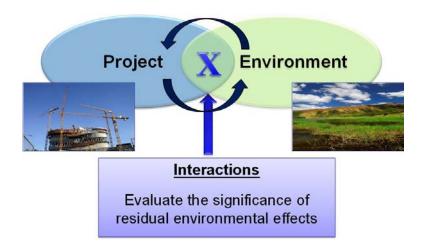
Introduction: What is Environmental Assessment?

Environmental assessment (EA) is a planning process used to identify potential impacts of a proposed project on the environment.

The Canadian Environmental Assessment Agency (the Agency) provides leadership and serves as a centre of expertise for federal environmental assessment. It is responsible for the overall administration of the federal environmental assessment process in accordance with the Canadian Environmental Assessment Act, 2012 (CEAA 2012).

Federal environmental assessment is a planning and decision making tool used to anticipate adverse environmental effects before they occur and provide plans to minimise and monitor those effects. The focus of a federal environmental assessment is on environmental effects. The BC environmental assessment process assesses direct social, health, heritage, and economic effects however the federal assessment process only looks at those types of effects if they are tied to changes in the environment (indirect effects).



What is a designated project?

A 'designated project' comprises one or more physical activities described in the *Regulations*Designating Physical Activities, including any physical activities incidental to them. The Roberts Bank

Terminal 2 project falls under section 24 (c) of those regulations which states a designated project would include: The construction, operation, decommissioning and abandonment of a new marine terminal designed to handle ships larger than 25 000 deadweight tonnes unless the terminal is located on lands that are routinely and have been historically used as a marine terminal or that are designated for such use in a land-use plan that has been the subject of public consultation.

What are environmental effects?

Environmental effects are changes to the environment (all components of the Earth) that result from a project. This includes effects on fish and their habitat, aquatic species or migratory birds and to water, air and soil health. An adverse (negative) environmental effect is one that is harmful to the environment.

Subsection 5(1) of CEAA 2012 defines the following effects within federal jurisdiction as environmental effects:

- a change to fish and fish habitat, other aquatic species and migratory birds;
- a change that may be caused to the environment that would occur on federal lands or that would cross provincial or international boundaries; and
- a change that may be caused to the environment that would affect Aboriginal peoples, such as their health or use of lands and resources for traditional purposes.

Subsection 5(2) specifies that environmental effects also include changes to the environment that are directly linked to or necessarily incidental to any statutory federal decisions about a project, such as *Fisheries Act* and *Disposal at Sea* authorizations.

Changes to the environment that may occur on federal lands are also assessed under CEAA 2012.

The following factors must be considered in a federal environmental assessment:

- environmental effects of the designated project, including environmental effects caused by accidents and malfunctions, and cumulative environmental effects
- significance of those environmental effects
- public comments
- mitigation measures and follow-up program requirements
- purpose of the designated project
- alternative means of carrying out the designated project
- changes to the project that may be caused by the environment
- results of any relevant regional study
- any other relevant matter as required by the Minister of the Environment

What is Mitigation?

Mitigation measures are actions that can be done to reduce (mitigate) or avoid the negative effects that a project could have on the environment. In order of preference, these actions include:

- 1. Eliminate Avoid the potential impact (e.g. through project design elements)
- **2. Reduce** Decrease the spatial/temporal scale of the impact during design, construction, etc.

- **3. Control** Where an environmental effect will occur, actively manage rates and intensity of impact (i.e. discharges to water or air)
- **4. Replace/Restore -** Apply rehabilitation techniques after the impact has occurred (e.g. revegetation of disturbed areas)
- **5. Compensate** Offset the residual impact through compensation such as off-site habitat creation, as appropriate

Mitigation Steps

- 1. Identify the characteristics of any environmental effects that require mitigation
- 2. Identify possible solutions/measures that are technically and economically feasible
- 3. Determine residual adverse environmental effects
- 4. Analyze potential effects of mitigation

What are Cumulative Effects?

- Cumulative environmental effects may result from the project in combination with other projects that have been or will be carried out.
- Cumulative environmental effects are the net result of the residual effects of the proposed project, after taking into account the implementation of mitigation measures, in combination with effects from other projects and activities within the area.
- Effects can be indirect, additive, or interactive.

What is considered when assessing the likelihood of significant adverse environmental effects?

