

Additional Information Requirements For Ports, Harbours & Wharves

Pursuant to Section 5(2) of the *Environmental Impact Assessment Regulation* of the Clean Environment Act, this document is intended to assist proponents in preparing a registration submission for projects involving the above-mentioned sector. It should be read in conjunction with the General Information Requirements as outlined in the latest version of the Registration Guide. The information requested in the Registration Guide must also be provided. Note that the following items are requirements **in addition to** those outlined in the Registration Guide. For further assistance, please contact the Project Assessment and Approvals Branch, Department of Environment at (506)-444-5382.

After reviewing a registration submission, the Technical Review Committee may require other information beyond the items listed below and in the Registration Guide.

Note: If your project involves any of the following components please contact the Canadian Environmental Assessment Agency, Atlantic Region at (902) 426-0564 to determine if your project requires a comprehensive study under the Canadian Environmental Assessment Act: a) construction of a marine terminal designed to handle vessels larger than 25 000 DWT.

Definition

This guideline is applicable to new harbours, ports and wharves and to modifications to existing facilities.

A complete list of potential triggers for project registration is provided in Schedule "A" of the Regulation. To determine if registration is required for a specific project, please contact the Project Assessment and Approvals Branch at the number listed above.

1.0 THE PROPONENT

See Registration Guide

2.0 THE UNDERTAKING

(v) Siting Considerations:

- Provide a site selection study including appropriate mapping, indicating how the selected facility footprint would minimize project impacts on areas of natural and cultural significance. The study must also consider how the environment may impact the proposed development (waves, currents, ice, fog etc.). The siting analysis must consider but is not limited to the following issues:
 - Compliance with the New Brunswick Coastal Areas Protection Policy

(<http://www.gnb.ca/0009/0371/0002/0001-e.asp>);

- Potential impacts to commercial/recreational fisheries (operations and resources);
- Location with respect to designated flood risk areas or areas prone to flooding or ice action;
- Potential impacts to archeological resources;
- Potential impacts to Aboriginal cultural heritage;
- Potential impacts to aquaculture facilities leases / licenses and commercial shellfish harvesting areas;
- Potential impacts to species at risk, their critical habitat or the residences of individuals of that species;
- Potential impacts to migratory birds and other wildlife;
- Potential impacts to environmentally significant areas (ESA);
- Potential Impacts to wildlife reserves/game management areas;
- Known contaminated sites including contaminated sediments;
- Location of any dredge disposal sites (land based or ocean disposal) in the vicinity;
- Existing outfalls (e.g. industrial, sewage treatment, etc.);
- Recreation and tourism areas (beaches, parks, etc.);
- Potential for interactions with other public or private wharves;
- Potential impacts on Navigable waters;
- Potential impacts on wetlands/salt marshes and other sensitive coastal habitats (e.g., dunes); and
- The existing regime of tides, currents, water levels and flow directions since addition of associated infrastructure (e.g., breakwater) could significantly alter the circulation in such as way as to cause algal blooms or continuous build up of sand – requiring annual dredging.

(vi) Physical Components and Dimensions of the Project:

Provide a detailed description of the proposed project, addressing the requirements contained in the Registration Guide. For this class of project the required information includes but is not limited to the following:

- Ensure that the site plan shows the locations of all facilities including ancillary features such as parking lots, access roads, spur railway lines, water supplies, sewage treatment facilities, aids to navigation, boat fuelling areas, fuel storage tanks, pumps and lines, associated commercial developments, etc.
- Identify any additional lands that may be acquired to accommodate future expansions.

(vii) Construction Details:

Provide a detailed description of the proposed construction activities and methods, addressing the requirements contained in the Registration Guide. For this class of project the required information includes but is not limited to the following:

- Will dredging be required for construction? ? If so, then volumes and characterization of material should be included. Where will spoils be disposed of? If spoils are to be disposed of on land, then a description of the existing environment at the disposal site, including land uses, wildlife, etc. should be provided.
- Describe the scope and timing of any in-water works, along with a list of all equipment and materials that will be in direct contact with water.
- Will the works involve the construction of containment cells and/or infilling of the shoreline or open water?
- Will the construction involve any blasting?
- Will the construction require pile driving?
- Describe the origin of any fill materials required for facility construction and the type and quantity of other construction materials that may be required (e.g., concrete, treated or untreated lumber).
- At the planning stage of the project, the proponent should consider all available construction material alternatives (e.g. untreated hemlock, tamarack or cedar, treated wood, pre-cast concrete, corrosive-resistant steel, plastic lumber) and select those materials that are best suited to the conditions and intended use of the structure. Analysis of the preferred construction material should include a consideration of the full life-cycle of the material (i.e. ease of use, design factors associated with the construction material, maintenance requirements and final disposal).
- Will the construction involve harrowing/raking of seafloor, infilling, in-water demolition (including debris recovery), trenching, side casting? Note that all of these activities may constitute disposal at sea, requiring a permit under the Canadian Environmental Protection Act and potentially triggering an Environmental Assessment under the Canadian Environmental Assessment Act.
- Identify any hazardous materials or wastes that will be used and generated during facility construction. Note that the only disposal option available for pressure treated wood is disposal at a landfill with permission of the owner or re-use of the material for another purpose.

- If concrete will be produced on site, the location and design of the concrete production area should be described.

(viii) Operation and Maintenance Details:

Provide a detailed description of the proposed project's operation and maintenance characteristics, addressing the requirements contained in the Registration Guide. For this class of project the required information includes but is not limited to:

- Provide an estimate of the weekly and annual boat traffic that would utilize that facility.
- Describe anticipated uses of the facility (e.g. recreational boaters, fishing and aquaculture operations, general commercial traffic, industrial use, etc.).
- Describe the dimensions, tonnage and draft of the largest vessels for which the facility would be designed.
- Describe the cargo that is anticipated.
- Describe the anticipated routes used by vessels to access the facility.
- Would the facility be designed for year round operation? Would facility operations require the use of icebreakers?
- How often will maintenance dredging be required? Where will spoils be placed? (describe options).
- Describe other maintenance activities that could occur (e.g., wharf repair, vessel maintenance/repair). If vessel maintenance is to take place, confirm whether any of the following activities could be involved: water jetting, abrasive blasting, grinding, chipping, sanding, scraping. Describe proposed mitigative measures that will prevent the deposit of paint chips or sandblasting material into any water body.
- Describe any hazardous material requirements for any maintenance activities.
- Describe any hazardous waste that would be generated during facility maintenance (e.g. sewage, paints, solvents, waste oil etc).
- Provide the outline of a waste management/run-off management plan for the facility, that will minimize the number of contaminants entering the harbour

3.0 DESCRIPTION OF THE EXISTING ENVIRONMENT

Include all relevant environmental features as noted in the Registration Guide. Examples of issues that may be of particular relevance to this class of project include but are not limited to the following:

- Fish and marine habitat assessment in the area that would be affected by the proposal including a description of migratory birds and associated habitat, species at risk, and critical as well as other sensitive habitats.
- The weather and climate.
- The existing regime of tides, currents, water levels and flow directions.
- Typical ice thickness and duration of ice-free periods, etc.
- The overall environmental quality of site (sediment, soil, water)
- The past and present land/water/resource use in the area (e.g., aquaculture, recreation, waste disposal, etc.)

4.0 SUMMARY OF ENVIRONMENTAL IMPACTS

All anticipated impacts should be described and discussed. These will depend on the scope and complexity of the project as well as the project location. See the Registration Guide for further information. Examples of impacts resulting from this class of project may include but are not limited to the following:

- Interactions with fisheries (commercial/recreational) operations and resources.
- Impacts to fish and fish habitat resulting from construction or operation of the facility. These may include but are not limited to: direct habitat removal by piers, cribs or breakwalls, habitat degradation due to facility construction or operation, impediments to fish passage, etc.
- Interactions between the operation and migratory birds (e.g. due to pier lighting, aids to navigation, boat movement, spills from equipment or vessels, etc.) during all phases of the project.
- Potential impacts of vessel traffic on marine life.

