# AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 5238-BSVRHU
Issue Date: October 2, 2020

Darling International Canada Inc.
485 Pinebush Road, No. 101
Cambridge, Ontario
N1T 0A6

Site Location: Rothsay Moorefield Plant
8406 Wellington County Road #7, Moorefield
Lot 8 and 9, Concession 13
Mapleton Township, County of Wellington

*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:*

- one (1) biological oxidation system, designated Bio1, serving an existing rendering facility having a maximum total processing capacity of 57.8 tonnes per hour of raw materials that receives Animal By-products and produces during times of maximum production up to 27.6 tonnes per hour of finished protein meal and tallow combined at typical moisture content.

  The system consists of a common pre-conditioning chamber for humidification of supply air, a reactor vessel consisting of 5 separate cells containing organic or inorganic media operating in parallel, an automated media irrigation system and fans, exhausting into the atmosphere at a volumetric flow rate of 109 cubic metres per second through a common stack, having an exit diameter of 2.63 metres extending 30 metres above grade. The system will treat the exhaust from the rendering operations and wastewater treatment building. Under normal operation, the Non-Condensable Gas (NCG) and High Intensity Odour (HIO) streams from the rendering process will be discharged to the system via an existing three stage scrubbing system consisting of a venturi scrubber and two packed towers in series, and an existing two stage scrubbing system consisting of a venturi scrubber and a packed tower in series;

- one (1) Non-condensable Gas (NCG) and High Intensity Odour (HIO) pre-incineration system equipped with a cyclonic wet collector scrubber, a blower and a mist eliminator, processing non-condensable gas, originating from five (5) shell and tube condensors, and HIO gases at a maximum volumetric flow rate of 4.73 actual cubic metres per second. The incineration system will remain in place for contingency purposes. During operation of this system, the treated non-condensable and HIO gases are scrubbed through a mesh filter prior to being incinerated in the boilers. During a failure of the boiler or during start up of the boiler and during shut down of the boiler, the non-condensable and HIO gases are discharged to the biological oxidation system via an existing three stage scrubbing system; a venturi scrubber and two packed towers in series;

- one (1) boiler (B1) used to fire natural gas or tallow with No. 2 oil standby located in the boiler room, rated at a maximum heat input of 59.6 gigajoules per hour, having a provision to handle a maximum of 3.3 cubic metres per second of non-condensable and HIO gases, equipped with three (3) tube and shell type heat recovery units arranged in series for recovery of heat from the exhaust gases for boiler combustion air pre-heat and boiler feedwater and make-up water pre-heat, exhausting into the atmosphere at a maximum volumetric flow rate of 7.98 actual cubic metres per second, through a stack, having an exit diameter of 0.61 metre, extending 2.0 metres above the roof and 12.0 metres above grade;

- one (1) boiler (B2) used to fire natural gas or tallow with No. 2 oil standby located in the boiler room, rated at a maximum heat input of 52.6 gigajoules per hour, equipped with one (1) tube and shell type heat recovery unit for recovery of heat from the exhaust gases for boiler combustion air pre-heat, exhausting into the atmosphere at a maximum volumetric flow rate of 7.47 actual cubic metres per second, through a stack, having an exit diameter of 0.90 metre, extending 6.0 metres above the roof and 16.0 metres above grade;

- one (1) boiler (B3) used to fire natural gas or tallow with No. 2 oil standby located in the boiler room, rated at a maximum heat input of 54.8 gigajoules per hour, having a provision to handle a maximum of 1.42 cubic metres per second of non-condensable and HIO gases, equipped with one (1) tube and shell type heat recovery unit for recovery of heat from the exhaust gases for boiler combustion air pre-heat, exhausting into the atmosphere at a maximum volumetric flow rate of 10.1 actual cubic metres per second, through a stack, having an exit diameter of 1.1 metres, extending 7.4 metres above the roof and 17.4 metres above grade;

- one (1) boiler (B4) fired with natural gas located in the boiler room, rated at a maximum heat input of 23.33 gigajoules per hour, exhausting into the atmosphere at a maximum volumetric flow rate of 2.13 cubic metres per second through a stack, having an exit diameter of 0.61 metre, extending 2.0 metres above the roof and 12.0 metres above grade;

