Ontario

Ministry of the Environment Ministère de l'Environnement

AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 7440-98UGZE Issue Date: April 16, 2014

All Treat Farms Limited 7963 Wellington Road 109 Rural Route No. 4 Arthur, Ontario N0G 1A0

Site Location: All Treat Farms 7963 Wellington County Road 109, Rural Route 4 Wellington North Township, County of Wellington N0G 1A0

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

one (1) composting facility, receiving a maximum of up to 5,000 tonnes of the Organic Waste per day and storing a maximum of up to 170,000 tonnes of temporarily stored Organic Waste, Organic Waste undergoing composting, immature compost, finished compost undergoing testing for compliance with the compost standards, and the residual and the rejected wastes at any time, consisting of the following structure, processes and equipment:

- one (1) fully enclosed Receiving Building, measuring 36.6 metres wide, 54.9 metres long and 13.0 metres high that will be used for receiving and mixing of Organic Waste, equipped with three (3) fast acting roll-up doors for truck access; served by one (1) ventilation system that maintains negative pressure in the Receiving Building and passes building air through one (1) three-stage cross-flow chemical scrubber comprised of an acid stage (sulphuric acid), a caustic stage and an oxidizing (hydrogen peroxide) stage with a design capacity of 25.0 cubic metres per second and a minimum odour removal efficiency of 75 percentage; discharging into the air at a maximum volumetric flow rate of 22.7 cubic metres per second, through a stack having an exit diameter of 1.8 metres extending 7.0 metres above roof and 20.0 metres above the grade;
- one (1) Cover-All Building, measuring approximately 37 metres wide, 122 metres long and 17 metres high, used for screening and storage of compost final product, complete with one (1) Material Processing Unit consisting of electrically powered trommel screens, deck screens and elevator/stackers stationed within the building;

- one (1) aerobic composting system labelled as "Wedge System", which includes mixing various preprocessed raw materials, proportioned depending on market conditions, to form into a large brick or wedge to allow biodegradation of the materials to occur, and to be turned and formed into a larger wedge for further composting and curing, and employing windrows to compost and/or cure materials;
- one (1) aerobic windrow composting system, for composting of pre-processed leaves;
- one (1) GORE[™] Cover Composting System, comprising Phase 1 and 2, which includes, on a concrete base:
 - a total of thirty-two (32) static aerated piles, with each Phase having sixteen (16) rows in two (2) rows of eight (8) each separated apart by approximately 2 metres between rows, and a total of sixty-four (64) in-floor aeration channels with two (2) channels for each pile. Each pile is directly monitored by temperature and oxygen probes which are connected to a computer system to control the aeration rate to maximize the composting process. Each pile is also served by one (1) medium pressure blower, rated for a maximum volumetric flow rate of 0.58 cubic metre per second, used to supply oxygen to the pile through the in-floor aeration channels. Secured and breathable GORE-TEX cover contains the composting material, except in the final phase where the GORE-TEX cover may or may not be used; and
 - processing equipment used around the site, including the following:

Process Equipment (Diesel Fuel Fired)	Quantity	Capacity (kilowatts)	
Rubber-Tired Loader	1	173	
Rubber-Tired Loaders	8	161	
Shredder (shredding yard waste)	1	746	
Shredder (generic)	1	184	
Diesel Bulldozers	2	141	
Diesel Bulldozer	1	56.7	
Diesel Skid Steers	3	51.5	
Diesel Trommel Screens	2	135	
Diesel Trommel Screen	1	115	
Diesel 100ft Stackers	2	78.3	
Diesel 70ft stacker	1	16.4	
Diesel Compact Tractor	1	26	
Diesel Mobile Cover Unwinding Machine	1	50.7	
Stacker Feeder	1	64	
Diesel Bulldozer	1	153	
Portable Work Lights	3	18	
Windrow Turner	1	500	
Shredder (shredding yard waste)	1	522	
Process Equipment (Electrical)	Quantity	Capacity (kilowatts)	
Wood Hog	1	298.4	
100ft stacker	1	19	
80ft stacker	1	19	
Shredder / Mixer	1	500	
Scrubber Unit	1	15	

