



TRANSPORTING LIQUEFIED NATURAL GAS SAFELY

PROJECTED FREQUENCY: 10-14 carriers a month or approximately 150/year

QUANTITY: License to export 10 million tonnes of LNG annually

Chevron and Woodside propose building the Kitimat LNG facility at Bish Cove, on Douglas Channel near Kitimat, B.C. This natural, deep sea port provides a safe and ideal location to begin the journey of natural gas from British Columbia to Asia-Pacific customers.

LNG carriers have been traveling the world's oceans for more than 50 years without serious incident. The nature of liquid natural gas is that it is non-explosive and non-toxic. LNG carriers have sophisticated leak detection systems to continually monitor their LNG tanks. If a release of natural gas were to occur, the LNG would simply turn into a vapour and dissipate. LNG does not mix with water and is non-polluting and non-toxic.

When it arrives at its destination, the LNG is warmed and transported as a natural gas to customers which include residences and industrial manufacturers, many that manufacture goods that are shipped back to consumers here in B.C.



Note: Illustrations are not to scale

PROJECT INFORMATION HIGHLIGHTS



Bish Cove Marine jetty and berth constructed to accommodate specialized LNG carriers



Kitimat LNG facility and Pacific Trail Pipeline projects estimated to create thousands of jobs during construction to be filled by British Columbians first



Local and First Nation businesses will have the opportunity for skills training, jobs and to provide a variety of goods and services across the value chain to support construction and operation of Kitimat LNG project



Significant new revenue to provincial government that will fund schools, hospitals, roads, transportation and other services

LNG CARRIER SAFETY



Only state-of-the-art carriers equipped with advanced leak detection systems will be used. Design minimizes amount of natural gas that warms and vaporizes during transport. Any vaporized gas is collected and used as fuel to propel the vessel and improve efficiency



LNG has been shipped worldwide for more than 50 years and 77,000 voyages without any loss of containment from an LNG carrier cargo tank



Douglas Channel is a designated Mandatory Pilotage Zone. This means, by law, all LNG carriers will be required to have BC Coast Pilots board before entering the channel and use their expert and local knowledge to navigate to the LNG terminal at Bish Cove



Regular mandatory reporting to Coast Guard Marine Communications and Traffic Services

ENVIRONMENT



When cooled to -160°C and liquefied, LNG is non-explosive, non-toxic and does not mix with water. In case of a release it becomes a gas again and evaporates into the atmosphere



If LNG warms, it becomes a gas that is lighter than air that quickly disperses into the air instead of collecting on the water or near the ground



"No-Go" zones designated as off-limits for LNG carriers and tugs to protect marine mammals and minimize effects on marine environment



Marine speed ranges will be adhered to for protection of people and marine life

TRANSPORTING LNG SAFELY

Liquefied natural gas carriers are among the safest commercial ships in the world with no serious incidents in over 50 years of transport



British Columbia Marine Pilots will navigate carriers from open seas off B.C.'s coast to the loading terminal and back out to open seas

Coast Guard Marine Communications and Traffic Services provide additional safety



Vessels carrying liquefied natural gas will use a well-developed local shipping route used safely by industry for over 40 years

Stringent Canadian regulations, policies, procedures and surveillance programs have been established in order to ensure the safety of marine transportation



The Kitimat LNG project is undergoing an extensive Technical Review Process of Marine Terminal Systems and Trans-shipment Sites (TERMPOL). TERMPOL is a

Transport Canada-led review that evaluates the project for safety of vessels entering B.C.'s coastal waters, navigation through channels, berthing and un-berthing at the marine terminal in Bish Cove and loading LNG

TERMPOL reports are shared with coastal First Nations and local communities for their input and review



Port State Control: Led by Transport Canada, ship inspection process involves boarding and inspecting of foreign vessels entering Canadian ports to ensure compliance with international maritime conventions, Canadian standards and regulations