

For discussion – an approach to presenting s. 25 recommendation for panel review

Fisheries and Oceans Canada, Transport Canada, and Environment Canada have reviewed the proposal by Keltic Petrochemicals Inc. to construct an industrial complex in Goldboro, Nova Scotia. The proposed complex includes a liquefied natural gas (LNG) receiving terminal, a LNG re-gasification and storage facility, a petrochemical plant, a 200 MW thermal generating station, a 58 km highway and other related infrastructure (e.g., wastewater management, water supply).

Each of the three departments has at least one decision in relation to a project element that triggers the need for an environmental assessment under the *Canadian Environmental Assessment Act* (CEAA). At least one of the project elements for which the Responsible Authorities have identified a section 5 decision under CEAA is described on the Comprehensive Study List Regulations (i.e., marine terminal for receipt of LNG). As further project details become known (e.g., water course crossings, water withdrawal requirements), it is possible that there may be additional CEAA triggers in relation to the proposed complex.

In considering the scale and complexity of the proposed project (e.g., five project elements are described on the Comprehensive Study List Regulations), and the potential for significant adverse environmental effects related to the federal government's mandate, the Responsible Authorities collectively recommend that the project be referred to the Minister of the Environment for review by a panel. It is understood that such a referral can be made under section 25 of CEAA.

Potentially significant effects of the project relate to federal responsibilities for such matters as the protection of navigable waters (*Navigable Waters Protection Act*), fish and fish habitat (*Fisheries Act*), migratory birds (*Migratory Birds Convention Act*), species at risk (*Species at Risk Act*), and environment quality (*Canadian Environmental Protection Act*). Public concerns regarding the project have also been expressed as exemplified by recent petitions signed by a substantial proportion of the affected community and filed with municipal, provincial and federal governments.

It is understood that federal environmental assessment efforts can be coordinated with provincial environmental assessment requirements. The Responsible Authorities are prepared to work with the Canadian Environmental Assessment Agency and the Government of Nova Scotia in the design and implementation of a coordinated environmental assessment process that allows for a timely and productive investigation of potential adverse effects and identification of necessary mitigation and follow-up measures.

DRAFT – FOR DISCUSSION
Keltic Petrochemicals Inc. LNG and Petrochemical Facility

Proposed criteria for Section 25 referral

Project may cause significant adverse environmental effects related to federal mandate

Scale and complexity of project

- Project as a whole collectively accounts for at least five items on the CEEA Comprehensive Study List Regulations. These regulations describe projects which “...are likely to have significant adverse environmental effects”.
- Project will likely meet threshold criteria for National Pollutant Release Inventory reporting and be considered a large final emitter of GHGs under federal program

Risk and Uncertainties

- Liquefied Natural Gas (LNG), and substances stored, used or produced at the proposed petrochemical plant (e.g. butane, ethane, ethylene, pentane, propane, propylene), are named on the list of substances governed by the Environmental Emergency Regulations under the *Canadian Environmental Protection Act* (CEPA). As set out in CEPA (s. 200), these substances are subject to the regulations because “...if they enter the environment as a result of an environmental emergency, [they]
 - have or may have an immediate or long-term harmful effect on the environment or its biological diversity,
 - constitute or may constitute a danger to the environment on which human life depends, or
 - constitute or may constitute a danger in Canada to human life or health”
- LNG is a new and rapidly growing part of the energy sector. In the US, federal agencies responsible for the review and regulation of LNG facilities have identified uncertainties regarding safety, security and environmental risks that demand attention. For example, studies sponsored by US federal agencies to better understand the behaviour of LNG when released in the marine environment have just been completed. These studies could lead to changes in the analyses conducted as part of environmental reviews to determine facility siting, LNG tanker delivery routes, and required safety and security exclusion zones.
- The facility is being purposely designed to receive, store or produce other dangerous goods along with LNG. Based on consultations with US authorities and others familiar with the international industry, LNG facilities are usually dedicated to receipt of LNG. Potential interactions among multiple products require particular attention.