Existing Noise Control Measures:

- One (1) acoustic silencer for the grinder engine combustion exhaust identified as noise Source NS-68e, 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
Insertion-Loss (decibel)	12	28	40	35	35	35	35	35

all in accordance with the Application for Approval submitted by All Treat Farms Limited dated February 28, 2013 and signed by Andrew Drury, All Treat Farms Limited; and the supporting information, including the Emission Summary and Dispersion Modelling Report, submitted by ZORIX Environmental dated February 28, 2013 and signed by Michael Rix; and email updates provided by Michael Rix, ZORIX Environmental on February 28, March 01, April 08, 11, 23, May 10, 23, July 08, 31, August 06, 15, 29, 30, September 04, 10, October 09 and 12, 2013; and email updates provided by Tom Vallarino, ZORIX Environmental on April 22, 30, August 07, 12, 13, 2013; and email updates provided by Andrew Drury, All Treat Farms Limited on July 01, August 20, 21, December 04, 2013 and February 11, 2014; and the Acoustic Assessment Report dated January 23, 2014, prepared by Ian Bonsma and Corey Kinart of HGC Engineering; and email dated January 31, 2014 from Ian Bonsma of HGC Engineering.

For the purpose of this environmental compliance approval, 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 Assessment Report" means the report, prepared in accordance with Publication NPC-233 submitted in support of the application, that documents all sources of noise emissions and Noise Control Measures present at the Facility. "Acoustic Assessment Report" also means the Acoustic Assessment Report dated January 23, 2014, prepared by Ian Bonsma and Corey Kinart of HGC Engineering and the email dated January 31, 2014 from Ian Bonsma of HGC Engineering.
- 3. "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.
- 4. "Acoustic Audit Report" means a report presenting the results of an Acoustic Audit, prepared in accordance with Publication NPC-233.
- 5. "Approval" means this entire Approval document and any Schedules to it, including the application and Supporting Documentation submitted in support of the application.
- "Approval (Waste)" means Environmental Compliance Approval (Waste Disposal Site) No.
 6716-9B3QJA, as amended, issued in respect of activities mentioned in subsection 27(1) of the EPA at the Facility.
- 7. "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.

- 8. "Company" means All Treat Farms Limited that is responsible for the construction or operation of the Facility and includes any successors and assigns in accordance with section 19 of the EPA.
- 9. "Director" means any Ministry employee appointed by the Minister pursuant to Section 5 of the EPA.
- 10. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located.
- 11. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended.
- 12. "Equipment" means the equipment and processes described in the Company's application, this Approval and in the supporting documentation referred to herein, to the extent approved by this Approval.
- 13. "Facility" means the composting facility described in the Company's application, this Approval and in the supporting documentation referred to herein, to the extent approved by this Approval.
- 14. "Independent Acoustical Consultant" means an Acoustical Consultant who is not representing the Company and was not involved in preparing the Acoustic Assessment Report or 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 the noise impact assessment or the design/implementation of Noise Control Measures for the Facility and/or Equipment.
- 15. "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 Approval.
- 16. "Manual" means a document or a set of documents that provides written instructions to staff of the Company.
- 17. "Ministry" means the ministry of the government of Ontario responsible for the EPA and includes all officials, employees or other persons acting on its behalf.
- 18. "Noise Abatement Action Plan" means the noise abatement program developed by the Company (detailed in Schedule "B" of this Approval), submitted to the Director and District Manager and approved by the Director, designed to achieve compliance with the sound level limits set in Publication NPC-300.
- 19. "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 the Company's application, Schedule "B" of this Approval and in the supporting documentation referred to herein, including the Acoustic Assessment Report, to the extent approved by this Approval.

