Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 3337-CQSNTR Issue Date: May 31, 2023

OPTrust Amaranth 6 Inc. 40 King St W, No. 5702 Toronto, Ontario M5H 3Y2

Site Location: OPTrust Amaranth 6

513048 Second Line

Township of Amaranth, County of Dufferin,

Ontario L0N 1L0

You have applied under section 20.2 of Part II.1 of the <u>Environmental Protection Act</u>, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:

PROPOSED WORKS

establishment, usage and operation of new non-municipal Works, for the treatment of sanitary sewage from the proposed new warehouse and distribution facilities and disposal of effluent to subsurface via a new Sewage Treatment Plant (Newterra MBR Treatment System) and Final Effluent disposal facilities as follows:

Classification of Sewage Treatment Plant: Tertiary

Details of Service Area:

- Type of Occupancy: Commercial/Industrial
- Type and Number of Units*:
 - Building #1 with 66 loading bays, 929 square metres of office space and 15 water closets (with a design sewage flow of 31.6 cubic metres per day);
 - Other proposed warehousing building(s)** similar to Building #1 with loading bays, office space and water closets.

Note*: the total design sewage flow for the above on-site buildings (Building #1 and other proposed buildings) as calculated in accordance with Table 8.2.1.3.B. in Part 8 of the OBC shall not exceed 105.4 cubic metres per day.

Note**: the location of the proposed Type A dispersal beds as described below and specified in Item 1 of

Schedule A shall not change as a result of any proposed buildings.

Design Capacity of Sewage Treatment Plant:

Design Capacity with All Treatment Trains in Operation	Upon Completion of Construction of All Proposed Works
Rated Capacity	105.4 m ³ /d

Influent:

Receiving Location	Types
In Collection System	Sanitary Sewage
At Sewage Treatment Plant	None

Sewage Treatment Plant - Newterra Membrane Bioreactor (MBR) Treatment System

Primary Treatment System

• one (1) vented primary clarifier tank being the first chamber of an in-ground fibre reinforced plastic (FRP) circular tank, having a working capacity of approximately 63 cubic metres and complete with an access riser with hatch and high level alarm instrumentation, receiving raw sewage from the proposed on-site facilities described above via an influent chamber and discharging primary effluent to an equalization tank as described below;

Flow Equalization

• one (1) vented flow equalization tank as a standalone in-ground FRP circular tank, having a working capacity of approximately 126 cubic metres, equipped with two (2) submersible sewage pumps (one duty, one standby) each rated at 145.9 litres per minute and coarse bubble air diffusers receiving air supply from two (2) air mixing blowers (one duty, one standby), and complete with an access riser with hatch and high/low level alarm instrumentation, discharging to a pre-anoxic tank as described below;

Influent Flow Measurement and Sampling Point

- flow measurement device on discharge to the pre-anoxic tank from the flow equalization tank;
- sampling of Influent from the influent chamber within the collection system;

Secondary Treatment System

- one (1) in-ground FRP circular tank consisting of three (3) interconnected chambers, as follows:
 - one (1) vented pre-anoxic tank for denitrification, having a working capacity of approximately 47.3 cubic metres, equipped with one (1) submersible sewage pump (one duty with one shelf spare) and four (4) eductor mixing assemblies, and complete with an access riser with hatch and high level alarm instrumentation, receiving the equalization tank effluent and a recycle stream from an aerobic tank described below, discharging effluent by gravity to the aerobic tank;
 - one (1) vented aerobic tank having a working capacity of approximately 72.3 cubic metres, equipped with fine bubble air diffusers receiving air supply from two (2) air mixing blowers (one duty, one standby) each rated at 444.5 normal cubic metres per hour, and one (1) submersible recirculation pump (one duty with one shelf spare) rated at 700 litres per minute discharging the mixed liquor back to the pre-anoxic tank described above, and complete with an access riser with hatch and instrumentation (high level alarm, pH transmitter and DO transmitter), discharging effluent by gravity to a post-anoxic tank as described below; and
 - one (1) vented post-anoxic tank for denitrification, having a working capacity of approximately 17.6 cubic metres, equipped with one (1) submersible sewage pump (one duty with one shelf spare) and four (4) eductor mixing assemblies, and two (2) submersible sewage pumps (two duty) each rated at 219 litres per minute, and complete with an access riser with hatch and high/low level alarm instrumentation, discharging effluent to two (2) membrane tanks as described below;
- two (2) membrane tanks housed inside a modified shipping container, each having a working capacity of approximately 3.5 cubic metres and equipped with eight (8) submerged ultrafiltration membrane modules per tank (each module having a membrane surface area of 27.9 square metres, for a total of 223.2 square metres per tank), two (2) air scouring blowers (one duty for each tank with one shelf spare) each rated at 140 normal cubic metres per hour, and two (2) permeate pumps (one duty for each tank with one shelf spare) each rated at 81.1 litres per minute, complete with high level alarm instrumentation, air bleed/prime pumps (one duty for each tank) and a backwash system consisting of one (1) duty backwash pump, one (1) duty backwash tank and two (2) cleaning agent dosing systems; discharging return activated sludge to the aerobic tank and Final Effluent to an effluent dosing tank as described below;

