

#### ENVIRONMENTAL COMPLIANCE APPROVAL NUMBER A-500-7090033587 Version: 1.0 Issue Date: December 11, 2020

Pursuant to section 20.3 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 and subject to all other applicable Acts or regulations this Environmental Compliance Approval is issued to:

Sun-Brite Foods Inc.

34 COUNTY ROAD 1532 COUNTY RD 34, RUTHVEN, ON LEAMINGTON ONTARIO N0P 2G0

*For the following site:* 

Site # 1 - Sewage Works 1532 County Road 34 Part Lot 10, Concession 3, Eastern Division Town of Kingsville, County of Essex Site # 2 - Spray Irrigation Field Part Lots 8 and 9, Concession 3, Eastern Division Town of Kingsville, County of Essex

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s) 0652-AEHQ7N, issued on March 29, 2017.

# 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:

sewage Works for the collection, transmission, treatment and disposal of treated process effluent, noncontact cooling water and stormwater runoff, having an average flow of 4,200 cubic metres per day (Wastewater Treatment Plant), serving a food processing facility canning tomatoes, sauces, condiments and beans site located at 1532 County Road 34, in the Town of Kingsville (former Gosfield South Township) discharging up to 7,700 cubic metres per day, including a maximum discharge rate of non-contact cooling water of 3,500 cubic metres per day during harvest period and 1,000 cubic metres per day per day during other times of the year, via an existing 375 mm diameter outlet pipe located on Part 2 Plan 12R-24285 to the Melville-Bruner Drain Extension and ultimately via the Melville-Bruner Drain and the Lane Drain (mixing zone) to Lake Erie or by spray irrigation, consisting of the following:

#### PROPOSED WORKS

#### NON-CONTACT COOLING WATER

modifications of discharge of non-contact cooling water, as follows:

• one (1) 375 millimetre diameter pipe (existing) to convey of non-contact cooling water to Lake Erie via three municipal drainage ditches known as Melville-Bruner Drain Extension, Melville-Bruner Drain and Lane Drain at a maximum rate of 3,500 cubic metres per day during harvest period and at a maximum rate of 1,000 cubic metres per day during other times of the year;

### CONTINGENCY NON-CONTACT COOLING TOWER

• provisions for a future non-contact cooling tower when deemed necessary to ensure the compliance to meet Effluent Limits identified in this Approval;

#### WASTEWATER TREATMENT PLANT

• one (1) existing lagoon/storage pond/stormwater management pond having a volumetric capacity of 45,460 cubic metres for temporary storage of stormwater runoff from the site and only in emergency situations of only process wastewater from the existing pump pit, west primary clarifier and north aeration tank and final effluent from the existing irrigation tank, complete with two (2) stormwater runoff inlet structures, one consisting of the existing 600 mm diameter northern inlet pipe and one consisting of a 750 mm diameter southern stormwater runoff inlet structure and rip-rap, the lagoon /storage pond/stormwater management pond discharging via an appropriately sized pumping system only back to the existing pump pit to ensure the process wastewater/stormwater stored in the lagoon /storage pond/stormwater management pond is conveyed back to the Wastewater Treatment Plant for full treatment, the lagoon/storage pond/stormwater management pond having no outlet structure allowing direct surface discharge to the environment;

#### SPRAY IRIGGATION SYSTEM

one (1) existing irrigation tank having a volumetric capacity of 128 cubic metres for temporary storage of effluent from the existing effluent holding tank and non-contact cooling water prior to disposal of effluent via the existing spray irrigation system on the spray irrigation field identified as Site # 2 – Spray Irrigation Field located on Part Lot 8 and 9, Concession 3, Eastern Division, Town of Kingsville, County of Essex, Ontario;

#### STORMWATER MANAGEMENT WORKS

stormwater management works for the collection and transmission of stormwater runoff from the 7.37 ha central western portion of the 18.49 ha site, discharging to the existing lagoon/storage pond/stormwater management, consisting of the following:

- 200 mm, 250 mm, 450 mm and 600 mm diameter storm sewers located in the central western portion of the site, collecting stormwater runoff from the 3.88 ha central western portion of the site, discharging via a 750 mm diameter outlet pipe and rip-rap to the existing lagoon/storage pond /stormwater management;
- an approximately 358 m long grassed swale located along the southern boundary of the parking area located adjacent to a new warehouse and along southern, eastern and northern boundaries of the new warehouse, having a maximum ponding depth of 0.35 m, a longitudinal gradient of 2% and 0.3%, a bottom width of 1.5 m, a top width of 3.6 m and 3:1 side slopes, discharging via a 750 mm diameter outlet pipe and rip-rap to the existing lagoon/storage pond/stormwater management;

- the existing 250 mm, 300 mm and 525 mm diameter storm sewers located in the north-western portion of the site, collecting stormwater runoff from the 2.65 ha north-western portion of the site, discharging via the existing 600 mm diameter outlet pipe to the existing lagoon/storage pond/stormwater management;
- seven (7) catchbasins and two (2) manholes located in the central eastern portion of the site, collecting stormwater runoff from the 0.84 ha central eastern portion of the site, discharging directly or ultimately via the existing 600 mm diameter outlet pipe to the existing lagoon/storage pond /stormwater management;

