

**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

Department/Agency	Natural Resources Canada
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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.

Based on the information provided to date, NRCan is not likely to be required to exercise a power or perform a duty or function pursuant to the Department's regulatory role under the *Explosives Act*.

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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?

Based primarily on its diverse scientific research programs, NRCan possesses the following expertise that may be relevant to the conduct of an impact assessment for this Project:

- Seismicity: Seismic hazard analysis, codes and standards, mitigation measures.
- Sea-level rise/changes
- Marine geoscience
- Oil chemical composition and characteristics of oils as well as oil spill behaviour in water.

NRCan may further revise its areas of expertise related to the Project's impact assessment as more information becomes available during the subsequent phases of the review process.

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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?

NRCan has not taken any course of action, or exercised a power or performed a duty or function that would allow the Project to proceed.

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)

NRCan has not had previous contact or involvement with the proponent regarding this project.

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

Based on the information available, NRCan does not possess any additional information or knowledge that has not been specified in this document.

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?

NRCan's mandate, areas of expertise, and the related issues that should be addressed in the impact assessment of the Project are summarized below:

- Seismic hazard assessment is the study of expected earthquake ground motions on the earth. In Canada, the development and evaluation of regional earthquake hazard models for applications in the National Building Code (NBC) is the responsibility of NRCan's Geological Survey of Canada (GSC). There has been no mention of seismicity in the IPD (2020). The Proponent should address the issues of seismicity: seismic hazards/NBCC standards during the project activities, effects of the environment on the project, and their seismic design provisions for the infrastructure.
- Sea-level rise is the increase in global mean sea level that occurs over time as a consequence of melting glaciers and ice sheets, and warming and expansion of the surface layer of the ocean. The Proponent should explain how they will ensure continuing operation in light of project sea-level change to at least the year 2120 and beyond as the DP4 infrastructure will be designed for 100+ years service life. Similar to the other GCT's other terminals, plans include ongoing refurbishment and maintenance to ensure the assets will continue in perpetuity. Therefore, from the IPD (2020) there seems to be no intention to decommission and abandon the project.
- Marine geoscience is the study of marine geology and marine processes as it relates to the dynamics of the ocean floor and coastal zones. The impact of project activities (construction/operation etc.) as it relates to marine geoscience issues and their mitigation strategies should be addressed by the proponent.
- NRCan has developed expertise in the compositional analyses of petroleum products including heavy crude oils such as diluted bitumen, and has installed oil spill testing facilities where oil behaviour studies in water environments are being conducted over the range of seasonal

temperatures found across Canada. The Proponent should address the impact that the Project's construction and operation has related to the fate and behaviour of oils in water environments, with consideration of the volumes and types of oils expected.

Kathy McPherson

Name of Departmental/Agency
Responder

Sr. Environmental Assessment Officer

Title of Responder

November 12, 2020

Date