Ontario

**Ministry of the Environment and Climate Change**
**Ministère de l'Environnement et de l'Action en matière de changement climatique**

## AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 0385-AP5RZY
Issue Date: September 27, 2017

All Treat Farms Limited
Post Office Box, No. 100
Thorold, Ontario
L2N 7S9

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 Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:*

existing stormwater management Works for the collection, transmission, treatment and disposal of up to **100,000 cubic meter per year** of stormwater at the composting facility located at the above mentioned site and consisting of the following:

- one (1) stormwater collection system servicing 2.5 hectare zone comprising of the mulch ground cover operations area (non-contact water) excluding roof top drains; which conveys water to Pond #1 via one (1) 600 millimetre diameter steel pipe approximately 50 metres long.

- one (1) 600 millimetre diameter corrugated steel pipe approximately 50 metres long to transmit stormwater from the raw materials storage area to Pond #1 across the agricultural drain (ATFL Drain) which crosses the property along a northeast-southwest axis.

- one (1) earthen berm at the south-west corner of the mulch ground cover operations area to contain stormwater runoff within the said area; and a portion of the west boundary of the raw materials storage area to prevent stormwater run-off flow to the ATFL Drain and, one (1) earthen berm extending on part of the west boundary and on part of the north boundary of the mulch ground cover operations to contain stormwater run-off within the said area.

- one (1) stormwater collection system, serving a 13.9 hectares zone comprising of the composting

area (contact water) excluding rooftop drains; which conveys water to Pond #1 via:

1. surface drainage over compacted granular material overlying native clay till;

2. shallow ditches;

3. one (1) 500 millimetre diameter pipe connected to a catch basin located at the north end of the GORE Cover Composting Pad;

4. one (1) drainage ditch, approximately 280 metres long and with a bottom width of approximately 600 millimetres at its widest point running longitudinally between the mulch ground cover operations area and the composting operations area; and two (2) earthen berms along the western and eastern perimeters to contain stormwater runoff within the said area.

- five (5) earthen unlined aerated lagoons, known as Pond #1 through Pond #5, and one (1) earthen unlined pond named Pond #6, with an approximate total volumetric holding capacity of 73,892 cubic metres including a freeboard of 0.5 metre, capable of discharging aerated stormwater to the spray irrigations system. The details of each pond is listed in the table below:

| ***Description*** | ***Pond #1*** | ***Pond #2*** | ***Pond #3*** | ***Pond #4*** | ***Pond #5*** | ***Pond #6*** |
|---|---|---|---|---|---|---|
| Capacity (cubic metre) | 4,302 | 3,794.4 | 4,514.4 | 16,149.6 | 16,841.4 | 28,260 |
| Free board (metre) | 0.5 | | | | | |
| Max. Liquid Depth (metre) | 1.8 | | | | | 3.6 |
| Area (square metre) | 2,390 | 2,109 | 2,508 | 8,972 | 9,373 | 7,850 |
| Capability to Spray Irrigate | Yes | | | | | |
| Spillway Connections | Pond #2 | Pond #3 | Pond #4 | Pond #5 | Pond #6 | - |
| Valve & Pipe Connections | 2 valves, 100 millimetre diameter pipe to Pond #2 and Pond #3. | 250 millimetre diameter pipe to Pond #3. | 2 valves, 100 millimetre diameter pipe to Pond #1, and 250 millimetre diameter pipe to Pond #4. | 1 valve, 250 millimetre diameter pipe to Pond #5. | 1 valve, 250 millimetre diameter pipe to Pond #4. | - |

- one (1) pumping sump fed by one (1) 600 millimetre diameter gravity feed pipe set in the east embankment of Pond #4, and equipped with one (1) 15 kilowatts submersible pump rated at 75

litres per second at a head of approximately 23 metres to discharge the effluent from Pond #4 via a 40 metres long, 200 millimetre diameter return pipe to Pond #1 or the ATFL Drain or to fill truck.

- two (2) rotary lobe blowers 20 horsepower each and one (1) rotary lobe blower 15 horsepower, for the aeration of Pond #1 through Pond #5 by servicing nine inch membrane dome aerators in each pond. Each lateral connects to an aerator assembly of four membrane dome aerators: Pond #1 is equipped with 12 laterals, Pond #2 with 16 laterals, Pond #3 with 10 laterals, Pond #4 with 20 laterals, and Pond #5 with 32 laterals. One (1) optional surface aerator.

- one (1) portable 15 kilowatts (20 horsepower) end suction centrifugal pump with a pump flow range of 12.6 litres per second at a head of 70.4 meters, to discharge water to the sprinkler system from any one of the six ponds, as required or to the ATFL Drain.

