

**ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 0419-BTNLJ9  
Issue Date: November 25, 2020

Toronto Hydro-Electric System Limited  
500 Commissioners Street  
Toronto, Ontario  
M4M 3N7

Site Location: 20 Underwriters Road  
City of Toronto  
M1R 3A9

*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:*

an oil spill containment system for the Underwriters Crouse Transformer Station having one (1) transformer in a fenced site 354 m<sup>2</sup> hectares, transformer containing approximately 5.15 m<sup>3</sup> of PCB-free Type II mineral insulating oil (CSA-C50-B); the containment system is designed to collect stormwater from up to 25-year storm event and any spill oil volume and has a total design volume of approximately 17.91 m<sup>3</sup> Litres, comprising:

One (1) spill containment pits measuring approximately 9.2m × 12.5m x 0.6 m deep with a containment volume of approximately 19.7 m<sup>3</sup> through a containment area of 115 m<sup>2</sup>, 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, two (2) 50 mm sand layers approximately (above and below the absorbent SAM layer), complete with Oil Mat smart membrane, non-woven geotextile and an approximate 0.5 m layer of fire quenching stone on top of the containment system, complete with Wick Drain;
- 150 millimetre Wick drain, laid horizontally, approximately 37 m long, installed around transformer and switchgear pad, laid on a 50 mm sand layer below the Sorbweb™ Plus layer, containment system and sloped towards an outlet for sample collection purposes, approximately 200 millimetre freeboard and 150 millimetre surface stone, outletting ultimately to a Detention Pit through a 100 mm perforated pipe installed in a Drainage Trench;

- One Detention Pit/Infiltration basin, 7.75 m x 4 m, filled with washed stones to a depth of 1.2 m laid over a non geotextile filter cloth laid on the pit bed, overtopped with an impermeable liner, and compacted backfilled material 0.9 m deep; the detention pit receiving the stormwater from the transformer containment area and discharging to the subsurface;

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:*

1. "Approval" means this entire document and any schedules attached to it, and the application;
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 Toronto Office of the Ministry;
4. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;
5. "Grab sample" is defined in Section 3.1.1 of the Ministry publication, "Protocol For the Sampling and Analysis of Industrial/Municipal Waste Water" dated January 1999, and as amended;
6. "mg/L" means milligrams per Litre;
7. "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;
8. "Owner" means Toronto Hydro-Electric System Limited, and its successors and assignees;
9. "OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;
10. "Professional Engineer" means a person entitled to practice as a Professional Engineer in the Province of Ontario under a licence issued under the Professional Engineers Act;
11. "Quarterly" means four times over a year, relatively evenly spaced where possible, commencing with the start-up of the Works;
12. "ug/L" means micrograms per litre; and
13. "Works" means the sewage Works described in the Owner's application, and 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 terms and conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
2. Except as otherwise provided by these terms and conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with this Approval.
3. Where there is a conflict between a provision of this environmental compliance approval and any document submitted by the Owner, the conditions in this environmental compliance approval shall take precedence. Where there is a conflict between one or more of the documents submitted by the Owner, the Application shall take precedence unless it is clear that the purpose of the document was to amend the Application.
4. Where there is a conflict between the documents listed in the Schedule A, 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 terms and conditions of this Approval are severable. If any term and condition of this environmental compliance approval, or the application of any requirement of this environmental compliance 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.
6. 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. EXPIRY OF APPROVAL

1. This Approval will cease to apply to those parts of the Works which have not been constructed within **five (5) years** of the date of this Approval.

## 3. CHANGE OF OWNER

1. The Owner shall notify the District Manager and the Director, in writing, of any of the following changes within **thirty (30) days** of the change occurring:
  - a. change of Owner or operating authority, or both;
  - b. change of address of Owner or operating authority or address of new Owner or operating authority;
  - c. change of partners where the Owner or operating authority is or at any time becomes a partnership, and a copy of the most recent declaration filed under the *Business Names Act, R.S.O. 1990, c. B.17* ; and
  - 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 "Initial Return" or "Notice of Change" filed under the *Corporations Information Act, R.S.O. 1990, c. C.39* , 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.

## 4. CONSTRUCTION

1. The Owner shall ensure that the design and construction of the Works is supervised by a Professional Engineer.
2. Upon construction of the Works, the Owner shall prepare a statement, certified by 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.
3. Within **six (6) months** of the construction of the Works, a set of as-built drawings showing the Works "as constructed" shall be prepared. These drawings shall be kept up to date through revision undertaken from time to time and a copy shall be retained for the operational life of the Works.

