AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL
NUMBER 7868-C5LR3F
Issue Date: August 24, 2021

St. David's Hydroponics Ltd.
822 Concession 7 Rd
Niagara-on-the-Lake, Ontario
L0S 1J0

Site Location: 822 Concession 7 Road, RR4
Town of Niagara-on-the-Lake
Regional Municipality of Niagara, Ontario

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:

establish, usage and operation of existing Stormwater Management Facilities, as well as Sanitary Sewage Treatment and Subsurface Disposal Works serving a greenhouse development located at 822 Concession 7 Road, in the Town of Niagara-on-the-Lake, consisting of the following:

Stormwater Management Facilities

Existing Works

Stormwater Management Facilities serving the greenhouse site with a total tributary area of 47.4 hectares, to provide quality control and attenuate the post-development peak flows to the pre-development levels, for storm events from 5 year up to and including the 100 year storm event, consisting of the following:

- water drainage pipes and swales, discharging roof-top and surface runoff into three (3) stormwater management wet ponds;

- one (1) stormwater management wet pond - Wet Pond #1, accepting runoff from Phase 1 greenhouse development, having a total storage volume of 18,000 cubic metres for storms up to the 100 year storm event, complete with a 200 millimetre diameter outlet pipe and a 4.5 metre wide overflow weir, discharging into municipal Line 6 Irrigation Channel for water re-use and ultimately discharging east into Bright's Drain;

- one (1) stormwater management wet pond - Wet Pond #2, accepting runoff from Phases 2 and 3

greenhouse development, having a total storage volume of 25,000 cubic metres for storms up to the 100 year storm event, complete with a 250 millimetre diameter outlet pipe, a 450 millimetre diameter overflow pipe and a 6 metre wide overflow weir, discharging into a municipal drain named Lavigne Drain for effluent discharge, or into municipal Line 6 Irrigation Channel for water re-use;

- one (1) stormwater management wet pond - Wet Pond #3, accepting runoff from Phase 4 greenhouse development, having a total storage volume of 16,890 cubic metres for storms up to the 100 year storm event, complete with a 200 millimetre diameter outlet pipe and a 0.59 metre wide overflow weir, discharging into a municipal drain named Lavigne Drain for effluent discharge, or into municipal Line 6 Irrigation Channel for water re-use;

- one (1) stormwater management dry pond accepting runoff common parking/driving areas for all phases, having a total storage volume of 16,000 cubic metres, discharging via 200 millimetre diameter outlet pipe into an oil/grit separator, and via a 2 metre wide overflow weir into an exiting grassed swale, which then discharges east into Bright's Drain;

- one (1) oil/grit separator, discharging into municipal Line 6 Irrigation Channel for water re-use; and

- including erosion/sedimentation control measures during construction and all other controls and appurtenances essential for the proper operation of the aforementioned Stormwater Management Facilities.

Sanitary Sewage Treatment and Subsurface Disposal Works

upgrade/modification of existing Sanitary Sewage Treatment and Subsurface Disposal Works that services the St. David's Hydroponics facility for collection, treatment and subsurface disposal of domestic sewage, to serve the existing four-phase greenhouse facility located at 822 Concession 7 Road in the Town of Niagara-on-the-Lake, Ontario, consisting of the following:

Proposed Works (Proposed Modification)

upgrade/modification of the existing sewage works to treat sewage at a maximum daily flow of 23,150 L/d (collected from the four phases of greenhouse operation, consisting of the following:

- a new grease interceptor (GI-2) with a capacity of 4,500 L, located on the discharge line from the kitchen in Bunkhouse No.3, discharging to Septic Tank 3 (ST-3) as described below;

- a new Septic Tank 3 (ST-3) with a working capacity of 25,000 L, equipped with OBC approved outlet effluent filter(s), to be installed on the discharging piping from Phase 4 Greenhouse and from Bunkhouse No.3, discharging by gravity to the Pump Tank 2 (PT-2) as described below;

- one (1) new Pump Tank 2 (PT-2) with a capacity of 4,500 L, equipped with one (1) 0.5 HP Little Giant WS100 H or approved equivalent submersible effluent pump, receiving wastewater from Septic Tank ST-3 and discharging to the existing Pump Tank PT-4 as described below;

