

Environmental Assessment Approval

Approval Date: February 7, 2023

EverWind Point Tupper Green

Hydrogen / Ammonia Project – Phase I

EverWind Fuels Company

Point Tupper, Richmond County, Nova Scotia

Terms and Conditions for Environmental Assessment Approval

1 Definitions

- 1.1 Act means *Environment Act* 1994-95, c.1, s.1, and includes, unless the context otherwise requires, the regulations made pursuant to the Act, as amended from time to time.
- 1.2 Department means the Department of Environment and Climate Change, and the contact for the Department for this Approval is:

Environment and Climate Change
Eastern Region, Port Hawkesbury
218 MacSween Street, Suite 12, Nova Scotia, B9A 2J8
Phone: 902-625-0791 Fax: 902-625-3722
- 1.3 Minister means the Minister of Environment and Climate Change.
- 1.4 Commencement means the same as to commence work, as defined in the Environmental Assessment Regulations.
- 1.5 EA means Environmental Assessment.

2 Scope

- 2.1 This Approval (the "Approval") relates to the Approval Holder(s) and their Registration Documentation, which includes all documentation submitted to the Department prior to the issuance of this Approval for the EverWind Point Tupper Green Hydrogen Project – Phase I, situated at or near Point Tupper, Richmond County, Nova Scotia, hereafter referred to as the "Project."
- 2.2 The Approval Holder(s) shall ensure the Project is carried out in accordance

with this Approval and the Registration Documentation, which includes all reference documents and supporting documentation.

3 General

- 3.1 The Approval Holder shall conduct the Project in accordance with the *Act*, as amended from time to time.
- 3.2 The Approval Holder shall, within two years of the date of issuance of this Approval, commence work on the Project unless granted a written extension by the Minister.
- 3.3 The Approval Holder shall provide written notification to the Department of the commencement date of the Project, at a minimum 30 days prior to the commencement.
- 3.4 The Approval Holder shall provide to the Department a concordance table detailing the status of the EA terms and conditions, on or before January 31 of each year until released in writing by the Department.
- 3.5 Prior to any proposed expansion, modification, or relocation of any aspect of the Project from that proposed in the Registration Documentation, the Approval Holder must submit the proposal to the EA Branch for review and may require an EA or amendment.
- 3.6 Nothing in this Approval relieves the Approval Holder of the responsibility for obtaining and paying for all other licenses, permits, approvals or authorizations necessary for carrying out the Project which may be required by municipal by-laws or provincial or federal legislation. The Minister does not warrant that such licenses, permits, approvals or authorizations will be issued.
- 3.7 No authority is granted by this Approval to enable the Approval Holder(s) to commence or continue the Project on lands which are not in the control or ownership of the Approval Holder(s). It is the responsibility of the Approval Holder(s) to ensure that such a contravention does not occur. Failure to retain said authorization may result in this Approval being cancelled or suspended.
- 3.8 The Approval Holder shall not transfer, sell, lease, assign or otherwise dispose of this Approval without the written consent of the Minister. The sale of a controlling interest of a business or a transfer of this Approval from a parent company to a subsidiary or an affiliate is deemed to be a transfer requiring consent.
- 3.9 Upon any changes to the Registry of Joint Stock Companies information related to the Approval Holder, the Approval Holder shall provide a copy to the

Department within 5 days of the changes.