- one (1) main feed line to discharge water from the 15 kilowatts pump to the sprinkler system via a 610 metres of 125 millimetre diameter pipe.

- one (1) sprinkler system consisting of up to 104 sprinklers set on 3.66 metre risers, approximately 3,600 metres of 100 millimetre diameter aluminium laterals and approximately 195 metres of 125 millimetre diameter aluminium main line.

- one (1) additional 3,584 metres of 100 millimetre diameter lateral pipe with up to eighty-nine (89) sprinklers set on 2.5 centimetre risers every 36.5 metres at a height of 1.2 metres in the additional spray irrigation system.

- one (1) spray irrigation field covering a surface area of 13.2 hectares, drained by subsurface tiles reaching a depth of 1 metre beneath the adjacent field surface with a valved pipe outlet to prevent discharge from the field during the spray irrigation period.

- one (1) additional spray irrigation field located southwest of the spray irrigation field mentioned above, covering a surface area of 21.4 hectares. The additional spray irrigation field is also drained by subsurface tiles reaching a depth of 1 meter beneath the adjacent field surface with a valved pipe outlet to prevent discharge from the field during the spray irrigation period.

all other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned sewage works.

all in accordance with supporting documents listed in Schedule 'A'.

*For the purpose of this environmental compliance approval, the following definitions apply:*

"ATFL Drain" means the surface water natural drain that bisects the All Treat Farms Ltd., property and connects to the Conestogo River;

"Approval"means this entire document and any schedules attached to it, and the application;

"Arithmetic Mean" is the sum of the results of n number of samples over the period specified divided by n;

"$CBOD_5$" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;

"Daily Concentration" means the concentration of a contaminant in the effluent discharged over any single day, as measured by a composite or grab sample, whichever is required;

"Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;

"District Manager" means the District Manager of the Guelph Office of the Ministry;

"*E. Coli* " refers to the thermally tolerant forms of Escherichia that can survive at 44.5 degrees Celsius;

"Effluent" from the Works means the discharge from the ponds to the ATFL Drain;

"EPA" means the *Environmental Protection Act* , R.S.O 1990, c.E.19, as amended;

"Equivalent equipment" means a substituted equipment or like-for-like equipment that meets the required quality and performance standards of a named equipment;

"Limited Operational Flexibility" (LOF) means any modifications that the Owner is permitted to make to the Works under this Approval;

"Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf;

"Monthly Average Concentration" means the Arithmetic Mean of all Daily Concentration of a contaminant in the effluent sampled or measured, or both, during a calendar month;

"Notice of Modifications" means the form entitled “Notice of Modifications to Sewage Works”;

"Owner" means All Treat Farms Limited, and includes its successors and assignees;

"Professional Engineer" means a person entitled to practise as a Professional Engineer in the Province of Ontario under a licence issued under the Professional Engineers Act;

"Spray Irrigation Season" means the frost-free period extending from April 15th to October 31st or the last frost free day of October, whichever occurs first; and

"Works" means the sewage works described in the Owner's application, and this Approval, and includes

modifications made under Limited Operational Flexibility.

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

**TERMS AND CONDITIONS**

## 1. GENERAL PROVISIONS

1.1 The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

1.2 Except as otherwise provided by these Conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval.

1.3 Where there is a conflict between a provision of any submitted document referred to in this Approval and the Conditions of this Approval, the Conditions in this Approval shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

1.4 Where there is a conflict between the listed submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

1.5 The requirements of this Approval are severable. If any requirement of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this Approval shall not be affected thereby.

1.6 The issuance of, and compliance with the conditions of, this Approval does not:

a) relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including, but not limited to, the obligation to obtain approval from the local conservation authority necessary to construct or operate the sewage Works; or

b) limit in any way the authority of the Ministry to require certain steps be taken to require the Owner to furnish any further information related to compliance with this Approval.

## 2. CHANGE OF OWNER

2.1 The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within **thirty (30) days** of the change occurring:

(a) change of Owner;

(b) change of address of the Owner;

(c) change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B17 shall be included in the notification to the District Manager; and

(d) change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C39 shall be included in the notification to the District Manager.

2.2 In the event of any change in ownership of the works, the Owner shall notify in writing the succeeding owner of the existence of this Approval,and a copy of such notice shall be forwarded to the District Manager.

2.3 The Owner shall ensure that all communications made pursuant to this condition will refer to this Approval's number.

## 3. OPERATIONS AND MAINTENANCE

3.1 The Owner shall ensure that at all times, the Works and related equipment and appurtenances which are installed or used to achieve compliance with this Approval are properly operated and maintained.

