

January 5, 2021

CIAR File No.: <u>81010</u>

Tracy Utting Agency Review Manager, Review Panels Division Impact Assessment Agency of Canada <email address removed>

RE: Request for Comment – Draft Joint Guidelines, GCT Deltaport Expansion – Berth Four Projet (DP4)

On November 10th, 2021 the Impact Assessment Agency of Canada (the Agency) requested that Natural Resources Canada (NRCan) conduct a review of Global Container Terminals (the Proponent) Tailored Impact Statement Guidelines (TISG) for the proposed Deltaport Expansion - Berth Four (the Project) near Delta, British Columbia.

NRCan is participating in the impact assessment process pursuant to *Impact Assessment Act, 2012* as a Federal Authority in possession of specialist or expert information or knowledge related to the Project. NRCan has conducted a review of the Draft Joint Guidelines based on the Department's expertise in sea-level rise, coastal geomorphology, fate and behaviour of oils and seismicity and earthquake hazard.

Details of NRCan's review can be found in the Table attached. If you have any questions, please contact me via e-mail at <email address removed> or by phone at <contact information removed>

Thank you,

Kathy McPherson Environmental Assessment Officer Office of the Chief Scientist

cc: Laurence Davidson – Team Lead, Impact Assessment Division John Clarke – Director, Impact Assessment Division



Tailored Impact Statement Guidelines – Federal Authority Comment Table

Department/Agency:	Natural Resources Canada (NRCan)			
14 Constants	Kathy McPherson, Impact Assessment Officer	Telephone:	<contact information="" removed=""></contact>	
IA Contact:		Email:		

Section and PDF Page number	Issue (rationale and whether the issue is project specific or general)	Suggested edit (show original text with suggested edits in track changes)	Type of edit (critical or recommended)
2.1 Project components, 2.1.1 Marine Components	Project specific	Disposal at sea areas should be included	Recommended
2.1.2 Onshore Components	Project specific: These activities are both noted in 2.2 Project activities, and so should be consistent with those in the project components section.	 There is already a bullet for waste disposal. However, another bullet should be included specifically for: disposal of excavated sediment on land areas Page 62: 3rd main bullet down "describe and provide maps, at an appropriate scale, or major drainage basins" - Change 'or' to 'of'. Pg 62: Describe the local and regional climate projections for the area with rationale of the climate model chosen and including a description of the current and projected climate impacts on marine water and sediment quality, (add: including predicted water and sediment discharge from the Fraser River). 	Recommended
9.3 Geology and Geological Hazards	Project specific	 Page 62: "in situ measurements of bed shear stress", should be changed to assessed, estimated or calculated. Any geological hazards that exist in the areas planned for the project facilities and infrastructure should be identified, including: History of seismic activity in the area, ground shaking, strength and type of shaking, this includes nearby moderate earthquakes and large distant earthquakes, site amplification/site effects (Example: please clarify whether offshore is considered in the area?), including induced earthquakes, and secondary effects such as the risk of seismic generated tsunamis, landslides and liquefaction; and Evidence of active faults. 	Recommended

9.7.4 Marine Water, Sediment and Coastal Geology - Potential Effects	Project specific	The list of all the interactions between the project and the marine environment should include: How dredging and loading of the upper delta will affect slope stability.	
14 Effects of the Environment on the Project	Project specific	1 st bullet should consider how environmental conditions, including natural hazards such as severe and/or extreme weather conditions and external events (e.g. earthquakes, flooding, drought, landslides/submarine landslides, tsunamis, volcanoes, sea- level changes, erosion, subsidence, fire, outflow conditions), could adversely affect the designated project and how this in turn could result in effects to the environment, health, social, economic and cultural conditions and impacts on Indigenous interests. Please note that the The Intergovernmental Panel on Climate Change (IPCC) has released its Sixth Assessment Report (AR6) which should be used as the current reference for sea-level changes.	Recommended
14 Effects of the Environment on the Project	Project specific	Pg 168, second bullet up from bottom, "identify the project's sensitivities and vulnerabilities to changes in climate (both in mean conditions and extremes such as short-duration heavy precipitation events)" should also include storm surge. Suggested change: "identify the project's sensitivities and vulnerabilities to changes in climate (both in mean conditions and extremes such as short-duration heavy precipitation events)" should also include storm surge. Suggested change: "identify the project's sensitivities and vulnerabilities to changes in climate (both in mean conditions and extremes such as short-duration heavy precipitation events, and storm surge and storm waves);" Suggested change: "Present-day and projected future flooding from storm surges and waves, taking into account probable and high-end projections of sea-level change and possible changes to storminess during the lifetime of the project.	Recommended
Section 15 Accidents and Malfunctions	Project specific: The amplitude of tsunamis and storms can lead to run-up and major flooding. The wavelength can pull a ship from its mooring lines, and currents could cause a ship to spin out of contro as well as cause major geomorphological changes.	Tsunamis and storms should be mentioned in this section. In particular, a tsunami wave's three features: amplitude, wavelength and associated currents. The following point should be added to this section: o at a minimum, analyze the risks associated with Tsunami generated by a major offshore earthquake	Recommended
Section 15.1 (Risk Assessment)	Project specific for the size of the vessels	Please include the highlighted notes to the existing text, " model the expected behaviour for spills of petroleum and hazardous and noxious substances that will be carried by vessels within the study area using information regarding <i>their expected volumes and</i> physical oceanography within the study area"	Recommended
Section 15.2 – (Mitigation)	Project specific for the size of the vessels	Please include the highlighted notes to the existing text, "these measures should reflect existing regulations and marine emergency response procedures, overseen and administered by federal and international authorities. This may include information on spill response and container recovery planning and provisions;)	Recommended

Section 16.5 Marine Shipping (Accidents and Malfunctions)	Project specific for the size of the vessels	Please include the highlighted notes to the existing text, "describe and evaluate the potential effects on the environment of accidents and malfunctions arising from these three physical activities (major commercial traffic routes, network focal points or areas where close-quarter situations and/or crossing traffic are likely to occur) for the volume of fuel and types of cargo carried, including impacts on social, economic or cultural elements of the environment and human health of people in close proximity of spilled contaminants: "	Recommended
		environment and human health of people in close proximity of spilled contaminants;"	