- one (1) natural gas fired water heater (WH) located in the truck wash building, rated at a maximum heat input of 0.6 gigajoules per hour, exhausting into the atmosphere at a maximum volumetric flow rate of 0.11 cubic metre per second through a stack, having an exit diameter of 0.25 metre, extending 3.7 metres above the roof and 9.4 metres above grade;

- one (1) aboveground diesel fuel storage tank (DT) with a volume capacity of 60 cubic metres, exhausting passively into the atmosphere;

- one (1) horizontal gasoline storage tank (GT) with a volume capacity of 1.36 cubic metres, exhausting into the atmosphere through a stack extending 1.07 metres above grade;

- one (1) No. 2 fuel oil vertical storage tank (OT) with a volume capacity of 109 cubic metres. The tank exhausts passively into the atmosphere through a stack, having an exit diameter of 7.6 centimetres, extending 8.23 metres above grade;

- five (5) vertical tallow storage tanks (TT). Four (4) tanks, with a volume capacity of 114.7 cubic metres each, and one (1) tank with a volume capacity of 337 cubic metres. Each tank exhausts passively into the atmosphere through a stack, each having an exit diameter of 7.6 centimetres, extending 1.83 metres above the roof and 10.36 metres above grade;

- three (3) cooling towers (CT1, CT2 and CT3), each with a combined cooling water capacity of 22.16 gigajoules per hour, each using well water and/or the treated water in Lagoon No. 1 as cooling water and each exhausting to the atmosphere at a maximum volumetric flow rate of 99.3 cubic metres per second through a 3.47 metres diameter cell, each extending 14.3 metres above grade;

- one (1) truck storage building, adjacent and directly connected to the raw material receiving building and used to enclose a maximum of twenty-five (25) incoming raw material trucks or trailers of offal, bone, dead stock, feathers or hog air, equipped with four (4) truck doors for entry and exit of the trucks and trailers and kept under negative pressure, exhausting as follows:

    - approximately 19 cubic metres per second cascaded to the raw material receiving building which is in turn routed to the biological oxidation system for treatment before exhausting into the atmosphere through the biological oxidation system exhaust stack at 30 metres above grade; and

    - approximately 9.5 cubic metres per second routed to the combustion air intake of boilers B1 and B3;

all in accordance with Schedule A.

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

1. "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 prepared by GHD Limited dated October 28, 2015 and February 20, 2020, both signed by Michael Masschaele.

2. "Animal By-products" means materials, including deadstock as defined in Disposal of Deadstock regulation under the Food Safety and Quality Act, that are permitted to be processed in the Facility.

3. "Approval" means this entire Environmental Compliance Approval and any Schedules to it.

4. "Boilers" means the boilers B1, B2 and B3 described in this Approval and in the supporting documentation referred to herein, to the extent approved by this Approval.

5. "Company" means Darling International Canada Inc. 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.

6. "Cooling Towers" means the cooling towers CT1, CT2 and CT3 described in this Approval and in the supporting documentation referred to herein, to the extent approved by this Approval.

7. "Director" means a person appointed by the Minister pursuant to section 5 of the EPA.

8. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Facility is geographically located.

9. "Environmental Assessment Act" means the Environmental Assessment Act, R.S.O. 1990, c.E.18, as amended.

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

11. "Equipment" means equipment or processes described in the ESDM Report, this Approval and in the Schedules referred to herein and any other equipment or processes.

12. "Facility" means the entire operation located on the property where the Equipment is located.

13. "Management Practice" means a set of documents that provides written instructions to staff of the Company.

14. "Manager" means the Manager, Technology Standards Section, Technical Assessment and Standards Development Branch of the Ministry, or any other person who represents and carries out the duties of the Manager, as those duties relate to the conditions of this Approval.

15. "Manual" means a document or a set of documents that provides written instructions to staff of the Company.

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

17. "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. It also means the Noise Control Measures outlined in Schedule D.

18. "O. Reg. 419/05" means the Ontario Regulation 419/05, Air Pollution – Local Air Quality, as amended.

