

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

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 9791-BJQRVU Issue Date: March 11, 2020

Orillia Power Distribution Corporation 360 West Street South Post Office Box No. 398 Orillia, Ontario L3V 6J9

Site Location: Uhthoff Distribution Substation

(formerly Fittons Distribution Substation)

4600 Uhthoff Line

City of Orillia, County of Simcoe

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:

an oil spill containment system for the Uhthoff Distribution Substation having two (2) transformers T1 and T2 on a fenced site 0.1 hectares in area, each transformer containing approximately 5845 Litres of PCB-free Type II mineral insulating oil (CSA-C50-B); the containment system is designed to intercept oil volume and stormwater from up to 50-year storm event and has a total design volume of approximately 16,000 Litres, with the following components:

- two (2) spill containment pits measuring approximately 9.0m (L) \times 9.5m (W) and 0.9m (D) deep each with an individual containment volume of approximately 16~m3 through a containment area of 77~m2, and equipped with the following;
- a secondary oil containment system using Sorbweb™ Plus with SAM (absorbent material) system, installed with a geotextile impermeable liner on walls and around the transformer pad, 2 (two) 51 millimetre sand layers approximately (above and below the absorbent SAM layer), complete with Oil Mat smart membrane, non-woven geotextile and an approximate 0.85 metre layer of fire quenching stone on top of the containment system, complete with 150 millimetre Wick drain installed on a sand layer below the containment system and sloped towards an outlet for sample collection purposes, approximately 200 millimetre freeboard and 150 millimetre surface stone;
- each wick drain transitioning into a 100mm PVC pipe; and a combined PVC pipe from each containment area discharging into an onsite storm lift station located in a sump having approximate dimensions of 1.5m x 1.5m x 3.575m, complete with oil sensor, equipped with a two (2) sump pump automatic pumping system, a

density type oil detection probe and a low transformer oil level pump- interlock, collecting the stormwater from the Transformer Containment Areas and discharging by means of a 27.9 metre run of a 50 millimetre diameter force main to 450 millimetre diameter municipal storm sewer through an existing catch basin;

including erosion/sedimentation control measures during construction and during operation; and all other controls, electrical equipment, instrumentation, piping and appurtenances essential for the proper operation of the aforementioned Works;

all in accordance with the Schedule A.

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

"Approval" means this entire document and any schedules attached to it, and the application;

"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;

"District Manager" means the District Manager of the Barrie District Office of the Ministry;

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

"mg/L" means milligrams per Litre;

"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;

"Owner" means Orillia Power Distribution Corporation, and its successors and assignees;

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

"ug/L" means micrograms per litre, and

"Works" means the sewage works described in the Owner's application of this Approval.

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 CONDITION

- (1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (2) Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and

maintain the Works in accordance with the description given in this Approval, and the application for approval of the Works.

- (3) Where there is a conflict between a provision of any document in the schedule referred to in this Approval and the conditions of this Approval, the Conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.
- (4) Where there is a conflict between the documents listed in the Schedule submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.
- (5) The Conditions of this Approval are severable. If any Condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

2. <u>CHANGE OF OWNER</u>

- (1) The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:
 - (a) change of Owner or operating authority, or both;
 - (b) change of address of Owner or operating authority or address of new Owner or operating authority;
 - (c) change of partners where the Owner or operating authority is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Partnerships Registration Act;
 - (d) change of name of the corporation where the Owner or operator is or at any time becomes a corporation, and a copy of the most current "Initial Notice or Notice of Change" (Form 1, 2 or 3 of O. Reg. 189, R.R.O. 1980, as amended from time to time), filed under the Corporations Information Act, shall be included in the notification to the District Manager;
- (2) In the event of any change in ownership of the Works, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the District Manager.
- (3) The Owner shall ensure that all communications made pursuant to this condition will refer to this Approval's number.

3. CHANGES IN PROCESSES OR PROCESS MATERIALS

(1) The Owner shall give written notice to the *District* Manager of any plans to change the processes or

process materials in the Owner's enterprise serviced by the *Works* where the change may significantly alter the quantity or quality of the sewage *Works*, while complying with the approved effluent quantity and quality criteria and no such change(s) shall be made unless with the written concurrence or approval of the *Director*.

(2) The *Owner* shall only use the type of oil, i.e. mineral-based transformer oil or vegetable-based transformer oil, according to the type of polymer-based oil absorbent material used. If a change is planned to change the type of oil, the *Owner* shall also change the polymer (Sorbweb Plus with SAM or equivalent) and obtain approval from the *Director* to amend this *Approval* before any modification is implemented.

4. OPERATIONS MANUAL

- (1) The Owner shall prepare an operations manual prior to the commencement of operation of the sewage works, that includes, but not necessarily limited to, the following information:
 - (a) operating procedures for routine operation of the Works;
 - (b) inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;
 - (c) repair and maintenance programs, including the frequency of repair and maintenance for the Works;
 - (d) contingency plans and procedures for dealing with potential spill, bypasses and any other abnormal situations and for notifying the District Manager; and
 - (e) complaint procedures for receiving and responding to public complaints.

(2) The Owner shall maintain the operations manual up to date through revisions undertaken from time to time and retain a copy at the location of the sewage works. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.

5. EFFLUENT OBJECTIVES

- (1) The Owner shall use best efforts to design, construct and operate the Works with the objective that the concentrations of the materials listed as effluent parameters in the effluent objectives table in the Schedule B are not exceeded in the effluent from the Works.
- (2) As a further effluent objective, the Owner shall use best efforts to maintain the pH of the effluent from the Works within the range of 6.5 to 9.5, inclusive, at all times.
- (3) The Owner shall include in all reports submitted in accordance with Conditions 7 and 8 a summary of the efforts made and results achieved under this Condition.

