

ATTACHMENT:
Federal Authority Advice Record
Response due by August 30, 2021.

Please submit the form to: KsiLisimsLNG@iaac-aeic.gc.ca
Ksi Lisims LNG - Natural Gas Liquefaction and Marine Terminal Project – Nisga'a Nation,
Rockies LNG Limited Partnership and Western LNG LLC
Agency File: 005806

Department/Agency	Transport Canada
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1. Is it probable that your department or agency may be required to exercise a power or perform a duty or function related to the Project to enable it to proceed?

If yes, specify the Act of Parliament and that power, duty or function.

Yes

Transport Canada is responsible for federal transportation policies and programs. It seeks to ensure that air, marine, road and rail transportation are safe, secure, efficient, and environmentally responsible. To that end, we can provide information in relation to marine safety and security, Canada Port Authorities, navigation protection, transportation of dangerous goods, rail safety, transportation-related trade, and civil aviation.

Canadian Navigable Waters Act

Transport Canada (TC) may be required to exercise a power or perform a duty or function with respect to the Canadian Navigable Waters Act (CNWA) based on the Initial Project description provided.

The Pacific Ocean is a Scheduled water under the CNWA and therefore the proponent must obtain an approval prior to commencing work on the proposed project. Transport Canada recommends that the proponent contact the Navigation Protection Program to seek guidance on obtaining an approval under the CNWA for the proposed work, however notes that no approval will be issued until the environmental review is complete.

TC requires further detailed project information, outlined in response 6, to confirm whether or not TC would be required to issue an approval to enable the project to proceed.

Below is the contact information for our regional specialist regarding navigation, assigned to this file, should the proponent have questions regarding appropriate templates/forms.

Roberta Dight , roberta.dight@tc.gc.ca

Navigation Protection Officer

Navigation Protection Program/ Transport Canada / Government of Canada

NPPAC-PPNPAC@tc.gc.ca / Tel: 604-318-0371 / TTY: 1-888-675-6863

Agente de protection de la navigation

Programme de protection de la navigation

Transports Canada / Gouvernement du Canada

CNWA online submission site (create a user/log in to continue): <https://wwwapps.tc.gc.ca/Prog/3/NWAR-RLen-E/en/Account/Login>

Visit our website @ <http://www.tc.gc.ca/eng/programs-621.html>

For some more information check out:

<https://www.canada.ca/en/services/environment/conservation/assessments/environmental-reviews/navigation-protection.html>

There are additional powers, duties or functions that may be applicable to the project and require compliance, but may not require a project-specific approval enabling the project to proceed. These could include:

Emergency Response Assistance Plan (ERAP) program

Dangerous Goods (DGs) must be handled, offered for transport and transported in accordance with the TC TDG Act/Regulations. There is a regulated Emergency Response Assistance Plan (ERAP) program (Part 7 of the TDG Regulations) that requires a company transporting certain types of DGs to have an ERAP before they can be transported. The ERAP must be approved by TC and the company must have received a registration number from TC before they are allowed to ship ERAP-able products. Anyone who handles, offers for transport, imports and/or transports DGs must comply with TDG regulations. This includes holding a valid TDG certificate, completing the appropriate documentation, using the proper means of containment, reporting any reportable spills and holding a valid ERAP when required.

<http://www.tc.gc.ca/eng/tdg/clear-part7-374.htm>.

If the transport of dangerous goods, requiring an ERAP, is offered by a third party (i.e. other than the proponent), then TC would not have to exercise power, duty, or function (i.e. approving the ERAP) to enable the Project to proceed. This would be the third party's responsibility to have their ERAP approved by TC.

Obstruction Clearance Permit – Canadian Aviation Regulations

TC may need to issue an Obstruction Clearance Permit in relation to the construction associated with the Project. As more detailed specifications for the project infrastructure are developed, they should be assessed for any marking/lighting requirements per Canadian Aviation Regulations (CAR) 601 - Division III - Marking and Lighting of Obstacles to Air Navigation and Standard 621 - Obstruction Marking and Lighting. The regulation can be accessed online at:

<http://www.tc.gc.ca/eng/acts-regulations/regulations-sor96-433.htm>.

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2. Is your department or agency in possession of specialist or expert information or knowledge that may be relevant to the conduct of an impact assessment of the Project?

Specify as appropriate.

Yes. TC is in possession of specialist or expert information or knowledge for the following:

Impacts to navigation resulting from the project

Transport Canada's Navigation Protection Program (NPP) would be able to provide specialist or expert information or knowledge with respect to the CNWA and impacts to navigation. The Canadian Navigable Waters Act authorizes and regulates interferences with the public right to navigation. The primary purpose of the Act is to regulate works and obstructions that may interfere with navigation in Canada's navigable waters.