- a new Waterloo Biofilter Tank No.3 (BFT-3) with a capacity of 19,500 L, connected to existing Waterloo Biofilter Tank No.2 (BFT-2) via a bottom drain connection (receiving sewage from PT-4), discharging via BFT-2 to the leaching beds as described below;

- one (1) new raised absorption trench leaching bed (2017 RALB) including four (4) cells, designed to have a treatment capacity of 11,675 L/day, consisting of 22 runs of 30 m of 76 mm diameter distribution pipe (660 m total for the leaching bed), embedded in minimum 600 mm wide absorption trenches, comprising a minimum of 900 mm deep imported sand layer having a percolation time of 10 min/cm and overlain by a 200 mm deep layer of stone, a minimum of 300 mm of imported sand above the top of the stone layer and overlain by 50 mm topsoil for seeding, completed with a minimum of 250 mm thick sand mantle extending on the down gradient side of the leaching cells;

- a berm to be constructed using excavated clayey soil along the eastern limits of the 2017 RALB, with a dimension of 2 metre wide and 0.3 metre high;

- a new Flow Meter Chamber No.2 (FMC-2), installed on the discharge line of BFT-2 to the 2013 Raised Adsorption Trench Leaching Bed (2013 RALB) so that the flows can be split to the 2013 RALB and the 2017 RALB, equipped with valves on each forcemain to control the flows;

- a new Neptune flow meter, installed on the forcemain to the 2017 RALB;

- modification of the existing effluent dosing system in the Waterloo Biofilter Tank No.2 (BFT-2) by replacing the existing 0.5 HP pump with a new 1.0 HP Little Giant WS100H pump rated at 113 L/min at TDH of 25 m, producing four (4) different flow velocities in each of the four discharge lines with flow control valves allowing a maximum flow of 11,675 L/day to the 2017 RALB, a maximum flow of 3,500 L/day to the 2008 RALB, and a maximum flow of 8,000 L/day to the 2013 RALB;

- relocation of the existing grease interceptor No.1 (GI-1) from the downstream of the existing Septic Tank 4 (ST-4) to the discharge line from the kitchen in Bunkhouse No. 2, discharging to ST-4;

Existing Works

- a Septic Tank 1 (ST-1) with a capacity of 5,700 L, equipped with OBC approved outlet effluent filter(s), receiving flow from Phase 2 Greenhouse, discharging to the Pump Tank 1 (PT-1) as described below;

- a Septic Tank 2 (ST-2) with a capacity of 5,700 L, equipped with OBC approved outlet effluent filter(s), receiving flow from Phase 3 Greenhouse, discharging to the Pump Tank 1 (PT-1) as described below;

- a Pump Tank 1 (PT-1) with a capacity of 2,270 L, equipped with one (1) 1.0 HP Berkley pump or approved equivalent submersible effluent pump, receiving wastewater from ST-1 and ST-2 and discharging to the existing Septic Tank 5 (ST-5) as described below;

- a Septic Tank 5 (ST-5) with a capacity of 30,000 L, equipped with OBC approved outlet effluent filter(s), receiving flow from PT-1, Bunkhouse No.1, the office and Phase 1 Greenhouse, discharging to the Pump Tank 4 (PT-4) as described below;

- a Septic Tank 4 (ST-4) with a capacity of 15,000 L, equipped with OBC approved outlet effluent filter(s), receiving flow from Bunkhouse No.2, discharging to the Pump Tank 4 (PT-4) as described below;

- a grease interceptor (GI-1) with a capacity of 4,500 L, currently located downstream of ST-4 and ST-5 **(to be relocated)**, receiving sewage from ST-4 and ST-5, discharging to Pump Tank 4 (PT-4) as described below;

- one (1) Pump Tank 4 (PT-4) with a capacity of 10,000 L, equipped with existing duplex effluent pumps, receiving wastewater from ST-3 (proposed new), ST-4 and ST-5, discharging to the new and existing biofilter tanks;

- one (1) Pump Tank 5 (PT-5) with a capacity of 10,000 L, bottom-connected to existing PT-4, receiving and discharging sewage via PT-4;

