

**ATTACHMENT: October 5, 2020
Federal Authority Advice Record**

Response due by November 12, 2020.

Please submit the form to: iaac.deltaport.aeic@canada.ca

GCT Deltaport Expansion, Berth Four Project – GCT Canada Limited Partnership
Agency File: 81010

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1. 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 the Act of Parliament and that power, duty or function.

[Not applicable.](#)

2. Is your department or agency in possession of specialist or expert information or knowledge that may be relevant to the conduct of an impact assessment of 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 potential impacts on human health from projects considered individually and cumulatively under the *Impact Assessment Act* (IAA). The Department provides expertise in the areas described below; it does not play a regulatory role. How the expertise provided by Health Canada will be used in the Impact Assessment process will ultimately be determined by the reviewing body(ies). It should also be noted that expertise related to assessing human health that are relevant to Impact Assessments (IAs) may be held by other federal, provincial and municipal partners, reflecting the shared jurisdiction for environmental and human health within Canada.

To support the implementation of the IAA, Health Canada can provide expertise in the following areas:

- Air quality
- Recreational and drinking water quality
- Traditional foods (Country Foods)
- Noise
- Human Health Risk Assessment (HHRA)
- Methodological expertise in conducting Health Impact Assessment (HIA)
- Electromagnetic fields

- Radiological emissions
- Public health emergency management of toxic exposure events

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:

<https://www.canada.ca/en/services/health/publications/healthy-living.html#a2.5>

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

Guidance prepared by Health Canada on management of crude oil incidents is available as a PDF and in html format through the following link:

- *Guidance for the environmental public health management of crude oil incidents: a guide intended for public health and emergency management practitioners:*

<http://publications.gc.ca/site/eng/9.849592/publication.html>

3. Has your department or agency considered 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 that would allow the Project to proceed in whole or in part?

Specify as appropriate.

Not applicable.

4. Has your department or agency had previous contact or involvement with the proponent or other party in relation to the Project? (for example, enquiry about methodology, guidance, or data; introduction to the project)

Provide an overview of the information or advice exchanged.

No.

5. Does your department or agency have additional information or knowledge not specified, above?

Specify as appropriate.

No.

6. From the perspective of the mandate and area(s) of expertise of your department or agency, what are the issues that should be addressed in the impact assessment of the Project, should the Agency determine that an impact assessment is required?

For each issue discussed, provide a concise, plain-language summary that is appropriate for inclusion in the Summary of Issues and Engagement.

Based on the limited information provided in the **initial Project Description (iPD)** by GCT Canada Limited Partnership (the Proponent), Health Canada has identified the following key issues and information requirements that are likely to be relevant to the GCT Deltaport Expansion, Berth 4 Project (the Project). These are not to be construed as an exhaustive list of requirements pertaining to human health for the Project.

Human Health Setting

Key issue: Health Canada notes that the proposed Project may cause effects to local residents, including Indigenous Peoples who practise traditional activities in the Project area. The Proponent should present information on populations and activities in the area, their distances in relation to the Project, and what Project components may affect which population/activity.

The iPD notes that the Project is located within the city of Delta, BC (p. 32), is approximately 3 km southwest of Tsawwassen First Nation (TFN), and 3.5 km from the nearest residence (p. 49). In addition to

terrestrial locations, the iPD states that the TFN have identified the importance of the tidal marsh and water lots for traditional and recreational use (p. 37).

Health Canada recommends that through discussion and consultation with existing land users, where possible, all potential human receptor locations be identified through maps and diagrams. This may include residences, temporary/seasonal/traditional use sites (e.g., fishing, berry picking, ceremonial, recreational), and other uses such as the proposed new TFN marina within the Project area. Sensitive human receptor locations, such as schools, hospitals, retirement complexes or assisted care homes, or other community-specific sensitive receptor locations should also be included. As well, the distances between human receptor locations and the key components of the Project that may have potential impacts on these receptors should be identified.

Air Quality

Key Issue: Health Canada notes that the proposed Project, and associated activities, may release a variety of contaminants into the air during all project phases (construction and operation). Therefore, the Proponent should provide a comprehensive inventory of all potential air contaminants that may be released.

With respect to Project-related emissions, the Proponent anticipates increases in some criteria air contaminants (CAC) during construction and operations, primarily from combustion-powered vessels, vehicles and equipment, and site activities during construction (p. 53). As such, the health effects of these pollutants should be assessed. Health Canada notes that in addition, diesel particulate matter (DPM), polycyclic aromatic hydrocarbons (PAHs), metals and volatile organic compounds (VOCs) can also arise from construction and operation activities. As such, the health effects of these pollutants should be assessed, including the carcinogenic and non-carcinogenic effects of DPM (separate from fine particulate matter).