19. "Odour Control Equipment" means the odour control equipment, used to treat the air in the Facility before the air is discharged into the atmosphere.

20. "Odour Management Plan" means a document which describes the measures to minimize odour emissions from the Facility and/or Equipment.

21. "Odour Performance Limit" means the maximum 10-minute average concentration of odour at the most impacted Sensitive Receptor, computed in accordance with Schedule C, resulting from the operation of the Facility, including fugitive emissions, of not greater than 1.0 odour unit under all atmospheric conditions.

22. "ORP" means oxidation-reduction potential of the scrubbing solution.

23. "PLC" means the Public Liaison Committee established for the dissemination, consultation, review and exchange of information relevant to the operation of the Facility,and consists of stakeholders to the extent approved by this Approval;

24. "Point of Impingement" has the same meaning as in section 2 of O. Reg. 419/05.

25. "Point of Reception" means Point of Reception as defined by Publication NPC-300.

26. "Pre-Test Information" means the information outlined in Section 1 of the Source Testing Code.

27. "Publication NPC-233" means the Ministry Publication NPC-233, "Information to be Submitted for Approval of Stationary Sources of Sound", October, 1995, as amended.

28. "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.

29. "Sensitive Receptor" means any location where there are human activities such as residences, nursing homes, daycare facilities, hospitals, schools, parklands, recreational facilities, play grounds, commercial plazas and office buildings.

30. "Source Testing Code" means the Source Testing Code, Version 2, Report No. ARB-66-80, dated November 1980, prepared by the Ministry, as amended.

31. "Source Testing" means sampling and testing to measure odour emissions as required under this Approval from the biological oxidation exhaust system under process conditions which represent a maximum operating range within the approved operating range of the Facility.

*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. PERFORMANCE CONDITIONS

1. By April 1, 2022, the maximum 10-minute average concentration of odour at a Sensitive Receptor, resulting from the operation of the Facility, including fugitive emissions, shall not be greater than the Odour Performance Limit.

2. The Company shall submit to the District Manager and the Director for review, an Odour Management Plan that includes measures in place and proposed, to meet the Odour Performance Limit at the Sensitive Receptors, no later than six (6) months from the date of Approval.

3. The Odour Management Plan shall include:

    a. Facility and process descriptions including a list of potential sources of odour and the Odour Control Equipment;

    b. Review of feasible odour control technologies;

    c. best management practices described in Ministry's Best Management Practices for Industrial Sources of Odour to ensure the effective implementation of the odour impact reduction measures, including:

        i. periodic preventative activities and their frequency;

        ii. inspection and maintenance procedures;

        iii. monitoring initiatives; and

        iv. record keeping practices for odour complaints and steps taken to address each complaint.

4. The Company shall:

    a. update and revise the Odour Management Plan within three (3) months of the implementation of any proposed modifications that may impact odour emissions;

    b. review and evaluate once every twelve (12) months from the date of this Approval, or at a frequency directed or agreed to in writing by the District Manager, the Odour Management Plan for the control of odour emissions;

c. record the results of each annual Source Testing results, review, and evaluation, and update the Odour Management Plan accordingly;

d. maintain the updated Odour Management Plan at the Facility and make it available to the Ministry staff upon request; and

e. submit an electronic copy of the updated Odour Management Plan to the District Manager annually before March 31 of each calendar year, or as otherwise directed by the District Manager.

5. The Company shall record, and retain such records, each time a specific preventative and odour impact reduction measure described in the Odour Management Plan is implemented .

6. The operating temperature in the combustion zone of the boilers B1 and B3, as recorded by the continuous temperature monitors, shall not be less than 900 degrees Celsius for a residence time not less than 0.75 second when the boilers are combusting non-condensable and HIO gases.

## 2. MONITORING

1. The Company shall monitor the following physical parameters of the biological oxidation system:

   a. process air flow through each cell;

   b. differential pressure across media bed in each cell;

   c. media temperature in each cell;

   d. inlet air temperature (after pre-conditioning chamber);

   e. process air relative humidity (after pre-conditioning chamber); and

   f. water flow of both the humidification water (pre-conditioning chamber) and the media irrigation water.

