of the *Biofilters*, including but not limited to the parameters monitored and the frequency of monitoring of those parameters;
 - (d) procedures for any record keeping activities relating to operation and maintenance of the Facility; and
 - (e) a *Fugitive Odour Management Plan*, identifying elements of operation of the *Facility*that are sources of fugitive odour emissions, for example odours associated with movement of materials in the *Facility*, and outlining the operational controls to achieve the objective of managing and minimizing emissions of odour associated with those fugitive odour sources in order to mitigate impacts on the *Sensitive Receptors*;
 - (f) procedures to assess and fine-tune the effectiveness of the odour misting systems installed in the *Facility*;
- (g) all appropriate measures to minimize noise, odorous and dust emissions from all potential sources; (2) implement the procedures, measures and recommendations of the *Manual*.
- 3. The *Company*shall keep all doors of the Receiving Building fully closed at all times, except when being used for necessary personnel and/or vehicle entrance and exit and/or the use of contingency equipment.
- 4. The *Company*shall ensure that the Receiving Building is kept under adequate negative pressure whenever there are *Waste Materials*inside the building.

NOTIFICATION REQUIREMENTS

5. The *Company*shall, not later than March 31 of each calendar year, notify the *District Manger*in writing the quantities of *Waste Materials* received, processed in the GORE TM Cover Composting System and processed in the open windrow system in the *Facility*. The *District Manager*may, at his or her discretion, terminate this notification requirement.

RECORD RETENTION

- 6. 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 operation, maintenance, repair and inspection of the Facility;
- (2) all records of fan failure such that there is no air flow through the *Biofilters*;

- (3) all measures taken to minimize odorous emissions from all potential sources; and
- (4) all records of 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.

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

- 1. Condition No. 1 is included to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the *Biofilters*.
- 2. Conditions No. 2 to 4, inclusive, are 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*.
- 3. Condition No. 5 is included to require the *Company* to notify staff of the *Ministry* so as to assist the *Ministry* with the review of the *Facility's* compliance with the *Act*, the regulations and this *Certificate*.
- 4. Condition No. 6 is included to require the *Company*to retain records and provide information to the *Ministry*so that compliance with the *Act*, the regulations and this *Certificate*can be verified.

This Certificate of Approval revokes and replaces Certificate(s) of Approval No. 2072-7PNSUU issued on April 2, 2009.

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:

* 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 <u>Environmental Bill of Rights</u>, 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 27th day of October, 2011

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

RW/ c: District Manager, MOE Niagara District Office Brad Bergeron, RWDI Air Inc.