

**ENVIRONMENTAL COMPLIANCE APPROVAL**

NUMBER 4020-D4FPKF  
Issue Date: August 15, 2024

Atura Hydrogen Inc., as general partner for and on behalf of  
Atura H2 L.P.  
1415 Joshuas Creek Dr, No. 101  
Oakville, ON L6H 7L9

Site Location: Niagara Hydrogen Centre Substation  
2900 Whirlpool Rd  
City of Niagara Falls, ON L0S 1P0

*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:*

Establishment of sewage works for the collection, transmission, treatment and disposal of stormwater as well as spill containment drainage at the Niagara Hydrogen Centre (NHC) Substation, located approximately 3 km east of the main NHC property, consisting of the following Works:

**Proposed Works:**

**Transformer Spill Containment**

- one (1) rectangular shaped spill containment pit below one (1) 30/40 MVA transformer (43.6 cubic metres of insulating mineral oil) located on the north-west side of the station, having a total spill containment volume of approximately 73 cubic metres, comprised of:
  - A concrete floor having length of approximately 11.0 metres and a width of approximately 9.15 metres;
  - A layer of fire quenching stone to be placed on top of the concrete floor, within the containment area, having an average depth of approximately 2.1 metres;
  - A concrete curb extending 15 centimetres past the quenching stone layer;
  - A concrete sump approximately 1.5 metres x 1.5 metres located in the south-east corner of the containment pit and connected to the stone layer via two (2) 254 mm diameter Stainless Steel pipes with 2-layers of 1/2" diameter metal filter mesh, discharging to the discharge pump manhole described below via 100 mm diameter Stainless Steel pipe;

## **Oil-Detection Sensor and Discharge Pump Manhole**

- one (1) Liquid Smart Alarm Sensor, Model #LS-1 (or Equivalent Equipment) located within a control manhole immediately south-east of the containment pit, preventing the discharge pump from operating once oil is detected in the effluent; connected to an on-site control panel as well as to the NHC plant, complete with alarm light at the control panel;
- one (1) automatically operated submersible discharge pump located within with the control manhole, complete with control logic to perform regular pump outs as required while maintaining the required containment volume, discharging containment pit effluent via one (1) 75 mm PVC discharge pipe towards a rip rap lined swale at the south-east property limit and ultimately to the OPG SAB2 Tunnel Outflow Channel.

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

all in accordance with supporting documents listed in Schedule A.

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

1. "Approval" means this entire Environmental Compliance Approval and any Schedules attached to it;
2. "Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;
3. "District Manager" means the District Manager of the appropriate local district office of the Ministry, where the Works are geographically located;
4. "EPA" means the *Environmental Protection Act* , R.S.O. 1990, c.E.19, as amended;
5. "Equivalent Equipment" means alternate piece(s) of equipment that meets the design requirements and performance specifications of the piece(s) of equipment to be substituted;
6. "Grab Sample" 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;
7. "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;
8. "mg/L" means milligrams per litre;

9. "µg/L" means micrograms per litre;
10. "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;
11. "Owner" means Atura Hydrogen Inc., as general partner for and on behalf of Atura H2 L.P. and its successors and assignees;
12. "OWRA" means the *Ontario Water Resources Act* , R.S.O. 1990, c. O.40, as amended;
13. "Proposed Works" means those portions of the Works included in the Approval that are under construction or to be constructed;
14. "Quarterly" means four times over a year, relatively evenly spaced where possible, commencing with the start-up of the Works; and
15. "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 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. The Owner shall design, construct, operate and maintain the Works in accordance with the conditions of this Approval.
3. Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence.
4. The issuance of, and compliance with the conditions of, this Approval does not:
  - a. relieve any person of any obligation to comply with any provision of any applicable statute, regulation or other legal requirement, including, but not limited to, the obligation to obtain approval from the local conservation authority necessary to construct or operate the 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.
2. In the event that completion and commissioning of any portion of the Works is anticipated to be more than five (5) years, the Owner shall submit an application for extension at least **twelve (12) months** prior to the end of the five (5) years from the day of issuance of this Approval. The application shall include the reason(s) for the delay, whether there is any design change(s) and a review of whether the standards applicable at the time of Approval of the Works are still applicable at the time of request for extension, to ensure the ongoing protection of the environment.