## 3. CONTINUOUS MONITORING

1. The Company shall, conduct and maintain a program, to monitor and record continuously the operating temperatures of the boiler (B1) and boiler (B3) when non-condensable and HIO gases are being incinerated in the boilers. The continuous temperature monitor shall be equipped with a continuous data recorder and shall comply with the requirements outlined in Schedule B.

## 4. OPERATION AND MAINTENANCE

1. The Company shall ensure that the Equipment, the scrubbers and the Facility are properly operated and maintained at all times. The Company shall:

    a. have prepared, and update as necessary, a Manual outlining the operating procedures for the Facility that relate to odour and noise, as well as the operating procedures and a maintenance program for the Equipment and the scrubbers in accordance with good engineering practice, including:

        i. routine and emergency operating and maintenance procedures recommended by the Equipment suppliers and the scrubber suppliers, including operating procedures for the Facility that relate to odour and noise during equipment malfunction, maintenance, power outages, by-passes and other emergency or abnormal operating conditions and procedures for notifying the Ministry of such events;

        ii. frequency of inspecting the preconditioning unit and biofilter media;

        iii. frequency of inspecting and cleaning of the mist eliminator and packed tower scrubbers when in use;

        iv. frequency of inspection of the flow rate, ORP and pH value of the scrubbing solution in packed tower scrubbers when in use;

        v. tracking system to determine the usage rate of chlorine dioxide, sodium hypochlorite or sulphuric acid in the scrubbers;

        vi. tracking system to determine the production rate of finished products;

        vii. instructions for any record keeping activities relating to the operation and maintenance of the Equipment and the odour and noise related activities at the Facility;

        viii. all appropriate measures to minimize noise and odour emissions from all potential sources, including but not be limited to unloading and raw material storage procedures; management procedures to ensure that the trailers containing Animal By-products with the highest potential for odour are unloaded first and the raw materials immediately transferred to receiving pits and/or stored within the facility under negative pressure, and processed as quickly as practical; and a contingency plan to deal with the storage of raw materials when the Facility is shut down; and

        ix. operational procedures to adequately cover the raw materials in the trailers with tarps to alleviate fugitive odour emissions, when the outside temperature is above zero degree Celsius;

b. have prepared, prior to receiving dead stock, and update, as necessary, a Management Practice outlining the operating procedures pertaining to dead stock to be included in the Manual, having:

   i. routine operating and maintenance procedures in accordance with good engineering practices;

   ii. emergency procedures;

   iii. procedures for any record keeping activities relating to operation and maintenance;

   iv. a contingency plan to deal with the storage of dead stock when the Facility is shut down;

   v. all appropriate measures to minimize odorous emissions from all potential sources;

c. implement the recommendations of the Management Practice;

d. ensure that staffing, training of staff, process controls, quality assurance, quality control procedure of or in relation to the Facility are adequate to achieve compliance with this Approval;

e. maintain, at the Facility, an inventory of critical spare parts for the Equipment, that can be installed in the event of failure. A list of critical spare parts shall be documented in the Manual;

f. implement and update, as necessary, the protocol finalized with the District Manager for the procedures for responding to complaints. The protocol shall include procedures for recording environmental complaints, including:

   i. a description, time and date of each incident;

   ii. wind direction at the time of the incident; and

   iii. a description of the measures taken to address the cause of the incident and to prevent a similar occurrence in the future;

g. implement the procedures of the operating and maintenance Manual.

2. The Company shall, whenever the outside temperature is above zero degrees Celsius, provide all raw material trailers with tarps and have the raw materials covered by the tarps in accordance with the operational procedures in the Manual to alleviate fugitive odour emissions.

3. The Company shall keep all windows in the production areas fully closed whenever there is unprocessed material in the Facility.

4. The Company shall keep all doors in the Truck Storage Building and the production areas of the Facility fully closed, except when being used for necessary personnel and/or vehicle entrance and exit, whenever there is unprocessed material in the Facility.

5. The Company shall ensure that the Truck Storage Building and all production areas of the Facility are operated under negative pressure.

## 5. SOURCE TESTING

1. The Company shall perform Source Testing to determine the rate of emission of odour from the biological oxidation system exhaust.

