

## The Need for TUG ESCORT

### Indigenous PARTICIPATION

**KOTUG Canada's office is located in Beecher Bay on the southern coast of Victoria near Sooke, BC.**

In keeping with Trans Mountain's goals for employment, training and business opportunities for Indigenous people who may have an interest in the Project, KOTUG Canada will provide opportunities to Indigenous peoples and communities. Learn more about KOTUG Canada at [kotugcanada.ca](http://kotugcanada.ca)

The escort tugs will operate out of Cheanuh Marina owned by the Sc'ianew First Nation (Beecher Bay First Nation) and approximately 15 members of the Sc'ianew First Nation will be trained to support towage services on-board these vessels once they go into operation.

### Did You KNOW?

- **Along with the two new tugs,** Trans Mountain and its shippers have the Western Canada Marine Response Corporation (WCMRC) Enhanced Response Regime (ERR) with one of the new response bases co-located out of Cheanuh Marina.
- **New technology built on the tugs** such as efficient engines and special graphene paint are expected to reduce underwater noise impacts and improve energy efficiency.
- **Under a separate agreement with WCMRC,** KOTUG Canada will also operate a large ocean-going oil spill response vessel, also equipped with high-capacity vessel towing capabilities. That vessel will also be based at the Cheanuh Marina and be part of the Enhanced Response Regime being implemented by WCMRC to improve oil spill response readiness on the BC West Coast.
- **KOTUG Canada will undertake crew recruitment and training for these vessels,** providing new skills and job opportunities to coastal communities.

Trans Mountain-related marine shipping has operated safely and responsibly for more than 65 years. Given all the progress in tanker safety and the existing robust marine regime, a spill from a Westridge Marine Terminal-related tanker would be an unlikely event.

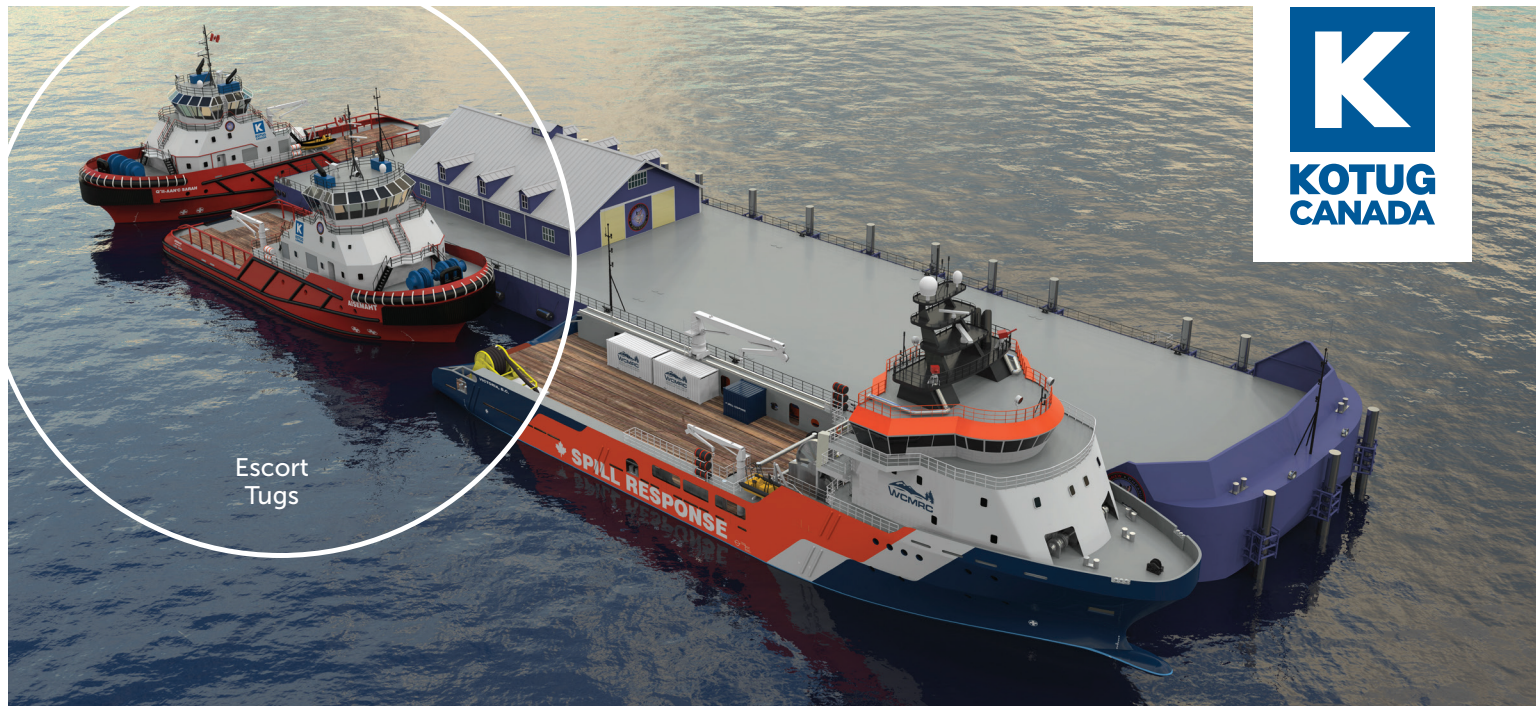
The regime will be further strengthened by additional risk control measures for the Trans Mountain Expansion Project (TMEP). One key measure will be the expanded tug escort for loaded tankers from Westridge; those tankers will be under escort by large, modern and highly capable tugs from the Port of Vancouver to the western entrance of the Juan de Fuca Strait, near the 12-nautical mile limit of Canada's territorial sea. This is a condition requirement imposed by the Canadian Energy Regulator (Condition 133). Escort tugs help to minimize the risk of grounding should a vessel become disabled for any reason.