3.2 The Owner shall update the operations manual of the Works, within three (3) months of the issuance of this Approval, and submit it for Director's approval. The operations manual shall include, but not be necessarily limited to, the following information:

(a) operating procedures for routine operation of the Works;

(b) inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;

(c) repair and maintenance programs, including the frequency of repair and maintenance for the Works;

(d) contingency plans and procedures for dealing with potential spill, unacceptable odours, by-passes and any other abnormal situations and for notifying the District Manager;

(e) complaint procedures for receiving and responding to public complaints, including a reporting system which records what steps the Owner took to determine the cause of the complaint and what corrective measures were taken to alleviate the cause and prevent its recurrence;

(f) a list of equipment, material and personnel that shall be available at the Works or shall be called

to the Works to deal with situations mentioned in Condition 3.2 (d); and,

(g) a description of methods and procedures to be employed in situations mentioned in Condition 3.2 (d) above including restrictions on run-off from the ponds contact with exposed surfaces to prevent the generation of additional contaminated run-off while the remediation operations are underway.

3.3 The Owner shall maintain the operations manual up to date through revisions undertaken from time to time and retain a copy at the location of the Works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.

3.4 The Owner shall ensure that the spray irrigation system shall only operate during the Spray Irrigation Season. Outside the said period, spray irrigation activities are prohibited.

3.5 The Owner shall ensure that during the Spray Irrigation Season the outlet valves from the tile drainage system in the irrigation fields are maintained in the closed position.

3.6 The discharge of Effluent from the Works into the ATFL Drain is prohibited:

(a) during the operation of the spray irrigation system in the Spray Irrigation Season except for the month of October if Condition 3.7 (a) and the criteria for Effluent discharge from the Works as given in Table 1 are met;

(b) between April 16 to September 30;

(c) if the receiver is frozen or if there is the ability of the Effluent to freeze on the way to the receiver and cause flooding issues; and

(d) unless the criteria for Effluent discharged from the Works as given in Table 1 are met.

3.7 The Owner shall ensure that the discharge of Effluent from the Works into the ATFL Drain shall be limited to no more than:

(a) **10 litres per second** during the months of October and November (i.e. Fall);

(b) **17 litres per second** (if Total Phosphorus concentration of the Effluent is between 0.2 milligram per litre and 0.3 milligram per litre, inclusive); **25 litres per second** (if Total Phosphorus concentration of the Effluent is between 0.1 milligram per litre and less than 0.2 milligram per litre); and **50 litres per second** (if Total Phosphorus concentration of the Effluent is less than or equal to 0.1 milligram per litre), during the months of December, January and February (i.e. Winter);

(c) **3 litres per second** from March 1 to April 15 (i.e. Spring); and

(d) The flows for December, January and February will be adjusted weekly upon receipt of the Total

Phosphorus results from the weekly sampling carried out as per Table 2.

3.8 The Owner shall immediately stop the spray irrigation of the fields if:

(a) there is present a potential for surface run-off from the spray irrigation fields to enter any agricultural drain or ditch, including the ATFL Drain, as a result of spray irrigation in combination with rainfall; or,

(b) an offensive odour, which may cause an adverse effect as defined in Section 14 (1) of the Environmental Protection Act, is detectable as a result of operating the Works; or,

(c) an aerosol or mist migrating off property as a result of the spray irrigation.

3.9 The Owner shall inform the District Manager in writing providing time, date, cause of interruption as mentioned in Conditions 3.6, and 3.8 above, and the necessary remedial actions undertaken to prevent the event(s) leading to the interruption from being repeated, and obtain permission to resume operations of the Works.

3.10 The Owner shall maintain sewage levels in the approved ponds **below** the freeboard level of 0.5 metre at all times.

3.11 In the event that the sewage levels at the lagoons, Ponds 1 to 6, reach the 0.5 m freeboard elevation, the Owner shall truck sewage from the ponds to an approved sewage treatment plant to prevent potential spills to the environment.

## 4. EFFLUENT OBJECTIVES

4.1 The Owner shall use best efforts to operate the spray irrigation system with objectives that the Effluent constituents including $CBOD_5$, Total Nitrogen (Nitrate, Nitrite, Ammonia and TKN), Total Phosphorus, Soluble Phosphorus and Sulfates are effectively attenuated by trees, and/or other vegetation grown in the spray irrigation fields, before reaching the water table or adjacent streams.