Underwater noise

TC's Environmental Policy Directorate is mandated to support the delivery of the government's environmental agenda to reduce the harmful impact of all transportation modes on Canada's natural environment, and to consider the impact of environmental changes on the national transportation system.

TC has expertise in the development of policy measures and options, as well as regulatory requirements, relating to various marine topics including: ship-source marine aquatic invasive species (hull biofouling), management of ship waste (plastics) and support for the protection and recovery of endangered species by managing adverse vessel impacts, including underwater noise and vessel strikes.

Marine sector air emissions

TC works to advance the Government of Canada's domestic and international agenda to reduce air emissions including greenhouse gas emissions from the transportation sector. It has expertise relating to various topics including: regulations, policies and programs to reduce emissions across the transportation sector domestically and internationally; efforts underway across the federal government to increase domestic and global adoption of emerging technologies, such as alternative fuels, in the transportation sector.

Climate risk assessments and climate impacts

TC supports the Government of Canada's efforts to advance adaptation action in Canada, focusing on the Canadian transportation system. TC has expertise related to: climate change impacts to transportation modes across the country; climate change risk and vulnerability assessment approaches; research and development on climate risks and adaptation solutions for northern transportation systems; and knowledge of other departments, jurisdictions, academics and organizations in Canada that are active in this area.

Marine Safety and Security

Transport Canada's role in marine safety and security is to regulate a marine transportation system that is safe and secure, efficient and environmentally responsible. Marine Safety and Security Branch (MSS) has expertise in the legislative framework for Canada's marine safety system, which includes Canada's marine oil spill preparedness and response regime. MSS may provide advice on compliance with the *Canada Shipping Act, 2001*, the *Marine Transportation Security Act*, and regulatory issues that apply to ship operations.

The Constitution Act, 1867 grants the federal government exclusive legislative jurisdiction over navigation and shipping.

Canada's marine safety and security system is comprehensive, with international and domestic components. The international governance framework is formed by several organizations, including the United Nations and the International Maritime Organization, that provide the fora for Canada and other member countries to meet to discuss issues of international interest including safety, certification and training of people who work at sea, pollution, as well as oil spill preparedness response and cooperation. The agreements reached at these fora are reflected in international conventions including:

- International Convention for the Safety of Life At Sea (SOLAS);
- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW);
- International Convention for the Prevention of Pollution from Ships (MARPOL);
- International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC); and
- Maritime Labour Convention, 2006.

As a member nation, Canada adopts the principles of these international agreements into domestic legislation and regulations. Our primary legislation is the *Canada Shipping Act, 2001*. The Act protects the health and well-being of people and the environment, regulates marine transportation and provides authority to investigate and, if necessary, to prosecute. Other important legislation includes: *the Pilotage Act*; *the Canada Marine Act*; *the Marine Liability Act*; and *the Marine Transportation and Security Act*.

The international nature of shipping requires member countries to work together through Memoranda of Understanding to share responsibilities. Together, international programs such as Flag State and Port State Control as well as domestic safety and security programs enable Canada, and other member countries to inspect foreign vessels for safety and security and enforce legislation.

For example, in Canada there are specific domestic regulations and oversight programs that uphold the international conventions governing ballast water management, biofouling of vessels' hulls, air emissions from vessel engines and other discharges including garbage, sewage, and bilge water.

Transportation of dangerous goods

Dangerous goods must be handled, offered for transport and transported in accordance with the Transportation of Dangerous Goods Act and associated Regulations.

TC's Transportation of Dangerous Goods Directorate conducts work related to the safe transportation of dangerous goods and the prevention and response to incidents involving dangerous goods. The group's activities consist of:

- Developing and enforcing safety standards for the safe transportation of dangerous goods;
- Conducting compliance monitoring of modal (air, rail, marine, road) shippers and importers, assessing emergency response assistance plans, means of containment standards and facilities; and,
- Operating the Canadian Transport Emergency Centre to provide advice on emergency response operations for incidents involving dangerous goods.

Transportation and Economic Analysis

TC possesses transportation and economic analysis expertise including expertise related to the impact of economic and societal trends in Canada and around the world on the resilience and performance of Canadian supply chains and the transportation system in general.

More specifically, expertise exists which conducts research on passenger and freight transportation to develop statistical profiles, forecasts, and other forms of economic analysis that support policy-making and program development. Expertise exists in such fields as economic and environmental analysis and research, transportation statistics, and forecasting and modelling.