- 3.10 If there is a discrepancy between the Registration Documentation and the terms and conditions of this Approval, the terms and conditions of this Approval shall apply.
- 3.11 Where a timeline is associated with a condition(s) of the Approval, the Approval Holder shall fulfil the requirements of the condition(s) within the prescribed timeline, unless otherwise authorized in writing by the Department.
- 3.12 The Approval Holder shall immediately notify the Department of any incident(s) of non-compliance with this Approval, in accordance with the Act and Regulations.
- 3.13 The Approval Holder shall bear all expenses incurred in carrying out the environmental management and monitoring required under the terms and conditions of this Approval, the Act or the Regulations.
- 3.14 Unless specified otherwise in this Approval, all samples required to be collected by this Approval, the Act or the Regulations shall be collected, preserved, and analyzed, by qualified personnel, in accordance with recognized industry standards and procedures and in accordance with any Standard under the Act or Regulations.
- 3.15 The Approval Holder shall ensure that this Approval, or a copy, is present at the Project site while personnel are on site and that personnel directly involved in the Project are made fully aware of the terms and conditions which pertain to this Approval.
- 3.16 The Approval Holder shall update any of the plans, programs or other documents required in this Approval to reflect the progressive development of the Project, and these documents shall be made available to the Department upon request. The Approval Holder shall make any changes that the Department deems necessary.
- 3.17 Based on the results of the monitoring required in this Approval, or otherwise completed for the Project, or at any time as determined by the Department, the Approval Holder shall make necessary modifications to mitigation plans and/or changes to Project operations to prevent unacceptable environmental effects, as required by the Department.
- 3.18 The Approval Holder shall provide to the Department a summary table detailing the results of the monitoring required in this Approval, or otherwise completed for the Project, on or before January 31 of each year until released in writing by the Department. The results shall clearly identify and summarize any

exceedances.

- 3.19 Where a Condition of this Approval requires the Approval Holder to consult a particular party or parties, the Condition will be considered complete once the Approval Holder provides a written confirmation letter from the third party or parties that the consultation is complete.

If there is a conflict between the Approval Holder and a party or parties regarding the consultation, the Department will determine if suitable consultation has been completed and/or if further action is required.

4 Project Design, Facility Development and Operations

- 4.1 As part of the application for the Industrial Approval under the *Act*, the Approval Holder shall provide to the Department, a Process Flow Diagram and a Design Basis Memorandum which integrates all the operational processes for the Project. These shall be developed by Professional Engineers licensed to practice in Nova Scotia, and shall include but not be limited to:

- An identification and quantitative estimate of all process inputs, throughputs and outputs.
- A comprehensive list of codes, standards, and regulations used for the design.

- 4.2 As part of the application for the Industrial Approval under the *Act*, the Approval holder shall provide an Operations Management Plan. This plan shall be developed by a professional engineer licensed to practice in Nova Scotia, and shall include but not be limited to:

- Details regarding the storage and handling of oxygen, including venting, to avoid risks associated with corrosion of equipment, enhanced combustion or explosion if near combustible materials.
- Details regarding the implementation of control systems, isolation barriers or strategies to ensure incompatible materials are not exposed during storage, transfer, use and/or accidental releases.
- Details regarding the setback distances established for storage of the chemicals used/generated in the facility, including hydrogen and ammonia, accompanied with rationale.
- A plan to mitigate hydrogen emissions, including but not limited to flaring. Details on how the flare will be maintained, identification of its fuel source and storage specifics shall be provided.
- Details about how the required amount of energy will be supplied to the facility in the case of unplanned power outage. This should include scenarios ranging from intermittent interruptions to unscheduled outages of at least 72 hours.

- Detailed measures to manage onsite sludge.
- 4.3 As part of the Industrial Approval under the *Act*, the Approval Holder shall provide a detailed Environmental Management Plan (EMP).
- 4.4 Prior to project operations, the Approval Holder shall develop a plan in consultation with Transport Canada to address the risks associated with the Project under the Canadian Navigable Waters Act. The plan shall be provided to the Department upon request.
- 4.5 The Approval Holder shall be responsible for the costs of any third-party review of plans, reports, or monitoring results deemed necessary by the Department over the life of the Project.

