



## ENVIRONMENTAL PROTECTION AND ENHANCEMENT ACT

BEING CHAPTER E-12 R.S.A. 2000 (the "Act")

#### Amendment No. 6

to

ENFORCEMENT ORDER NO. EO-2011/03-NR

Cleanit Greenit Composting System Inc. 1500, 10180-101 Street NW Edmonton, Alberta T5J 4K1

-and-

Ms. Kirstin Castro-Wunsch 7222 - 119 Street NW Edmonton, Alberta T6G 1V6

[hereinafter collectively referred to as "the Parties"]

WHEREAS Enforcement Order No, EO-2011/03-NR [the "EO"] was issued to the Parties on December 13, 2011;

WHEREAS Amendment #1 to the EO was issued to the Parties on December 22, 2011.

WHEREAS on March 2, 2012, in response to a written request from Cleanit Greenit Composting System Inc. ["Cleanit Greenit"], Amendment #2 to the EO was issued to the Parties, amending the dates in Clauses 11 and 14 of the EO from March 16, 2012 to April 23, 2012.

WHEREAS on April 19, 2012, in response to a written request from Cleanit Greenit, Amendment #3 to the EO was issued to the Parties, further amending the dates in Clauses 11 and 14 of the EO from April 23, 2012 to May 25, 2012;

WHEREAS on May 30, 2012, in response to a written request from Cleanit Greenit, Amendment #4 to the EO was issued to the Parties, further amending the dates in Clauses 11 and 14 of the EO from May 25, 2012 to June 29, 2012, and amending the dates in Clause 12(h) from June 29, 2012 to September 14, 2012;

WHEREAS on June 29, 2012, the Director met with the Parties and respective consultants to discuss the Materials Characterization Report and the Site Rehabilitation Plan:

WHEREAS based on the submissions made by the Parties at the June 29, 2012 meeting, the Director issued to the Parties Amendment #5 to the EO, amending the date in clause 8(s) of the EO from June 29, 2012 to August 30, 2013;

WHEREAS the EO, as amended, set out a number of requirements, of which the following are still outstanding or in question:

- The Pond Rehabilitation Plan submitted by the Parties pursuant to Clauses 11-13, inclusive, did
  not include the volume of sediments at the bottom of the surface water storage pond, the
  manner in which the contents of the surface water storage pond would be removed and
  disposed, an assessment of the integrity of the surface water storage pond liner, and a
  schedule for the implementation of the Pond Rehabilitation Plan, contrary to Clauses
  12(e),(f),(g), and (h);
- Clauses 14 and 15 of the EO (amended by Amendment #4) required the Parties to submit by June 29, 2012 a Soil Impact Delineation Report, signed by a qualified professional registered with APEGA, including a number of details described in Clause 15 of the EO. On June 29, 2012, the Director received a proposal, signed by an Engineer-in-training. The Director has never received the required Soil Impact Delineation Report, contrary to Clauses 14 and 15 of the EO, as amended; and
- Temperature data for Lot 05-10 from October 15-November 24, 2010, was provided by Cleanit Greenit to ESRD on March 16, 2012 in a report entitled "Point 6 Material Characterization 03 15 2012", however in the 2010 Annual Report, Cleanit Greenit reported that its temperature probe broke after June 15, 2010, and therefore there is no temperature data available thereafter. This discrepancy was never resolved;

WHEREAS on October 11, 2012, the Director met with the Parties and respective consultants to discuss the current state of the compost facility, including the cumulative volume of waste received in 2011, the implementation of an aerated windrow pilot project, and the Parties' plans for the upcoming 12 months;

WHEREAS at the October 11, 2012 meeting, the Director received from the Parties, among other details, information outlining the Parties' plans to:

- remove Material from the Lands;
- expand the aerated windrow pilot project to the rest of the compost facility;
- empty the 'wet bunker'; and
- reform operations by August 2013;