Sensitivity of receiving environment

- At least one endangered species protected under the *Species at Risk Act* may be adversely affected by the proposal (e.g., the project is in the vicinity of one of only a few endangered Roseate tern colonies in Canada)

Proposed Criteria for Determining Scope of Project (if necessary)

- Federal government has already identified likely or plausible CEAA triggers in relation to the LNG receiving terminal, the marginal wharf and possible disposal at sea activities
- Linkage of receiving terminal to re-gasification and storage facility (interdependence)
- Linkage of receiving terminal/marginal wharf to all other project elements (interdependence)
- Cumulative effects of each of the project elements, existing development, and induced developments (stated goal of the municipality is to attract more industry, highway could promote more development).
- Federal government-wide responsibilities and interests applicable to all project elements (see attached examples based on EC-administered legislation)
- Uncertainty re: full extent of CEAA triggers (e.g., TC NWPA, DFO HADD) in relation to other project elements such as the highway, thermal generating station, petrochemical facility and water supply. Application of the in-until-out principle suggests that these project elements be considered in the scope of project subject to federal EA.

Preliminary Summary of EC Mandated Interests and Scoping Concerns

Project Component	EC Responsibilities/Interests
LNG Terminal/Marginal Wharf	<ul style="list-style-type: none"> • CEPA Disposal at Sea Permit • SARA (e.g., endangered roseate tern colony at Country Island) • Migratory Birds Convention Act and regulations general provisions • Fisheries Act s. 36 • Federal Policy on Wetland Conservation (govt. wide)
LNG Re-gasification and Storage Facility	<ul style="list-style-type: none"> • CEPA Environmental Emergency (E2) Regulations (LNG a listed substance) • CEPA National Pollution Release Inventory (NPRI) reporting requirements • CEPA National Ambient Air Quality Objectives • Facility is likely to be identified as large final emitter of GHGs • SARA • Migratory Birds Convention Act and regulations general provisions • Fisheries Act s. 36 • Federal Policy on Wetland Conservation (govt. wide)
Petrochemical Complex	<ul style="list-style-type: none"> • CEPA E2 Regulations (e.g. butane, ethane, ethylene, propylene, pentane, propane) • CEPA fuel regulations (various) • CEPA NPRI reporting requirements • CEPA Toxic Substances • CEPA Priority Substance Risk Assessment currently underway for ethylene • CEPA National Ambient Air Quality Objectives • Canada-Wide Standards • Migratory Birds Convention Act and regulations general provisions • SARA • CEPA Vinyl Chloride Release Regulations • Fisheries Act s. 36 • Federal Policy on Wetland Conservation (govt. wide)
Cogenerating Station	<ul style="list-style-type: none"> • CEPA Ambient Air Quality Objectives • CEPA National Emission Guidelines for Stationary Combustion Turbines. • CEPA New Source Emission Guidelines for Thermal Electricity Generation. • CEPA Environmental Code of Practice for Steam Electric Power Generation - Design Phase (Report EPS 1/PG/1). • CEPA Environmental Codes of Practice for Steam

Electric Power Generation - Operations Phase (Report
EPS 1/PG/5, November 1992)

- CEPA E2 Regulations
- CEPA Toxic Substances
- CEPA NPRI reporting requirements
- Canada-Wide Standards
- Migratory Birds Convention Act and regulations general provisions
- Fisheries Act s. 36
- SARA
- Federal Policy on Wetland Conservation (govt. wide)

Highway

- CEPA Toxic Substances (e.g., Road Salt)
- CEPA Code of Practice for the Environmental Management of Road Salts
- CEPA National Ambient Air Quality Objectives
- Migratory Birds Convention Act and regulations general provisions
- Fisheries Act s. 36
- SARA
- Federal Policy on Wetland Conservation (govt. wide)