Supplementary Treatment System

- one (1) caustic chemical dosing system consisting of one (1) caustic chemical storage tank with spill containment and one (1) metering pump (one duty), dosing caustic chemical (sodium hydroxide or equivalent) into the return streams from the membrane tanks to the aerobic tank;
- two (2) carbon source dosing systems each consisting of one (1) carbon material storage tank with spill containment and one (1) metering pump (one duty), dosing external carbon material (MicroC or equivalent) inline from the equalization tank to the pre-anoxic tank, and directly into the post-anoxic

tank;

Sludge Management System

• one (1) vented activated sludge holding tank being the second chamber of the in-ground FRP circular tank with its first chamber being used as the primary clarifier tank (as described above), having a working capacity of approximately 57.2 cubic metres, equipped with coarse bubble air diffusers receiving air supply from two (2) air mixing blowers (one duty, one standby), and complete with an access riser with hatch and high/low level alarm instrumentation, discharging supernatant to the primary clarifier tank via a submersible chain supported decant pump (one duty), with resulting sludge to be hauled off-site for disposal at an appropriately-approved receiving facility;

Effluent Dosing Tank

• one (1) pre-cast concrete effluent dosing tank having a total capacity of approximately 60,000 litres, equipped with two (2) submersible effluent pumps (one duty and one standby), each rated at approximately 1.9 litres per second at 15 metre total dynamic head, evenly dosing the proposed Type A dispersal beds as described below via 75 millimetre diameter forcemains;

Final Effluent Flow Measurement and Sampling Point

- one (1) flow measurement device immediately downstream of the effluent dosing tank;
- sampling of Final Effluent on discharge to the effluent dosing tank;

Final Effluent Disposal Facilities

$Q_{\text{max}} = 105.4$ cubic metres per day

- four (4) partially raised Type A dispersal beds located along the west property boundary towards the northwest corner of the site, with a total maximum design capacity of 105.4 cubic metres per day, with <u>each</u> bed consisting of the following (from top to bottom):
 - a 75 millimetre thick sodded top soil layer;
 - 600 millimetre thick native sandy fill;
 - six (6) pods of distribution piping with each pod having five (5) runs of 20 metre long, 100 millimetre diameter perforated distribution piping (for a total length of 600 metres per bed) installed 1.6 metres apart, centre to centre;
 - a stone layer having an area of approximately 1,154 square metres (56 metres by 20.6 metres) and a thickness of 250 millimetres, enclosed in permeable geo-textile fabric;
 - a sand layer having an area of approximately 1,200 square metres (60 metres by 20 metres), a minimum thickness of 600 millimetres and a sand percolation time of 6 to 10 minutes per

centimetre;

• complete with a sand mantle extending 15 metres easterly beyond the outermost edge of the stone layer in the direction of flow;

including all other mechanical system, electrical system, instrumentation and control system, standby power system, piping, pumps, valves and appurtenances essential for the proper, safe and reliable operation of the Works in accordance with this Approval, in the context of process performance and general principles of wastewater engineering only;