5 Water Resources

- 5.1 Unless otherwise authorized in writing by the Department, within 30 metres of a surface watercourse and/or a wetland the Approval Holder shall not remove vegetation, or conduct any Project activities including but not limited to the following:
- Fuel storage, refueling, and/or lubrication of equipment;
 - Washing of machinery or equipment; and
 - Storage of equipment, excavated material, and potential contaminants.
- 5.2 As part of the application for the Industrial Approval under the *Act*, the Approval Holder shall provide the following information regarding wetlands:
- i. Industrial facility:
 - Details on soils, vegetation and hydrology of all the drainage features (anthropogenic included) to determine the presence of wetlands.
 - ii. Transmission Line Interconnection corridor:
 - Clarification of which wetlands had WESP-AC functional assessments completed and conduct WESP-AC for any additional wetlands that have potential to be directly or indirectly impacted within the corridor or which are hydrologically connected to the corridor.
 - Construction plan with the pole placement around the wetlands.
 - Demonstrate that wetlands have been avoided, to the extent possible, and risks to indirect alteration of wetland area have been mitigated.
 - As applicable, information about any potential wetland alteration, such as excavation, filling, draining, as well as any potential impact to the hydrological or hydrogeological function of the wetland, as applicable.

5.3 As part of the application for the Industrial Approval under the *Act*, the Approval Holder shall submit a site Surface Water Management Plan. This plan shall be developed by a qualified professional engineer licensed to practice in Nova Scotia and shall include, but not be limited to:

- Measures to monitor water quality and quantity, including identification of parameters to be monitored, monitoring locations, frequency and methods for sampling/testing.
- Measures to mitigate scour, flooding, sediment loading, and thermal charging related to discharges from the systems, where appropriate.
- Measures to monitor compliance and evaluate the plan's effectiveness during the different operational phases of the Project.
- Assessment of potential indirect impacts to downstream water resources (including wetlands) and a summary of proposed mitigations, where appropriate.
- Details related to the design of any on-site surface water collection ditches, pond(s) and other features, including considerations for the impacts of climate change.
- Considerations provided in the Department's Storm Water Management Policy from October 10, 2003, as amended from time to time.

5.4 Prior to Project commencement, the Approval Holder shall submit a detailed sediment and erosion control plan for the project to the Department for review and acceptance. The plan shall be developed by a professional engineer licensed to practice in Nova Scotia and shall include:

- Sediment and erosion control measures for the industrial facility (including roadworks)
- Sediment and erosion control measures for the transmission line corridor.

5.5 As part of the application for the Industrial Approval under the *Act*, the Approval Holder shall submit a Wastewater Management Plan to the Department. This plan shall be developed by a qualified professional engineer licensed to practice in Nova Scotia and shall include but not be limited to:

- Characterization of all the Project's wastewaters, their sources, estimated concentrations in untreated effluent, and identification of applicable limits based on a receiving water assessment.
- Description of the treatment process(es) for each component of the Project's wastewater treatment system. The substances treated in the different components shall be identified, and the performance capacity of each component shall be provided.
- Identification of all discharge locations for each of the components of the

wastewater treatment system, in the freshwater and marine environments, as applicable.

- Assessment of the receiving environment including but not limited to:
 - Identification of aquatic species present in the receiving environment.
 - Discussion on the impact of the predicted water quality on the aquatic environment, including the impact of the chemical, physical and thermal properties of the predicted wastewater.

5.6 As part of the application for the Industrial Approval under the *Act*, the Approval Holder shall submit a Water Conservation Plan. This plan shall be developed based on the Guide for Surface Water Withdrawals from November 2016, as amended from time to time, and shall include but not be limited to:

- Detailed information, rationale and calculations related to the raw water intake needs for the Project, including, but not limited to, a process water balance.
- Assessment of the water uses required by the different processes and water related losses throughout the system.
- Clarification on how these processes have been assessed from a water conservation perspective.

5.7 The Approval Holder shall ensure that potable water supplies are registered and comply with the responsibilities of a registered drinking water supply owner.

5.8 In consultation with the Department, the Approval Holder shall develop site specific groundwater monitoring criteria and points of compliance for the site. These criteria are to be used within the groundwater monitoring program when analyzing the results of groundwater monitoring at the site.

5.9 As part of the application for the Industrial Approval under the *Act*, the Approval Holder shall design and implement a groundwater monitoring plan. The plan shall be designed by a qualified hydrogeologist licensed to practice in Nova Scotia and shall include but not be limited to:

- site specific groundwater monitoring criteria and points of compliance developed in consultation with the Department.
- description of the monitoring network, location and depth of monitoring wells,
- initial baseline monitoring results, assessment of these results and a methodology to evaluate conditions over time.