Trade Policy

Transport Canada possesses knowledge of the mechanisms governing international trade in goods and services, Canada's international trade agreements, in particular the transportation-related provisions in Canada's international trade agreements, as well as expertise in the negotiation of these transportation-related provisions.

Trade Policy is also responsible for policy direction of the National Trade Corridors Fund. The National Trade Corridors Fund provides federal contributions to strategic infrastructure investments that strengthen the efficiency and resilience of the transportation system to support trade. Projects are selected on a merit basis through competitive processes and cost-shared with proponents and partners in the public and private sectors.

Transportation Innovation

TC's Innovation Centre (TC-IC) promotes technology development research and expertise to position TC as a leader in transportation innovation. Among its mandate the Innovation Centre is committed to plan, oversee and report on technology, testing and evaluation in all modes of transportation, and develop partnerships with academia, private and public sectors in fulfilling its mandate. TC-IC marine RD&D group's research goals focus on two core research streams: Clean Marine and Marine Mammal Protection.

Clean Marine stream advances technologies to decrease greenhouse gas (GHG) and criteria air contaminant (CAC) emissions from Canadian vessels; this is accomplished through research activities that focus on efficiency improvements and/or fundamental research and validation of clean technologies or design changes. Some example research topics are hull coating/cleaning applications, low carbon fuels (ex. LNG) and zero emission propulsion technologies (ZEPT).

Marine Mammal Protection stream advances technologies and/or designs that mitigate the impact of vessel-sourced underwater radiated noise (URN) on marine species and improves the detection of marine mammal presence in order to reduce the risk of acoustical and physical disturbances. Under this research pillar the Quiet Vessel initiative (QVI) focuses on testing safe, environmentally-responsible and effective quiet vessel technologies, retrofits, designs, and operational practices that reduce the impacts of underwater noise on vulnerable marine mammals and the marine environment. Some example research topics are marine mammal detection technologies, vessel acoustic profiling, and noise mitigation technologies.

Marine Policy

TC's Marine Policy Directorate is mandated to support domestic and international marine policy matters related to economic competitiveness and clean shipping. The Marine Policy Directorate is divided into three groups: International Marine Policy, Domestic Marine Policy, and Ports and Seaways, each of which develops and interprets policy, legislation and regulations specific to its area of expertise.

Ports Policy undertakes work related to overall governance of the 17 Canada Port Authorities (CPAs), including financial and policy analysis related to their role as trade facilitators. The Division also serves as a liaison with CPAs when required. Ports Policy develops, implements and monitors both short and medium-term policy as it applies to CPAs, who are, given the increasing focus on multimodal supply chain transport systems and the environment, intricately involved in key policy initiatives such as gateways and trade corridors, infrastructure improvements, community and Indigenous relations, safety and security, and the greening of the transport system. These policy demands are in addition to those more directly related to ports such as potential amendments to the Canada Marine Act and port integration where Ports Policy provides policy input on an ongoing basis.

The Domestic Shipping Policy division is responsible for assessing the competitiveness and efficiency of the domestic marine sector. It monitors, collects and interprets data from multiple sources and provides advice on economic issues affecting supply chains, trade, the environment and labour, and is responsible for the administration, enforcement and policy direction of the Coasting Trade Act. It also supports specific Oceans Protection Plan initiatives (e.g. Seamless Response Regime, Anchorages and Northern Low Impact Shipping Corridors) and is responsible for policy direction for the Oil Tanker Moratorium Act. The division works in consultation with industry associations and stakeholders on a range of domestic marine issues to support Government of Canada objectives related to trade, the environment and employment and to ensure that all aspects of the domestic marine sector remain efficient and competitive.

The International Marine Policy division is responsible for maintaining bilateral and multi-lateral relationships on marine matters, monitoring and providing advice on economic matters in the international marine industry and supporting clean shipping through its contributions to the ballast water management program and its management of the Marine Liability Act. In particular, the International Marine Policy division has expertise relating to legislation, regulations, and policies to ensure that compensation is available for damages from a ship-source oil spill, which is based on international conventions and the polluter-pays principle.

Surface Policy

TC's Surface Policy team develops and implements a wide range of policies in support of surface transportation (rail, highways, bridges and border crossings, urban transit). The directorate includes a number of groups, including Rail Policy Analysis and Legislative Initiatives, which provides advice and analysis on a range of freight rail policy issues.