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. "Annual Average Daily Influent Flow" means the cumulative total sewage flow of Influent to the Sewage Treatment Plant during a calendar year divided by the number of days during which sewage was flowing to the Sewage Treatment Plant that year;
- 2. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;
- 3. "BOD5" (also known as TBOD5) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demands;
- 4. "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
- 5. "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;
- 6. "District Manager" means the District Manager of the appropriate local district office of the Ministry where the Works is geographically located;
- 7. "E. coli" refers to coliform bacteria that possess the enzyme beta-glucuronidase and are capable of cleaving a fluorogenic or chromogenic substrate with the corresponding release of a fluorogen or chromogen, that produces fluorescence under long wavelength (366 nm) UV light, or color development, respectively. Enumeration methods include tube, membrane filter, or multi-well procedures. Depending on the method selected, incubation temperatures include 35.5 + 0.5 °C or 44.5 + 0.2 °C (to enumerate thermotolerant species). Depending on the procedure used, data are reported as either colony forming units (CFU) per 100 mL (for membrane filtration methods) or as most probable number (MPN) per 100 mL (for tube or multi-well methods);
- 8. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19;
- 9. "Final Effluent" means effluent that is discharged to the environment through the approved effluent disposal facilities, including all Bypasses, that are required to meet the compliance limits stipulated in the

- Approval for the Sewage Treatment Plant at the Final Effluent sampling point(s);
- 10. "Grab Sample" or "Grab" means an individual sample of at least 1000 millilitres collected in an appropriate container at a randomly selected time over a period of time not exceeding 15 minutes;
- 11. "Influent" means flows to the Sewage Treatment Plant from the collection system;
- 12. "Licensed Engineering Practitioner" means a person who holds a licence, limited licence or temporary licence under the *Professional Engineers Act,* R.S.O. 1990, c. P.28;
- 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. "Monthly Average Effluent Concentration" is the mean of all Single Sample Results of the concentration of a contaminant in the Final Effluent sampled or measured during a calendar month;
- 15. "Normal Operating Condition" means the condition when all unit process(es), excluding Preliminary Treatment System, in a treatment train is operating within its design capacity;
- 16. "OBC" means the Ontario Building Code, Ontario Regulation 332/12 (Building Code) as amended to January 1, 2015, made under the *Building Code Act*, 1992, S.O. 1992, c. 23;
- 17. "Operating Agency" means the Owner, person or the entity that is authorized by the Owner for the management, operation, maintenance, or alteration of the Works in accordance with this Approval;
- 18. "Owner" means OPTrust Amaranth 6 Inc., including any successors and assignees;
- 19. "OWRA" means the *Ontario Water Resources Act*, R.S.O. 1990, c. O.40;
- 20. "Preliminary Treatment System" means all facilities in the Sewage Treatment Plant associated with screening and grit removal;
- 21. "Primary Treatment System" means all facilities in the Sewage Treatment Plant associated with the primary sedimentation unit process and includes chemically enhanced primary treatment;
- 22. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
- 23. "Rated Capacity" means the Annual Average Daily Influent Flow for which the Sewage Treatment Plant is designed to handle;
- 24. "Secondary Treatment System" means all facilities in the Sewage Treatment Plant associated with biological treatment, secondary sedimentation and phosphorus removal unit processes;
- 25. "Sewage Treatment Plant" means all the facilities related to sewage treatment within the sewage treatment

plant site excluding the Final Effluent disposal facilities;

- 26. "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;
- 27. "Works" means the approved sewage works, and includes Proposed 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.

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* shall be included in the notification:
 - d. change of name of the corporation and a copy of the most current information filed under the *Corporations Information Act, R.S.O. 1990, c. C.39* 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 the Operating Agency;

- b. change of the Operating Agency, including address of the 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 number of this Approval.

3. CONSTRUCTION OF PROPOSED WORKS

- 1. All Proposed Works in this Approval shall be constructed and installed and must commence operation within **five (5) years** of issuance of this Approval, after which time the Approval ceases to apply in respect of any portions of the Works not in operation. In the event that the construction, installation and/or operation of any portion of the Proposed Works is anticipated to be delayed beyond the time period stipulated, the Owner shall submit to the Director an application to amend the Approval to extend this time period, at least six (6) months prior to the end of the period. The amendment application shall include the reason(s) for the delay and whether there is any design change(s).
- 2. Upon completion of construction of the Proposed Works, the Owner shall prepare and submit a written statement to the District Manager, certified by a Licensed Engineering Practitioner, that the Proposed Works is constructed in accordance with this Approval.
- 3. **One (1) week** prior to the commencement of the operation of the Proposed Works, the Owner shall notify the District Manager (in writing) of the pending start-up date.
- 4. Within **one** (1) **year** of completion of construction of the Proposed Works, 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.
- 5. The Owner shall ensure that the treatment technologies are installed in accordance with the manufacturer's installation manual.
- 6. The Owner shall ensure that the Works are constructed such that minimum horizontal clearance distances as specified in the OBC are satisfied.
- 7. The Owner shall ensure that an imported soil that is required for construction of any subsurface disposal bed as per this Approval is tested and verified by the Licensed Engineering Practitioner for the percolation time (T) prior to delivering to the site location and the written records are kept at the site.