#### EXISTING WORKS

upgrades and modifications to the existing sewage works to provide a stand-by capacity in case of failure or shut down due to maintenance of the existing primary clarifier and to decrease the temperature of the primary influent prior to discharging to the existing anoxic tank, consisting of the following:

- one (1) 23.5 m long and 5.5 m wide and having a side water depth (SWD) of 3.7 m underground concrete stand-by primary clarifier located north-west of the existing Blower Building and east of the existing Storage Lagoon, having a volumetric capacity of 432 m<sup>3</sup> and a surface overflow rate of 27.7 m <sup>3</sup>/(m<sup>2</sup>xday), complete with sludge and scum removal mechanisms, discharging to the existing anoxic tank;
- one (1) existing 3.25 m long, 3.25 m wide and 5.2 m high induced draft counterflow single cell cooling tower (Waltco Systems Ltd. Model WGI-1010B-15-1 or equivalent), located north-west of the existing Blower Building and east of the existing Storage Lagoon, having a design water recirculation rate of 53 L/s with the influent entering temperature of 42.2 <sup>0</sup>C and the effluent leaving temperature of 31.1 <sup>0</sup>C at a wet bulb temperature of 24.4 <sup>0</sup>C, discharging to the existing primary clarifier;
- two (2) 76 ton chillers to reduce anoxic tank influent temperature, as required by the biological process to operate at acceptable temperatures;

### NON-CONTACT COOLING WATER

discharge of non-contact cooling water from a tomato and other vegetable processing operation located at the above site as follows:

- one (1) non-contact cooling tower having a design water recirculation rate of 31.5 L/s with the influent entering temperature of 54.4 <sup>0</sup>C and the effluent leaving temperature of 30 <sup>0</sup>C at a wet bulb temperature of 24.4 <sup>0</sup>C;
- all other appurtenances essential for proper operation of the sewage works;

#### WASTEWATER TREATMENT PLANT

the existing sewage works with the objective to increase the aeration and clarification capacity to minimize the spray irrigation requirements, consisting of the following:

- four (4) screens including: two (2) existing and one (1) new rotary double drum screens, each with 0.91 m (36 inches) diameter by 1.22m (48 inches) long by 2mm (0.08 inches) slot inner drum and 1.22m (48 inches) diameter by 1.83m (72 inches) long outer drum by 0.5mm (0.02 inches) slot outer drum, and one (1) Bauer 48" (1.22m X 72" (1.83m) Hydrasieve screens, for screening of the effluent from the existing screening system prior to discharge to a primary settling tank;
- one (1) concrete primary settling tank, with a volumetric capacity of 432 m<sup>3</sup> and with overflow rate of 27.7m per day, complete with a chain and sludge collector system with scum skimmer for removal of solids from the effluent prior to discharge to an anoxic tank;
- one (1) anoxic tank with a volumetric capacity of 785 m<sup>3</sup> to provide a hydraulic retention time of approximately 4.6 hours based on average flow of 4,200 m<sup>3</sup> per day;
- two (2) aeration tanks with a total volumetric capacity of 2,849 m<sup>3</sup> to provide a hydraulic retention time of 16.8 hours based average flow of 4,200 m<sup>3</sup> per day;
- one (1) aeration system consisting of five (5) blowers as follows: two (2) existing blowers (93 kW each), two (2) existing (112 kW), plus one additional blower (112 kW) with a capacity to supply 97.8 m<sup>3</sup> per minute of air into the aeration tank via 432 diffusers in the aeration tanks, each rated at 375.3 litres per minute;
- two (2) secondary clarifiers, each measuring 14.0m in diameter and 4.6m of side water depth with an average overflow rate of 10.59m<sup>3</sup>/m<sup>2</sup> per day with treated overflow being discharged to the Melville-Bruner Drain Extension or to a spray irrigation field;
- two (2) return activated sludge pumps, each rated at 2600 litres per minute at 6.0m of total dynamic head for return of activated sludge from the secondary clarifier bottom to the anoxic tank or to an aerobic sludge digester;
- two (2) two-metre-wide belt filter presses, together with chemical preparation and feed system to dewater combined primary and secondary sludge;
- one (1) solids separation system (flexible membrane unit) consisting of forty-eight (48) membranes, one(1) permeate/backpulse pump, one (1) vacuum pump, one (1) hypochlorite addition system and other appurtenances to process up to 20.55 m<sup>3</sup>/hour of effluent from the aeration tank with return of the effluent either to the process or direct discharge to the Melville-Bruner Drain Extension;
- two (2) internal recirculation pumps, each rated at 3.0 m<sup>3</sup>/minute at 4.5m of total dynamic head, to recirculate aeration tank content to the anoxic tank;
- one (1) spray irrigation system consisting of an irrigation field covering an area of 45 hectares, one (1) pump and piping system with a maximum rated capacity of 147.3m<sup>3</sup> per hour, one irrigation hose, reel, boom and/or wand assembly for spray irrigation of the wastewater from the secondary clarifier overflow;

- one (1) aeration wastewater cooling tower having a design water recirculation rate of 36.2 L/s with the influent entering temperature of 40 <sup>0</sup>C and the effluent leaving temperature of 32.2 <sup>0</sup>C at a wet bulb temperature of 24.4 <sup>0</sup>C; and
- 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 1.