## 5. EFFLUENT REQUIREMENTS

5.1 The Owner shall operate the Works in such a manner as to ensure that:

(a) except for pH and Dissolved Oxygen, the Monthly Average Concentrations of the material listed in Table 1 as Effluent quality parameters do not exceed their respective maximum Monthly Average Concentrations in the Effluent from the Works;

(b) the pH of the Effluent from the Works is within the range specified in Table 1; and

(c) the concentrations of Dissolved Oxygen in the Effluent from the Works does not fall below the effluent limit set in Table 1 for the said quality parameter.

5.2 The Director reserves the right to impose additional limitations on the Effluent discharge through an amendment of this Approval based on the monitoring data provided for the Works and receiver conditions.

| **Table 1 - *Effluent* Limits** | | |
|---|---|---|
| ***Effluent* Parameter** | **Maximum *Monthly Average Concentration*** (milligrams per litre) | **Maximum Waste Loading** (kilograms per day unless otherwise indicated) |
| Column 1 | Column 2 | Column 3 |
| $CBOD_5$ | 7.5 | - |
| Total Ammonia Nitrogen | 5.0 | - |
| Total Phosphorus* | 0.3 | Fall – 0.26<br>Winter – 0.43<br>Spring – 0.08 |
| Total Suspended Solids | 20.0 | - |
| | **Minimum *Daily Concentration*** (milligrams per litre) | |
| Dissolved Oxygen | 5.0 | |
| pH of the Effluent maintained between 6.0 to 9.5, inclusive, at all times. | | |

* means that the Total Phosphorous loading for the effluent discharge season to the ATFL Drain shall not exceed 30 kilograms.

5.3 For the purpose of determining compliance with and enforcing Effluent limits set in Table 1, an exceedance is deemed to have occurred when:

(a) a series of grab samples collected in the same calendar month and analyzed for an Effluent parameter for which a maximum Monthly Average Concentration is greater than the corresponding maximum Monthly Average Concentration mentioned above in Table 1;

(b) the concentration of Dissolved Oxygen is smaller than the minimum Daily Concentration specified in Table 1;

(c) The Individual Waste Loading of a parameter named in Column 1 of Table 1 exceed the corresponding maximum waste loading as set out in Column 3 of Table 1; or

(d) any single grab sample analyzed for pH exhibits a pH level outside of the range set out in Table 1.

5.4 The Owner shall cease discharge of the Effluent from the Works upon any exceedance of the parameters sampled as per Table 2 with their respective limits set out in Table 1.

5.5 The Owner shall cease the discharge of Effluent to the ATFL Drain during a discharge period, defined as

October 1 of one year to April 15 of the following year, if the discharge of Effluent will result or is likely to result in a Total Phosphorus loading to the ATFL Drain which is greater than 30 kilograms for that discharge period.

## 6. MONITORING AND RECORDING

6.1 For the days on which the spray irrigation system is operated the Owner shall conduct a visual inspection which shall include, but not limited to the following:

(a) a daily inspection of the spray irrigation field to ensure that no surface run-off is flowing directly to the agricultural drain as a result of spray irrigation alone or spray irrigation in combination with rainfall, nor that the applied wastewater accumulates at the surface of the irrigated area to create puddles of any size; and

(b) a daily inspection of the perimeter of the spray irrigation field to ensure that no aerosol or mist migrates off property.

6.2 The Owner shall use best efforts to operate the ponds such that Dissolved Oxygen concentration is at a minimum level of 2 milligrams per litre in all ponds during the Spray Irrigation Season or at a concentration that does not cause negative effects on the vegetation growth in the Spray Irrigation Fields.

6.3 The Owner shall for the purpose of maintaining the batch size to an equivalent depth of no more than 1.3 centimetre over the irrigated surface, install and maintain a continuous flow meter upstream of the spray irrigation system. The flow meter shall have an accuracy to within +/- 15% of the actual flowrate for the entire design range of the flow meter.

6.4 The Owner shall calibrate the flow meter as mentioned in Condition 6.3 at regular intervals not exceeding **one (1) year** to ensure that the flow meter meets the accuracy requirement specified herein.

6.5 At the end of each batch applied to the spray irrigation field, the Owner shall record the following information:

(a) the reading on the continuous flow meter;

(b) the date and period of application (hours);

(c) the location of the spray irrigated land sections; and

(d) the surface area to which they correspond.

6.6 **Seven (7) days** prior to the commencement of first discharge of Effluent to the ATFL Drain each year, the Owner shall notify the District Manager. The District Manager may vary the time required for notification as mentioned in this condition.