2. The Company shall quantify the rates of emission of odour from the Boilers when the exhaust of the Truck Storage Building is used as combustion air intake of the Boilers and when the Boilers are firing on tallow.

3. The Company shall quantify fugitive odour emissions from the Facility. The fugitive sources which the emissions to be quantified include, but should not be limited to, the following:

    a. loaded trucks waiting to be dumped and emptied trucks in the storage yard;

    b. biological treatment tanks and three (3) lagoons in the wastewater treatment system;

    c. tank vents from the five (5) outdoor tallow storage tanks; and

    d. one (1) feather meal silo.

4. The Company shall submit to the Manager a test protocol, including the Pre-Test Information for fugitive odour emission measurements, odour emission measurements of the Boilers and the Source Testing required by the Source Testing Code. The Company shall finalize the test protocol in consultation with the Manager.

5. The Company shall not perform Source Testing, boilers odour emission measurements and fugitive odour emission measurements required under this Approval until the Manager has accepted the test protocol.

6. The Company shall complete the Source Testing, boilers odour emission measurements as well as fugitive odour emission measurements not later than three (3) months after acceptance of the test protocol by the Manager, or within a period as directed by the Manager or the District Manager.

7. The Company shall notify the District Manager and the Manager in writing of the location, date and time of any impending Source Testing, boilers odour emission measurements and fugitive odour emission measurements required by this Approval, at least fifteen (15) days prior to the Source Testing, boilers odour emission measurements and fugitive odour emission measurements.

8. The Company shall submit all reports on the Source Testing, boilers odour emission measurements and fugitive odour emission measurements to the District Manager and the Manager not later than two (2) months after completing the Source Testing. The report shall be in the format described in the Source Testing Code, and shall also include, but not be limited to:

    a. an executive summary;

    b. an updated emission inventory;

    c. records of weather conditions such as ambient temperature and relative humidity, all operating conditions of the Facility including the hourly processing rate of the material and operating temperatures of the boilers, and the operating conditions of the biological oxidation system and the Boilers;

    d. identification on a map, and in a table, of all of the Sensitive Receptor locations;

    e. reporting the quantification of the odour removal efficiencies of the inorganic and organic media in the biological oxidation system; and

    f. the results of dispersion calculations taking into account point and fugitive odour emissions, indicating the maximum 10-minute average concentration for odour at the Point of Impingement and at the most impacted Sensitive Receptor computed in accordance with Schedule C;

9. The Director may not accept the results of the Source Testing if:

    a. the Source Testing Code or the requirements of the Manager were not followed; or

    b. the Company did not notify the District Manager and the Manager of the Source Testing, boilers odour emission measurements and/or fugitive odour emission measurements; or

    c. the Company failed to provide a complete report on the Source Testing, boilers odour emission measurements and fugitive odour emission measurements.

10. If the Director does not accept the results of the Source Testing, boilers odour emission measurements and fugitive odour emission measurements, the Director may require re-testing.

11. The Company shall perform, in consultation with the District Manager, subsequent annual Source Testing to determine the rates of emission of odour from the biological oxidation system exhaust in accordance with Condition No. 5.1, boilers odour emission measurements in accordance with Condition No. 5.2, as well as fugitive odour emission measurements in accordance with Condition No. 5.3 above, once during each year of operation.

12. The Director may not require subsequent annual testing of part of the fugitive odour emission measurements if the results of the Source Testing, the boilers odour emission measurements and/or the fugitive odour emission measurements indicate that the environmental impact from the contaminants and/or the point and/or fugitive sources is insignificant and/or that the emissions from boilers and/or the fugitive sources have already been sufficiently characterized as determined by the Director.

## 6. NOTIFICATION OF COMPLAINTS

1. The Company shall notify the District Manager and the PLC in writing, of each odour and/or noise complaint received by the Company within two (2) business days, in the format used by the Company as detailed in the Company's Public Complaint Form, as revised April 9, 2018. Changes to the Company's Public Complaint Form shall be as directed or agreed to in writing by the District Manager.

2. The Company shall notify the Ministry within two (2) business days from when the occurrence of particulate matter deposits resulting from the operation of the Cooling Towers are revealed.