5.10 Prior to any blasting, the Approval Holder shall prepare a blasting plan. The plan shall consist of a completed pre-blast survey for structures within 800 metres of the point of the blast, including water quality analysis for water wells within the same area. A blast monitoring plan and a blast damage response shall also be

prepared. These documents shall be made available to the Department upon request.

- 5.11 The Approval Holder, at their expense, shall replace any water supply which has been lost or damaged as a result of Project operations, as authorized and required by the Department.

6 Flora and Fauna

- 6.1 The Approval Holder shall provide the Wildlife Division, Department of Natural Resources and Renewables (NS NRR) with digital way points and shape files showing precise locations for species listed under the Species at Risk Act (SARA) and/or Endangered Species Act (ESA), as well as of Species of Conservation Concern identified during field work. Data should adhere to the format prescribed in the NRR Template for Species Submissions for EAs. Data are to be provided within two months of their collection.
- 6.2 Prior to commencement, the Approval Holder shall develop a Wildlife Management Plan in consultation with NS NRR.
- 6.3 Prior to vegetation clearing on Crown lands, the Approval Holder shall complete field surveys for old-growth forest. Survey design and methodology shall be developed in consultation with NS NRR.
- 6.4 Prior to vegetation clearing in the Transmission Interconnection Line corridor, the Approval Holder shall complete targeted wildlife field surveys. Survey design and methodology shall developed in consultation with NS NRR.
- 6.5 Revegetation must be undertaken using native species following consultation with NS NRR.

7 Air Quality and Noise

- 7.1 As part of the application for the Industrial Approval under the *Act*, the Approval Holder shall submit the results of Air Quality Dispersion Modelling, which shall include, but not be limited to:
- Continuous emissions from all site activities.
 - The local baseline concentrations of all substances emitted for comparison with applicable ambient air quality standards.
 - The effect of liquid ammonia vaporizing.
 - All mitigation measures which will be applied.
 - Proposed monitoring measures.
- 7.2 As part of the application for the Industrial Application under the *Act*, the Approval Holder shall submit a noise monitoring plan, which shall include, but not be limited to:
- Baseline monitoring data at the receptor locations, as identified in the registration documentation.
 - Results shall be compared to the maximum permissible noise levels, and

mitigation measures proposed or to be applied, as required.

- 7.3 The Approval Holder shall ensure that noise emissions at the property boundaries do not contribute to an exceedance of the maximum permissible sound levels limits specified in the Nova Scotia Environment and Labour “Guidelines for Environmental Noise Measurement and Assessment” dated May 18, 2005, as amended from time to time.

8 Traffic

- 8.1 The Approval Holder shall develop and implement any traffic control management plan based on applicable guidelines in consultation with Nova Scotia Department of Public Works (NSDPW). The Approval Holder shall also contact NSDPW to obtain any other applicable permitting for working on provincially owned roads.

9 Archaeological and Heritage Resources

- 9.1 The Approval Holder shall cease work and contact the Special Places Coordinator, Nova Scotia Department of Communities, Culture, Tourism and Heritage (CCTH) immediately upon discovery of an archaeological, or paleontological site, artifact or fossil specimen unearthed during any phase of the Project. If the find is of certain or possible Mi’kmaq origin, the Approval Holder shall also contact the appropriate Mi’kmaq representatives as advised by CCTH.
- 9.2 Prior to any ground disturbance in the Transmission Interconnection Line corridor, the Approval Holder shall complete an Archaeological Impact Assessment (ARIA) for the portions of the corridor which have not been encompassed by previously conducted ARIAs. This assessment shall be developed in consultation with Nova Scotia Department of Communities, Culture, Tourism and Heritage (CCTH).