# **DEFINITIONS**

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

- 1. "Act" means the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended;
- 2. "Approval" means this entire document and any schedules attached to it, and the application;
- 3. "Average Concentration" means the arithmetic mean of the concentrations of all weekly samples collected during a calendar month;
- 4. "Bypass" means diversion of sewage around one or more treatment processes, within the sewage treatment works with the diverted sewage flows being returned to the sewage treatment train upstream of the effluent sampling point and discharged via the approved effluent disposal facilities;
- 5. "District Manager" means the District Manager of the Sarnia District Office of the Ministry;
- 6. "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;
- 7. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
- 8. "Equivalent Equipment" means a substituted equipment or like-for-like equipment that meets the required quality and performance standards of a named equipment;
- 9. "Event" means a Bypass. An Event ends when there is no recurrence of Bypass in the 12-hour period following the last Bypass.
- 10. "Existing Works" means those portions of the sewage works previously constructed and approved under an Approval;
- 11. "Grab sample" means a volume of effluent of at least 100 millilitres which is collected over a period not exceeding fifteen minutes and immediately transferred to an appropriate laboratory sample container;
- 12. "harvest period" means approximately twelve (12) week period in the month of August, September and October in a calendar year;
- 13. "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;
- 14. "Owner" means Sun-Brite Foods Inc. and its successors and assignees;
- 15. "OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;
- 16. "Proposed Works" means the sewage works described in the Owner's application, this Approval, to the extent approved by this Approval;
- 17. "Rated Capacity" means the maximum daily flow for which the Works are approved to handle; and

18. "Works" means the sewage works described in the Owner's application, and this Approval, and includes both Proposed Works and Previous Works.

# **TERMS AND CONDITIONS**

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

### 1. GENERAL CONDITION

(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.

(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, and the application for approval of the Works.

(3) Where there is a conflict between a provision of any document in the schedule 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 documents in the schedule, the document bearing the most recent date shall prevail.

(4) Where there is a conflict between the documents listed in the Schedule 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.

(5) The Conditions of this Approval are severable. If any Condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

### 2. CHANGE OF OWNER

(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 or operating authority, or both;

(b) change of address of Owner or operating authority or address of new owner or operating authority;

(c) change of partners where the Owner or operating authority is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Partnerships Registration Act;

(d) change of name of the corporation where the Owner or operator is or at any time becomes a corporation, and a copy of the most current "Initial Notice or Notice of Change" (Form 1, 2 or 3 of O. Reg. 189, R.R.O. 1980, as amended from time to time), filed under the Corporations Information Act shall be included in the notification to the District Manager.

(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.

## 3. PROHIBITION

(1) The Owner shall ensure that under no circumstance process wastewater/stormwater stored in the existing lagoon/storage pond/stormwater management pond be directly discharged off site.

(2) The Owner shall ensure that the process wastewater/stormwater stored in the existing lagoon /storage pond/stormwater management pond is only discharged back to the existing pump pit to ensure that the process wastewater/stormwater undergoes full treatment at the existing Wastewater Treatment Plant prior to off site discharge.

### 4. BYPASSES

(1) Any Bypass is prohibited, except:

(a) an emergency Bypass when a structural, mechanical or electrical failure causes a temporary reduction in the capacity of a treatment process or when an unforeseen flow condition exceeds the design capacity of a treatment process that is likely to result in personal injury, loss of life, health hazard, basement flooding, severe property damage, equipment damage or treatment process upset, if a portion of the flow is not bypassed;

(b) a planned Bypass that is a direct and unavoidable result of a planned repair and maintenance procedure or other circumstance(s), the Owner having notified the District Manager in writing at least fifteen (15) days prior to the occurrence of Bypass, including an estimated quantity and duration of the Bypass, an assessment of the impact on the quality of the Final Effluent and the mitigation measures if necessary, and the District Manager has given written consent of the Bypass.

(2) Notwithstanding the exceptions given in Paragraph 1, the Owner shall undertake everything practicable to maximize the flow through the downstream treatment process(es) prior to bypassing.

(3) At the beginning of a Bypass Event, the Owner shall immediately notify the District Manager. This notice shall include, at a minimum, the following information:

- (a) the type of the Bypass as indicated in Paragraph 1 and the reason(s) for the Bypass;
- (b) the date and time of the beginning of the Bypass;

(c) the treatment process(es) gone through prior to the Bypass and the treatment process(es) bypassed;

(d) the effort(s) done to maximize the flow through the downstream treatment process(es) and the reason(s) why the Bypass was not avoided.

(4) Upon confirmation of the end of a Bypass Event, the Owner shall immediately notify the District Manager. This notice shall include, at a minimum, the following information:

(a) the date and time of the end of the Bypass;

(b) the estimated or measured volume of Bypass.

(5) For any Bypass Event, the Owner shall collect daily sample(s) of the Final Effluent, inclusive of the Event and analyze for all effluent parameters outlined in the Compliance Limits condition, following the same protocol specified in the Monitoring and Recording condition for the regular samples. The sample(s) shall be in addition to the regular Final Effluent samples required under the monitoring and recording condition. If the Event occurs on a scheduled monitoring day, the regular sampling requirements prevail. If representative sample for the effluent parameter(s) that require grab sample cannot be obtained, they shall be collected after the Event at the earliest time when situation returns to normal.