The health effects of these contaminants should be assessed against federal (Canadian Ambient Air Quality Standards) and provincial standards (BC Ambient Air Quality Objectives), whichever is the more conservative. The assessment should also consider all project phases including baseline, project-only and future (baseline + project). As well, since the Project is in an area where there are other proposed development projects that may contribute to air emissions, an assessment of cumulative air health effects would also be important.

Traditional Foods

Key Issue: Health Canada notes that Project activities may cause changes to the environment that could result in traditional foods accumulating higher levels of contaminants. Should this be the case, Health Canada supports the need for a human health risk assessment.

The iPD notes that the Project will require a total of approximately 43 hectares (ha) of dredging to expand/deepen the berth pocket(s) (p.12). If contaminants are present in marine sediments near the Project area, they may become re-suspended during Project construction and/or operation. Thus, it will be necessary to identify the contaminants of potential concern (COPCs) and to understand the potential uptake of these COPCs in traditional foods consumed by residents in the area. Additionally, consideration should be given to contaminants emitted into the air that may deposit onto foods consumed by people.

Health Canada guidance supports the need for a human health risk assessment (HHRA) when elevated levels of COPCs are identified in environmental media, and there are possible exposure pathways to humans (i.e. through the consumption of traditional foods, drinking water, etc.). Alternatively, if local Indigenous communities who harvest in the area express concerns about the potential contamination of traditional foods as a result of Project-related activities (e.g., construction), an HHRA may also be warranted.

Noise

Key Issue: Health Canada notes that Project construction and operations will create noise that may cause disturbance to the local population. The Proponent should conduct a noise assessment of the area, taking into account populations that may be more sensitive to noise.

Health Canada notes that local communities are already experiencing noise and vibration from the existing Roberts Bank terminals, BC ferries terminal, road and rail traffic, and the proposed Project would generate additional noise. In addition, the Project is located 3.5 km from the nearest residence (p. 49). Local indigenous communities may also have a great expectation of 'peace and quiet' when they are undertaking traditional activities in the lands and waters surrounding the Project. Given that human receptors may be susceptible to noise impacts from the Project, Health Canada would recommend a detailed noise

assessment, in accordance with Health Canada's guidance, that takes into account a comparison between existing (baseline), Project-sourced noise, and Project plus baseline noise levels. As well, since the Project is in an area where there are other proposed development projects that may contribute to noise levels, an assessment of cumulative noise effects would also be important.

The noise assessment should identify and describe human receptors that may have a heightened sensitivity to noise exposure (e.g. Indigenous Peoples, schools, childcare centres, places of worship, etc.). Particular attention will need to be given to the potential for sleep disturbance to local residents near the Project area.

Finally, the iPD suggests that short sea shipping results in less noise than truck transportation. Health Canada suggests that the Proponent undertake a full analysis of these local transportation options to present their various positive and negative effects.

Health Impact Assessment

Key Issue: A detailed health impact assessment (HIA) would be appropriate to capture potential positive and adverse effects on social, economic and health conditions. Disaggregated information on human health-relevant factors is required to support Gender Based Analysis Plus (GBA+) and analysis of health impacts.

Health Canada notes that the TFN have expressed interest in a human health assessment to address the close proximity of the proposed Project to residential development on TFN lands (p. 98). A detailed HIA would be appropriate to 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. An HIA emphasizes that physical, mental, and social well-being is determined by a broad range of conditions, or factors, from all sectors of society known as the determinants of health. The HIA would consider community concerns and incorporate GBA+ to reflect how project activities can affect subgroups of the population in different ways. If a detailed HIA is undertaken, disaggregated information is required to conduct GBA+ and understand the differential health impact of the project on women, children and other vulnerable groups, including from a cumulative effects perspective.

Additional comments

If there is a potential for human exposure to COPCs from water or sediment, for example through incidental ingestion, dermal contact and/or inhalation of particulates during recreational activities, these should be included as exposure pathways in the assessment of human health.

Finally, Health Canada is supportive of the Proponent assessing the effects of marine shipping, road and rail activities that are not within GCT's care and control within the Impact Assessment (p. 16). Health Canada notes other contaminants resulting from these activities may not be addressed in the iPD, and these should be considered when assessing human health.

<Original signed by>

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Name of Departmental / Agency Responder

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Title of Responder

November 6, 2020

Date