10 Public Engagement

- 10.1 The Approval Holder shall develop and implement a comprehensive complaint resolution plan for receiving and responding to complaints related to the Project. The plan will include, but not be limited to, a reporting system which records all complaints received, documents the steps taken to determine the cause of complaint, sets out a timeline for responding to complaints, and establishes a recording system that details all corrective measures taken to alleviate the cause and prevent its recurrence. The plan shall be made available to the Department upon request.
- 10.2 The Approval Holder shall appoint a contact person designated to deal with complaints and shall provide the contact information to the Department.

10.3 Prior to commencement of the Project, the Approval Holder shall develop and implement a plan for the formation and operation of a Community Liaison Committee (CLC) including terms of reference, which meet the Department's Guide for the Formation and Operation of a Community Liaison Committee, as amended from time to time. The Approval Holder shall operate the CLC for the duration of the Project or until released in writing by the Department.

11 Engagement with the Mi'kmaq of Nova Scotia

11.1 The Approval Holder shall develop and implement a Mi'kmaq Communication Plan, which will include but not be limited to a process for communicating Project details and seeking input from the Mi'kmaq of Nova Scotia on the development and implementation of Project mitigation and monitoring plans. The plan shall be updated regularly and be available to the Department upon request.

11.2 The Approval Holder shall develop a Mi'kmaq Ecological Knowledge Study (MEKS) for the Transmission Line Corridor in accordance with the Mi'kmaq Ecological Knowledge Study Protocol. The plan shall be made available to the Department and to the Mi'kmaq of Nova Scotia upon request.

12 Accidents, Malfunctions and Contingency Plan

12.1 As part of the application for the Industrial Approval under the *Act*, the Approval Holder shall provide to the Department a Quantitative Risk Analysis (QRA) for the facility, which shall include but not be limited to:

- Modelling and mitigations for worst-case scenarios, which shall consider failed lines/or tanks and cascading effects.
- Rationale for modelled scenarios.
- HAZ ID process and report.
- The main project risks from environmental and safety perspectives, with risk matrix that considers probability and severity of accidents, malfunctions and unplanned events.
- Consideration whether redesign or replacement of any facility components are required.

12.2 The Approval Holder shall submit a comprehensive contingency plan to the Department with the Industrial Approval application under the *Act*, which meets the Department's Contingency Planning Guidelines, and the results of the analysis outlined in section 12.1. The Plan shall provide prevention measures and address plans for dealing with accidental occurrences, including but not limited to:

- Spills or releases of hydrogen, ammonia (gas or liquid), hydrocarbons or other hazardous materials (e.g., sodium hydroxide, hydrochloric acid, etc.) for all the Project's processes, which include production, delivery and end use.

- Loss of electrical power.
- Failure of wastewater management facilities and erosion and sediment control measures, fires, and vehicular collisions.
- Fire, explosions and/or hazardous interactions.

12.3 The Approval Holder shall develop an emergency evacuation plan to be distributed to the Department, the Town of Port Hawkesbury, Municipality of the County of Richmond, Nova Scotia Emergency Management Office and local police and fire departments for review prior to the start of operation of the facility. A draft of this plan must be submitted to the above noted organizations at least six months in advance of operation of the facility and be finalized prior to commencement of operations.

12.4 The Approval Holder shall submit with the Industrial Approval application under the *Act*, a surface water contingency plan. This plan shall identify timelines for response and the measures to be taken if unacceptable effects to water quality or quantity of residential and or municipal water supplies occur due to project activities. The Approval Holder shall address the problem to the satisfaction of the Department.

12.5 The Approval Holder shall maintain sufficient resources on site, or in coordination with local fire departments, to handle the spill or release of any dangerous goods or waste dangerous good used or produced at the facility.

13 Securities

13.1 The Approval Holder shall submit security, in the form and amount determined by the Department, with the application for an Industrial Approval under the *Act*.

14 Decommissioning and Site Reclamation

14.1 As part of the application for the Industrial Approval under the *Act*, the Approval Holder shall include a preliminary decommissioning/reclamation plan.



Honourable Timothy Halman, MLA
Minister of Environment and Climate Change