WHEREAS the Parties also advised Alberta Environment and Sustainable Resource Development ("ESRD") at the October 11, 2012 meeting that the facility will reach the annual 20,000 tonnes waste limit before the end of 2012;

WHEREAS the information provided by the Parties at the October 11, 2012 meeting, represents a significant change to the Parties' plans for the Material on the Lands and future operations at the compost facility, and particularly impact some of the requirements of the EO, as amended, including but not limited to the Site Rehabilitation Plan (Clauses 7-9) and the Updated Operations Plan (Clauses 16-19);

WHEREAS in December 2012, the Director received from the Parties' consultant, Dr. John Paul, a report entitled Calculations for Transition to Aerated Windrows for Cleanit Greenit (dated December 5, 2012) [the "2012 Aerated Windrows Transition Plan"] containing a plan to convert the compost facility from a static pile system to a ground-level, forced aerated windrow system;

WHERES in this EO, as amended, use of the term "Finished Compost" means 'compost' as defined in Section 3(1)(c) of the Environmental Code of Practice for Compost Facilities, which meets the most recent edition of Guidelines for Compost Quality, published by the Canadian Council of Ministers of the Environment:

WHEREAS in this EO, as amended, use of the term "Waste" means 'waste' as defined in the Waste Control Regulation (AR 192/96, as amended), and without limiting the generality of the foregoing, includes feedstock, bulking agents, amendments and unfinished compost;

WHEREAS in this EO, as amended, use of the word 'Material' means Waste or Finished Compost or any combination of these;

WHEREAS in this EO, as amended, use of the term "Aerated Windrow" means a forced aerated windrow constructed at the same level as the ground surface;

WHEREAS in this EO, as amended, use of the term "Aerated Windrow System" means a system of Aerated Windrows;

WHEREAS based on the changes that have occurred since the EO was issued on December 13. 2011, the plans presented by the Parties on October 11, 2012, and the information contained in the 2012 Aerated Windrows Transition Plan, the Director is of the opinion that this further amendment of the EO is necessary;

WHEREAS Jeff Toering, District Compliance Manager, Northern Region, has been appointed a Director for the purposes of issuing and amending enforcement orders under the Act (the "Director");

THEREFORE, I, Jeff Toering, District Compliance Manager, Northern Region, pursuant to Section 212 of the Environmental Protection and Enhancement Act, DO HEREBY ORDER:

- 1. The Parties shall remove from the Lands
  - a. 6,000 m<sup>3</sup> of Material by January 31, 2013;
  - b. An additional 6,000m<sup>3</sup> of Material by February, 28 2013;
  - c. An additional 6,000m<sup>3</sup> of Material by March 31, 2013
  - d. An additional 6,000m<sup>3</sup> of Material by April 30, 2013;
  - e. An additional 6,000m3 of Material by May, 31, 2013;
  - f. An additional 6,000m3 of Material by June 30, 2013;
  - g. An additional 6,000m3 of Material by July 31, 2013;
  - h. An additional 6,000m3 of Material by August 31, 2013;
  - i. An additional 6,000m³ of Material by September 30, 2013;
     j. An additional 6,000m³ of Material by October 31, 2013;

  - k. An additional 6,000m3 of Material by November 30, 2013.

