

ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER A-500-1093725437

Version: 1.0

Issue Date: October 8, 2020

Pursuant to section 20.3 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 and subject to all other applicable Acts or regulations this Environmental Compliance Approval is issued to:

HYDRO ONE NETWORKS INC

483 BAY STREET ,FLOOR TCT12
TORONTO ONTARIO
M5G 2P5

For the following site:

Belleville Transmission Station
171 Centre Street, Belleville
Ontario, K8N 4W8

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:

sewage works for the collection, transmission, treatment and disposal of drainage water and stormwater at the Belleville Transmission Station, consisting of the following:

TRANSFORMER SPILL CONTAINMENT

Transformer 3T1 Spill Containment

one (1) rectangular shaped spill containment pit under transformer 3T1 (87 cubic metres of oil) located east of transformers 3T2, having a spill containment volume of 110.8 cubic metres comprised of:

- a concrete floor having a length of approximately 15.0 metres and a width of approximately 12.6 metres;
- a layer of fire quenching stone to be placed on top of the concrete floor, within the containment area, having an average height of approximately 0.61 metres;
- a concrete curb having an average height of approximately 0.40 metres above the quenching stone layer; and
- drained via a 200 millimetre diameter stainless steel pipe and manhole MH-1000 to the new oil-water separator OWS HT-1 to be located on the north side of the station.

Transformer 3T2 Spill Containment

one (1) rectangular shaped spill containment pit under transformer 3T2 (87 cubic metres of oil) located south of the Oil-Water Separator, having a spill containment volume of approximately 112.06 cubic metres comprised of:

- a concrete floor having a length of approximately 15.0 metres and a width of approximately 12.6 metres;
- a layer of fire quenching stone to be placed on top of the concrete floor, within the containment area, having an average height of approximately 0.63 metres;
- a concrete curb having an average height of approximately 0.40 metres above the quenching stone layer; and
- drained via a 200 millimetre diameter stainless steel pipe and manhole MH-1000 to the new oil-water separator OWS HT-1 to be located on the north side of the station.

OIL WATER SEPARATOR

Oil-Water Separator OWS HT-1

one (1) precast, concrete oil-water separator, located north of transformer 3T1 and 3T2, having a length of approximately 8.54 metres, a width of approximately 4.14 metres and a depth of approximately 4.10 metres, receiving effluent from transformer 3T1 and 3T2, designed to provide:

- a design flow of approximately 29.79 litres per second for oil separation, greater than the criteria flow rate of the flow regulator of 23.0 litres per second (when head is 1.30 metres);
- an oil holding volume of approximately 114.91 cubic metres as measured to 0.20 metres from the floor where the tee pipe opening is positioned;
- a 200 millimetre diameter stainless steel T-pipe extending 0.20 metres above the floor into the riser, 3.35 metres long from the outlet invert; and
- discharges effluent via a 200 millimetre diameter HDPE pipe towards MH-1001 and then towards the existing drainage outlet.

Drainage System

the existing site drainage system include:

- a network of catch basins, manholes, interconnected by perforated (underdrainage) and solid (main) piping throughout the station.
- one (1) drainage outlet located at the north side of the station.
- stormwater drainage for the station control building.

all other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned sewage works.

all in accordance with supporting documents listed in Schedule 1.

DEFINITIONS

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 appropriate local district office of the Ministry, where the site is geographically located.
4. "EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended.
5. "Equivalent Equipment" means a substituted equipment or like-for-like equipment that meets the required quality and performance standards of a named equipment.
6. "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.
7. "mg/L" means milligrams per Litre.
8. "Ministry" means the ministry of the government of Ontario responsible for the EPA and OWRA and includes all officials, employees or other persons acting on its behalf.
9. "Owner" means Hydro One Network Inc., and its successors and assignees.
10. "OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended.
11. "Notice of Modifications" means the form entitled "Notice of Modifications to Sewage Works".
12. "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.
13. "Quarterly" means four times over a year, relatively evenly spaced where possible, commencing with the start-up of the Works.
14. "Limited Operational Flexibility" (LOF) means any modifications that the Owner is permitted to make to the Works under this Approval.
15. "ug/L" means micrograms per litre.
16. "Works" means the sewage works described in the Owner's application, this Approval, and the modifications made under Limited Operational Flexibility.

TERMS AND CONDITIONS

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

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, the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this Approval.