- Potential sources of pollutants (solid waste, petroleum, chemicals, wood preservatives, erosion, sedimentation, run off, re-suspension of contaminated sediment).
- Anticipated noise impacts (vessel engines, whistles, navigation signals, vehicular traffic, associated commercial/industrial activities, etc.) on existing adjacent sensitive land uses (e.g. residential properties, schools, recreational lands etc.) and marine life.
- Potential impacts the proposed facility will have on vehicular or pedestrian traffic patterns.
- Anticipated impacts on water movement and coastal processes (e.g. currents, wave patterns, erosion, deposition, lateral movement of suspended materials, bar formation) in both long term and short term.
- The potential impact of rising sea levels/coastal subsidence on the long term viability of the project.

5.0 SUMMARY OF PROPOSED MITIGATION

Describe all mitigative measures that will be employed to minimize the potential environmental impacts identified above. These may include but are not limited to the following:

- Identify measures to be implemented to prevent the release of petroleum products and other hazardous materials into the environment during facility construction and operation. Provisions for the management of hazardous materials (e.g. lubricants, fuel, hydraulic oil) and wastes (e.g. waste oil) should be identified to ensure that the risk of chronic and accidental releases is minimized. Non hazardous waste and other refuse should be reused or recycled. If reuse or recycling opportunities are not available, the refuse should be disposed of at an approved site.
- To minimize the risk of impacts resulting from possible accidents and malfunctions, during facility construction, operation and maintenance, appropriate contingency plans (e.g. a spill contingency plan) must be prepared. At the time of project registration it is generally sufficient to provide the outline of such plans, along with a commitment to finalize them as a condition of approval. In developing a contingency plan, it is recommended that the Canadian Standards Association publication Emergency Planning for Industry CAN/CSA-Z731-95 be consulted as a useful reference.
- Construction or decommissioning activity in water can cause re-suspension of bottom sediments and the potential release of contaminants from sediments. Silt curtains and/or other precautions should be utilized to prevent the release of suspended solids and/or other contaminants.

- Provide a stormwater management plan to control the release of sediment and other contaminants during facility construction and operation.
- Drainage from concrete production areas and wash water from the cleaning of batch plant mixers, mixer trucks, conveyors, and pipe delivery systems are very alkaline and also contain sediments and additives may be harmful to fish. Appropriate mitigation should be employed to ensure such drainage does not enter receiving waters. All such drainage and wash water including drainage from aggregate storage and washing areas should be directed to a settling pond for control and treatment as appropriate. Solids which accumulate in a settling pond should be removed on a regular basis to ensure that the settling pond remains effective.
- For major facilities, vessel accident and oil spill potential assessments may be required.
- Describe design features that will be employed to minimize loss of fish habitat (e.g. use of floating docks).
- Discuss proposed restrictions on vessel operating speeds (low wake zones, etc.).
- Pressure treated wood should not be used in freshwater environments with low flow/ low flushing rates or in sensitive environments. Wood treated with pentachlorophenol must not be used in any freshwater or salt water aquatic environment. Saw dust from pressure treated wood must be captured to avoid entry into water.
- Every effort should be taken to ensure any dunes, salt marshes and other sensitive coastal habitats within the project area are not impacted in a negative manner.
- Measures should be taken to ensure that project staff and vehicles do not trample sensitive beach habitats. Furthermore, beaches and dunes should not be used as staging areas for the project.
- The proponent should ensure that no litter (including food waste) is left in coastal areas by construction personnel.
- A consideration of potential effects of the environment on construction activities is important. The proponent is encouraged to consult Environment Canada's local forecast at <http://weatheroffice.ec.gc.ca/> prior to conducting in-water construction activity so that it can be scheduled accordingly.
- Coastal infrastructure may be expected to last several decades. Over the next century, sea level rise induced by climate change (9 to 88 cm) combined with crustal subsidence (approximately 20 cm) will add to the effects of winds, waves and storm surges. While

project components may be amenable to retrofitting at a later date, it may be more cost effective to factor the above changes into the initial design of the project.

6.0 PUBLIC INVOLVEMENT

See Registration Guide

7.0 APPROVAL OF THE UNDERTAKING

The majority of the Province's coastline below the ordinary high water mark is considered Provincial Crown land. Authorization may be required from the Minister of Natural Resources under the Crown Lands and Forests Act for undertakings that impact submerged Crown lands.

8.0 FUNDING

See Registration Guide

9.0 SIGNATURE

See Registration Guide

10.0 SUBMISSION INSTRUCTIONS

See Registration Guide