The Agency has created a <u>reference guide</u> that sets out an approach for deciding whether the adverse environmental effects a project are likely to cause significant adverse environmental effects. This includes consideration of a combination of elements including scientific data, quantitative thresholds set in regulations, guidelines or standards, social values, cultural knowledge and professional judgement. Mitigation measures are taken into account in assessing significance, and any residual effects which remain after mitigation is applied are assessed for their significance.

Standard significance criteria

- Magnitude: refers to the amount of change in a measurable parameter relative to baseline conditions
- Geographic extent: refers to the spatial area over which the environmental effect occurs
- <u>Timing, frequency and duration:</u> when, how often, and for how long the environmental effect occurs

- Reversibility: refers to the extent to which the component being assessed is expected to recover from the environmental effects to the baseline conditions or other target
- Context: the context within which environmental effects occur

The Review Panel will prepare a report that sets out its conclusions on the significance of the environmental effects of a project. That report is then sent to the Minister of the Environment who will make the Environmental Assessment Decision, as set out in the figure below.

Minister of the Environment EA Decisions Overview Minister determines if the project is likely to cause significant adverse environmental effects under ss 5(1) & 5(2), taking into account the EA Report [27(1)] and any mitigation measures considered appropriate [52(1)] LIKELY NOT LIKELY Environmental effects under 5(1): Minister refers to the GIC whether Conditions* are established in relation the effects are justified in the to the environmental effects referred circumstances [52(2)] to in 5(1) with which the proponent must comply [53(1)] Environmental effects under 5(2): Conditions* are established - that are GIC decides whether the directly linked or necessarily incidental significant adverse environmental to the exercise of a power or effects the project are likely to JUSTIFIEDperformance of a duty or function by cause are justified or not in the federal authority that would permit a circumstances [52(4)] designated project to be carried out in whole or in part - with which the proponent must comply [53(2)] NOT JUSTIFIED A decision statement issued indicating the Project is not permitted A decision statement is issued by the Minister to the proponent that include * The conditions referred must include the implementation of the mitigation measures that were any conditions* established under s 53 [54(1)] taken into account under ss52(1) and the implementation of a follow-up program [53(4)]

What is an EA Decision Statement?

- A statement (document) issued by the Minister that:
 - informs proponent of the Minister's section 52(1) decisions and, if appropriate, of Cabinet's section 52(4) decision, and advises the proponent that:
 - the project may not proceed (significant adverse effects are likely and are not justified in the circumstances); or
 - the project may proceed (no likely significant adverse environmental effects or Cabinet has determined that the likely significant adverse environmental effects are justified in the circumstances)
 - identifies the conditions the proponent must comply with, if the project may proceed

Conditions in a Decision Statement

- Conditions in the EA decision statement must include:
 - implementation of the mitigation measures that were taken into account in by the Minister in reaching her s. 52 decisions; and
 - Implementation of a follow-up program which will verify the accuracy of the EA and determine the effectiveness of the mitigation measures
- Additional conditions may be included at the Minister's discretion
- Conditions in the EA decision statement must address the environmental effects as described in s. 5 of CEAA 2012
- Requires understanding both ss. 5(1) and ss. 5(2) and the ability to demonstrate how a condition relates to an environmental effect
- If the condition addresses ss. 5(2), conditions only take effect if the federal authority exercises the power or performs the duty or function (e.g. issuing of a permit)

Compliance & Enforcement

Compliance

- A key requirement within the Act is that the proponent must not carry out any part of the project that will result in s.5(1) environmental effects unless it complies with the conditions defined in the Minister's s.54 EA decision statement (s.6).
- The Agency has the responsibility to promote, monitor, and facilitate compliance with the Act.

Enforcement

- Act includes provisions that allow for enforcement of the requirements of the Act (s.89-102).
- It will be a violation of the Act for a proponent to proceed with a project before a decision statement is issued or to not fulfill the conditions of a decision statement (s.6).
- Fines range from \$100k to \$400k; in some instances, if the offence is committed or continued on more than one day, it may constitute a separate offense for each day.
- Administrative monetary penalties may be set under regulations.
- Minister can designate "persons or classes of persons" to carry out the enforcement of the Act.
 - Designated persons are federal government employees with specific training in compliance and enforcement and knowledge of CEAA 2012.

- Depending on the conditions set by the Minister, the proponent may have to consult with Aboriginal groups to meet some conditions.
- If Aboriginal groups believe an offense under CEAA 2012 is occurring, they can notify the Agency.
- These designated people will have the authority to verify compliance with the Act.
- In case of non-compliance, the enforcement response will vary based on nature of contravention.