

ATTACHMENT November 23, 2022

Federal Authority Advice Record: Designation Request under IAA

Response due by December 19, 2022

Clearwater Peat Harvesting Project

Department/Agency	Health Canada
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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

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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

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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?

Yes

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). 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 health effects;
- Contamination of country foods (e.g. fish, wild game, garden produce, berries, etc.);
- Drinking and recreational water quality;
- Radiological effects;
- Electric and magnetic fields;
- Noise impacts;
- Methodological expertise in human health risk assessment;
- Methodological expertise in conducting Health Impact Assessment (HIA); and
- Public health emergency management of toxic exposure events.

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

No

Provide an overview of the information or advice exchanged.

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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 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.

Health Canada has reviewed the following documents received by email from Jennifer.Dallaire@iaac-aeic.gc.ca on November 28, 2022:

- [Request for Designation under IAA - Letter to Federal Authorities.pdf](#)
- [Designation Request Letter.pdf](#)

Health Canada also reviewed the document received by email from Jennifer.Dallaire@iaac-aeic.gc.ca on November 30, 2022:

- [Clearwater_location_2022.pdf](#)

The document Designation Request Letter referred to three documents: Biophysical Report and Peat Development Operations Plan – 2022 Update; Wetland Assessment and Impact Report – 2022; and Update Conservation and Reclamation Plan – 2022 Update. However, these documents were not provided for review and could not be located on the internet. These documents may contain relevant additional details.

There are no details in the available documents related to areas of expertise of Health Canada (HC). However, it is noted in the document Designation Request Letter that the O'Chiese First Nation claim historic and current use of the lands within the area of the proposed Project. As well, there are two O'Chiese First Nation Reserves within 20 - 48 km from Rocky Mountain House that may be impacted by Project activities. Indigenous health is an area of federal jurisdiction that Project activities may have the potential to impact.

HC does not approve or issue licences, permits or authorizations in relation to development projects; therefore, none of the potential effects stated below can be managed by the Department. There may be a potential for impacts to human health in the following areas:

Human Health Setting

In order to assess potential risks to human health, it is necessary to identify locations of potential human receptors, including residences and sensitive human receptor locations (i.e. schools, hospitals, retirement complexes or assisted care homes), through maps and diagrams. The distances between human receptor locations and the key components of the Project that may impact these receptors should be identified. HC recommends that a human health risk assessment (HHRA) that includes all relevant contaminants, human receptors and potential exposure pathways be provided if applicable. This information is not included in the documents provided, therefore HC cannot comment on the potential for risks to human health from exposure to environmental contaminants.

Air Quality

There is a potential for adverse impacts to human health through the degradation of ambient air quality through 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 (PM₁₀ and PM_{2.5}), nitrogen oxides (NO_x), sulphur dioxide (SO₂), diesel particulate matter (DPM), volatile organic compounds (VOCs), among other air pollutants that may be emitted during these phases. Without detailed emission information provided by the proponent, the location of potential human receptors, and an assessment of the potential effects on the ambient air quality, HC cannot provide additional advice on the potential adverse impact to human health (see response to 9 below for HC guidance). Contaminant-specific isopleth maps with human receptor locations identified should be provided. Human receptor locations should include traditional/recreational land use areas, seasonal cabins, permanent residences and any particularly sensitive receptors (e.g. schools, hospitals, senior residences, etc.).

Noise

Ambient noise levels may increase due to machinery use during road construction, clearing, and drainage activities, as well as increased traffic during the construction and operation phases of the Project. There may be potential adverse impacts to human health from increased noise, including but not limited to speech comprehension, and annoyance. Additionally, the hours of operations of Project activities are unknown. If Project construction and operations occur between 10pm and 7am, there is potential for the Project to cause sleep disturbance. Without additional information provided by the proponent, the location of potential human receptors (including recreational and traditional land use areas and locations of any seasonal cabins), and a noise assessment, HC cannot provide advice on the potential adverse impact of noise to human health.