(6) The Owner shall submit a summary report of the Bypass Event(s) to the District Manager within thirty (30) days of the bypass event. The summary reports shall contain, at a minimum, the types of information set out in Paragraphs (3), (4) and (5) and either a statement of compliance or a summary of the non-compliance notifications submitted as required under Paragraph 1 of Condition 14. If there is no Bypass Event, a statement of no occurrence of Bypass in the annual report is deemed sufficient.

## 5. OPERATION AND MAINTENANCE

(1) The Owner shall exercise due diligence in ensuring that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate funding, adequate operator staffing and training, including training in all procedures and other requirements of this Approval and the OWRA and regulations, adequate laboratory facilities, process controls and alarms and the use of process chemicals and other substances used in the Works. Furthermore, the Owner shall also ensure that all monitoring programs and maintenance schedules for the Works and related equipment are complied with.

(2) The Owner shall operate the Works within the Rated Capacity of the Works.

(3) The Owner shall ensure that the total maximum discharge rate from the Works to the Melville-Bruner Drain Extension does not exceed 7,700 cubic metres per day.

(4) The Owner shall ensure that the maximum discharge rate of non-contact cooling water from the Works to the Melville-Bruner Drain Extension does not exceed a maximum discharge rate of 3,500 cubic metres per day during harvest period and at a maximum rate of 1,000 cubic metres per day per day during other times of the year.

(5) The Owner shall prepare an operations manual prior to the commencement of operation of the proposed sewage Works, that includes, but not 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, bypasses and any other abnormal situations and for notifying the District Manager; and

(e) complaint procedures for receiving and responding to public complaints.

(6) 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 sewage Works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.

(7) The Owner shall ensure that the design minimum liquid retention volume in the existing lagoon /storage pond/stormwater management pond is maintained at all times.

(8) The Owner shall undertake an inspection of the condition of the stormwater management works, at least quarterly (once every three months), and undertake any necessary cleaning and maintenance to ensure that sediment, debris and excessive decaying vegetation are removed from the above noted stormwater management works to prevent the excessive build-up of sediment, debris and/or decaying vegetation to avoid reduction in capacity of the works. The Owner shall also regularly inspect and clean out the stormwater runoff inlet structures to the works to ensure that these are not obstructed.

(9) The Owner shall visually inspect a staff gauge installed in the existing lagoon/storage pond /stormwater management pond, on a semi-annual basis, to monitor the amount of sediment accumulating in the existing lagoon/storage pond/stormwater management pond and remove the sediment, if necessary, to avoid reduction in the capacity of the existing lagoon/storage pond /stormwater management pond.

(10) The Owner shall maintain a logbook to record the results of these inspections and any cleaning and maintenance operations undertaken, and shall keep the logbook at the site. The logbook shall include the following:

- (a) the name of the stormwater management works;
- (b) the name of the person who conducted each inspection; and

(c) the date and results of each inspection, maintenance and cleaning, including an estimate of the quantity of any materials removed and method of clean-out of the works.

(11) The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the operation and maintenance activities required by this Approval.

### 6. EFFLUENT OBJECTIVES

(1) The Owner shall use best efforts to design, construct and operate the Works with the objective that the concentrations of the materials named below as effluent parameters are not exceeded from the Works at Sampling Location 1:

Table 1 - Effluent Objectives           Sampling Point: Sampling Location 1 - Effluent from the ZeeWeed Treatment System and Anoxic-Bioreactor-Clarifier Treatment Systems - at a location prior to mixing with non-contact cooling water		
Effluent Parameter	Average Monthly Concentration Objective (the arithmetic mean concentration of all grab samples taken in a month) (milligrams per litre)	Maximum Concentration Objective (any single grab sample) (milligrams per litre)
Column 1	Column 2	Column 3
BOD <sub>5</sub>	10	15
Total Suspended Solid (TSS)	10	15
Total Ammonia Nitrogen	3	5
Total Phosphorus	0.5	1
pH of the effluent maintained between 6.0 to 9.0, inclusive, at all times		

(2) In the event of an exceedance of one of the objectives set out in Subsection (1), the Owner shall:

(a) notify the District Manager as soon as possible during normal working hours;

(b) take immediate action to identify the source of contamination, including the assessment of the performance of the sewage Works, and

(c) take immediate action to prevent further exceedance.

## 7. EFFLUENT LIMITS

(1) The Owner shall design, construct and operate the Works such that the concentrations of the materials named below as effluent parameters are not exceeded from the Works at Sampling Locations 3 and 4:

#### Table 2 - Effluent Limits

Sampling Point: Sampling Location 3 - Combined Effluent - at a point after the cooling water and sewage effluent from the ZeeWeed Treatment System and Anoxic-Bioreactor-Clarifier Treatment Systems are combined; downstream of the mixing manhole located on Part 2 Plan 12R-24285; before the combined effluent is discharged from the site to the Melville Bruner Drain Extension

Effluent Parameter	Average Concentration Limit (milligrams per litre)	Maximum Concentration Limit (milligrams per litre)
Column 1	Column 2	Column 3
BOD <sub>5</sub>	10	15
Total Suspended Solid (TSS)	10	15
Total Ammonia Nitrogen	3	5
Total Phosphorus	0.5	1
pH of the combined effluent maintained between 6.0 to 9.0, inclusive, at all the time		