## 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 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; or
  - 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. C39* shall be included in the notification.
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 and the Director.
3. The Owner shall ensure that all communications made pursuant to this condition refer to the number of this Approval.

## 4. CONSTRUCTION OF PROPOSED WORKS

1. Upon the construction of the Works, the Owner shall prepare a statement, certified by a Licensed Engineering Practitioner, that the Works are constructed in accordance with this Approval, and upon request, shall make the written statement available for inspection by Ministry personnel.

2. Within **one (1) year** of the construction of the Proposed Works, a set of as-built drawings showing the Works “as constructed” shall be prepared. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the Works 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 areas or the Discharge Pump Manhole.
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.
2. The Owner shall ensure that the manual 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 discharge pump manhole 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 the transformers and oil discharge offsite, including procedures for notifying the District Manager; and
  - e. procedures for receiving, responding and recording public complaints, including recording any follow-up 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.

## **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 under the Effluent Objectives Table listed in **Schedule B** are not exceeded in the effluent from the Works.
2. In the event of an exceedance of one 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 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 QUALITY MONITORING

1. The Owner shall carry out the following regular effluent monitoring program for the effluent from the transformer spill containment Works under the following conditions:
  - a. The effluent from the containment pit 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 B**, unless otherwise required in writing by this Approval or by the District Manager;
  - 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
2. The Owner shall carry out the following effluent monitoring program immediately after a spill as defined under Condition 5, Subsection (4)(b) or following any effluent exceedance reported under the regular effluent monitoring program outlined in condition 10.1:
  - a. The effluent from the spill and/or effluent objective exceedance affected containment pit shall be sampled at the **designated outlet**, in accordance with the sample type specified for each parameter listed in the Effluent Monitoring Table included in **Schedule B**, unless otherwise required in writing by this Approval or by the District Manager.
  - b. In the event of a spill or 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 containment pit 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 2016, 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. 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 performance reports on a calendar year basis by March 31 of the calendar year following the period being reported upon and submit to the District Manager upon request. 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 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.
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 millimetres 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. Condition 1.4 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 in accordance with the approval and that record drawings of the Works “as constructed” are maintained for future references.
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 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. Environmental Compliance Approval Application for a Industrial Sewage Works submitted by Atura Hydrogen Inc., as general partner for and on behalf of Atura H2 L.P, dated February 8, 2024 and received on February 7, 2024, and all supporting documentation and information.
2. Stormwater Management Report Niagara Hydrogen Centre Substation Area, dated February 6, 2024 and revised May 3, 2024, including calculations and engineering drawings along with revised drawings dated May 15, 2024, prepared by Pyramids Engineering

## Schedule B

### Effluent Objectives Table

| Effluent Parameter | Concentration Objective |
|--------------------|-------------------------|
| Oil and Grease     | 15 mg/L                 |

### Effluent Monitoring Table (measured at the discharge pump manhole)

|             |                |
|-------------|----------------|
| Frequency   | Quarterly      |
| Sample Type | Grab           |
| Parameters  | Oil and Grease |

In accordance with Section 139 of the *Environmental Protection Act*, you may by written notice served upon me, the Ontario Land 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 ("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 Minister of the Environment,  
Conservation and Parks  
777 Bay Street, 5th Floor  
Toronto, Ontario  
M7A 2J3

and

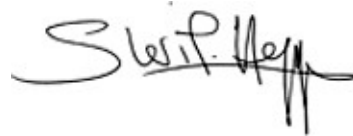
The Director appointed for the purposes of  
Part II.1 of the *Environmental Protection Act*  
Ministry of the Environment,  
Conservation and Parks  
135 St. Clair Avenue West, 1st Floor  
Toronto, Ontario  
M4V 1P5

\* Further information on the 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](http://www.olt.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 15th day of August, 2024



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

MS/

c: District Manager, MECP Niagara  
Nader Tadros, Pyramids Engineering