- Waterloo Biofilter Tank No. 1 (BFT-1), single-compartmented tank with a capacity of 19,300 L, connected to existing Biofilter Tank No.2 (BFT-2) via a bottom drain connection, receiving sewage from PT-4, and discharging via BFT-2 to the leaching beds;

- Waterloo Biofilter Tank No. 2 (BFT-2), single-compartmented tank with a capacity of 19,300 L, connected to existing BFT-1 and proposed new BFT-3 via a bottom drain connection, receiving sewage from PT-4, with 50% of the treated effluent discharging to ST-5 and 50% of the treated effluent discharging to the leaching beds;

- one (1) raised Type A Dispersal Bed (2013 RALB) rated for 8,000 L/day, constructed in four cells using imported sand with a T-time of 6 to 10 min/cm, with a total sand area of 3,349 m^2, a total stone area of 506 m^2, comprising 24 runs of 16.5 m of 100 mm diameter distribution pipe (396 m total for the leaching bed), comprised of a 300 mm thick stone layer overlying a 600 mm thick sand layer, surrounded by a sand mantle that papers down to a thickness of 250 mm around the perimeter, and equipped with a distribution box with outlet flow equalizers;

- one (1) raised Type A Dispersal Bed (2008 RALB) rated for 3,500 L/day, constructed in two cells using imported sand with an estimated T-time of 10 min/cm, with a total sand area of 1,210 m^2, a total stone area of 200 m^2, consisting of 16 runs of 15.2 m of 100 mm diameter distribution pipe (243.8 m total for the leaching bed), comprised of a stone layer overlying a sand layer having a total minimum depth of 500 and that the stone layer have a minimum depth of 200 mm and that the sand layer have a minimum depth of 250 mm;

All in accordance with the supporting documents set out in Schedule A attached to this Approval.

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

1. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;

2. "BOD_5" (also known as $TBOD_5$) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demand;

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

4. "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;

5. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located;

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

7. "Existing Works" means those portions of the Works included in the Approval that have been constructed previously;

8. "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;

9. "Operating Agency" means the Owner or the entity that is authorized by the Owner for the management, operation, maintenance, or alteration of the Works in accordance with this Approval;

10. "Owner" means any person that is responsible for the establishment of the Works being approved by this Approval, and includes Owner's Legal Name and its successors and assignees;

11. "OWRA" means the *Ontario Water Resources Act,* R.S.O. 1990, c. O.40, as amended;

12. "Rated Capacity" means the maximum daily flow for which the Works are approved to handle;

13. "Single Sample Result" means the test result of a parameter in the effluent discharged on any day, as measured by a probe, analyzer or in a composite or grab sample, as required;

14. "Proposed Works" means the sewage works described in the Owner's application, this Approval, to the extent approved by this Approval;

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

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

TERMS AND CONDITIONS

General Terms and Conditions

1. GENERAL PROVISIONS

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 terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

2. The Owner shall design, construct, operate and maintain the Works in accordance with the conditions of this Approval.

3. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.

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

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

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

2. CHANGE OF OWNER AND OPERATING AUTHORITY

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 address of Owner;

    b. change of Owner, including address of new owner;

    c. change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act, R.S.O. 1990, c. B.17* , as amended, shall be included in the notification;

    d. change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the *Corporations Information Act, R.S.O. 1990, c. C.39* , as amended, shall be included in the notification.

2. The Owner shall notify the District Manager, in writing, of any of the following changes within thirty (30) days of the change occurring:

a. change of address of Operating Authority;

b. change of Operating Authority, including address of new Operating Authority.

3. In the event of any change in ownership of the Works, the Owner shall notify the succeeding owner in writing, of the existence of this Approval, and forward a copy of the notice to the District Manager.

4. The Owner shall ensure that all communications made pursuant to this condition refer to the environmental compliance approval number.

3. CONSTRUCTION OF PROPOSED WORKS / RECORD DRAWINGS

1. All Proposed Works in this Approval shall be constructed and installed and must commence operation by November 28, 2022, after which time the Approval ceases to apply in respect of any portions of the Proposed Works not in operation.

2. The Owner shall ensure that the construction of the Proposed Works is supervised by a licensed installer as defined in the *Ontario Building Code* or a Professional Engineer as defined in the Professional Engineers Act.