## 5. OPERATION AND MAINTENANCE

1. The Owner shall ensure that the Works and related equipment and appurtenances which are installed or used to achieve compliance with this Approval are properly operated and maintained. The Owner shall check the Works on a **monthly basis**, as a minimum, and keep a record of the inspections in a log-book at the Station. Upon the request of the Owner, the District Manager may reduce the frequency of inspection, in writing.
2. The Owner shall use best efforts to immediately identify and clean up all losses of oil from the transformers.
3. The Owner shall, upon identification of a loss of oil, take immediate action to prevent the further occurrence of such loss.
4. In furtherance of, but without limiting the generality of, the obligation imposed by Subsection (1), the Owner shall ensure that equipment and material for the containment, clean up and disposal of oil and materials contaminated with oil are kept on hand and in good repair for immediate use in the event of:
  - a. loss of oil from the transformers and equipment;
  - b. a spill within the meaning of Part X of the EPA; or
  - c. the identification of an abnormal amount of oil in the spill containment system or the oil-water separator.
5. The Owner shall ensure that the oil that is used in all transformers is free from Polychlorinated Biphenyls.

## 6. OPERATIONS MANUAL

1. In furtherance of, but without limiting the generality of the obligation imposed by Condition 5, the Owner shall prepare an operations manual prior to the commencement of operation of the Works, that includes, but is not necessarily limited to, the following information:
  - a. operating procedures for routine operation of the Works and for periodic self-monitoring of the oil-water separator effluent;
  - 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. a spill prevention, control and countermeasures plan to address loss of oil from transformers

- and oil discharge offsite, including procedures for notifying the District Manager; and
- e. procedures for responding to environmental concerns from the public.
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 Works for as long as they are in operation. Upon request, the Owner shall make the manual available for inspection and copying by Ministry personnel.

## **7. 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 under the effluent objectives table in **Schedule B** are not exceeded in the effluent from the Works.
2. In the event of an exceedence of one of the objectives set out in the effluent objectives table in **Schedule B**, the Owner shall:
  - a. notify the District Manager as soon as possible during normal working hours;
  - b. take immediate action to identify the source of contamination; and
  - c. take immediate action to prevent further exceedence.

## **8. EFFLUENT - VISUAL OBSERVATIONS**

1. Notwithstanding any other Condition in this Approval, the Owner shall ensure, by periodic visual inspection and recording in a log-book, 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, foam or discolouration on the receiving waters.

## **9. SAMPLES AND MEASUREMENTS**

1. The Owner shall ensure that all samples and measurements taken for the purposes of this Approval are taken at a time and in a location characteristic of the quality and quantity of the effluent stream, over the time period being monitored.

## **10. EFFLUENT MONITORING**

1. The Owner is exempted from the requirement of a regular, Approval-imposed effluent monitoring program for the herein approved Works under the following conditions:
  - a. The Works shall be operated using Best Management Practices and in compliance with the established effluent objectives as set out in Condition 7 and the effluent objectives table in

**Schedule B**, as confirmed, from time to time, by recorded self-monitoring data;

- b. Ministry staff may enter the site of the Works at any reasonable time to inspect the Works which can include, but not be limited to, the taking of samples and copying of monitoring information from the station record; and
  - c. The monitoring requirements as described in the effluent monitoring table included in **Schedule B** will be undertaken for twelve (12) months directly following a spill, with termination of the monitoring requirements to be determined by the District Manager at the end of the twelve (12) month period.
2. The Owner shall carry out the following effluent monitoring program immediately after a spill as defined under Condition 5, Subsection (4)(b):
- a. The Owner shall sample the effluent from the oil-water separator, at the outlet pipe, during a time period when there is a representative effluent flow moving through the outlet pipe, in accordance with the monitoring frequencies and sample types specified in the effluent monitoring table included in **Schedule B** and shall analyse the sample for the parameters named, unless otherwise required in writing by this Approval or by the District Manager: and
  - b. In the event of an exceedence of any of the objectives set out in Condition 7 and the effluent objectives table **Schedule B**, the Owner shall increase the frequency of sampling of the effluent from the oil-water separator, at the outlet pipe, during a time period when there is a representative effluent flow moving through the outlet pipe, to once per month for each month that discharge occurs until it is demonstrated to the District Manager that the effluent complies with the said objectives.
3. The methods and protocols for sampling, analysis, and recording shall conform, in order of precedence, to the methods and protocols specified in the following:
- a. Ministry of the Environment publication "Protocol for the Sampling and Analysis of Industrial/ Municipal Wastewater", January 1999, as amended from time to time by more recently published editions; and
  - b. the publication "Standard Methods for the Examination of Water and Wastewater", 21st edition, 2005, as amended from time to time by more recently published editions.
4. The Owner shall maintain a log-book at the Station for recording all information related to, or resulting from, the operational, inspection and monitoring activities required by this Approval and shall retain all such records for a minimum of **five (5) years** from the date of their creation.