4. DESIGN OBJECTIVES

1. The Owner shall design and undertake everything practicable to operate the Sewage Treatment Plant in accordance with the Final Effluent parameters design objectives listed in the table(s) included in

Schedule B.

5. COMPLIANCE LIMITS

1. The Owner shall operate and maintain the Sewage Treatment Plant such that compliance limits for the Final Effluent parameters listed in the table(s) included in **Schedule C** are met.

6. OPERATION AND MAINTENANCE

- 1. The Owner shall ensure 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 staffing and training, including training in all procedures and other requirements of this Approval and the OWRA and relevant regulations made under the OWRA, process controls and alarms and the use of process chemicals and other substances used in the Works.
- 2. The Owner shall prepare the operations manual for the Works within **six (6) months** of completion of construction of the Proposed Works, that includes, but not necessarily limited to, the following information:
 - a. operating procedures for the Works under Normal Operating Conditions;
 - 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. procedures for the inspection and calibration of monitoring equipment;
 - e. operating procedures for the Works to handle situations outside Normal Operating Conditions and emergency situations such as a structural, mechanical or electrical failure, or an unforeseen flow condition:
 - f. a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification of the Spills Action Centre (SAC) and District Manager;
 - g. procedures for receiving, responding and recording public complaints, including recording any followup actions taken.
- 3. The Owner shall maintain an up to date operations manual and make the manual readily accessible for reference at the Works for the operational life of the Works. Upon request, the Owner shall make the manual available to Ministry staff.
- 4. The Owner shall ensure that the Operating Agency fulfills the requirements under O. Reg. 129/04, as

- amended for the Works, including the classification of facilities, licensing of operators and operating standards.
- 5. The Owner shall maintain a logbook to record the results of all inspections, repair and maintenance undertaken, calibrations, monitoring and spill response or contingency measures undertaken and shall make the logbook available for inspection by Ministry staff. The logbook shall include the following:
 - a. the name of the operator making the entry; and
 - b. the date and results of each inspection, repair, maintenance, calibration, monitoring, spill response and contingency measure.
- 6. The Owner shall, upon the construction, prepare and make available for inspection by Ministry staff, a maintenance agreement with the manufacturer for the MBR treatment process/technology. The maintenance agreement must be retained at the site and kept current for the operational life of the Works.
- 7. 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.
- 8. The Owner shall visually inspect the general area where Works are located for break-out once every month during the operating season.
- 9. In the event a break-out is observed from a subsurface disposal bed, the Owner shall do the following:
 - a. sewage discharge to that subsurface disposal bed shall be discontinued;
 - b. the incident shall be **immediately** reported verbally to the Spills Action Centre (SAC) at (416) 325-3000 or 1-800-268-6060;
 - c. submit a written report to the District Manager within one (1) week of the break-out;
 - d. access to the break-out area shall be restricted until remedial actions are complete;
 - e. during the time remedial actions are taking place the sewage generated at the site shall not be allowed to discharge to the environment; and
 - f. sewage generated at the site shall be safely collected and disposed of through a licensed waste hauler to an approved sewage disposal site.
- 10. The Owner shall ensure that the sludge holding tank be inspected **at least monthly** by the Operating Agency, and the sewage sludge accumulated in the tank be periodically withdrawn at the frequency required to maintain efficiency of the treatment system.

- 11. The Owner shall have a valid written agreement with a hauler who is in possession of a Waste Management Systems Approval, for the treatment and disposal of the sludge generated from the Works, at all times during operation of the Works.
- 12. The Owner shall ensure that flow of effluent discharged into the Type A dispersal beds does not exceed **105.4 cubic metres per day**.
- 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 operation and maintenance activities required by this Approval.