- 20. "Odour Abatement Plan" means the document or set of documents submitted by the Company to satisfy Conditions 16 and 17 in this Approval.
- 21. "Organic Waste" means solid non-hazardous waste derived from plants or animals, including wastes consisting of other compounds of carbon, all readily biodegradable, and as listed in Section 2 of the Company's "Approval (Waste).
- 22. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05.
- 23. "Pre-Test Plan" means a plan for the Source Testing including the information required in Section 5 of the Source Testing Code.
- 24. "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.
- 25. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995 as amended.
- 26. "Publication NPC-300" means the Ministry Publication NPC-300, "Environmental Noise Guideline, Stationary and Transportation Sources – Approval and Planning, Publication NPC-300", August, 2013, as amended.
- 27. "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).
- 28. "Source Testing" means sampling and testing to measure odour emissions as required under this Approval from the odour sources specified in this Approval under process conditions which yield the worst case emissions within the approved operating range of the odour sources which satisfies paragraph 1 of subsection 11(1) of O. Reg. 419/05.
- 29. "Source Testing Code" means the Ontario Source Testing Code, dated June 2010, prepared by the Ministry, as amended.

You are hereby notified that this environmental compliance 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 at all times. The Company shall, as a minimum:
 - (1) prepare, within three (3) months from the date of this Approval and update, as necessary, a Manual outlining the operating procedures for the Facility; including as a minimum:
 - (a) measures to control and monitor the aeration of the Organic Waste undergoing composting to ensure that the oxygen content in the Organic Waste undergoing composting is sufficient to prevent the composting mass from becoming anaerobic;
 - (b) measures to control the aeration, blending and mixing of the Organic Waste undergoing composting to minimize odorous emissions from the composting operation as well as raw material and compost storage;
 - (c) all appropriate measures to minimize fugitive dust emissions from all potential sources;
 - (d) emergency procedures, including spill clean-up procedures;
 - (2) implement the recommendations of the operating Manual;
 - (3) ensure that all doors in the Receiving Building are kept closed at all times except during shipping and/or receiving, operational access and maintenance; and
 - (4) maintain a negative air pressure atmosphere within the Receiving Building, relative to the ambient atmospheric conditions at a magnitude sufficient enough to prevent:
 - (a) a migration of the fugitive odour emissions from the Receiving Building; or
 - (b) an occurrence of an adverse effect and/or complaints from the public being affected by the said migration of the fugitive odour emissions from the Receiving Building.

FUGITIVE DUST CONTROL

- 2. The Company shall develop 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;
- (i) general work areas; and
- (j) various operations including but not limited to shredding, grinding, mixing or blending, yard waste processing (Wedge process), leaf processing, curing, screening etc.
- (2) potential causes for high dust emissions and opacity resulting from these sources;
- 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; and
- (5) inspection and maintenance procedures and monitoring initiatives to ensure effective implementation of the preventative and control measures.
- 3. The Company shall
 - (1) update the Best Management Practices Plan annually by the end of each calendar year,
 - (2) retain at the Facility an electronic and hard copy of the most recent Best Management Practices Plan; and.
 - (3) upon request of staff of the Ministry provide in a format satisfactory to the staff of the Ministry a copy of the most recent Best Management Practices Plan.

SOURCE TESTING

- 4. The Company shall perform Source Testing to determine the rates of emission of odour from the following odour sources, and other sources in the Facility as agreed or directed by the District Manager.
 - (1) leaf shredding area;

- (2) leaf screening area;
- (3) leaf piles;
- (4) GoreTM Composting System; and
- (5) Three-stage cross-flow chemical scrubber
- 5. The Company shall submit, not later than three (3) months from the date of this Approval, to the Manager a Pre-Test Plan for the Source Testing required by the Source Testing Code. The Company shall finalize the Pre-Test Plan in consultation with the Manager.
- 6. The Company shall not perform Source Testing required under this Approval until the Manager has accepted the Pre-Test Plan.
- 7. The Company shall complete the Source Testing, not later than twelve (12) months after acceptance of the Pre-Test Plan by the Manager, or within a period as agreed or directed by the Manager or the District Manager.
- 8. 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 Approval, at least fifteen (15) days prior to the Source Testing.
- 9. The Company shall submit a report on the Source Testing to the District Manager and the Manager not later than three (3) 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 updated emission inventory;
 - (3) records of weather conditions such as ambient temperature and relative humidity, wind speed and direction, any environmental complaints if received, at the time of the Source Testing;
 - (4) all operating conditions of the Facility including but not limited to the quantity of Organic Waste received, the quantity of Organic Waste in the Receiving Building, the quantity of Organic Waste in the process and the quantity of compost final product in the Cover-All Building at the time of the Source Testing;and
 - (5) the results of dispersion calculations, taking into account all other odour sources not tested in the Source Testing, indicating the maximum 10-minute average concentration of odour at the Point of Impingement and at the most impacted Sensitive Receptor computed in accordance with Schedule "A".
- 10. 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; 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.
- 11. If the Director does not accept the results of the Source Testing, the Director may require re-testing.
- 12. The Company shall perform, in consultation with the District Manager, subsequent annual Source Testing of odour to determine the rate of emission of odour from the sources specified in condition No. 4 of this Approval, and any other source(s) in the Facility that the District Manager deems necessary to be quantified, under anticipated worst case situations, once during each year of operation.
- 13. The District Manager may not require annual Source Testing of odour from a source of odour if, at the discretion of the District Manager, the results of the Source Testing indicate that the environmental impact from the source is insignificant or the odour emissions from the sources has already been sufficiently characterized.