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- 3. The Parties shall, while carrying out the requirements of Clause 1(a) through (d), remove from the Lands the entirety of Lot 05-10, also known as the Canmore Biosolids.
- 4. The Parties shall, prior to removing any Waste from the Lands, obtain:
  - Written acceptance from each of the registered landowners of each of the parcels of land to which Waste removed in accordance with Clause 1 (of this Amended Order), will be deposited; and
  - b. Written approval from the Director.
- If the Material removed from the Lands is taken to an Approved Waste Management Facility, Clause 4 does not apply.
- 6. The Parties shall, beginning on February 7, 2013, and then on or before the first Thursday of every month thereafter, submit to the Director a Waste and Material Removal Report, signed by Dr. John Paul, or a third party qualified professional currently registered with the Association of Professional Engineers and Geoscientists of Alberta (APEGA) excluding all employees of an corporation of which Ms. Castro-Wunsch is a director, containing all of the following information for the immediately preceding calendar month:
  - a. the total tonnage of Waste received on the Lands;
  - b. a table setting out
    - i. each of the types of Waste received on the Lands;
    - ii. the corresponding tonnage of Waste received for each of the types reported pursuant to clause 6(b)(i) of this Amended Order;
  - c. the total tonnage of all Material removed from the Lands, including, but not limited to:
    - i. Waste; and
    - ii. Finished compost;
  - d. the legal land locations to which all Waste removed from the Lands was taken:
  - e. a copy of each of the scale tickets obtained for all Material deposited at an Approved Waste Management Facility;
  - f. The cumulative total of Waste received on the Lands for the calendar year; and
  - g. The cumulative total of Material removed from the Lands for the calendar year.

# Odour Monitoring & Communications Plan

- 7. The Parties shall, by January 31, 2013, submit to the Director, for the Director's approval a written Odours Monitoring and Communications Plan, signed by an independent third-party qualified professional currently registered with APEGA, excluding all employees of any corporation of which Ms. Kirstin Castro-Wunsch is a director, or other professional as approved by the Director.
- 8. The Odours Monitoring and Communication Plan shall include, at minimum:

- a. The manner in which odours will be monitored, mitigated and managed throughout the implementation of Clause 1;
- b. A written plan to continuously monitor each of the following throughout the implementation of Clause 1:
  - i. Sulphur dioxide;
  - ii. Ammonia:
  - iii. Hydrogen sulphide;
  - iv. Total Reduced Sulphur; and
  - v. Total particulates.
- c. A written plan to, throughout the implementation of Clause 1, meet the Alberta Ambient Air Quality Objectives and Guidelines Summary (Alberta Environment; April 2011) for each of the parameters stated in Clause 8(b);
- d. A written plan to, throughout the implementation of Clause 1, operate a 24-hour Public Report Line, which shall:
  - Operate 24-hours per day;
  - ii. Operate 7 days per week; and
  - iii. Be answered by a live person.
- The Parties shall implement the Odours Monitoring and Communication Plans in accordance with the Director's written authorization, until notified otherwise in writing by the Director.
- 10. When either of the Parties receive information from ESRD, a member of the public or any other complainant, regarding an odour, the Parties shall complete all of the following:
  - a. The Parties shall immediately verify the source of the odour;
  - Immediately upon verification of the source of the odour, the Parties shall telephone 1-800-222-6514 to report the verified source of the odour; and
  - c. Submit to the Director, within 72 hours of receiving the odour information, a complete Odour Complaint Response Form, attached to this Amended Order as Appendix 'A'.

#### **Aerated Windrows**

- 11. The Parties shall by March 1, 2013,
  - a. Install, and
  - b. Implement operation of

at least one Aerated Windrow.

- 12. The Parties shall by May 1, 2013,
  - a. Install, and
  - b. Implement operation of

at least one additional Aerated Windrow.

 As of March 1, 2013, the Parties shall only accept Waste if that Waste will be composted using the Aerated Windrow System.

## Surface Water Storage Pond

- 14. The Parties shall not release, cause or allow to be released any substance from the surface water storage pond.
- 15. The Parties shall, by March 30, 2013 submit to the Director, a written 2013 Surface Water Storage Pond Rehabilitation Report, signed by an independent third-party qualified professional currently registered with APEGA, excluding all employees of any corporation of which Ms. Kirstin Castro-Wunsch is a director, or other professional approved by the Director.
- 16. In the 2013 Surface Water Storage Pond Rehabilitation Report the Parties shall include, at minimum, all of the following information:
  - a. A complete
    - i. chemical and
    - ii. physical assessment of all of the sediments at the bottom of the surface water storage pond, from the top of the sediment to the clay liner of the surface water storage pond; and
  - A detailed assessment of the integrity of the liner of the surface water storage pond.
- 17. The Parties shall, by April 30, 2013 provide written confirmation to the Director that the surface water storage pond has adequate freeboard for a 1 in 25 year, 24-hour duration storm event.