7. 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 tables under the monitoring program included in **Schedule D** 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 document referenced in Paragraph 2.b.
 - c. definitions for frequency:
 - i. Biweekly means once every two weeks;
 - ii. Monthly means once every month;
 - iii. Quarterly means once every three months;
 - iv. Annually means once every year.
 - d. a schedule of the day of the week/month for the scheduled sampling shall be created. The sampling schedule shall be revised and updated every year through rotation of the day of the week for the scheduled sampling program, except when the actual scheduled monitoring frequency is three (3) or more times per week.
 - e. The measurement frequencies specified in **Schedule D** in respect to any parameter may, after three (3) years of monitoring in accordance with this condition, be modified by the Director in writing.
- 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 Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended;
- b. the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater Version 2.0" (January 2016), PIBS 2724e02, as amended;
- c. the publication "Standard Methods for the Examination of Water and Wastewater", as amended; and
- d. for any parameters not mentioned in the documents referenced in Paragraphs 2.a, 2.b and 2.c, the written approval of the District Manager shall be obtained prior to sampling.
- 3. The Owner shall monitor and record the flow rate and daily quantity using flow measuring devices or other methods of measurement as approved below calibrated to an accuracy within plus or minus 15 per cent (+/- 15%) of the actual flowrate of the following:
 - a. Influent flow to the Sewage Treatment Plant by continuous flow measuring devices and instrumentations;
 - b. Final Effluent discharged from the Sewage Treatment Plant by continuous flow measuring devices and instrumentations;
- 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.

8. REPORTING

- 1. The Owner shall report to the District Manager orally **as soon as possible** any non-compliance with the compliance limits specified in Condition 5, 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) made under the EPA, the Owner shall, within **fifteen** (15) days of the occurrence of any reportable spill as provided in Part X of the EPA and O. Reg. 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 performance reports on a calendar year basis and submit to the District Manager in an electronic format by **March 31** of the calendar year following the period being reported upon. The reports shall contain, but shall not be limited to, the following information pertaining to the reporting period:

- a. a summary and interpretation of all Influent monitoring data, and a review of the historical trend of the sewage characteristics and flow rates;
- b. a summary and interpretation of all flow data and results achieved in not exceeding the maximum subsurface disposal bed design flow (105.4 cubic metres per day) discharged into the Type A dispersal beds;
- c. a summary and interpretation of all Final Effluent monitoring data, including concentrations, flow rates and a comparison to the design objectives and compliance limits in this Approval, including an overview of the success and adequacy of the Works;
- d. a summary of any deviation from the monitoring schedule and reasons for the current reporting year and a schedule for the next reporting year;
- e. a summary of all operating issues encountered and corrective actions taken;
- f. a summary of all normal and emergency repairs and maintenance activities carried out on any major structure, equipment, apparatus or mechanism forming part of the Works;
- g. a summary of any effluent quality assurance or control measures undertaken;
- h. a summary of the calibration and maintenance carried out on all Influent and Final Effluent monitoring equipment to ensure that the accuracy is within the tolerance of that equipment as required in this Approval or recommended by the manufacturer;
- i. a summary of efforts made to achieve the design objectives in this Approval, including an assessment of the issues and recommendations for pro-active actions when any of the design objectives is not achieved more than 50% of the time in a year or there is an increasing trend in deterioration of Final Effluent quality;
- j. a tabulation of the volume of sludge generated, an outline of anticipated volumes to be generated in the next reporting period and a summary of the locations to where the sludge was disposed;
- k. a summary of any complaints received and any steps taken to address the complaints;
- 1. a summary of all other situations outside Normal Operating Conditions and spills within the meaning of Part X of EPA and abnormal discharge events;
- m. any changes or updates to the schedule for the completion of construction and commissioning operation of major process(es) / equipment groups in the Proposed Works; and
- n. any other information the District Manager requires from time to time.