3. Upon construction of the Proposed Work, the Owner shall prepare a statement, certified by a licensed installer or a Professional Engineer, that the Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry staff and staff of the local municipality.

4. A set of record drawings of the Works shall be kept up to date through revisions undertaken from time to time and a copy shall be readily accessible for reference at the Works.

Stormwater Management Facilities

4. EFFLUENT COMPLIANCE LIMITS AND VISUAL OBSERVATIONS

1. The Owner shall operate and maintain the Stormwater Management Facilities such that compliance limits for the effluent parameters listed in the Effluent Compliance Limits Table included in **Schedule B** are met.

2. Notwithstanding any other conditions of this Approval, the Owner shall ensure that the effluent from the Stormwater Management Facilities is essentially free of floating and settable solids and does not contain oil or any other substance in amounts sufficient to create a visible film or sheen or foam or discolouration on the receiving waters.

5. OPERATION AND MAINTENANCE

1. The Owner shall inspect the Works at least two (2) times per year and, if necessary, clean and maintain

the Works to prevent the excessive build-up of sediments, oil/grit, and/or vegetation.

2. 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 available for inspection by the Ministry.

6. MONITORING AND RECORDING

1. The Owner shall, upon commencement of operation of the Stormwater Management Facilities, carry out a scheduled monitoring program of collecting samples at the required sampling points, at the frequency specified or higher, by means of the specified sample type and analyzed for each parameter listed in the table under the monitoring program included in **Schedule C** and record all results, as follows:

    a. all samples and measurements are to be taken at a time and in a location characteristic of the quality and quantity of the sewage stream over the time period being monitored.

    b. definitions and preparation requirements for each sample type are included in the document referenced in Paragraph 2.a.

    c. definitions for frequency:

        i. Monthly means once every month

2. The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following documents and all analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District Manager:

    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" (21st edition), as amended from time to time by more recently published editions; and

    c. an approved method that meets the same data quality objectives specified in either of the above documents.

3. The sampling frequencies and/or parameters specified listed in the table(s) under the monitoring program included in **Schedule C** may be reduced where authorized in writing by the Director if the Owner is able to demonstrate satisfactory performance for two (2) consecutive years.

4. In the event of an exceedance of the concentration values of the trigger parameters listed in the table included in **Schedule D**, during the prescribed monitoring events listed in the table under the monitoring program included in **Schedule C**, the Owner shall develop a contingency plan within three (3) months of such an occurrence evaluating the root cause for the exceedance, and recommending actions/ measures to be taken to prevent future occurrences of such events, and submit the plan to the District Manager for

review and approval.

5. Once accepted by the District Manager, the Owner shall implement the contingency plan within three (3) months of receiving approval.

6. 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.

7. 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 EPA and O. Reg. 675/98 (Classification and Exemption of Spills and Reporting of Discharges), the Owner shall, within fifteen (15) days of the occurrence of any reportable spill as provided in Part X of the EPA and Ontario Regulation 675/98, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill, clean-up and recovery measures taken, preventative measures to be taken and a schedule of implementation.

3. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.

4. The Owner shall prepare, and submit to the District Manager upon request, a performance report on an annual basis, by April 1 for the previous calendar year. The report shall contain, but shall not be limited to, the following information pertaining to the reporting period:

    a. a summary and interpretation of all effluent monitoring data, and a comparison to the compliance limits and trigger concentrations in this Approval, including an overview of the success and adequacy of the Stormwater Management Facilities.

    b. a description of any operating problems encountered and corrective actions taken;

    c. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Stormwater Management Facilities;

    d. a summary of any effluent quality assurance or control measures undertaken in the reporting period;

    e. a summary of any complaints received during the reporting period and any steps taken to address the complaints;

    f. a summary of all by-pass, spill or abnormal discharge events; and

    g. any other information the District Manager requires from time to time.

8. Effluent Objectives

1. The Owner shall use best efforts to design, construct and operate the Sanitary Sewage Treatment and Subsurface Disposal Works with the objective that the concentrations of the materials named in **Schedule E** as effluent parameters are not exceeded in the effluent being discharged from the biofilter tanks to the leaching beds.