COMPLAINTS / ODOUR-CONTAMINANT EMISSIONS RESPONSE PROCEDURE

- 14. A designated representative of the Company shall be available to receive public complaints caused by the operations at the Facility twenty-four (24) hours per day, seven (7) days per week.
- 15. If at any time, the Company receives a complaint regarding the operation of the Facility, the Company shall respond to the complaint according to the following procedure:
 - (1) The Company shall record each complaint on a formal complaint form entered in a computerized tracking system. The information recorded shall include the nature of the complaint, circumstances of the complaint including weather conditions, the name, address and the telephone number of the complainant and the time and date of the complaint;
 - (2) the Company, upon notification of the complaint shall initiate appropriate steps to determine all possible causes of the complaint, proceed to take the necessary actions to eliminate the cause of the complaint and forward a formal reply to the complainant; and
 - (3) the Company shall immediately notify the Ministry of the complaint, followed with the submission of a written report within one (1) week of the complaint detailing what actions, if any, were taken to identify and remediate the cause of the complaint and what remedial action, if any, would be taken.

ODOUR ABATEMENT PLAN

16. Commencing on March 31, 2015, and at intervals of five (5) years thereafter, the Company shall submit to the District Manager an Odour Abatement Plan in hard copy format and in electronic format that will include at a minimum:

- (1) the current maximum 10-minute average odour concentrations of the Facility at the most impacted Sensitive Receptor and other neighbouring Sensitive Receptors, computed in accordance with Schedule "A";
- (2) an updated technology benchmarking report (TBR) that identifies technically feasible options to reduce off-property odour impacts from the operation of the Facility;
- (3) proposed odour abatement measures and a timeline for implementation of the odour abatement measures that will be implemented over the next five (5) years;
- (4) except for the first Odour Abatement Plan, an assessment of the last five (5) annual odour progress reports and a summary of the Company's ability to reduce the maximum 10-minute average odour concentrations year after year at the most impacted Sensitive receptor and other neighbouring Sensitive Receptors, computed in accordance with Schedule "A" and any associated changes made to the Odour Abatement Plan as a result.
- 17. The Company shall submit to the District Manager, during the implementation of the current Odour Abatement Plan, annual odour progress reports in hard copy format and in electronic copy format by March 31 of each year that will include at a minimum:
 - (1) the site odour monitoring and assessment information for the previous year;
 - (2) the effectiveness/progress/results of the odour abatement measures implemented during the previous year to:
 - (a) eliminate or control the cause(s) of the complaints(s) if any that the Company or the Ministry has received during the previous year, and
 - (b) reduce the maximum 10 minute average odour concentrations at the most impacted Sensitive Receptor and other neighbouring Sensitive Receptors, computed in accordance with Schedule "A" compared to the previous year.