## 11. 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 prepare and submit to the District Manager, a performance report, on an annual basis, within **ninety (90) days** following the end of the period being reported upon. The first such report shall cover the first annual period following the issuance of this Approval 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 comprehensive interpretation of all monitoring data and analytical data collective relative to the Works during the reporting period, 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 the efforts made and results achieved in comparison to the effluent quality objectives in accordance with Condition 7;
  - f. an evaluation of the calibration and maintenance procedures conducted on all monitoring equipment; and
  - g. any other information the District Manager requires from time to time.
3. In addition to the obligations under Part X of the EPA, the Owner shall, within **ten (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, or discovery thereof, 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. The District Manager may by written notice waive the requirement of a written report, on a case-by-case basis, when the respective oral report is made.
4. The Owner shall immediately notify the Ministry's Spills Action Centre of any Works failure or potential Works failure, including any spills.



5. The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
6. Reporting in accordance with subsections (3) or (4) does not relieve the Owner of any other regulatory or statutory obligations, including its reporting obligations pursuant to Part X of the EPA, nor does it relieve the Owner of any other obligations imposed by this Approval.

## 12. TEMPORARY SEDIMENT AND EROSION CONTROL

1. The Owner shall install and maintain temporary sediment and erosion control measures during construction and conduct inspections once every **two (2) weeks** and after each significant storm event (a significant storm event is defined as a minimum of 25 mm of rain in any 24 hours period). The inspections and maintenance of the temporary sediment and erosion control measures shall continue until they are no longer required and at which time they shall be removed and all disturbed areas reinstated properly.
2. The Owner shall maintain records of inspections and maintenance which shall be made available for inspection by the Ministry, upon request. The record shall include the name of the inspector, date of inspection, and the remedial measures, if any, undertaken to maintain the temporary sediment and erosion control measures.

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

1. Condition 1 is imposed to ensure that the Works are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The Works are to be constructed in a timely manner to ensure ongoing protection of the environment.
2. Condition 2 is included to ensure that, when the Works are constructed, the Works will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
3. Condition 3 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.
4. Condition 4 is included to ensure that the Works are constructed, and may be operated and maintained such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
5. Condition 5 is included to ensure that the Works will be operated and maintained in a manner enabling compliance with the terms and conditions of this Approval, such that the environment is protected and deterioration, loss, injury or damage to any person or property is minimized and/or

prevented.

6. Condition 6 is included to ensure that an operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept current 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 and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a bench-mark for Ministry staff when reviewing the Owner's operation of the Works.
7. Condition 7 is imposed to establish non-enforceable effluent quality objectives which the Owner is obligated to use best efforts to meet on an ongoing basis. Also imposed are procedures to be followed to minimize environmental impact in the event the objectives are exceeded.
8. Condition 8 is imposed to ensure that the effluent discharged from the Works meets the Ministry's effluent quality requirements, as specified, on a continuous basis, thus minimizing environmental impact on the receiver.
9. Conditions 9 and 10 are related to sampling, monitoring and record keeping. They have been imposed to require the Owner to demonstrate, when required, that the performance of the Works is at a level consistent with the design and effluent objectives specified in the Approval and does not cause any impairment to the receiving watercourse, and that all pertinent information is available for any future review.
10. 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.
11. Condition 12 is included as installation, regular inspection and maintenance of the temporary sediment and erosion control measures is required to mitigate the impact on the downstream receiving watercourse during construction until they are no longer required.

### **Schedule A**

1. Application for Approval of Industrial and Private Water and Sewage Works dated December 12, 2019 and received on December 17, 2019.

## Schedule B

### Effluent Objectives Table

(sample location: effluent discharge sample collected near detention pit outlet)

<b>Effluent Parameter</b>	<b>Concentration Objective</b> (milligrams per litre unless otherwise indicated)
Oil and Grease	15
Polychlorinated biphenyls	0.01 ug/L
Phenolics(4AAP)	20 ug/L

### Effluent Monitoring Table

<b>Frequency</b>	Quarterly
<b>Sample Type</b>	Grab
<b>Parameters</b>	Oil and Grease, Polychlorinated biphenyls and Phenolics (4AAP)

*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

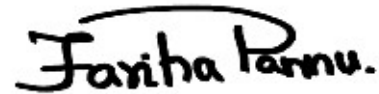
The Director appointed for the purposes of  
Part II.1 of the Environmental Protection Act  
Ministry of the Environment,  
Conservation and Parks  
135 St. Clair Avenue West, 1st Floor  
Toronto, Ontario  
M4V 1P5

**\* 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](http://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 25th day of November, 2020



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

KH/

c: District Manager, MECP Toronto District.  
Seop Lee, Cima Canada Inc.