

FACT SHEET

Offshore Terminal Options

Among the 14 alternate long-term fuel delivery options studied by VAFFC were building a fixed or floating terminal west of YVR.

Offshore limitations:

- Both fixed and floating terminals introduce man-made structures well into exposed waters of the Strait of Georgia.
- A floating terminal west of Sea Island would require a pipeline crossing the environmentally sensitive Sturgeon Bank mudflats to connect to the storage tanks at YVR.
- For a fixed terminal, a six-kilometre trestle across the Sturgeon Bank mudflats would be required to support the access road and pipeline to shore.
- Both fixed and floating terminals would need to be located outside of shipping channels, thus increasing pipeline length and depth below water.
- Depth of offshore locations poses cost, construction and maintenance challenges.
- Offshore options also possibly conflict with YVR's Master Plan, which includes an option for an off-shore runway.
- This option has very high operating and maintenance challenges and cost.
- The area is further exposed to high winds and wave action during storms that could lead to operations disruptions and increased tanker laytimes, such as English Bay or Plumper Sound.

Near-shore limitations:

- A fixed terminal closer to Sea Island would require extensive dredging to create a navigable channel of suitable width and depth for vessels to access the terminal.
- This option would lead to prohibitive construction costs associated with dredging.
- Given the ecological sensitivities of the Sturgeon Bank foreshore, this concept would likely face significant regulatory challenges.
- This option possibly conflicts with YVR's Master Plan, which includes an option for an off-shore runway.
- The Sturgeon Bank is a deltaic front comprised of fine sediments from the Fraser River, and this area is subject to sub-marine landslides and is considered extremely unstable in the event of an earthquake. Extensive geotechnical improvements would be required for any offshore pipeline or terminal infrastructure, causing significant environmental disturbance.