When selecting the tug escort provider for Project vessels, ensuring tug capabilities under year-round environmental conditions are of high importance. To ensure consistent science-based criteria, Vancouver-based, globally-renowned naval architect Robert Allan prepared a tug matrix for TMEP after consultation with BC Coast Pilots, tug operators and maritime regulators. The matrix highlighted that the optimum minimum tug size for Project vessels (up to Aframax class) should be 40 metres long with a minimum 110 tonnes bollard pull.

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Working with Project shippers, Trans Mountain entered into an exclusive supplier arrangement for escort tug service to TMEP tankers with KOTUG Canada. KOTUG Canada intends to provide the service using a pair of escort-rated 9,000 horsepower tugs, each approximately 50 metres long and each capable of providing about 120 tonnes bollard pull. The addition of these tugs to the local area, along with their capable crews, will provide added safety to all types of large commercial vessels, including TMEP tankers, plying the commercial shipping lanes shared by Canadian and US vessel traffic in the region.



Escort  
Tugs

## About KOTUG

KOTUG Canada offers a broad range of towage and maritime services across Canada, bringing together the combined experiences, expertise and best practices of two industry-leading companies:

### KOTUG INTERNATIONAL HORIZON MARITIME

KOTUG Canada combines global knowledge with local expertise and local partners. We are firmly committed to the highest industry standards of health, safety, environment, quality and security. It is our mission to exceed client expectations for the benefit of all stakeholders with an unmatched commitment to First Nations, social responsibility and environmental sustainability.



## ESCORT Tugs

The escort tugs are two modern (2018 and 2020 built) identical versatile azimuth stern drive (ASD) escort tugs.

These large 55-metre length overall (LOA) Escort Rated tugs are well equipped with double drum winches placed both forward and aft. They can perform towage duties both over the stern and bow.

Equipped with two powerful engines delivering a total of 9,000 break horse power (BHP) the vessels can reach up a speed up to 14 knots and delivering up to 120 tonnes bollard pull both ahead and astern.

Both vessels will be equipped with the latest SCHOTTEL SYDRIVE azimuth thrusters enabling to operate in a hybrid mode where a single engine can drive the two thrusters, significantly reducing emissions, underwater noise and fuel consumption on-board the vessels.

The large aft deck provides sufficient space for assisting during oil-spill events whereby oil contaminated water can be stored in the large dedicated oil recovery tanks (each with a capacity of more than 500 cubes).

The vessels are also equipped with Firefighting Class 2 equipment, suitably to assist in fire response duties both at sea as well as on the terminal.

## Oil SPILL RESPONSE Vessel (OSRV)

The oil spill response vessel (OSRV) is an existing Havyard 842 designed anchor-handling tug supply (AHTS) vessel, suitably equipped for enhanced spill response duties as well as emergency towage and support duties.

This large 75-metre LOA vessel is built to operate in harsh weather conditions and with her powerful engines (12,000 kW) can reach emergency situations in a safe and swift manner.

To maintain in a stable position near a casualty, the vessel is equipped with Dynamic Positioning Class 2 as well as a retractable azimuth thruster forward.

The large aft deck onboard the OSRV (530m<sup>2</sup>) is well suited to place enhanced spill response equipment onboard and capable of storing oil contaminated water in her large oil recovery tanks with a maximum capacity of 1,036 m<sup>3</sup>.

To provide swift assistance during spill situations, the vessel is equipped with two fast support crafts (so-called MOB (man overboard) boats).

The OSRV is equipped with large accommodation and office space to act as an emergency response room on-site, as well as sufficient fuel capacity to stay at sea for prolonged periods of time.

Equipped with Firefighting Class 1, the vessel is also capable to assist in firefighting duties on-board vessels and at the terminal.