RECORD RETENTION

- 18. 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 operation, maintenance and monitoring activities of the Facility. These records as well as the Manual shall be made available to staff of the Ministry upon request. The Company shall retain:
 - (1) all records on the maintenance, repair and inspection of the Facility and Equipment;
 - (2) all records on the amounts of incoming raw material and production rate of finished products, on a daily, monthly and annual basis;

- (3) all records of fan failure such that there is no process air flow through the three-stage cross-flow chemical scrubber,
- (4) all records of Source Testing;
- (5) all measures taken to minimize dust, odour and noise emissions from all potential sources; and
- (6) all records on 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 PERFORMANCE

- 19. The Company shall, at all times, prohibit trucks from idling at the loading docks.
- 20. The Company shall:
 - (1) restrict operation of the raw materials delivery trucks identified as noise Source NS-77 to the daytime period between 7:00 AM and 7:00 PM.
 - (2) restrict operation of the grinder identified as noise Source NS-68 to the daytime period between 7:00 AM and 7:00 PM and to the shaded green areas highlighted in Figure 6 of the Acoustic Assessment Report.
- 21. The Company shall:
 - (1) fully implement the Noise Abatement Action Plan specified in the Acoustic Assessment Report and detailed in Schedule "B" of this Approval;
 - (2) ensure, subsequent to the completion of the Noise Abatement Action Plan, that the noise emissions from the Facility comply with the limits set out in Ministry Publication NPC-300;
 - (3) maintain existing stockpiles/barriers as depicted in Figure 4 of the Acoustic Assessment Report. The 6.0 and 5.5 metre high stockpiles, both extended at least 45 metres long are mobile. The 6.0 metre high stockpile needs to be maintained approximately 40 metres north of the screeners (NS-07 and NS-80) and the 5.5 metre high stockpile needs to be maintained approximately 35 metres south of the screeners. The stockpiles shall be continuous without holes, gaps or other penetrations, and having surface density at least 20 kilograms per square metre; and

(4) ensure that the Noise Control Measures are properly maintained and continue to provide the acoustical performance outlined in the Acoustic Assessment Report.

ACOUSTIC AUDIT

- 22. The Company shall carry out acoustic audit measurements on the actual noise emissions due to the operation of the Facility, following the completion of the Noise Abatement Action Plan. The Company:
 - (1) shall carry out acoustic audit measurements in accordance with the procedures in Publication NPC-103;
 - (2) shall submit an Acoustic Audit 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 not later than six (6) months after full implementation of the Noise Abatement Action Plan.
- 23. The Director:
 - (1) may not accept the results of the Acoustic Audit if the requirements of Publication NPC-233 were not followed;
 - (2) may require the Company to repeat the Acoustic Audit if the results of the Acoustic Audit are found unacceptable to the Director.

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

- 1. Conditions No. 1 to 3 are included to emphasize that the Facility and Equipment must be maintained and operated according to a procedure that will result in compliance with the EPA, the regulations and this Approval.
- 2. Conditions No. 4 to 13, inclusive, are included to require the Company to gather accurate information so that compliance with the EPA, the regulations and this Approval can be verified.
- 3. Conditions No. 14 and 15 are included to require the Company to gather accurate information and to notify the Ministry so that the environmental impact and subsequent compliance with the EPA, the regulations and this Approval can be verified.
- 4. Conditions No. 16 and 17 are included to require the Company to continually reduce its odour impact on the Sensitive Receptors.
- 5. Condition No. 18 is included to require the Company to retain records and provide information to the Ministry so that compliance with the EPA, the regulations and this Approval can be verified.
- 6. Conditions No. 19 to 21 are included to provide the minimum performance requirement considered necessary to prevent an adverse effect resulting from the operation of the Facility.

7. Conditions No. 22 and 23 are included to require the Company to gather accurate information and submit an Acoustic Audit Report in accordance with procedures set in the Ministry's noise guidelines, so that the environmental impact and subsequent compliance with the EPA, the regulation and this Approval can be verified.