9. Operations and Maintenance

1. The Owner shall prepare an Operations Manual within six (6) months of the start up of the Sanitary Sewage Treatment and Subsurface Disposal Works, that includes, but is not necessarily limited to, the following information:

    a. operating procedures for routine operation of the Sanitary Sewage Treatment and Subsurface Disposal Works;

    b. procedures for the inspection and calibration of monitoring equipment;

    c. inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary.

    d. repair and maintenance programs, including the frequency of repair and maintenance for the sewage Sanitary Sewage Treatment and Subsurface Disposal Works;

    e. contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the District Manager; and

    f. complaint procedures for receiving and responding to public complaints.

2. The Owner shall maintain the Operations Manual current and retain a copy at the location of the Works for the operational life of the Sanitary Sewage Treatment and Subsurface Disposal Works. Upon request, the Owner shall make the manual available to Ministry staff.

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

4. The Owner shall sign a Service and Maintenance Agreement with the manufacturer or approved agent of the Waterloo Biofilter treatment system. The maintenance agreement must be retained at the site for as long as the Sanitary Sewage Treatment and Subsurface Disposal Works are in operation, kept current and made available for inspection by the Ministry staff.

5. The Owner shall receive from the manufacturer or distributor of Waterloo Biofilter printed literature that

describes the unit in detail and provides complete instructions regarding the operation, servicing, and maintenance requirements of the unit and its related components necessary to ensure the continued proper operation in accordance with the original design and specifications.

6. The Owner shall ensure that the treatment system is at minimum inspected annually by Waterloo Biofilter authorized personnel, and maintained according to the manufacturer's recommendations;

7. The Owner shall ensure that the septic tank(s) is pumped out every 3-5 years or when the tank is 1/3 full of solids and the effluent filter(s) is cleaned out at minimum once a year (or more often if required).

8. The Owner shall ensure that grass-cutting is maintained regularly over the subsurface disposal bed(s), and that adequate steps are taken to ensure that the area of the underground works is protected from vehicle traffic.

9. The Owner shall ensure that the drainage operations in the subsurface disposal bed on the property are observed on a monthly basis for breakouts and results recorded in a log book.

10. The Owner shall ensure that in the event a breakout is observed from the subsurface disposal bed, the discharge to the bed is immediately discontinued and the incident immediately reported verbally to the District Manager, followed by a written report within one (1) week. The Owner shall also ensure that during the time remedial actions are taking place the discharge from the Works is collected and disposed off-site through a licensed waste hauler to an approved waste disposal site.

11. The Owner, prior to the start-up of the Sanitary Sewage Treatment and Subsurface Disposal Works, shall test the proposed effluent dosing pump installed upstream of area beds to verify capacity and pump(s) running time as per this Approval , so the Works will operate within the approved maximum daily sewage flows for the three leaching beds (3,500 L/day for 2008 RALB, 8,000 L/day for 2013 RALB and 11,675 L/day for 2017 RALB).

12. The Owner shall maintain a logbook to record the results of Operation and Maintenance activities specified in the above subclauses, and shall keep the logbook at the site and make it available for inspection by the Ministry staff.

13. 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.

10. Monitoring and Recording

1. The Owner shall, upon commencement of operation of the Sanitary Sewage Treatment and Subsurface Disposal Works, carry out a scheduled monitoring program of collecting samples at the required sampling points, at the frequency specified or higher, by means of the specified sample type and analyzed for each parameter listed in the table under the monitoring program included in **Schedule F** and record all results, as follows:

    a. all samples and measurements are to be taken at a time and in a location characteristic of the quality

and quantity of the sewage stream over the time period being monitored.

b. definitions and preparation requirements for each sample type are included in the document referenced in Paragraph 2.a.

2. The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following documents and all analysis shall be conducted by a laboratory accredited to the ISO/IEC:17025 standard or as directed by the District Manager:

   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; and

   c. an approved method that meets the same data quality objectives specified in either of the above documents.

3. The Owner shall measure and record the daily volume of effluent being discharged to subsurface disposal systems.

4. 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.

5. Monitoring and Annual Reports shall be done by a qualified person familiar with the technical aspects of sewage Works. The report and all numerical data shall be provided in digital editable format (e.g., MS Word™ for the report and MS Excel™ files for all numerical data), all on electronic media (e.g., CD).