Indigenous Relations

If requested by the Agency to participate in and support Indigenous consultation activities, TC's lead IA officer will involve their Indigenous Relations unit in Pacific Region.

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3. Has your department or agency considered the Project; exercised a power or performed a duty or function under any Act of Parliament in relation to the Project; or taken any course of action that would allow the Project to proceed in whole or in part?

No.

Specify as appropriate.

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4. Has your department or agency had previous contact or involvement with the proponent or other party in relation to the Project? (for example, enquiry about methodology, guidance, or data; introduction to the project)

Yes

Provide an overview of the information or advice exchanged.

Transport Canada has received an inquiry from the proponent regarding operational northern BC marine shipping considerations as well as questions regarding Transport Canada's Technical Review Process of Marine Terminal Systems and Transshipment Sites (TERMPOL). The voluntary TERMPOL review process gives objective guidance to proponents planning to build and operate a marine terminal system for the bulk handling of oil, chemicals and liquefied gases. Transport Canada will continue to provide advice and guidance in keeping with our federal authority role regarding the assessment of marine safety and navigational considerations.

5. Does your department or agency have additional information or knowledge not specified, above?

Yes.

Specify as appropriate.

The Oceans Protection Plan

The Oceans Protection Plan is administered by Transport Canada, DFO, and ECCC and aims to develop a world class marine safety system, preserve and restore marine ecosystems, build Indigenous partnerships, create a stronger evidence base and increase community participation and public awareness. Built on science, technology and traditional knowledge, the Oceans Protection Plan includes over 50 marine safety, research and ecosystem initiatives from coast-to-coast-to-coast.

Below are descriptions of Transport Canada led initiatives that may have overlap with the Project:

Enhanced Maritime Situational Awareness (EMSA):

Transport Canada is working with pilot partners to develop a web-based Geographic Information System that improves situational awareness for Indigenous and coastal communities to support marine safety, environmental monitoring and protection, and marine spatial planning. The EMSA system, which is available now but also undergoing a process of enhancement and improvement, provides a platform to upload, create, and/or view spatial data and near-real time vessel traffic to provide a common operating picture and to support collaboration.

The EMSA is being developed collaboratively with 13 Indigenous nations (pilot partners) across Canada. While there are no further opportunities to become pilot partners on the EMSA initiative, TC can work to provide access to the EMSA system. There are currently more than 625 EMSA users, including Indigenous nations, federal & provincial government, academic/science organizations, and industry. The EMSA pilot project initiative is a part of Canada's Oceans Protection Plan. As such, it is currently funded through March 2022 but Transport Canada is working with its pilot partners to create a series of recommendations to government for the continuation of the project after this date.

Cumulative Effects of Marine Shipping:

As part of the Oceans Protection Plan, Canada is committed to the Cumulative Effects of Marine Shipping initiative, intended to improve understanding of cumulative effects from marine vessel activities at identified pilot sites, including the Northern Shelf Bioregion in BC, through strengthened collaboration between the federal government, Indigenous governments, coastal communities, marine stakeholders and other interested parties. A key deliverable of the national Cumulative Effects of Marine Shipping initiative is the development of a framework to guide and direct Cumulative Effects of Marine Shipping activities across Canada.

In June 2018, the Pacific North Coast First Nations and Canada entered into a Reconciliation Framework Agreement for Bio-Regional Oceans Management and Protection. The Reconciliation Framework Agreement commits the Parties to advance Collaborative Governance and Management on matters related to Marine Planning and Oceans Management and Shipping, Marine Safety, and Ocean Protection. Schedule B of the Reconciliation Framework Agreement commits the Parties to engage in discussions to achieve "improved understanding of the cumulative effects of shipping on marine wildlife and ecosystems (including human communities), including collaborative work to collect and update baseline data to support effective environmental stewardship". A member of the Nisga'a Lisims Government has been sitting on the RFA CEMS Technical working group table, as an observer, since January of 2019.

The Northern Shelf Bioregion Cumulative Effects of Marine Shipping Pilot Project is seeking to achieve stated goals and objectives within the Reconciliation Framework Agreement mandate and existing legislation and policy as well as within an agreed to Project Charter and workplan. Work is currently underway on the conduct of the Cumulative Effects of Marine Shipping assessment, which will lead to the identification of tools and strategies to mitigate the adverse cumulative effects of marine shipping on priority marine shipping issues and valued components. Valued components prioritized by the First Nations include impacts from underwater noise on cetacean distribution and behaviour as well as cetacean prey; impacts of vessel strikes on cetaceans; and impacts of vessel activities on indigenous marine uses.