### **Table 3 - Effluent Limits**

**Sampling Point: Sampling Location 4** – Combined Effluent Final Discharge Location- discharge point from the existing 375 mm diameter outlet pipe to the Melville Bruner Drain Extension located the King's Highway No. 3

Effluent Parameter	<b>Average</b> <b>Concentration Limit</b> (milligrams per litre)	Maximum Concentration Limit (milligrams per litre)
Column 1	Column 2	Column 3
Total Suspended Solid (TSS)	10	15
Total Phosphorus	0.5	1
pH of the combined effluent maintained between 6.0 to 9.0, inclusive, at all the time		

Table 4 – Effluent Limi	t
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Sampling Point: Sampling Location 3 - Combined Effluent - at a point after the cooling water and sewage effluent from the ZeeWeed Treatment System and Anoxic-Bioreactor-Clarifier Treatment Systems are combined; downstream of the mixing manhole located on Part 2 Plan 12R-24285; before the combined effluent is discharged from the site to the Melville Bruner Drain Extension

Effluent Parameter	Maximum Daily Average Temperature Limit (the arithmetic mean Temperature of the on-line temperature measurements taken in a 24-hour period)
Column 1	Column 2
Temperature ( <sup>0</sup> C)	30 <sup>0</sup> C

(2) For the purposes of determining compliance with and enforcing subsection (1):

(a) non-compliance with respect to an Average Concentration Limit is deemed to have occurred when the arithmetic mean concentration of all grab samples taken in a month analyzed for a parameter named in Column 1 is greater than the corresponding Average Concentration Limit set out in Column 2 of subsection (1);

(b) non-compliance with respect to a Maximum Concentration Limit is deemed to have occurred when any single grab sample analyzed for a parameter named in Column 1 is greater than the corresponding Maximum Concentration Limit set out in Column 3 of subsection (1);

(c) a non-compliance with respect to Maximum Daily Average Temperature Limit is deemed to have occurred when the arithmetic mean temperature of the on-line temperature measurements taken in a 24-hour period at the designated effluent discharge location is greater than the corresponding maximum temperature set out in Column 2 of subsection (1); and

(d) non-compliance with respect to pH is deemed to have occurred when any single measurement is outside of the indicated range.

## 8. EFFLUENT - ODOUR AND VISUAL OBSERVATIONS

(1) Notwithstanding any other condition in this Approval, the Owner shall ensure that the effluent from the Works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen or foam on the receiving waters.

(2) The Owner shall ensure that appropriate mitigative measures are taken should any objectionable odour is generated from the sewage Works.

#### 9. SPRAY IRRIGATION

The Owner shall ensure that the spray irrigation system is operated such that:

(1) the effluent to be disposed via the spray irrigation system shall only include the effluent collected in the existing irrigation tank receiving effluent via the existing effluent holding from two (2) existing secondary clarifiers and non-contact cooling water;

(2) the disposal of effluent via spray irrigation is applied only on the spray irrigation field identified as Site # 2 - Spray Irrigation Field located on Part Lot 8 and 9, Concession 3, Eastern Division, Town of Kingsville, County of Essex, Ontario, and

(3) no spray irrigation is to take place:

a) on frozen ground or between November 1 and April 30 of any calendar year;

b) during heavy rain events, when the ground is saturated, under conditions that may cause the effluent to drift off the property or during the period when there is surface ponding or the ground is frozen or snow covered;

c) if there is possibility of drift of aerosol or objectionable odours off the property;

d) within twenty metres of any surface watercourse or surface drain; and

e) at a rate greater than 50 cubic metres per hectare of spray irrigation area per day.

(4) The application of the effluent to the spray irrigation field shall be stopped in the event that:

(a) surface runoff flows from the spray irrigation field to the adjacent property or to a ditch, as a result of spray irrigation either alone or in combination with rainfall; or

(b) an offensive odour is generated as a result of spray irrigation; or

(c) an aerosol or drift migrates off the property.

(5) The Owner shall record the volume of effluent sprayed on to the irrigation field on a daily basis.

(6) The Owner should ensure that the application of effluent to the approved spray irrigation field is carried out in a manner that maximizes evapotranspiration and allows the soil to dry out periodically.

(7) The Owner should ensure that whenever ponding or run-off of sprayed effluent occurs, the application of effluent to the affected area of the spray irrigation field is immediately terminated, and adequate time is allowed before resumption of the application of effluent to that area for the area to dry to a degree that would preclude immediate recurrence of ponding or run-off.

(8) The Owner shall provide and maintain suitably posted signs at all points of access to the spray irrigation field indicating that the treated sewage effluent is being used to irrigate the field and that trespassing is prohibited.

### 10. EFFLUENT MONITORING AND RECORDING

The Owner shall carry out the following monitoring program:

(1) All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.

(2) For the purposes of this condition, the following definitions apply:

(a) Weekly means once each week;

(b) Monthly means once every month; and

(c) Quarterly means once every three months.

