

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 2899-C4YHPH
Issue Date: August 20, 2021

St. David's Hydroponics Ltd.
4860 Martin Road
Lincoln, Ontario
L0R 1B0

Site Location: 4860 Martin Road
Town of Lincoln
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:

usage and operation of existing stormwater management Works serving a greenhouse development with a total tributary area of 7.27 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 either stormwater storage cisterns or a stormwater detention pond;
- one (1) stormwater management wet pond, having a total storage volume of 16,000 cubic metres, and an active volume of 3,135 cubic metres for storms up to the 100 year storm event, complete with two (2) 300 millimetre diameter outlet pipes with an invert elevation of 97.64 meters and two outlet pipes (one 150 mm diameter and one 300 mm diameter) with an invert elevation of 98.06 metres, discharging into the roadside ditch along Martin Road;
- two (2) stormwater storage cisterns, receiving runoff from partial area of greenhouse roof-top and also from the stormwater management detention pond, having a total storage volume of 520 cubic metres, discharging effluent for irrigation water supply; and
- including erosion/sedimentation control measures during construction and all other controls and appurtenances essential for the proper operation of the aforementioned Works.

All in accordance with the submitted supporting documents listed in Schedule A.

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. "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;
3. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located;
4. "EPA" means the *Environmental Protection Act*, R.S.O. 1990, c.E.19, as amended;
5. "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;
6. "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;
7. "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;
8. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40, as amended;
9. "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;
10. "Works" means the approved sewage 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

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 AGENCY

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 Agency;
 - b. change of Operating Agency, including address of new Operating Agency.
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. RECORD DRAWINGS

1. A set of record drawings of the Works shall be prepared or updated. These drawings 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.

4. EFFLUENT COMPLIANCE LIMITS AND VISUAL OBSERVATIONS

1. The Owner shall operate and maintain the Works 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 Works 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 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 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", as amended; 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 Works.
 - 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 Works;
- 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.

PROHIBITION

The Owner shall ensure that the stormwater management Works 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 Works.

Schedule A

1. Application for Environmental Compliance Approval dated July 12, 2018 and received on December 5, 2018, and submitted by St. David's Hydroponics Ltd. for the existing stormwater management works serving the proposed greenhouse development, including design report, engineering drawings, final plans and other supporting information.

Schedule B

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.

Sampling Period	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

Monitoring Program

Effluent Monitoring Table

Sampling Station	One (1) sampling point at outlet pipes of the stormwater management wet pond, prior to discharging into the roadside ditch along Martin Road. Note: When flow is present, a sample is to be collected at the outlet pipes; if no flow is present and standing water is present, a sample shall be collected from the point in the vicinity of the outlet pipes.
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

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.

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

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.
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.

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.

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

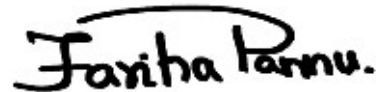
The Director appointed for the purposes of
Part II.1 of the Environmental Protection Act
Ministry of the Environment,
Conservation and Parks
135 St. Clair Avenue West, 1st Floor
Toronto, Ontario
M4V 1P5

*** 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 20th day of August, 2021



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