#### Soil

- 18. The Parties shall, by June 28, 2013 submit to the Director a written detailed Soil Impact Delineation Report, signed by an independent third-party qualified professional currently registered with APEGA, excluding all employees of any corporation of which Ms. Kirstin Castro-Wunsch is a director.
- 19. In the Soil Impact Delineation Report, the Parties shall include at minimum, all of the following:
  - a. The results of a complete delineation of impacts to soils
    - i. under the Lands; and
    - ii. all areas adjacent to the Lands to which soil contamination may have migrated;
  - The raw analytical results of all sampling and analyses done (which analyses must include chromatograms for hydrocarbon analyses) and a comparison of those results to
    - at least one off-site control; and
    - ii. the applicable guidelines in the Alberta Tier 1 Soil and Groundwater Remediation Guidelines (December 2010, Alberta Environment) and Alberta Tier 2 Soil and Groundwater Remediation Guidelines (December 2010, Alberta Environment); and
  - c. A proposal for remedying all soil contamination that exceeds Alberta Tier 1 Soil and Groundwater Remediation Guidelines (December 2010, Alberta Environment) and Alberta Tier 2 Soil and Groundwater Remediation Guidelines (December 2010, Alberta Environment).

## Temperature Data

- 20. The Parties shall by February 28, 2013 submit in writing to the Director confirmation that the temperature data for Lot 05-10 from October 15-November, 2010 submitted to the Director on March 16, 2012 is either:
  - a. Valid, or
  - b. Unavailable.

# 2013 Updated Operations Plan

- 21. The Parties shall, by February 28, 2013 submit to the Director, for the Director's approval, a written detailed 2013 Updated Operations Plan, signed by a third party qualified professional currently registered with APEGA, excluding all employees of any corporation of which Ms. Kirstin Castro-Wunsch is a director, or other professional approved by the Director.
- 22. In the 2013 Updated Operations Plan, the Parties shall include, at minimum, all of the following:
  - A plan to operate the compost facility as an Aerated Windrow System, including but not limited to:
    - The incorporation into the Aerated Windrow System of all new Waste received at the Facility;
    - ii. Commitment and plan to maintain all Aerated Windrows at a height of no more than 4.3 metres;
  - Written commitment to and procedure for at least annual calibration of Cleanit Greenit's scale by a person accredited by Measurement Canada;
  - Written commitment to and procedure for weighing and recording all Waste brought to the Lands;
  - d. A detailed Facility Design Plan and Specifications, including all of those items described in sections:
    - i. 1.2(b)(i):
    - ii. 1.2(b)(ii)b.; and
    - iii. 1.2(b)(ii)g.

of the Standards for Composting Facilities (Alberta Environment July 2007 - draft);

- e. A written commitment to and plan for, from 2014 and onward, maintaining at any given time, a total amount of material at the site of no more than 20,000 tonnes;
- f. With respect to a liquid Waste receiving area on the Lands, a written commitment and plan to:
  - Construct a liquid Waste receiving area with a liner that meets the specifications in section 3.3 of the Standards for Composting Facilities (Alberta Environment July 2007 – draft);
  - Empty the liquid Waste receiving area before the close of business each day;
  - iii. Incorporate liquid Waste into an Aerated Windrow before the close of business each day; and
  - Refuse to accept liquid Waste outside of business hours.
- g. A plan to maintain physical separation among the following stages:

- i. Active composting
- ii. Curing of compost; and
- iii. Storage of Finished Compost
- h. A system for retaining recipe records for each batch of Waste being composted;
- A detailed surface water management plan, including but not limited to those items described in sections:
  - i. 1.2(b)(ii)h.;
  - ii. 1.2(b)(ii)i; and
  - iii. 5.3

of the Standards for Composting Facilities (Alberta Environment July 2007 - draft);

- A plan for maintaining, at all times, adequate freeboard in the surface water storage pond to accommodate a 1 in 25 year, 24-hour duration storm event; and
- Each of those items described in section 1.3 of the Standards for Composting Facilities (Alberta Environment July 2007 – draft);
- 23. In the 2013 Updated Operation Plan, the Parties shall also include:
  - a. An updated written Odour Management Plan, including each of those items described in section 1.4 of the Standards for Composting Facilities (Alberta Environment July 2007 – draft); and
  - b. Written commitment to follow the requirements of each of sections
    - i. 5.1:
    - ii. 5.5; and
    - iii. 6

of the Standards for Composting Facilities (Alberta Environment July 2007 – draft):

- 24. The Parties shall implement the 2013 Updated Operations Plan in accordance with the Director's written authorization.
- 25. The following are hereby deleted, cancelled or repealed, as the case may be:
  - a. Clause 1, and Clauses 3-19, inclusive of EO-2011/03-NR;
  - b. The last paragraph on page 8 of EO-2011/03-NR, which is: "WHEREAS is [sic] it is the Director's opinion that in these [sic] Order, "Waste" includes "waste" as defined in the Waste Control Regulation (AR 192/96, as amended), and without limiting the generality of the foregoing, includes feedstock, bulking agents, and amendments."
  - c. Amendment #1 to EO-2011/03-NR;
  - d. Amendment #2 to EO-2011/03-NR;
  - e. Amendment #3 to EO-2011/03-NR;
  - f. Amendment #4 to EO-2011/03-NR; and
  - g. Amendment #5 to EO-2011/03-NR;

DATED at the City of Edmonton in the Province of Alberta, this 8th day of January, 2013.

Original signed by:

Jeff Toering
District Compliance Manager
Northern Region

Section 91 of the *Environmental Protection and Enhancement Act* may provide a right of appeal against this decision to the Alberta Environmental Appeals Board. There may be a strict time limit for filing such an appeal. A copy of Section 91 is enclosed. For further information, please contact the Board Secretary at #306 Peace Hills Trust Tower, 10011 - 109 Street, Edmonton, Alberta, T5J 3S8; telephone 780-427-6207; fax 780-427-4693.

Notwithstanding the above requirements, the Party(ies) shall obtain all necessary approvals in complying with this order.

Take notice that this environmental protection order is a remedial tool only, and in no way precludes any enforcement proceedings being taken regarding this matter under this Act or any other legislation.

Appendix 'A'

Odour Complaint Response Form	
Alberta Environment Reference Number:	
Alberta Environment contact name:	
Date and time of contact with Alberta Environment:	
Date and time of the odour event:	
The location the odour was noted:	
The duration of the odour event	
Intensity of the odour (very strong, strong, moderate, weak)	
Description of the odour	
A detailed description of the circumstances leading u	p to the release:
Date and Time Cleanit and Greenit staff attended the site to determine the source of the odour:	
Describe what was found by the Cleanit Greenit employee:	
Wind direction and speed	
Was a truck being off loaded at the time of the complaint? If yes, who was the customer, what were they off loading and specifically where on site?	
Was the compost actively being turned at the time of complaint? If yes, which Lot was being turned?	
Were any products being screened?	
Was there any upset or activity at the site that could cause off site odours? If yes, explain in detail.	
Did the operators wear filter masks?	
Are there any activities going on nearby that the site operator is aware of that could be the source for potential odours?	
The steps or procedures which were taken to minimize, control or stop the release.	
Steps or procedures which will be taken to prevent similar releases	