3. Where there is a conflict between a provision of any submitted document 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 listed submitted documents, the document bearing the most recent date shall prevail.
4. Where there is a conflict between the submitted documents and the application, the application shall take precedence, unless it is clear that the purpose of the documents 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.
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 approvals from the local conservation authority and the municipality 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. The Approval issued by 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 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 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 Proposed 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 oil loss, take appropriate 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 Station transformers;
 - 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 areas, the Oil /Water Separator/Holding Tanks, the Oil Control Manhole or in the Sampling Catch Basins.
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 operation manual prior to the commencement of the operation of the Works.
2. The Owner shall ensure that the manual includes:
 - a. operating procedures for routine operation of the Works and for periodic self-monitoring of the transformer spill containment effluents;
 - 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 the transformers and oil discharge offsite, including procedures for notifying the District Manager; and
 - e. procedures for responding to environmental concerns from the public.
3. The Owner shall maintain the operations manual current, 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 named as effluent parameters in the Effluent Objectives Table listed in Schedule 2 are not exceeded in the effluent from the Works
2. In the event of an exceedance of the objectives set out in Subsection (1), 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 exceedance.

8. EFFLUENT - VISUAL OBSERVATIONS

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, foam or discoloration on the final receiver.

9. SAMPLES AND MEASUREMENTS

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

10. EFFLUENT QUALITY MONITORING

1. The Owner is exempted from the requirement of a regular, Approval-imposed, effluent monitoring program for the effluents from the transformer spill containment works under the following conditions:
 - a. The works shall be operated using Best Management Practices and in compliance with the established effluent objective as set out in Condition 7, Subsection (1), 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 under Subsection (2) below 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 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 effluent from the spill affected **oil-water separator** shall be sampled at the **designated outlet**, in accordance with the monitoring frequency and sample type specified for each parameter listed in the Effluent Monitoring Table included in Schedule 2, unless otherwise required in writing by this Approval or by the District Manager.
 - b. In the event of an exceedance of the objective set out in Condition 7, Subsection (1), the Owner shall increase the frequency of sampling of the affected effluent from the **oil-water separator** 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 objective.
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.
 - 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 retain for a minimum of **five (5) years** from the date of their creation, or longer if requested in writing by the District Manager, all records and information related to, or resulting from, the monitoring, inspection and maintenance activities required by this Approval.

11. LIMITED OPERATIONAL FLEXIBILITY

1. The Owner may make modifications to the Works in accordance with the Terms and Conditions of this Approval and subject to the Ministry's "Limited Operational Flexibility Criteria for Modifications to Sewage Works", included under Schedule 3 of this Approval, as amended.
2. Sewage works proposed under Limited Operational Flexibility shall adhere to the design guidelines contained within the Ministry's publication "Stormwater Management Planning and Design Manual, 2003" and the "IEEE Guide for Containment and Control of Oil Spills in Substations" (IEEE Standard 980-2013), as amended, and engineering best practices.
3. The Owner shall ensure at all times, that the Works, related equipment and appurtenances which are installed or used to achieve compliance are operated in accordance with all Terms and Conditions of this Approval.
4. For greater certainty, the following are not permitted as part of Limited Operational Flexibility:
 - a. modifications to the Works that may adversely affect the approved effluent quality criteria or the location of the discharge/outfall;
 - b. modifications to the type of treatment process technology of the Works, or modifications that alter the treatment train process design;
 - c. modifications to activities mentioned in sub-section 9(1) of the EPA; and
 - d. modifications to the Works pursuant to an order issued by the Ministry.
5. Implementation of Limited Operational Flexibility is not intended to be used for piecemeal measures that result in major alterations or expansions.
6. If the implementation of Limited Operational Flexibility requires changes to be made to the Emergency Response, Spill Reporting and Contingency Plan, the Owner shall, as deemed necessary in consultation with the District Manager, provide a revised copy of this plan to the local fire services authority prior to implementing Limited Operational Flexibility.

7. For greater certainty, any modification made under the Limited Operational Flexibility may only be carried out after other legal obligations have been complied with, including those arising from the *Environmental Protection Act*, *Niagara Escarpment Planning and Development Act*, *Oak Ridges Moraine Conservation Act*, *Lake Simcoe Protection Act* and *Greenbelt Act*.
8. At least thirty (30) days prior to implementing Limited Operational Flexibility, the Owner shall complete a Notice of Modifications describing any proposed modifications to the Works and submit it to the District Manager.
9. In the event that at least one Notice of Modifications was submitted for this Approval, the Approval shall be amended for renewal within ten (10) years from the date of issuance of the Approval. The Owner shall submit to the Director an application to amend this Approval six (6) months prior to the renewal deadline. The renewal application shall include, at minimum, the following information:
 - a. the most current description of the Works;
 - b. copies of all Notices of Modifications that were submitted to the District Manager since the issuance of the Approval; and
 - c. a performance report on the operation and maintenance of the Works, including any exceedances of effluent criteria that occurred during the ten-year period since the issuance of the Approval.