11. Reporting

1. One week prior to the start up of the operation of the Proposed Works of Sanitary Sewage Treatment and Subsurface Disposal Works, the Owner shall notify the District Manager (in writing) of the pending start up date.

2. In addition to the obligations under Part X of the Environmental Protection Act, the Owner shall, within 10 working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, 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, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.

4. The Owner shall prepare and submit a performance report, on an annual basis, within ninety (90) days

following the end of each operational season to the District Manager. The first such report shall cover the first annual period following the commencement of operation of the Works and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

a. a summary and interpretation of all monitoring data identified in Condition 7 (1) and an overview of the success and adequacy of the Sanitary Sewage Treatment and Subsurface Disposal Works;

b. a review and assessment of performance of all sewage works, including treatment units and disposal beds;

c. a description of any operating problems encountered and corrective actions taken at all Sanitary Sewage Treatment and Subsurface Disposal Works located at the property;

d. a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of all Works located at the property;

e. a summary of any effluent quality assurance or control measures undertaken in the reporting period;

f. a tabulation of the daily volumes of effluent disposed through the subsurface disposal systems during the reporting period;

g. a summary of any complaints received during the reporting period and any steps taken to address the complaints;

h. a summary of all spill or abnormal discharge events; and

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

PROHIBITION

The Owner shall ensure that the Stormwater Management Facilities are operated exclusively for the collection, transmission, treatment and disposal of stormwater runoff. Under **no** circumstance shall any process wastewater (including, but not limited to, the wastewater from irrigation of the plants, the wastewater from the washing of floors/vegetable (if any), floor drain wastewater, or boiler blow downs or condensate) from the site be discharged into the Stormwater Management Facilities.

Schedule A

1. Application for Environmental Compliance Approval (ECA) dated July 12, 2018 and received on December 5, 2018 and submitted by Toine van der Knapp, V.P., of St. David's Hydroponics Ltd. for the amendment of ECA Number **6051-ASRP95** to add existing stormwater management works serving the proposed greenhouse development, including design report, engineering drawings, final plans and other supporting information.

Schedule B

Stormwater Management Facilities

Effluent Compliance Limits Table

Effluent Parameter	Concentration Limit (**Four-month Rolling Average***[2] otherwise indicated) (maximum unless otherwise indicated)
Total Phosphorus	0.5 mg/L*[1]
Nitrate Nitrogen	20 mg/L
Potassium	25 mg/L
Copper	0.02 mg/L
Chloride	200 mg/L
Sulphate	200 mg/L
Zinc	0.10 mg/L
pH	between 6.5 - 10.0 inclusive (**Single Sample Result**)

Note*[1]: mg/L means milligrams per litre.

Note*[2]: For an example of rolling average, see "Understanding Four-month Rolling Average" below.

Understanding Four-month Rolling Average

A four-month rolling average is an average value based on the 4 most recent months of data. The average "rolls along" with the most recent data. Rolling average is a useful means of illuminating trends in data where there is wide variation in the data from sample event to sample event.

SamplingPeriod	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
P1	0.20	0.30	0.36	0.55	0.45	0.20	0.30					
P2	0.20	0.30	0.36	0.55	0.45	0.20	0.30	0.25				
P3	0.20	0.30	0.36	0.55	0.45	0.20	0.30	0.25	0.15			

For example: from the Table above:

- the 4 month rolling average for July reporting (for P1) is (0.55+0.45+0.20+0.30)/4=0.37
- the 4 month rolling average for August reporting (for P2) is (0.45+0.20+0.30+0.25)/4=0.30
- the 4 month rolling average for September reporting (for P3) is (0.20+0.30+0.25+0.15)/4=0.22

Schedule C

Stormwater Management Facilities

Monitoring Program

Effluent Monitoring Table

Sampling Station	Four (4) sampling points at outlets/weirs of the following, prior to discharging into Lavigne Drain and/or Line 6 Irrigation Channel: 1. Wet Pond #1; 2. Wet Pond #2; 3. Wet Pond #3; and 4. oil/grit separator or the Dry Pond. Note: When flow is present, a sample is to be collected at each outlet pipe/weir; if no flow is present and standing water is present, a sample shall be collected from the point in the vicinity of the each outlet pipe/weir.
Sampling Type	Grab
Sample Frequency	Monthly (year-round)
Sampling Parameters	Total Suspended Solid, Total Ammonia Nitrogen, Nitrate Nitrogen, Total Phosphorus, Ortho Phosphorus (Phosphorus as Phosphate), Zinc, Copper, Manganese, Iron, Molybdenum, Boron, Chloride, Sulphate, Potassium, Hardness, pH

