Environmental Health Program Regulatory Operations and Enforcement Branch 1505 Barrington Street Halifax, NS B3J EY6

August 03, 2023

Karen Lalonde Project Manager, Atlantic Region Impact Assessment Agency of Canada

Sent by email to: Karen.Lalonde@iaac-aeic.gc.ca

Subject: Port au Port-Stephenville Wind Power and Hydrogen Generation Project – Request for Federal Expert Advice on Designation Request

Dear Karen Lalonde:

Thank you for your email dated July 14, 2023, requesting federal expert advice on the Designation Request for the Port au Port-Stephenville Wind Power and Hydrogen Generation Project.

Health Canada participates in the impact assessment process as a federal authority under the *Impact Assessment Act*, upon request. Health Canada makes available specialist/expert information or knowledge in their possession to responsible authorities and review panels, among others. Health Canada does not make decisions or issue licenses, permits, or authorizations in relation to the impact assessment of a development project.

Health Canada has provided its comments for your consideration in the attached document.

Should you have any questions concerning Health Canada's comments, please contact Lauchie MacLean (lachlan.maclean@hc-sc.gc.ca).

Sincerely,

<Original signed by>

Karine Menezes A/ Regional Manager, EHP – Atlantic ROEB, Health Canada

cc: Heather Jones-Otazo, Acting Manager, Environmental Assessment and Contaminated Sites (EACS) Division, Healthy Environments and Consumer Safety Branch (HECSB), Health Canada Lauchie MacLean, Impact Assessment Specialist, EHP, ROEB, Health Canada Aurelia Thevenot, Senior Environmental Health Specialist, EACS, HECSB, Health Canada Matthew Goncalves, Environmental Assessment Coordination Specialist, EACS, HECSB, Health Canada

Attached: HC Comment table on the Port au Port-Stephenville Wind Power and Hydrogen Generation Project



ATTACHMENT: July 14, 2023

Federal Authority Advice Record: Designation Request under the IAA

Response due by August 3, 2023

Port au Port-Stephenville Wind Power and Hydrogen Generation Project (also known as Project Nujio'qonik)

Department/Agency	Health Canada
Lead Contact	Karine Menezes: Acting Regional Manager, Regulatory Operations and Enforcement Branch (ROEB),Environmental Health Program (EHP)
Full Address	800 René-Lévesque Blvd West 800, boul René-Lévesque ouest Montréal Quebec, H3B 1X9 CA
Email	karine.menezes@hc-sc.gc.ca
Telephone	514-226-5867
Alternate Departmental Contact	Lauchie MacLean: Regional Impact Assessment Specialist, ROEB, EHP, Tel: 782-409-3340 Email: lachlan.maclean@hc-sc.gc.ca

1.	Has your department or agency considered whether it has an interest in the Project; exercised a power
	or performed a duty or function under any Act of Parliament in relation to the Project; or taken any
	course of action (including provision of financial assistance) that would allow the Project to proceed in
	whole or in part?

Specify as appropriate.

No.

2. Is it probable that your department or agency may be required to exercise a power or perform a duty or function related to the Project to enable it to proceed?

If yes, specify that power, duty or function and its legislative source.

No.

3. If your department or agency will exercise a power or perform a duty or function under any Act of Parliament in relation to the Project, will it involve public and Indigenous consultation?

Specify as appropriate.

Not applicable.

4. Is your department or agency in possession of specialist or expert information or knowledge that may be relevant to any potential adverse effects within federal jurisdiction caused by the Project or adverse direct or incidental effects stemming from the Project?

Specify as appropriate.

As a federal authority, Health Canada will provide specialist or expert information and knowledge in the Department's possession (expertise) to support the assessment of impacts on human health from projects considered individually or cumulatively under the *Impact Assessment Act* (IAA). The Department provides expertise in the areas described below; it does not play a regulatory role. It should also be noted that expertise related to assessing human health that is relevant to impact assessment (IA) may be held by other federal, provincial, and municipal partners, reflecting the shared jurisdiction for environmental and human health within Canada. For example, the Public Health Agency of Canada (PHAC) has expertise in the social determinants of health approach and health equity, and may provide that expertise through Health Canada, upon request from the reviewing body(ies). How the expertise provided by Health Canada and PHAC will be used in the IA process will ultimately be determined by the reviewing body(ies).