REASONS

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. Condition 1.(6) is included to emphasize that the issuance of this Approval does not diminish any other statutory and regulatory obligations to which the Owner is subject in the construction, maintenance and operation of the Works. The Condition specifically highlights the need to obtain any necessary conservation authority approvals. The Condition also emphasizes the fact that this Approval doesn't limit the authority of the Ministry to require further information.
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, upon request. 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 benchmark 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, that it does not cause any impairment to the receiving areas and that required operational information is available for review.
10. Condition 11 is included to ensure that the Works are operated in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider. These conditions are also included to ensure that a Professional Engineer has reviewed the proposed Modifications and attests that the Modifications are in line with that of Limited Operational Flexibility and provide assurance that the proposed Modifications comply with the Ministry's requirements stipulated in the terms and conditions of this Approval, Ministry policies, guidelines, and industry engineering standards and best management practices.

APPEAL PROVISIONS

In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review 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 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*

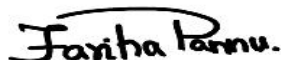
AND

*The 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.elto.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 8th day of October, 2020



Fariha Pannu

Director

appointed for the purposes of Part II.1 of the Environmental Protection Act

c: Lin Li, Hydro One Networks Inc.
Renee Pettigrew

The following schedules are a part of this environmental compliance approval:

SCHEDULE 1

Environmental Compliance Approval Application for Industrial Sewage Works uploaded by Lin Li, of HYDRO ONE NETWORKS INC., certified by Renee Pettigrew, of HYDRO ONE NETWORKS INC., dated July 07, 2020, and all supporting documentation and information.

SCHEDULE 2

Effluent Objectives Table

Effluent Parameter	Concentration Objective (milligrams per litre unless otherwise indicated)
Oil and Grease	15 mg/L
Phenol	20 ug/L
Polychlorinated Biphenyls (PCB)	0.05 ug/L

Effluent Monitoring Table

Parameters	Frequency	Sample Type
Oil and Grease	Quarterly	Grab
Phenol	Quarterly	Grab
Polychlorinated Biphenyls (PCB)	Quarterly	Grab

SCHEDULE 3

Limited Operational Flexibility Criteria for Modifications to Sewage Works

1. The modifications to sewage works approved under an Environmental Compliance Approval (Approval) that are permitted under the Limited Operational Flexibility (LOF), are outlined below and are subject to the LOF conditions in the Approval, and require the submission of the Notice of Modifications. If there is a conflict between the sewage works listed below and the Terms and Conditions in the Approval, the Terms and Conditions in the Approval shall take precedence.

1.1 Spill Containment Pits

Modifications made to an approved spill containment pit, provided that the capacity within the spill containment pit is sufficient to store, for a minimum of twenty-four (24) hours, the combined volume of the oil within the largest transformer that the pit services and the volume of precipitation generated under a 25-year storm event.

1.2 Replacement of Transformers

Replacement of a transformer with a new transformer that utilizes PCB-free oil, provided that:

- the capacity within the spill containment system is sufficient to store, for a minimum of twenty-four (24) hours, the combined volume of the oil within the largest transformer that the system services and the volume of precipitation generated under a 25-year storm event;
- the oil storage volume of the oil-water separator is greater than the volume of oil within the largest transformer that is serviced by the separator; and
- the flow rate of stormwater conveyed to the oil-water separator does not exceed the design flow rate of the separator.

1.3 Oil-Water Separators

Modifications made to an approved oil-water separator, provided that:

- the location and receiver of the drainage outlet remains unchanged;
- the oil storage volume of the oil-water separator does not decrease after the modification; and
- the flow rate of stormwater conveyed to the oil-water separator does not exceed the design flow rate of the separator.

1.4 Drainage Works

Replacement of or modifications to on-site drainage works that convey stormwater runoff provided that:

- the conveyance system discharges to a municipal sewer, ditch or drain;
- the location and receiver of the drainage outlet remains unchanged;
- the flow rate of stormwater runoff leaving the site does not increase;
- the quality of stormwater runoff leaving the site is the same or better than before the modifications; and

- the flow rate of stormwater conveyed to any treatment technologies, including oil-water separators, does not exceed the design flow rate of the treatment technology.
2. Sewage works that are exempt from section 53 of the OWRA by Ontario Regulation 525/98 continue to be exempt and are not required to follow the notification process under this Limited Operational Flexibility.
 3. Normal or emergency operational modifications, such as repairs, reconstructions, or other improvements that are part of maintenance activities, including cleaning, renovations to existing approved sewage works equipment, provided that the modification is made with Equivalent Equipment, are considered pre-approved.
 4. The modifications noted in section (3) above are **not** required to follow the notification protocols under Limited Operational Flexibility, provided that the number of pieces and description of the equipment as described in the Approval does not change.