6.7 Prior to the discharge of Effluent from the Works into the ATFL Drain, grab water samples are to be

collected of the sewage in the pond which is to be discharged and analyzed for the parameters listed in Table 1, and during the discharge from the Works, grab water samples of the Effluent are to be collected and analyzed for the parameters and frequency listed in Table 2.

| **Table 2 - *Effluent* Monitoring** | |
|---|---|
| ***Effluent* Parameters** | **Minimum Frequency** |
| $CBOD_5$ | Weekly |
| *E. Coli* | Weekly |
| Dissolved Oxygen (DO) | Daily |
| Nitrate | Weekly |
| Nitrite | Weekly |
| pH (field) | Weekly |
| Phenolics | Weekly |
| Temperature (field) | Weekly |
| Total Ammonia Nitrogen (TAN) | Weekly |
| Total Kjeldahl Nitrogen (TKN) | Weekly |
| Total Phosphorus (TP) | Weekly |
| Total Suspended Solids (TSS) | Weekly |

6.8 The methods and protocols for sampling, analysis, and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

(a) the Ministry's Procedure F-10-1, “Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended from time to time by more recently published editions;

(b) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; and

(c) the publication "Standard Methods for the Examination of Water and Wastewater" (20th edition), as amended from time to time by more recently published editions.

6.9 The Temperature and pH of the Effluent shall be determined in the field at the time of sampling for total ammonia. The concentration of Un-ionized ammonia shall be calculated using the total ammonia concentration, pH and Temperature using the methodology stipulated in "Ontario's Provincial Water Quality Objectives" dated July 1994, as amended, for ammonia (Un-ionized).

6.10 The Owner shall continue with the soil, vegetation and groundwater monitoring which began with the

spray irrigation activities in 1995:

(a) one (1) soil sample shall be collected from the spray irrigation field once every **six (6) months**, that is before and immediately after each Spray Irrigation Season, and analyzed for sodium adsorption ratio (SAR), exchangeable sodium percentage (ESP), pH, nutrient amendment requirements.

(b) one (1) representative soil sample shall be collected from the spray irrigation field at the end of Spray Irrigation Season every **five (5) years** from the time at which the background groundwater quality was identified, and analyzed for Arsenic, Cadmium, Cobalt, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, and Zinc, all in accordance with the protocols and methods mentioned in Condition 6.8.

(c) an annual assessment by a qualified agronomist of the plant communities growing on the irrigation fields shall be conducted, and shall include, but not be limited to, an examination of: plant health as it relates to growth and foliage coloration; rooting depth; species mortality; replacement and replanting needs.

(d) three (3) sets of groundwater samples (1 + 2 replicates) shall be collected every **five (5) years** from the time at which the background groundwater quality was identified, and analyzed for Chloride, Dissolved Organic Carbon, *E. Coli* , Nitrogen (Nitrite, Nitrate, and Total Kjeldahl), Sulfate, Sulfide, and Total Dissolved Solids, all in accordance with the protocols and methods mentioned in Condition 6.8.

(e) monitoring requirements mention in Conditions 6.10 (a) to (d) maybe modified, reduced or eliminated in writing by the Director.

6.11 The Owner shall ensure that a log-book is maintained at the site at all times, which must be made available for inspection and copying by Ministry personnel. The log-book shall contain, but not be limited to, the following:

(a) results of inspection made in accordance to Conditions 6.1 (a) and (b);

(b) results of the daily measurements made in accordance with Condition 6.2;

(c) the fertilizer formula, application rate, state of application, and dates on which nutrients are supplied to the spray irrigation fields in addition to that provided by the irrigation effluent;

(d) for each batch of spray irrigation water in addition to recording as per Condition 6.5, the Owner shall ensure that ambient temperature and rainfall data from a weather station on-site or within a radius of 50 kilometres are also recorded for rainfall events during the Spray Irrigation Season; and

(e) any occurrence of unusual events.

6.12 Except for background groundwater quality data, the Owner shall retain for a minimum of **six (6) years** from the date of the reported activity or longer as required in writing by the District Manager, all records and information related to or resulting from the monitoring activities required by this Approval.

6.13 The background groundwater quality data shall be kept in perpetuity.

## 7. REPORTING

7.1 **Seven (7) days** prior to the commencement of first discharge of Effluent to the ATFL Drain each year, the Owner shall notify the District Manager. The District Manager may vary the time required for notification as mentioned in this condition.

7.2 The Owner shall report to the District Manager or designate, any exceedance of any parameter specified in Condition 5 orally, as soon as reasonably possible, and in writing within **seven (7) days** of the exceedance.

7.3 In addition to the obligations under Part X of the Environmental Protection Act, the Owner shall, within **ten (10) working days** of the occurrence of any spill, by-pass or loss of any product, by product, intermediate product, oils, solvents, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.