## 7. RECORD RETENTION

1. 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 required by this Approval. These records as well as the Manual including Management Practice shall be made available to staff of the Ministry upon request. The Company shall retain:

    a. all records on the maintenance, repair and inspection of the Equipment, including scrubbers;

    b. all records of the following:

        i. process air flow through each cell;

        ii. differential pressure across media bed in each cell;

        iii. media temperature in each cell;

        iv. inlet air temperature (after pre-conditioning chamber); and

v. water flow of both the humidification water (pre-conditioning chamber) and the media irrigation water.

c. daily records of process air relative humidity (after the pre-conditioning chamber);

d. all records of fan failure (no process air flow) and pump failure (no humidification water flow);

e. usage records of sodium hypochlorite, chlorine dioxide or sulphuric acid in the scrubbers;

f. all records on the amounts of incoming raw material with potential odour impact, on a daily basis;

g. all records of incoming dead stock on a daily basis;

h. all records on the production rate of finished products;

i. all measures taken to minimize odour emissions from all potential sources; and

j. all records on the environmental complaints.

## 8. NOISE

1. The Company shall:

   a. implement the Noise Control Measures detailed in Schedule D of this Approval;

   b. ensure that the noise emissions from the Facility comply with the limits set in Ministry Publication NPC-300; and

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

## 9. DISTRICT NOTIFICATION

1. Prior to the replacement of biological oxidation system media, the Company shall notify the District Manager in writing at least thirty (30) days prior to the intended media replacement date. District Manager notification must include:

   a. the cell which is undergoing the media replacement;

   b. the estimated date(s) that the media replacement is taking place; and

c. measures to minimize the emission of odour during and following media replacement, including but not limited to restoring the inorganic media.

## 10. PUBLIC LIAISON COMMITTEE

1. The Company shall use its best efforts to establish and maintain a PLC for the Facility.The PLC shall serve as a forum for the dissemination, consultation, review and exchange of information relevant to the operation of the Facility,including process operations, maintenance, complaints resolution and any subsequent applications for approval under the EPA.

2. The Company shall,

   a. in consultation with the PLC, develop a Terms of Reference for the PLC that will describe how the PLC will operate and carry out its functions. The Terms of Reference shall include a dispute resolution strategy to resolve issues and disagreements between the PLC and the Company.Any changes to the Terms of Reference for the PLC shall be made by the PLC;

   b. in consultation with the PLC, determine the appropriate meeting frequency and review it on an annual basis;

   c. allow the PLC reasonable access to the Facility and Company's consultants' reports relating to the operation of the Facility for the purpose of carrying out it's objective and mandate;

   d. invite representation from the following groups to participate in the PLC:

      i. home/business owners within 1,000 metres of the Facility or as directed by the District Manager; and

      ii. Guelph District Office of the Ministry as an optional member;

3. The Company,with approval from the Director and District Manager,may dispense with the PLC if, after a period of time and after giving sufficient notice, there is no interest from the public in continuing with the PLC.The need for a PLC shall be reviewed by the Company on a yearly basis.

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

1. Conditions Nos. 1 to 3, inclusive, and No. 8 are included to provide the minimum performance requirements considered necessary to prevent an adverse effect resulting from the operation of the Facility.

2. Conditions No. 4 is included to emphasize that the Equipment and the Facility must be maintained and operated according to a procedure that will result in compliance with the EPA, the regulations and this Approval.

3. Conditions No. 5 is included to require the Company to gather accurate information so that compliance with the EPA, the regulations and this Approval can be verified.

4. Condition No. 6 is included to require the Company to notify the Ministry so that the environmental impact and subsequent compliance with the EPA, the regulations and this Approval can be verified.

5. Condition No. 7 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. Condition No. 9 is included to require the Company to notify the District Manager of the replacement of the biological oxidation system media.

7. Condition No. 10 is included to require the Company to properly address environmental issues that may arise from the operation of the Facility and to minimize the impact on the environment.