(3) Samples shall be collected and analyzed at the following sampling points, at the sampling frequencies and using the sample type specified for each parameter listed:

Table 5 - I	Table 5 - Effluent Monitoring - Sampling Locations: 1, 2, 3 and 4		
Sampling Location 1			
Sampling Location	Effluent from the ZeeWeed Treatment System and Anoxic- Bioreactor-Clarifier Treatment Systems - at a location prior to mixing with cooling water		
	Sampling Parameters A		
Sampling Frequency	Weekly		
Sampling Type	Grab Sample		
Sampling Parameters	Total Suspended Solids (TSS), BOD <sub>5</sub> , Total Ammonia Nitrogen, Nitrate-Nitrogen, Total Phosphorus, pH, Temperature and Conductivity		
	Sampling Parameters B		
Sampling Frequency	Weekly (when spay irrigating)		
Sampling Parameter	Chloride		
	Sampling Location 2		
Sampling Location	Non-contact Cooling Water		
Sampling Frequency	Weekly		
Sampling Type	Grab Sample		
Sampling Parameters	pH, Temperature and Conductivity		
Sampling Location 3***			
Sampling Location	Combined Effluent - at a point after the cooling water and sewage effluent from the ZeeWeed Treatment System and Anoxic-Bioreactor- Clarifier Treatment Systems are combined; downstream of the mixing manhole located on Part 2 Plan 12R-24285; before the combined effluent is discharged from the site to the Melville Bruner Drain Extension		
Sampling Parameters A			
Sampling Frequency	Weekly		
Sampling Type	Grab Sample		
Sampling Parameters	Total Suspended Solids (TSS), BOD <sub>5</sub> , Total Ammonia Nitrogen, Total Phosphorus and pH		

Sampling Parameter B		
Sampling Frequency	Hourly	
Sampling Type	On-line	
Sampling Parameters	Temperature	
Sampling Location 4***		
Sampling Location	Combined Effluent - discharge point from the existing 375 mm diameter outlet pipe to the Melville Bruner Drain Extension located the King's Highway No. 3	
Sampling Frequency	Monthly (during the harvest period)	
Sampling Type	Grab Sample	
Sampling Parameters	Total Suspended Solids (TSS), Total Phosphorus, pH, Temperature and Conductivity	

\*\*\*Note: Sampling Parameters for Sampling Locations 3 and 4 shall be completed by a CALA accredited Laboratory.

(4) The methods and protocols for sampling, analysis, toxicity testing, and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

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

(b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition) as amended from time to time by more recently published editions.

(5) The Owner shall measure, record and calculate the daily effluent flow rates discharged from the existing Wastewater Treatment Plant to the Melville-Bruner Drain Extension on each day of the discharge, using flow measuring devices or other methods of measurement calibrated to an accuracy within plus or minus 15 per cent (+/- 15%) of the actual flow rate.

(6) A continuous flow measuring device(s) shall be installed and maintained to measure the flowrate of the effluent from the sewage Works to the Spray Irrigation Field, with an accuracy to within plus or minus fifteen per cent (15%) of the actual flowrate for the entire design range of the flow measuring device and the Owner shall measure, record and calculate the flowrate for each effluent stream on each day of sampling.

(7) The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

## 11. RECEIVING WATERS QUALITY MONITORING AND RECORDING

The Owner shall, upon issuance of this Approval, carry out the following monitoring program for a minimum consecutive 2-year period. The 2-year period shall include 2 full production seasons at the increased flow rate. If the monitoring program shall indicate impairment to the receiving waters

quality due to the increased effluent discharge quantity, the monitoring program shall continue or further monitoring and reporting and/or process modifications may be requested by the District Manager:

(1) All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.

(2) Samples shall be collected and analyzed at the following sampling locations, at the minimum sampling frequencies and using the sample type specified for each parameter listed:

Table 6 - Receiving Water Monitoring	
Sampling Locations	<ol> <li>Lane Drain upstream of the Melville-Brunner Drain;</li> <li>Lane Drain downstream of the Melville-Brunner Drain;</li> <li>In the Melville-Brunner Drain near Graham Side Road; and</li> <li>In the Melville-Brunner Drain Extension, at the site discharge location</li> </ol>
Sampling Frequency	Continuous from June to October each year
Sampling Type	On-line
Sampling Parameters	Flow, Temperature

(3) 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 publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended;

(b) the publication "Standard Methods for the Examination of Water and Wastewater", as amended.

(4) A continuous flow measuring device shall be installed and maintained at each sampling location specified in Table 6 to measure the flowrate of the effluent from the site, with an accuracy to within plus or minus 15 per cent of the actual flowrate for the entire design range of the flow measuring device.

(5) The Owner shall establish a rating curve at the monitoring locations to develop an understanding of both the flow path of the discharge and the affects of the discharge on the Lane Drain. A minimum of 8 discrete flow measurements is required to develop a rating curve at each location.

(6) At the end of each harvest season, the Owner shall prepare and submit to the District Manager, a receiving waters quality monitoring performance report that shall include, but not be limited to, a summary and interpretation of all monitoring data as required by this Condition and a comparison to Effluent Limits outlined in Conditions 5, including an overview of the success and adequacy of the sewage Works and any other information the District Manager may require.

(7) The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

#### 12. GROUNDWATER MONITORING

(1) The Owner shall continue the existing Groundwater Monitoring Program in accordance with the document titled "Proposed Groundwater Monitoring Plan for Spray Irrigation Field, Part Lots 8 and 9", Concession 3, Eastern Division (formerly Township Gosfield South), Town of Kingsville, County of Essex, Ontario" prepared by Conestoga-Rovers and Associates and dated May 30, 2005 to assess the impact of the spray irrigation, unless otherwise directed by the District Manager in writing or as long as spray irrigation of the wastewater is continued.