7.4 The Owner shall prepare and submit an annual performance report in a format acceptable to the District Manager no later than **May 31** of each year for each preceding spray irrigation and Effluent discharge period, defined as May 1 of one year until April 15 of the following year. The annual performance report shall contain, but shall not be limited to, the following information:

(a) a summary and interpretation of all effluent water quality and flow monitoring data and a comparison to the effluent limits and loading outlined in Condition 5, including an overview of the success and adequacy of the Works;

(b) a summary and interpretation of all monitoring and recording requirements as mentioned in Conditions 6.1, 6.7, 6.9 and 6.10;

(c) a description of any operating problems encountered and corrective actions taken;

(d) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;

(e) a summary of any Effluent quality assurance or control measures undertaken in the reporting period;

(f) a summary of the calibration and maintenance carried out on all Effluent monitoring equipment as

specified in Conditions 6.3 and 6.4;

(g) an assessment of nitrate impacts on the receiver. If the assessment shows an impact on the receiver, recommendations on a nitrate objective must be provided for the approval of the Director;

(h) a tabulation of the estimated volume of sewage trucked off-site in the reporting period, including dates and a summary of the locations to where the sewage was disposed of; and

(i) any other information the District Manager requires from time to time.

## 8. LIMITED OPERATIONAL FLEXIBILITY

8.1 The Owner may make modifications to the Works in accordance with the Terms and Conditions of this Approval and subject to the Ministry's "Limited Operational Flexibility Criteria for Modifications to Sewage Works ", included under Schedule B of this Approval, as amended.

8.2 Sewage works under Limited Operational Flexibility shall adhere to the design guidelines contained within the Ministry's publication "Design Guidelines for Sewage Works 2008", as amended.

8.3 The Owner shall ensure at all times, that the Works, related equipment and appurtenances which are installed or used to achieve compliance are operated in accordance with all Terms and Conditions of this Approval.

8.4 For greater certainty, the following are not permitted as part of Limited Operational Flexibility:

(a) Modifications to the Works that result in an increase of the approved Rated Capacity of the Works;

(b) Modifications to the Works that may adversely affect the approved effluent quality criteria or the location of the discharge/outfall;

(c) Modifications to the treatment process technology of the Works, or modifications that involve construction of new reactors (tanks) or alter the treatment train process design;

(d) Modifications to the Works approved under s.9 of the EPA, and

(e) Modifications to the Works pursuant to an order issued by the Ministry.

8.5 Implementation of Limited Operational Flexibility is not intended to be used for piecemeal measures that result in major alterations or expansions.

8.6 If the implementation of Limited Operational Flexibility requires changes to be made to the Emergency Response, Spill Reporting and Contingency Plan, the Owner shall, provide a revised copy of this plan to

the local fire services authority prior to implementing Limited Operational Flexibility.

8.7 For greater certainty, any modification made under the Limited Operational Flexibility may only be carried out after other legal obligations have been complied with, including those arising from the *Environmental Protection Act, Niagara Escarpment Planning and Development Act, Oak Ridges Moraine Conservation Act, Lake Simcoe Protection Act* and *Greenbelt Act.*

8.8 At least **thirty (30) days** prior to implementing Limited Operational Flexibility, the Owner shall complete a Notice of Modifications describing any proposed modifications to the Works and submit it to the District Manager.

8.9 The Owner shall not proceed with implementation of Limited Operational Flexibility until the District Manager has provided written acceptance of the Notice of Modifications or a minimum of **thirty (30) days** have passed since the day the District Manager acknowledged the receipt of the Notice of Modifications.

## SCHEDULE 'A'

1. Environmental Compliance Approval Application for Industrial Sewage Works submitted by Lesley Clarke, Walker Industries, and signed by Tim Murphy, Vice President Environmental Performance, All Treat Farms Limited, dated May 18, 2017, and all supporting documentation and information;

2. Environmental Compliance Approval Application for Industrial Sewage Works submitted by David Ellis, P. Eng., of Geosyntec Consultants Inc., and signed by George White, President, All Treat Farms Limited, dated July 13, 2012, and all supporting documentation and information;

3. Electronic correspondence from David Ellis, P. Eng., of Geosyntec Consultants Inc., to the Review Engineer dated July 10, 2013;

4. Electronic correspondence from Ms. Sarah Day, of MOE's Technical Support Section, West Central Office, to the Review Engineer dated July 10, 2013;

5. Contingency and Emergency Response Plan, dated March 20, 2013 and submitted to the Ministry on September 23, 2013, by Mr. Andrew Drury of All Treat Farms Limited;

6. Electronic correspondence from David Ellis, P. Eng., of Geosyntec Consultants Inc., to the Review Engineer dated October 09, 2013;