6. <u>EFFLUENT - VISUAL OBSERVATIONS</u>

- (1) Notwithstanding any other condition in this Approval, the Owner shall ensure that the effluent from the works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen or foam on the receiving waters.
- (2) The Owner shall, as a minimum, check the oil detection systems on a monthly basis during the initial year of operations and create a written record of the inspections.
- (3) The visual inspection frequencies specified in subsection (2) shall continue quarterly (four times over a year) after the initial year of operations and continue at frequencies as per Condition 7 (4) thereafter.

7. EFFLUENT MONITORING AND RECORDING

The Owner shall, upon commencement of operation of the sewage *works*, carry out the following monitoring program:

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

- (2) Samples shall be collected and analyzed from the concrete sump well, at the sampling frequencies and using the sample type specified for each parameter listed in the Schedule C:
- (3) The methods and protocols for sampling, analysis, toxicity testing, and recording shall conform, in order of precedence, to the methods and protocols specified in the following:
 - (a) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (August 1994), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions;
 - (b) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition) as amended from time to time by more recently published editions;
- (4) The Owner shall, in the event of an exceedance of the maximum concentration objective set out in the Table No. 1, increase the frequency of sampling and immediately report to the District Manager verbally, with a copy of the written record created for the monitoring weekly until the District Manager provides written direction that additional sampling and reporting is no longer required.
- (5) If over a period of twenty-four (24) months of effluent monitoring under Condition (1), there are no exceedances of the maximum concentration set out in the Table 1, the Owner may reduce the measurement frequency of effluent monitoring to a frequency as the District Manager may specify in writing, provided that the new specified frequency is never less than annual.

8. REPORTING

- (1) One week prior to the start up of the operation of the Works, the Owner shall notify the District Manager (in writing) of the pending start up date.
- (2) The Owner shall report to the District Manager or designate, any exceedance of any parameter specified in Condition 5 orally, as soon as reasonably possible, and in writing within seven (7) days of the exceedance.
- (3) In addition to the obligations under Part X of the *Environmental Protection Act*, the Owner shall, within ten (10) working days of the occurrence of any reportable spill as defined in Ontario Regulation 675/98, bypass or loss of any product, by-product, intermediate product, oil, solvent, waste material or any other polluting substance into the environment, submit a full written report of the occurrence to the District Manager describing the cause and discovery of the spill or loss, clean-up and recovery measures taken, preventative measures to be taken and schedule of implementation.
- (4) The Owner shall prepare and submit a performance report to the District Manager on an annual basis within 90 days following the end of the period being reported upon. 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 and a comparison to the effluent objectives outlined in Condition 5, including an overview of the success and adequacy of the sewage 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 sewage works;
- (d) a summary of any effluent quality assurance or control measures undertaken in the reporting period;
- (e) a summary of the calibration and maintenance carried out on all effluent monitoring equipment;
- (f) a description of efforts made and results achieved in meeting the Effluent Objectives of Condition 5.

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

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- 1 Condition 1 is imposed to ensure that the works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.
- 2. Condition 2 is included to ensure that the Ministry records are kept accurate and current with respect to approved works and to ensure that subsequent owners of the works are made aware of the Approval and continue to operate the works in compliance with it.
- 3. Condition 3 is included to ensure that the works is operated in accordance with the information submitted by the owner relating to the process and materials which are served by the works, and to ensure that any contemplated changes in them which could potentially affect the characteristics of effluent from the works will be properly reviewed and approved.
- 4. Condition 4 is included to ensure that a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner and made available to the Ministry. Such a manual is an integral part of the operation of the Works. Its compilation and use should assist the owner in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the owner's operation of the Works.

- 5. Conditions 5 and 6 are imposed to ensure that the effluent discharged from the works meets the Ministry's effluent quality objectives thus minimizing potential negative impacts on the environment.
- 6. Condition 7 is included to require the Owner to demonstrate on a continual basis that the quality and quantity of the effluent from the approved works is consistent with the design objectives specified in the Approval and that the approved works do not cause any impairment to the receiving watercourse.
- 7. Condition 8 is included to provide a performance record for future references and to ensure that the Ministry is made aware of problems as they arise, so that the Ministry can work with the Owner in resolving the problems in a timely manner.

SCHEDULE 'A'

1.	Application for Approval of Environmental Compliance, Industrial Sewage Works, dated April 11, 2019
	and received on April 16, 2019, prepared and submitted by Orillia Power Distribution Company,
	including all supporting documentation.

SCHEDULE 'B'

Effluent Objectives			
Effluent Parameter	Concentration Objective		
Oil and grease	15 mg/L		
Phenolics(4AAP)	20 ug/L		

SCHEDULE 'C'

Effluent Monitoring - (Sample Point at the Stormwater Pump Station)				
Effluent Parameter	Frequency	Sample Type		
_	Quarterly. Four times over a year,	Grab		
	relatively evenly spaced.			
	At a minimum two (2) of these			
	samples have to be taken within 48			
	hours after a 10mm rainfall event.			

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 Director appointed for the purposes of The Secretary* The Minister of the Environment. Part II.1 of the Environmental Protection Act Environmental Review Tribunal Conservation and Parks Ministry of the Environment, 655 Bay Street, Suite 1500 AND 777 Bay Street, 5th Floor AND Conservation and Parks Toronto, Ontario Toronto, Ontario 135 St. Clair Avenue West, 1st Floor M5G 1E5 M7A 2J3 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 11th day of March, 2020

Fariha Parnu.

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

KH/

c: District Manager, MECP Barrie District. Oday Wade'e, Albarrie GeoComposites Ltd.