(2) To prevent the entry of surface water and other foreign materials, the Owner shall ensure that all groundwater monitoring wells which form part of the monitoring program are properly maintained which includes but isn't limited to wells being properly capped, secured, and protected from damage.

(3) Any groundwater monitoring well included in the on-going monitoring program that is damaged shall be assessed, repaired, replaced or decommissioned by the Owner, as required:

(a) The Owner shall repair or replace any monitoring well which is destroyed or in any way made to be inoperable for sampling such that no more than one regular sampling event is missed; and

(b) All monitoring wells which are no longer required as part of the groundwater monitoring program, and have been approved by the Director for abandonment, shall be decommissioned by the Owner, as required, in accordance with the Wells Regulation, to prevent contamination through the abandoned well. A report on the abandonment of the well shall be included in the Annual Report for the period during which the well was abandoned.

(4) Samples of groundwater shall be collected from MW1-2017 (located up gradient and away from the Spray Irrigation Field), MW2-2005 (located in the centre of the Spray Irrigation Field), MW3-2005 (located downgradient of the Spray Irrigation Field), MW4-2005 (located downgradient of the Spray Irrigation Field) and MW5-2005 (located in the centre of the Spray Irrigation Field) Monitoring Wells and sampled at the frequency specified, by means of the specified sample type and analysed for each parameter listed and all results recorded:

	Table 7 - Groundwater Monitoring
Sampling Locations	MW1-2017, MW2-2005, MW3-2005, MW4-2005 and MW5-2005
Sampling Frequency	At or near the end of the spray irrigation season
Sampling Type	Grab Sample
Sampling Parameters	Total Dissolved Solids (TDS), Total Phosphorus, Total Kjeldahl Nitrogen (TKN), Total Ammonia Nitrogen, Nitrite-Nitrogen, Nitrate- Nitrogen, Chloride, Temperature, pH
Groundwater Monitoring	Water Level

(5) The methods and protocols for sampling, analysis, toxicity testing, and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

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

(b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition) as amended from time to time by more recently published editions.

## 13. SPILL CONTINGENCY PLAN

(1) Within three (3) months from the issuance of this Approval, the Owner shall implement a spill contingency plan - that is a set of procedures describing how to mitigate the impacts of a spill within the area serviced by the Works. This plan shall include as a minimum:

(i) the name, job title and location (address) of the Owner, person in charge, management or person(s) in control of the facility;

(ii) the name, job title and 24-hour telephone number of the person(s) responsible for activating the spill contingency plan;

(iii) a site plan drawn to scale showing the facility, nearby buildings, streets, catchbasins & manholes, drainage patterns (including direction(s) of flow in storm sewers), any receiving body(ies) of water that could potentially be significantly impacted by a spill and any features which need to be taken into account in terms of potential impacts on access and response (including physical obstructions and location of response and clean-up equipment);

(iv) steps to be taken to report, contain, clean up and dispose of contaminants following a spill;

(v) a listing of telephone numbers for: local clean-up company(ies) who may be called upon to assist in responding to spills; local emergency responders including health institution(s); and MOE Spills Action Centre 1-800-268-6060;

(vi) Materials Safety Data Sheets (MSDS) for each hazardous material which may be transported or stored within the area serviced by the Works;

(vii) the means (internal corporate procedures) by which the spill contingency plan is activated;

(viii) a description of the spill response training provided to employees assigned to work in the area serviced by the Works, the date(s) on which the training was provided and by whom;

(ix) an inventory of response and clean-up equipment available to implement the spill contingency plan, location and, date of maintenance/replacement if warranted; and

(x) the date on which the contingency plan was prepared and subsequently, amended.

(2) The spill contingency plan shall be kept in a conspicuous, readily accessible location on-site.

(3) The spill contingency plan shall be amended from time to time as required by changes in the operation of the facility.

### 14. **REPORTING**

(1) The Owner shall report to the District Manager orally as soon as possible any non-compliance with the compliance limits, and in writing within seven (7) days of non-compliance.

(2) 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 reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, 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.

(3) The Owner shall prepare and submit a performance report to the District Manager on an annual basis within sixty (60) days following the end of the period being reported upon. The reports shall contain, but shall not be limited to, the following information:

(a) a summary and interpretation of all monitoring data as required by Conditions 10 and 11, and a comparison to Effluent Objectives and Effluent Limits outlined in Conditions 6 and 7 respectively, including an overview of the success and adequacy of the sewage Works;

(b) a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 6, including an evaluation of the need for modifications to the sewage Works to improve performance and reliability;

(c) interpretation of all monitoring data as required by Condition 12 and summary of analytical results for all data pertaining to the spray irrigation;

(d) a detailed characterization of the quality of the effluent, including chloride, disposed by the spray irrigation;

(e) a tabulation of the total daily flow volume discharged from the Works to the Melville Bruner Drain Extension;

(f) a tabulation of the total daily flow volume discharged from the Works to the Spray Irrigation Field;

(g) an assessment of the impact of effluent on the Melville Bruner Drain Extension;

(h) an assessment of the impact on the quality of downstream groundwater resulting from the spray irrigation operations;

(i) an assessment of the compliance with the Ministry's Reasonable Use Policy associated with the effluent land application (spray irrigation);

(j) a description of any operating problems encountered and corrective actions taken during the reporting period;

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

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

(m) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;

(n) a summary of any complaints received during the reporting period and any steps taken to address the complaints;

(o) a summary of any by-pass, spill or abnormal discharge events; and

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

(4) The Owner shall retain for a minimum of three (3) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this Approval.