7. Electronic correspondence from Ms. Sarah Day, of MOE's Technical Support Section, West Central Office, to the Review Engineer dated October 29, 2013;

8. Operations & Maintenance Manual, prepared by Geosyntec Consultants International, Inc., dated September 24, 2014; and

9. All other supporting documentation and correspondence.

## SCHEDULE 'B'

### Limited Operational Flexibility Criteria for Modifications

### to Industrial Sewage Works

1. The modifications to sewage works approved under an Environmental Compliance Approval (Approval) that are permitted under the Limited Operational Flexibility (LOF), are outlined below and are subject to the LOF conditions in the Approval, and require the submission of the Notice of Modifications. If there is a conflict between the sewage works listed below and the Terms and Conditions in the Approval, the Terms and Conditions in the Approval shall take precedence.

1.1 Sewage Pumping Stations

a. Alter pumping capacity by adding or replacing equipment where new equipment is located within an existing sewage treatment plant site or an existing sewage pumping station site, provided that the modifications do not result in an increase of the sewage treatment plant Rated Capacity and the existing flow process and/or treatment train are maintained, as applicable.

b. Forcemain relining and replacement with similar pipe size where the nominal diameter is not greater than 1,200 mm.

1.2 Sewage Treatment Process

a. Installing additional chemical dosage equipment including replacing with alternative chemicals for pH adjustment or coagulants (non-toxic polymers) provided that there are no modifications of treatment processes or other modifications that may alter the intent of operations and may have negative impacts on the effluent quantity and quality.

b. Expanding the buffer zone between a sanitary sewage lagoon facility or land treatment area and adjacent uses provided that the buffer zone is entirely on the proponent’s land.

c. Optimizing existing sanitary sewage lagoons with the purpose to increase efficiency of treatment operations provided that existing sewage treatment plant rated capacity is not exceeded and where no land acquisition is required.

d. Optimizing existing sewage treatment plant equipment with the purpose to increase the efficiency of the existing treatment operations, provided that there are no modifications to the works that result in an increase of the approved Rated Capacity, and may have adverse effects to the effluent quality or location of the discharge.

e. Replacement, refurbishment of previously approved equipment in whole or in part with Equivalent Equipment, like-for-like of different make and model, provided that the firm

capacity, reliability, performance standard, level of quality and redundancy of the group of equipment is kept the same. For clarity purposes, the following equipment can be considered under this provision: pumps, screens, grit separators, blowers, aeration equipment, sludge thickeners, dewatering equipment, UV systems, chlorine contact equipment, bio-disks, and sludge digester systems.

1.3 Sewage Treatment Plant Outfall

a. Replacement of discharge pipe with similar pipe size provided that the outfall location is not changed.

1.4 Stormwater Management System

a. Modifications of stormwater management works to service the existing approved drainage area located within the site, provided that there is no increase in the average impervious area established in the original design and the discharges from the site will not exceed the attenuated flows established in the original design.

b. Installation of new oil grit separators.

1.5 Sanitary Sewers

a. Pipe relining and replacement with similar pipe size within the Sewage Treatment Plant site, where the nominal diameter is not greater than 1,200 mm.

1.6 Pilot Systems

a. Installation of pilot systems for new or existing technologies provided that:

i. any effluent from the pilot system is discharged to the inlet of the sewage treatment plant or hauled off-site for proper disposal,

ii. any effluent from the pilot system discharged to the inlet of the sewage treatment plant or sewage conveyance system does not significantly alter the composition/concentration of the influent sewage to be treated in the downstream process; and that it does not add any inhibiting substances to the downstream process, and

iii. the pilot system's duration does not exceed a maximum of two years; and a report with results is submitted to the Director and District Manager three months after completion of the pilot project.

2. Sewage works that are exempt from section 53 of the OWRA by O. Reg. 525/98 continue to be exempt and are not required to follow the notification process under this Limited Operational Flexibility.

3. Normal or emergency operational modifications, such as repairs, reconstructions, or other improvements

that are part of maintenance activities, including cleaning, renovations to existing approved sewage works equipment, provided that the modification is made with Equivalent Equipment, are considered pre-approved.

4. The modifications noted in section (3) above are not required to follow the notification protocols under Limited Operational Flexibility, provided that the number of pieces and description of the equipment as described in the Approval does not change.