Water Quality

Surface and groundwater may be impacted by spills of harmful substances (e.g., oils/fuels, waste products, etc.) used for the Project during construction and operations. Local changes to groundwater flows may also affect the quality of local potable water sources. The clearing and drainage of the peatland may release contaminants (e.g., methylmercury) that have the potential to impact recreational and drinking water quality, which may in turn impact human health through dermal contact or ingestion. HC suggests identifying surface bodies of water and groundwater sources, including natural springs, that are currently used, or may be used in the future, for recreational and traditional purposes (e.g., swimming, fishing) or likely to be used as a source of drinking water, and that may be affected by Project activities, as well as human receptors in proximity to the project that may be utilizing these water sources.

Without additional information on the location of potential human receptors and the identification of water sources used by the community and land users, HC cannot provide advice on the potential adverse impact of exposure to surface water or groundwater on human health.

Country Foods

The Project can potentially impact the quality of country foods through changes to water quality and air quality (i.e., contaminant uptake through direct contact or ingestion of air and water, and within the food chain – e.g., methylmercury). It is noted in the document: Designation Request Letter that O’Chiese First Nation use the lands surrounding the proposed Project location for traditional activities, including hunting, trapping, fishing and gathering of plants and berries for food and medicines. Without the identification of receptors, contaminants that are emitted to the environment, and what country foods are harvested in the area, HC cannot provide advice on the potential for adverse human health impacts associated with the consumption of local country foods.

Gender-Based Analysis and Health Impact Assessment

Information on how the Project would differentially impact diverse groups of people with respect to health-relevant factors is not provided. Disaggregated information is required to understand the differential health impacts of the Project on women, children and other vulnerable groups, including from a cumulative effects perspective.

The documents do not provide sufficient information about the range of impacts on human health and community well-being. A Health Impact Assessment (HIA), with indicators informed through engagement with potentially affected Indigenous communities, would capture potential positive and adverse effects on social, economic and health conditions in addition to the environmental (biophysical) conditions typically included in an environmental assessment. The HIA would be in addition to the HHRA that has already been suggested.

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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. The Project could result in potential:
- adverse effects to areas within federal jurisdiction, including Indigenous peoples and lands;
 - adverse impacts to soil, water, wetlands, watersheds, medicines, vegetation and other component of the environment important to O’Chiese First Nation treaty rights;
 - alteration of the land and hydrological and ecological functions of groundwater, surface water, and wetlands in O’Chiese First Nation’s traditional territory;
 - significant adverse impacts on the treaty and aboriginal rights of O’Chiese First Nation as well as significant adverse effects on health, social, and economic conditions;
 - adverse impacts to O’Chiese First Nation’s Section 35 rights;
 - impacts to highly used traditional hunting, trapping and gathering areas including areas of cultural importance (i.e. gravesite located approximately 6km from the Project area);
 - contribution to climate change due to loss of peatland carbon storage and sequestration area; and
 - cumulative effects of existing peat harvesting operations in the area, which are likely irreversible or not restorable for well over 100 years.)

No

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?

No

If yes, please specify.

9. 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.

Available Health Canada guidance:

Health Canada has published the following guidance documents for evaluating human health impacts:

Guidance for Evaluating Human Health Impacts in Environmental Assessment:

- [Human Health Risk Assessment](#)
- [Air Quality](#)
- [Water Quality](#)
- [Country Foods](#)
- [Noise](#)
- [Interim Guidance on Health Impact Assessment¹](#).

Finally, PHAC has published the following guidance documents 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](#). Public Health Agency of Canada

Brenda Woo

Name of departmental / agency responder

Regional Manager

Title of responder

December 19, 2022

Date

¹Health Canada. Draft Interim Guidance Document for the Health Impact Assessment of Designated Projects under the *Impact Assessment Act*. Draft for review. June 30, 2022. Available upon request.