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 construction of Proposed Works is included to ensure that the Works are constructed in a timely manner so that standards applicable at the time of Approval of the Works are still applicable at the time of construction to ensure the ongoing protection of the environment, and that prior to the commencement of construction of the portion of the Works that are approved in principle only, the Director will have the opportunity to review detailed design drawings, specifications and an engineer's report containing detailed design calculations for that portion of the Works, to determine capability to comply with the Ministry's requirements stipulated in the terms and conditions of the Approval, and also ensure that the Works are constructed in accordance with the Approval and that record drawings of the Works "as constructed" are updated and maintained for future references.
- 4. Condition 4 regarding design objectives is imposed to establish non-enforceable design objectives to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
- 5. Condition 5 regarding compliance limits is imposed to ensure that the Final Effluent discharged from the Works to the environment meets the Ministry's effluent quality requirements.
- 6. Condition 6 regarding operation and maintenance is included to require that the Works be properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. As well, the inclusion of a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner. 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.
- 7. Condition 7 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 design objectives and compliance limits.
- 8. Condition 8 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.

Schedule A

1.	Application for Environmental Compliance Approval for Municipal and Private Sewage Works, dated
	March 9, 2022 and received on March 11, 2022, submitted by OPTrust Amaranth 6 Inc., including the
	design brief, final plans, specifications and all supporting documentation and correspondence submitted in
	support of this application.

Schedule B

Final Effluent Design Objectives

Final Effluent	Averaging Calculator	Objective
Parameter		
CBOD5	Monthly Average Effluent Concentration	5 mg/L*
Total Suspended Solids	Monthly Average Effluent Concentration	5 mg/L
Total Inorganic Nitrogen	Monthly Average Effluent Concentration	4 mg/L
(Ammonia Nitrogen,		
Nitrate Nitrogen and		
Nitrite Nitrogen)		
pН	Single Sample Result	6.5 - 8.5 inclusive

^{*}Note: "mg/L" means milligrams per litre.

Schedule C

Final Effluent Compliance Limits

Final Effluent Parameter	Averaging Calculator	Limit (maximum unless otherwise indicated)
CBOD5	Monthly Average Effluent Concentration	10 mg/L*
Total Suspended Solids	Monthly Average Effluent Concentration	10 mg/L
Total Inorganic Nitrogen (Ammonia Nitrogen, Nitrate Nitrogen and Nitrite Nitrogen)	Monthly Average Effluent Concentration	5 mg/L
рН	Single Sample Result	between 6.0 - 9.5 inclusive

^{*}Note: "mg/L" means milligrams per litre.

Schedule D

Monitoring Program

Influent

- Influent sampling point (see Page 2)

Parameters	Sample Type	Minimum Frequency
BOD5	Grab	Quarterly
Total Suspended Solids	Grab	Quarterly
Total Kjeldahl Nitrogen	Grab	Quarterly

Final Effluent

- Final Effluent sampling point (see Page 4)

Parameters	Sample Type	Minimum Frequency
CBOD5	8 hour composite	Biweekly
Total Suspended Solids	8 hour composite	Biweekly
Total Kjeldahl Nitrogen	8 hour composite	Monthly
Total Ammonia Nitrogen	8 hour composite	Biweekly
Nitrate as Nitrogen	8 hour composite	Biweekly
Nitrite as Nitrogen	8 hour composite	Biweekly
E. coli	Grab	Monthly
Total Coliforms	Grab	Monthly
pH	Grab/Probe/Analyzer	Monthly

Sludge/Biosolids
- sludge holding tank

Parameters	Sample Type	Minimum Frequency
Total Solids	Grab	Annually
Total Phosphorus	Grab	Annually
Total Ammonia Nitrogen	Grab	Annually
Nitrate as Nitrogen	Grab	Annually
Metal Scan	Grab	Annually
- Arsenic		
- Cadmium		
- Cobalt		
- Chromium		
- Copper		
- Lead		
- Mercury		
- Molybdenum		
- Nickel		
- Potassium		
- Selenium		
- Zinc		

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me and the Ontario Land Tribunal within 15 days after receipt of this notice, require a hearing by the Tribunal. Section 142 of the *Environmental Protection Act* provides that the notice requiring the hearing ("the Notice") 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:

Registrar*
Ontario Land Tribunal
655 Bay Street, Suite 1500
Toronto, Ontario
M5G 1E5
OLT.Registrar@ontario.ca

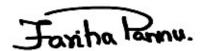
and

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 Ontario Land Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349 or 1 (866) 448-2248, or www.olt.gov.on.ca

The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.

DATED AT TORONTO this 31st day of May, 2023



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

SW/

c: District Manager, MECP Guelph District Office Jeff Cobbledick, P.Eng. & Suzanne Troxler P. Eng., Tatham Engineering Limited