# REASONS

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 the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.
- 2. Condition 2 is imposed 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 the Approval and continue to operate the Works in compliance with it.
- *3.* Condition 3 is imposed to ensure that the Works are constructed, and may be operated and maintained such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
- 4. Condition 4 regarding Bypasses is included to indicate that Bypass is prohibited, except in circumstances where the failure to Bypass could result in greater damage to the environment than the Bypass itself. The notification and documentation requirements allow the Ministry to take action in an informed manner and will ensure the Owner is aware of the extent and frequency of Bypass Events.
- 5. Condition 5 is imposed to ensure that 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. Furthermore, the condition is imposed to ensure that the Works are constructed, and may be operated and maintained such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
- 6. Condition 6 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.
- 7. Conditions 7 and 8 are imposed to ensure that the effluent discharged from the Works to the spray irrigation field and into the adjacent ditch meets the Ministry's effluent quality requirements thus minimizing environmental impact on the receivers.
- 8. Condition 9 is imposed to ensure that the Works are operated in a manner that minimizes any off property impacts for the spray irrigation operation.
- 9. Conditions 10 and 11 are imposed to require the Owner to demonstrate on a continual basis that the quality and quantity of the effluent from the approved Works is consistent with the design objectives and effluent limits specified in the Approval and that the approved Works does not cause any impairment to the receivers. Furthermore, the condition is imposed to ensure that the discharge temperature of the non-contact cooling water from the facility is acceptable and that the cooling water is not contaminated with the process material due to leakage.
- 10. Condition 12 is imposed to ensure that the groundwater is protected and the disposal from the facility satisfies the Ministry's "Reasonable Use Criteria" beyond the owner's property boundary.

- 11. Condition 13 is imposed to ensure that the Owner will implement the Spill Contingency Plan, such that the environment is protected and deterioration, loss, injury or damage to any person(s) or property is prevented.
- 12. Condition 14 is imposed to provide a performance record for future references and to ensure that the Ministry is made aware of problems as they arise, so that the Ministry can work with the Owner in resolving the problems in a timely manner.

# **APPEAL PROVISIONS**

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me, the Environmental Review Tribunal and in accordance with Section 47 of the <u>Environmental Bill of</u> <u>Rights, 1993</u>, 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:

\* 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.elto.gov.on. ca

This instrument is subject to Section 38 of the Environmental Bill of Rights, 1993, that allows residents of Ontario to seek leave to appeal the decision on this instrument. Residents of Ontario may seek leave to appeal within 15 days from the date this decision is placed on the Environmental Registry. By accessing the Environmental Registry at www.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 11th day of December, 2020

Fariha Parnu.

Fariha Pannu

Director

appointed for the purposes of Part II.1 of the Environmental Protection Act

c: Mohammad Nazrul Islam, GHD Limited Entoni Demiraj

# **SCHEDULE 1**

- 1. Environmental Compliance Approval Application submitted by Mohammad Islam, Mohammad Islam, M.E.Sc., P.Eng., GHD, dated May 5, 2020 and received on May 21, 2020.
- The design report titled "Environmental Compliance Application (ECA) Amendement Application Sun-Brite Foods Inc. – Wastewater Treatment Plant 1532 County Road 34, Ruthven, Ontario NOP 2G0" " dated May 20, 2020, prepared by GHD.
- 3. The design report titled " Stormwater Management Plan, Sun-Brite Foods Inc. 1532 County Road 34 Kingsville, Ontario NOP 2GO." dated May 4, 2020, and engineering drawings prepared by GHD.
- 4. All additional documentation provided by GHD.
- 5. Environmental Compliance Approval Application submitted by V.P. Rivest, P.Eng., Manager -Technical Services, Sun-Brite Foods Inc., dated January 7, 2015 and received January 8, 2015.
- 6. Application for Approval of Sewage Works dated January 24, 2013, submitted by Victor Rivest, Manager, Technical Services of Sun-Brite Foods Inc, and supporting information prepared by CRA.
- 7. Application for Approval of Industrial Sewage Works dated November 19, 2002, and the associated documents submitted by the Manager, Technical Services, Sun-Brite Canning Limited, Kingsville, Ontario.
- 8. Application for Approval of Industrial Sewage Works dated May 28, 2001 and other documents submitted by the Manager, Technical Services, Sun-Brite Canning Ltd., Kingsville, Ontario.
- 9. Application for Approval of Industrial Sewage Works dated May 1, 2000, and the associated documents submitted by the Manager, Technical Services, Sun-Brite Canning Limited, Kingsville, Ontario.
- 10. Application for Approval of Industrial Sewage Works dated June 2, 1999, and the associated documents submitted by the Manager, Technical Services, Sun-Brite Canning Limited, Kingsville, Ontario.