Schedule D

Stormwater Management Facilities

Trigger Concentration Values for Monitoring Table

Trigger Parameter	**Trigger Concentration (Four-month Rolling Average)** (maximum unless otherwise indicated)
Nitrate Nitrogen	15 mg/L*
Total Phosphorus	0.3 mg/L
Potassium	20 mg/L
Total Suspended Solid	30 mg/L

Note*: mg/L means milligrams per litre.

Schedule E

Sanitary Sewage Treatment and Subsurface Disposal Works

Effluent Objectives

(for sample collected on the discharge line of BFT-2)

Effluent Parameter	Concentration Objective (milligrams per litre unless otherwise indicated)
CBOD5	10.0
Total Suspended Solids (TSS)	10.0

Schedule F

Sanitary Sewage Treatment and Subsurface Disposal Works

Raw Sewage Monitoring

(Samples to be collected at the head of the inlet of the works)

Sample Type	Grab
Frequency of Sampling	Discrete grab samples must be collected **every three (3) months** during the operating season; samples to be collected either manually or by automatic sampler.
Parameters	BOD5, and Total Suspended Solids

Effluent Monitoring

(Samples to be collected at the outlet from the Waterloo Biofilter treatment system)

Sample Type	Grab
Frequency of Sampling	Discrete grab samples must be collected **every three (3) months** during the operating season; samples to be collected either manually or by automatic sampler.
Parameters	CBOD5, and Total Suspended Solids

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

General Terms and Conditions

1. Condition 1 regarding general provisions is imposed to ensure that the Works are constructed and operated in the manner in which they were described and upon which approval was granted.

2. Condition 2 regarding change of Owner and Operating Agency is included to ensure that the Ministry records are kept accurate and current with respect to ownership and Operating Agency of the 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 regarding record drawings is included to ensure that record drawings of the Works "as constructed" are updated and maintained for future references.

Stormwater Management Facilities

4. Condition 4 regarding effluent compliance limits is imposed to ensure that the effluent discharged from the Works to the environment meets the Ministry's effluent quality requirements; and regarding visual observation is to establish non-enforceable objectives to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.

5. Condition 5 regarding operation and maintenance is included to require that the Works be properly operated and maintained such that the environment is protected.

6. Condition 6 regarding monitoring and recording is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the compliance limits specified in the Approval.

7. Condition 7 regarding reporting is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for this Approval.

Sanitary Sewage Treatment and Subsurface Disposal Works

8. Condition 8 is imposed to ensure that effluent quality requirements established for biofilter treatment system are satisfied.

9. Condition 9 is included to require that the Works be properly operated, maintained, and equipped such that the environment is protected. As well, the inclusion of an operations manual, maintenance agreement with the manufacturer for the treatment process/technology and a complete set of "as constructed" drawings 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 information 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 work.

10. Condition 10 is included to enable the Owner to evaluate and demonstrate the performance of the Works, on a continual basis, so that the Works are properly operated and maintained at a level which is consistent with the design objectives specified in the Approval and that the Works does not cause any impairment to the receiving watercourse.

11. Condition 11 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.

Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s). 6051-ASRP95 issued on November 28, 2017.

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* Environmental Review Tribunal 655 Bay Street, Suite 1500 Toronto, Ontario M5G 1E5	AND	The Minister of the Environment, Conservation and Parks 777 Bay Street, 5th.Floor Toronto, Ontario M7A 2J3	AND	The Director appointed for the purposes of Part II.1 of the Environmental Protection Act Ministry of the Environment, Conservation and Parks 135 St. Clair Avenue West, 1st Floor Toronto, Ontario M4V 1P5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or www.ert.gov.on.ca**

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 24th day of August, 2021

Fariha Pannu.

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

NH/

c: District Manager, MECP Niagara District Office
Hank Klassen, Quartek Group