**SCHEDULE A**

**Supporting Documentation**

1. Application for a Certificate of Approval (Air), dated April 29, 2005 and signed by Jim Long, Maple Leaf Foods Inc., along with the Report Number 28163 dated April 28, 2005 prepared by Pinchin Environmental Limited, the CD-ROM received June 17, 2005 from Pinchin Environmental Limited with the ISC-Prime dispersion model runs backed-up, the additional information provided by Pinchin Environmental Limited on behalf of Maple Leaf Foods Inc., dated June 20, 2005, August 30, 2005, September 1, 2005 and signed by Paul Geisberger, P.Eng., and all the information relied upon the issuance of the Certificate of Approval (Air) Number 6063-5W4QA3 dated June 18, 2004.

2. Application for Certificate of Approval (Air & Noise), dated February 2, 2006 and signed by Anne Tennier, P.Eng., Maple Leaf Foods Inc., and all supporting information associated with the application including additional information provided by Pinchin Environmental Ltd. on behalf of Maple Leaf Foods Inc., dated April 3, 2006 and signed by Paul Geisberger, P.Eng.

3. Application for Approval (Air & Noise), dated January 25, 2007 and signed by Dave Turton, Maple Leaf Foods Inc., and all supporting information associated with the application including additional information provided by Pinchin Environmental Ltd. on behalf of Maple Leaf Foods Inc., dated February 7, 2007 and signed by Paul Geisberger, P.Eng., and the additional information provided in an email sent by Paul Geisberger, P.Eng., of Pinchin Environmental Ltd. on May 14, 2007.

4. Application for Approval (Air & Noise), dated January 22, 2008 and signed by Anne Tennier, P.Eng., Maple Leaf Foods Inc., and all supporting information associated with the application including additional information provided by Pinchin Environmental Ltd. on behalf of Maple Leaf Foods Inc., dated March 3, 2008, March 13, 2008, March 18, 2008 and signed by Paul Geisberger, P.Eng.

5. Application for Approval (Air & Noise), dated July 20, 2009 and signed by Anne Tennier, P.Eng., Maple Leaf Foods Inc., and all supporting information associated with the application including the Emission Summary and Dispersion Modelling Report provided by ENVIRON EC (CANADA) Inc. on behalf of Maple Leaf Foods Inc., dated May 26, 2009 and signed by Paul Geisberger, P.Eng.

6. Application for Approval (Air & Noise), dated September 8, 2017, signed by John Bayliss and submitted by the Darling International Canada Inc.

7. Emission Summary and Dispersion Modelling Report, prepared by Paul Geisberger, Ramboll Canada Inc. and dated September 8, 2017.

8. Acoustic Assessment Report entitled Acoustic Assessment Report prepared by GHD, dated October 28, 2015 and signed by Michael Masschaele.

9. Emission Summary and Dispersion Modelling Report, prepared by Paul Geisberger, Ramboll Environ Canada Inc. and dated February 21, 2020.

10. Acoustic Assessment Report, prepared by Michael Masschaele, GHD Limited and dated February 20, 2020.

**SCHEDULE B**

## Continuous Temperature Monitoring System

**PARAMETER:**
Temperature

**LOCATION:**
The sample point for the continuous temperature monitor in boiler (B1) shall be located at the outlet of the combustion chamber at a point corresponding to 0.75 seconds residence time or more. The sample point for the continuous temperature monitor in boiler (B3) shall be at the outlet of the combustion chamber at a point where temperature and residence time are maximized.

**PERFORMANCE:**
The continuous temperature monitor shall meet the following minimum performance specifications for the following parameters:

| PARAMETERS | SPECIFICATION |
|---|---|
| Type | shielded "K" type thermocouple, or equivalent |
| Accuracy | ± 1.5 percent of the minimum gas temperature |

**DATA RECORDER:**
The data recorder must be capable of registering continuously the measurement of the monitor without a significant loss of accuracy and with a time resolution of 1 minutes or better.

**RELIABILITY:**
The monitor shall be operated and maintained so that accurate data is obtained during a minimum of 95 percent of the time for each calendar quarter.