Health Canada can provide human health expertise in the following areas:

- Air quality:
- · Recreational and drinking water quality;
- Contamination of country foods (i.e., traditional foods);
- Noise:
- Methodological expertise in human health risk assessment;
- Methodological expertise in conducting health impact assessment;
- Electromagnetic fields;
- Radiological emissions; and
- Public health emergency management of toxic exposure events.

5. Has your department or agency had previous contact or involvement with the Proponent or other parties in relation to the Project?

Provide an overview of the information or advice exchanged.

No.

6. From the perspective of the mandate and area(s) of expertise of your department or agency, does the Project have the potential to cause adverse effects within federal jurisdiction or adverse direct or incidental effects as described in section 2 of the IAA? Could any of those effects be managed through legislative or regulatory mechanisms administered by your department or agency? If a licence, permit, authorization or approval may be issued, could it include conditions in relation to those effects?

Specify as appropriate.

With respect to proposed development projects, Health Canada is not a regulatory body and does not issue any approvals or make any regulatory decisions.

Health Canada has reviewed the following documents provided by the Impact Assessment Agency of Canada on July 14, 2023:

- Request for Designation of the Port au Port-Stephenville Wind Power and Hydrogen Generation Project (also known as Project Nujio'gonik)
- Additional Information from World Energy GH2 Submitted to the Agency on May 19, 2023 and June 26, 2023
- Newfoundland and Labrador Provincial Environmental Assessment Registration Document (EARD)
- Port au Port-Stephenville Wind Power and Hydrogen Generation Project Request for Designation under IAA – Letter to Federal Authorities

Key Issue: The information provided in the available documents is not sufficient to confirm whether there exists a potential to cause adverse effects on human health within federal jurisdiction, i.e., effects to Indigenous peoples. There is a lack of detailed information provided on the location of potential human receptors, the Project's proximity to any permanent, seasonal or temporary residences, and the project's proximity to land used for traditional purposes by Indigenous peoples. In addition, limited information on the Codroy-area windfarm was provided, beyond the number of wind turbines proposed (up to 164) and their general location.

Based on the information provided, there may be adverse impacts to Indigenous health from project-related changes to the biophysical environment (e.g., potential changes to noise, water air quality, and country food), as outlined below.

Air Quality

There is a potential for adverse impacts to human health through the degradation of ambient air quality from increased exhaust emissions from machinery, fugitive dust, and fuel combustion by-products during road construction, clearing, and drainage activities. These emissions may include coarse and fine particulate matter (PM_{10} and $PM_{2.5}$), nitrogen oxides (NO_x), sulphur dioxide (SO_2), diesel particulate matter (DPM), volatile organic compounds (VOCs), among other air pollutants that may be emitted mainly during the construction phase. Despite there being pollutant emissions during construction and the potential presence of Indigenous peoples in the vicinity of the project (to be confirmed) the documents do not indicate whether effects on the health of Indigenous peoples are anticipated. However, standard mitigation measures such as those identified by the Proponent in the EARD are known to be effective at reducing construction-related emissions and best practices should be employed to manage project effects on ambient air quality.

Water Quality

Surface and groundwater may be impacted by harmful substances during construction and operation phases of the Project (e.g., sediment runoff if contaminated soils/sediments are present, oils/fuel spills, waste products, wastewater discharge from the water purification plant, etc.). Standard mitigation measures have been identified in the EARD that are known to be effective at reducing the project-related effects on water quality (e.g., implementation of sediment control measures and hazardous materials management practices). While wastewater discharge concentrations were not provided, the Proponent indicated that discharge concentrations above provincial or federal discharge regulations would require mitigation measures such as water treatment or water re-circulation prior to discharging into the marine environment.

Country Foods

There is potential for Project activities to adversely impact the quality of country foods through changes to water quality (e.g., wastewater discharge), soil quality (e.g., deposition of contaminants onto soil and subsequent plant uptake, oil/fuel spills, etc.), and air quality (e.g., deposition of contaminants from air onto plant surfaces). However, insufficient information is provided on country foods in the project area, specifically what is harvested, where the harvesting occurs, and who consumes country foods. While general information is provided in the EARD about Miaiwpukek First Nation harvesting practices (section 4.3.5), there is no local information specific to the project area. Detailed information about the harvesting practices of Qalipu First Nation and non-Indigenous people in the local area is also missing. In the absence of this information, changes to the health of Indigenous peoples through consumption of country foods should be identified as a potential project effect.

