

MARINE SAFETY

FACT SHEET



The goal of our marine safety program is to reduce the chances of a shipping incident to as close to zero as we can. The Northern Gateway Project is committed to ensuring that tankers will be operated to the internationally recognized safety and environmental standards. The safe passage of vessels will be achieved through the following comprehensive strategies that bring together the best people, technology and planning:

- **Compliance with regulations** - tankers must comply with shipping regulations and safety standards required under the Canada Shipping Act and other relevant Canadian statutes, and applicable IMO conventions and initiatives (e.g. SOLAS, MARPOL).
- **Tanker Acceptance Program (TAP)** - prior to arrival in Canadian waters, tankers will be vetted by independent, third-party agencies and will be required to meet Northern Gateway's safety and environmental standards.
- **BC Coast Pilots** - all tankers will be safely guided by BC Coast Pilots within the compulsory pilotage areas regulated by the Pacific Pilotage Authority.
- **Reduced speeds** - tanker speed will be reduced to between 8 and 12 knots in the coastal shipping channels and operational safety limits will be established for visibility, wind, and sea conditions
- **Escort tugs** - all laden tankers in the CCAA will be accompanied by one tug tethered (attached) to the tanker, and a second tug in close escort. Ballasted tankers within the CCAA and all tankers (laden and ballasted) travelling between the pilot boarding stations and the CCAA will be accompanied by one close escort tug. Escort tugs will also be available for ocean rescue within Canadian waters.
- **Ballast water exchange** - all tankers will be required to meet the requirements of Canada's Ballast Water Control and Management Regulations under the Canada Shipping Act.
- **Radar** - Radar will be installed along important sections of the routes to monitor all marine traffic and provide additional information to monitoring stations and to pilots. Additional navigational aids, such as beacons, buoys and lights will be installed throughout the shipping channels.
- **Tanker inspections** - tankers will be subject to regular Port State inspections by Transport Canada
- **Loading arms** - loading arms at the marine terminal will accommodate tidal fluctuations and various tanker sizes and will be equipped with emergency shutdown valves, cameras and powered emergency release systems.
- **Vapour Recovery** - A vapour recovery unit will be used to capture hydrocarbon vapours displaced from tanker cargo holds.
- **Mooring Lines** – the loads on ships mooring lines will be continuously monitored while the ship is at berth.