**SCHEDULE C**

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

**CALCULATE ONE-HOUR AVERAGE CONCENTRATION**

The one-hour average concentration of odour at the most impacted Sensitive Receptor shall be calculated using the detailed procedure described as follows:

1. Calculate one-hour average concentration of odour at the most impacted Sensitive Receptor at which the highest concentration occurs in employing AERMOD 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;

2. 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; and

3. Record and 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 in a histogram. The histogram 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 maximum 10-minute average concentration of odour at the Sensitive Receptor will be considered to be the maximum odour concentration corresponding to 99.5% of the time in the 5 year modelling period at the most impacted Sensitive Receptor. If elimination of meteorological anomalies in accordance with the section 6.5 of the ministry's document titled "Air Dispersion Modelling Guideline for Ontario" dated February 2017, as amended, is considered before considering frequency, only those anomalies per year of meteorology over the full modelling grid as required under section 14 of O. Reg. 419/05 shall be removed.

4. Use the following formula to convert and record one-hour average concentrations at the Point of Impingement and at the most impacted Sensitive Receptor to 10-minute average concentrations:

$$X_{10min} = X_{60min} * 1.65$$

where $X_{10min}$ = 10-minute average concentration

$X_{60min}$ = one-hour average concentration

(Equation: X Subscript 10 min Baseline equals X Subscript 60 min Baseline times 1.65, where X Subscript 10 min Baseline equals 10-minute average concentration and X Subscript 60 min Baseline equals one-hour average concentration.)

**SCHEDULE D**

**Noise Control Measures**

**Silencers**

- four (4) silencers, one for each of the Blower Building Sidewall Exhausts EF-9, EF-10, EF-11 and EF-12, 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) | 9 | 12 | 22 | 28 | 27 | 21 | 18 | 14 |

- two (2) silencers, one for each of the Blower Building Intake Louvres 1 & 2, 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) | 7 | 13 | 23 | 28 | 26 | 20 | 17 | 14 |

- four (4) silencers, one for each of the Blower Intake Ducts, 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) | 11 | 34 | 28 | 25 | 23 | 20 | 6 | -- |

**Barriers**

- one (1) 3.1 metres high W-shaped acoustic barrier wall (with a total length of approximately 15 metres) located on the rooftop of the Biofilter Building, positioned around and approximately 1 metre from Biofilter Fans BF-01 & BF-02, as per Figure 4 of the Acoustic Assessment Report, continuous without holes, gaps and other penetrations, and having a surface mass density of at least 10 kilograms per square metre.

- one (1) 3.1 metres high W-shaped acoustic barrier wall (with a total length of approximately 15 metres) located on the rooftop of the Biofilter Building, positioned around and approximately 1 metre from Biofilter Fans BF-03 & BF-04, as per Figure 4 of the Acoustic

Assessment Report, continuous without holes, gaps and other penetrations, and having a surface mass density of at least 10 kilograms per square metre.

- one (1) 3.1 metres high L-shaped acoustic barrier wall (with a total length of approximately 11 metres) located on the rooftop of the Biofilter Building, positioned around and approximately 1 metres from Biofilter Fan BF-05, as per Figure 4 of the Acoustic Assessment Report, continuous without holes, gaps and other penetrations, and having a surface mass density of at least 10 kilograms per square metre.

**Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 0571-ASHJTG issued on February 13, 2018.**

*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 Environmental Bill of Rights, 1993, the Minister of the Environment, Conservation and Parks, within 15 days after receipt of this Notice, require a hearing by the Tribunal. The Minister of the Environment, Conservation and Parks 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:*

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*<br>Environmental Review Tribunal<br>655 Bay Street, Suite 1500<br>Toronto, Ontario<br>M5G 1E5 | AND | The Minister of the Environment,<br>Conservation and Parks<br>777 Bay Street, 5th Floor<br>Toronto, Ontario<br>M7A 2J3 | AND | The Director appointed for the purposes of Part II.1 of the Environmental Protection Act<br>Ministry of the Environment,<br>Conservation and Parks<br>135 St. Clair Avenue West, 1st Floor<br>Toronto, Ontario<br>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**

*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 https://ero.ontario.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 2nd day of October, 2020

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

ML/

c: District Manager, MECP Guelph District Office
Paul Geisberger, P.Eng., Ramboll Canada Inc.