Proactive Vessel Management

The Proactive Vessel Management Initiative fosters collaboration between the Government of Canada, Indigenous Nations, the marine shipping industry and other stakeholders to improve marine safety and environmental protection through the development of voluntary vessel traffic management measures. Pilot projects undertaken over the past two years in partnership with Pacific North Coast First Nations signatory to the RFA are providing valuable learning, and some measures have been put into place. Principles and practices emerging through this initiative could have potential application in other BC coastal areas.

Places of Refuge Contingency Plan

Transport Canada is the lead agency for decisions related to ships requesting a place of refuge (POR) in Canadian waters, and has been working to revitalize the National Places of Refuge Contingency Plan (PORCP). A place of refuge is a site where a ship in need of assistance can take action to stabilize its condition to protect human life and the environment. Place of refuge requests may be complex and urgent, requiring close coordination and communications between the vessel and Marine Safety authorities.

The PORCP development work includes collaborating with coastal First Nations to develop sub-regional annexes to the PORCP and pre-identify specific sites that may be used as places of refuge if there is need. An additional 140-160 LNG tanker voyages per year in this area will increase the potential for a POR incident, and the North Coast sub-regional annex will need to be developed accordingly.

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6. From the perspective of the mandate and area(s) of expertise of your department or agency, what are the issues that should be addressed in the impact assessment of the Project, should the Agency determine that an impact assessment is required?

For each issue discussed, provide a concise, plain-language summary that is appropriate for inclusion in the Summary of Issues and Engagement.

Marine Shipping Operations

The IPD notes that “The number of LNG shipments per year is estimated to be between 140 and 160, depending on the size of the LNG carriers used and the total LNG produced by the Project”. To the extent it is possible, the Detailed Project Description (DPD) should provide additional information on the operation marine shipping scenario to be considered within the assessment. For instance, the DPD should respond to the following issues:

- What is the basis of the estimate of 140 to 160 LNG shipments per year?
- If there is a range of possible operational marine shipping scenarios, including the potential for a phased or ramp up to a maximum export capacity, this should be detailed with environmental assessment documentation and TC would encourage the proponent to bring forward any feasible scenarios for operation, and the confidence any such scenario would become a reality.

Air Emissions

Section 2.7 of the IPD outlines Emissions, Discharges, and Waste related to the project. The proponent notes a number of air pollutants that will be emitted from the project throughout the project lifecycle. To the extent possible, the Detailed Project Description should provide information on the mitigation measures for all air pollutants created by the project. Transport Canada is specifically interested in air emissions related to the marine sector (i.e. LNG carriers and support vessels). Further, Transport Canada would recommend air emissions and the atmospheric environment as a listed item within the Summary of Issues and request for the proponent to further evaluate and describe how the project will consider the best available technologies, best environmental practices, and mitigation measures to reduce air emissions related to the marine shipping related components of the project.

Rail implications

TC has not identified any rail related implications for the project. TC requests confirmation within the DPD that the project does not have any rail related components. In the event that there are, TC possess rail expertise:

The Rail Safety Directorate's organizational mission is to advance the safety of the Canadian rail transportation system through regulation, outreach and oversight, where this mission leads to a vision of a national transportation system that Canadians recognize as safe and efficient.

The dimensions of Regulation, Outreach and Oversight are three core areas in which Rail Safety carries forth its collective objective to achieve a safe rail transportation system. It is within these three dimensions that the expertise of rail safety may be looked upon to provide advice for projects directly or indirectly involving railways.

Navigation

Further detailed project information is required to determine potential impacts to navigation. The information TC requires prior to determining or providing advice on the project's impacts to navigation includes:

- Construction methodology for both the proposed work and any associated temporary works
- Details of the existing infrastructure (location, project date, project methodology, NPP file number for existing infrastructure) proposed for use according to the Initial Project Description; and
- Potential cumulative impacts to navigation in conjunction with surrounding works (e.g. water intakes, bridges, diversions, transmission lines, pipelines) in the regional study area as defined by the Impact Assessment Agency.

Transport Canada encourages owners of proposed works subject to the CNWA to solicit navigation related comments and concerns, from the public and Indigenous users, during the impact assessment or public outreach phase. Providing these comments and concerns to the department can help inform the Navigation Protection Program's evaluation of potential impacts to navigation and subsequent determination of appropriate mitigation measures later on, in the approvals phase.

Transport Canada
Name of Departmental / Agency Responder

Eric Crawford, Environmental Advisor
Title of Responder

September 9, 2021
Date