SCHEDULE "A"

Procedures for the Calculation of 10-minute Average Concentration of Odour

CALCULATE ONE-HOUR AVERAGE CONCENTRATION

1. The one-hour average concentration of odour at the most impacted Sensitive Receptor shall be calculated using the Detailed Procedure described as follows:

Detailed Procedure

- (a) Calculate one-hour average concentration of odour at the most impacted Sensitive Receptor at which the highest concentration occurs in employing the AERMOD atmospheric dispersion model or another atmospheric dispersion model acceptable to the Director that employs at least five (5) years of hourly local meteorological data and that can provide results reported as individual one-hour average odour concentrations.
- (b) Convert each one-hour average concentrations predicted over the five (5) years of hourly local meteorological data to a 10-minute average concentration using the One-hour Average to 10-Minute Average Conversion described below.
- (c) Present the 10-minute average concentrations predicted to occur over a five (5) year period at the Point of Impingement and at the most impacted Sensitive Receptor. The results shall be presented in tabular form. The table shall identify all predicted 10-minute average odour concentration occurrences in terms of frequency, identifying the number of occurrences over the entire range of predicted odour concentration in increments of not more than 1/10 of one odour unit. The table shall also present the cumulative frequency of occurrence and identify the modelled hour(s) (year, month, day, hour) of all predicted occurrences having the predicted 10-minute average odour concentration higher than 0.9 odour unit. The maximum 10-minute average concentration of odour at the Sensitive Receptor will be considered to be the maximum odour concentration at the most impacted Sensitive Receptor that occurs and is represented in the table, disregarding outlying data points as agreed by the District Manager and Director.

ONE-HOUR AVERAGE TO 10-MINUTE AVERAGE CONVERSION

2. Use the following formula to convert one-hour average concentration predicted by an atmospheric dispersion model to a 10-minute average concentration:

 $X_{s} = X_{T} * 1.65$

where $X_s = 10$ -minute average concentration $X_T =$ one-hour average concentration

SCHEDULE "B"

Noise Abatement Action Plan

Stage 1 - control must be completed 6 months after the date of this Approval

1. The Company shall construct a 4.3 metre high stockpile to mitigate the sound level of the grinder identified as noise Source NS-06 on the receptors. The stockpile shall be located approximately 25 metres northeast of the grinder and extending at least 32 metres long as depicted in Figure 5 of the Acoustic Assessment Report. The stockpile shall be continuous without holes, gaps or other penetrations, and having surface density at least 20 kilograms per square metre.

Stage 2 - controls must be completed 12 months after the date of this Approval

- 2. The Company shall construct a 6.0 metre high barrier, extending at least 125 metres long positioned as per Figure 5 of the Acoustic Assessment Report, continuous without holes, gaps or other penetrations, and having surface density at least 20 kilograms per square metre.
- 3. The Company shall construct a 4.5 metre high barrier, extending at least 55 metres long positioned as per Figure 5 of the Acoustic Assessment Report, continuous without holes, gaps or other penetrations, and having surface density at least 20 kilograms per square metre.
- 4. The Company shall construct a 11 metre high barrier, extending at least 125 metres long positioned as per Figure 5 of the Acoustic Assessment Report, continuous without holes, gaps or other penetrations, and having surface density at least 20 kilograms per square metre.

Stage 3 - controls must be completed 18 months after the date of this Approval

- 5. The Company shall construct a 3.5 metre high barrier, extending at least 190 metres long positioned as per Figure 5 of the Acoustic Assessment Report, continuous without holes, gaps or other penetrations, and having surface density at least 20 kilograms per square metre.
- 6. The Company shall construct a 7.0 metre high barrier, extending at least 100 metres long positioned as per Figure 5 of the Acoustic Assessment Report, continuous without holes, gaps or other penetrations, and having surface density at least 20 kilograms per square metre.
- 7. The Company shall construct a 10 metre high barrier, extending at least 150 metres long positioned as per Figure 5 of the Acoustic Assessment Report, continuous without holes, gaps or other penetrations, and having surface density at least 20 kilograms per square metre.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 8032-77KLY8 issued on February 7, 2008.

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 <u>Environmental Bill of</u> <u>Rights, 1993</u>, 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	<u>AND</u>	Part II.1 of the Environmental Protection Act Ministry of the Environment 2 St. Clair Avenue West, Floor 12A Toronto, Ontario M4V 1L5
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* 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 16th day of April, 2014

The Director own sinted for the moments of

RudyWa

Rudolf Wan, P.Eng. Director appointed for the purposes of Part II.1 of the *Environmental Protection Act*

BS/

c: District Manager, MOE Guelph District Office Michael Rix, Zorix Environmental