Ontario

Ministry of
the Environment

# Notice of Planned Modification to Industrial Sewage Works

RETAIN COPY OF COMPLETED FORM AS PART OF THE LIMITED OPERATIONAL FLEXIBILITY APPROVAL AND SEND ORIGINAL TO THE DISTRICT MANAGER

## Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility

*(Insert the ECA number and issuance date, Schedule activity type (A or B) and notice number, which should start with "01" and consecutive numbers thereafter)*

| ECA number | Issuance Date (mm/dd/yy) | Schedule (A or B) | Notice number |
|---|---|---|---|
| | | | |

## Part 2 – Description of the modifications as part of the Limited Operational Flexibility

*(Attach a detailed description of the sewage works)*

Description shall include:
1. A detail description above of the modifications and/or operations to the sewage works (e.g. sewage work component, location, size, material, process name, etc.)
2. An assessment of the anticipated environmental effects (for Schedule B activities only)
3. Updated versions of, or amendments to, all relevant technical documents required by this ECA that are affected by the modifications as applicable, e.g. site plan, design brief, drawings, emergency and spill prevention plan, etc.

## Part 3 – Declaration by Professional Engineer

I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design:
1. Has been prepared or reviewed by a Professional Engineer who is licensed to practice in the Province of Ontario;
2. Has been designed in accordance with the Limited Operational Flexibility as described in the ECA;
3. Has been designed consistent with Ministry's Design Guidelines, adhering to engineering standards, industry's best management practices, and demonstrating ongoing compliance with s.53 of the Ontario Water Resources Act; and other appropriate regulations.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate

| Name (Print) | PEO License Number |
|---|---|
| | |
| **Signature** | **Date (mm/dd/yy)** |
| | |
| **Name of Employer** | |
| | |

## Part 4 – Declaration by Owner

I hereby declare that:
1. I am authorized by the Owner to complete this Declaration;
2. The Owner consents to the modification; and
3. This modifications to the sewage works are proposed in accordance with the Limited Operational Flexibility as described in the ECA.
4. The Owner has fulfilled all applicable requirements of the *Environmental Assessment Act*.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate

| Name of Owner (Print) | Name of Owner Representative (Print) |
|---|---|
| | |
| **Owner Representative's Signature** | **Date (mm/dd/yy)** |
| | |
| **Owner representative's title** | |
| | |

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

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in this Approval and the practice that this Approval is based on the most current document, if several conflicting documents are submitted for review. Condition 1.6 is included to emphasize that the issuance of this Approval does not diminish any other statutory and regulatory obligations to which the Owner is subject in the construction, maintenance and operation of the Works. The condition specifically highlights the need to obtain any necessary conservation authority approvals. The condition also emphasizes the fact that this Approval doesn't limit the authority of the Ministry to require further information.

2. Condition 2 is included to ensure that the Ministry records are kept accurate and current with respect to approved Works and to ensure that subsequent owners of the Works are made aware of this Approval and continue to operate the Works in compliance with it.

3. Condition 3 is included to require that the Works be properly operated and maintained in such a manner that the environment is protected. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner and made available to the Ministry. Such a manual is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the Owner's operation of the Works. The Condition also defines requirements for spray irrigation Works.

4. Condition 4 is imposed to establish non-enforceable Effluent quality objectives which the Owner is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs and before the compliance limits of Condition 6 are exceeded.

5. Condition 5 is imposed to ensure that the Effluent discharged from the Works meet the Ministry's effluent quality requirements thus minimizing environmental impact on the receiver.

6. Condition 6 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives and Effluent limits specified in this Approval and that the Works does not cause any impairment to the receiving body.

7. Condition 7 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.

8. Condition 8 is included to ensure that the Works are operated in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider. These Conditions are also included to ensure that a Professional Engineer has reviewed the proposed modifications and attests that the modifications are in line with that of Limited Operational Flexibility, and provide assurance that the proposed modifications comply with the Ministry's requirements stipulated in the Terms and Conditions of this Approval, MOE policies, guidelines, and industry engineering standards and best management practices.

**Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 8777-95JJE4 issued on November 7, 2014.**

*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:*

a. 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;
b. 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:*

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. 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

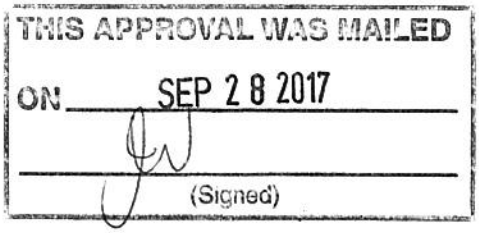
AND

The Director appointed for the purposes of Part II.1 of the Environmental Protection Act
Ministry of the Environment and Climate Change
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** 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) 326-5370 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 27th day of September, 2017




Fariha Pannu.

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

AA/

c: District Manager, MOECC Guelph District Office
Lesley Clarke, Walker Industries