Noise

The EARD identified potential negative impacts on human health in the project area resulting from noise during both the construction and operation phases. The outlined measures to mitigate and understand the current and future potential risks were outlined in the EARD (sections 2.4, 2.6, 2.8, and appendix A), including timing activities to avoid nuisances to off-site receptors and a grievance resolution protocol. While Health Canada's noise thresholds and other Canadian standards are mentioned, specific details regarding current and predicted noise levels at sensitive receptor locations were not provided.

- 7. Does your department or agency have a program or additional authority that may be relevant and could be considered as a potential solution to concerns expressed about the Project? In particular, the following issues have been raised by the requestor:
 - effects to fish and fish habitat:

- effects to wildlife, including migratory birds and species at risk;
- effects to the marine environment (e.g., disruption of historic contamination);
- accidents or malfunctions (e.g., ammonia or hydrogen leaks);
- alternative means of carrying out the project were not adequately considered;
- cumulative effects from past drilling, mining, milling, and accidents and malfunctions in the area.
- mistrust in the proponent and the provincial process (e.g., perceived project-splitting);
- effects to Indigenous peoples (e.g., country foods, current use);
- effects to climate change from upstream and downstream impacts of hydrogen and ammonia production; and
- inadequate public and Indigenous engagement on the Project.

If yes, please specify the program or authority.

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8. Does your department or agency have information about the interests of Indigenous groups in the vicinity of the Project; the exercise of their rights protected by section 35 of the *Constitution Act, 1982*; and/or any consultation and accommodation undertaken, underway, or anticipated to address adverse impacts to the section 35 rights of the Indigenous groups?

If yes, please specify.

No

If your department has guidance material that would be helpful to the Proponent or the Agency, please include these as attachments or hyperlinks in your response.

To date, Health Canada has published the following guidance documents for evaluating human health impacts in impact/environmental assessments:

- Human Health Risk Assessment
- Air Quality
- Drinking and Recreational Water Quality
- Country Foods
- Noise
- Radiological Impacts

Health Canada. 2016. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Air Quality. Available online at: https://www.publications.gc.ca/site/eng/9.802343/publication.html

Health Canada. 2018. Guidance for Evaluating Human Health Impacts in Environmental Assessments: Country Foods. Available online at: https://www.publications.gc.ca/site/eng/9.855584/publication.html

Health Canada. 2016. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Drinking and Recreational Water Quality. Available online at: https://www.publications.gc.ca/site/eng/9.832511/publication.html

Health Canada. 2019. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Human Health Risk Assessment. Available online at: https://www.publications.gc.ca/site/eng/9.870475/publication.html

Health Canada. 2017. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise. Available online at: https://www.publications.gc.ca/site/eng/9.832514/publication.html

Health Canada. 2017. Guidance for Evaluating Human Health Impacts in Environmental Assessment: Radiological Impacts. Available online at: https://www.publications.gc.ca/site/eng/9.803614/publication.html

Health Canada has also published guidance on environmental public health management of crude oil incidents that may provide guidance to addressing potential human health impacts from hazardous waste events as well as the methodological approach for conducting Health Impact Assessments of Designated Projects under the Impact Assessment Act:

Health Canada. 2018. Guidance for the Environmental Public Health Management of Crude Oil Incidents. Available online at: https://publications.gc.ca/collections/collection_2018/sc-hc/H129-82-2018-eng.pdf

Health Canada. 2022. Interim Guidance Document for the Health Impact Assessment of Designated Projects under the Impact Assessment Act. Draft for review. June 30, 2022. Open for review until September 30, 2023. Available upon request to: ia-ei@hc-sc.gc.ca

The Public Health Agency of Canada (PHAC) has published the following guidance for evaluating other aspects of human health (e.g., mental health):

- Social Determinants of Health and Health Inequalities
- Key Health Inequalities in Canada: A National Portrait.

Karine Menezes		
Name of departmental / agency responder		
Acting Regional Manager, Environmental Health Program – Atlantic region		
Title of responder		
2023-08-03		
Date		