Aligning Environmental Impact Assessment (EIA) with Existing Environmental Regulatory and Management Frameworks to Improve EIA Quality

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Introduction

Canada has robust and complex environmental regulatory and management frameworks, administered by different levels of government. These frameworks serve to avoid and reduce many adverse effects of projects by establishing prohibitions, permit requirements, and other obligations with which a proponent must comply before it can proceed. When these existing frameworks are inadequately considered in the environmental impact assessment (EIA) process, decreased efficiency and effectiveness of EIA, including duplicative assessment and overlapping or conflicting approval conditions, can result. The capacity of EIA process administrators and participants to consider key matters may consequently be diminished.

This paper describes challenges that may arise when existing environmental regulatory and management frameworks are not adequately considered when determining the need for an EIA, establishing the scope of an EIA, administering an EIA review process, and in EIA decision-making. The paper also makes recommendations for improving the efficiency and effectiveness of EIA through greater reliance on such frameworks where they exist and are mandatory and enforceable. Examples from Canadian jurisdictions are provided to illustrate key points.

Challenges

Challenges in determining the need for an EIA

Some jurisdictions in Canada identify the types and characteristics of projects to which EIA legislation applies, but confer discretion on the EIA process administrator to determine, through a screening process, whether an EIA is in fact needed. For example, in British Columbia, the EIA process administrator may determine that a reviewable project may proceed without an assessment if he/she considers the project "will not have a significant adverse environmental, economic, social, heritage, or health effect, taking into account practical means of preventing or reducing to an acceptable level any potential adverse effects of the project." Failure to exercise this discretion where project components and/or likely effects are well understood and regulated/managed can result in unnecessary expenditure of time and resources to undertake an EIA that will not likely change environmental management approaches or outcomes. This may be driven in some cases by an attempt to manage perceived administrative and legal risk.

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Challenges in establishing the scope of an EIA

The scope of an EIA, including the scope of the project that is to be assessed, the factors to be considered in the assessment, and the scope of the assessment of those factors, is normally determined (in Canadian jurisdictions) by the EIA process administrator or statutory decision-maker. While mandatory considerations are often specified in the applicable EIA legislation (e.g., sections 5 and 19 of the Canadian Environmental Assessment Act, 2012 (CEAA 2012)), the EIA process administrator or statutory decision-maker typically retains considerable discretion to determine the scope of those considerations.

In Canada, the current practice of EIA process administrators is to specify the scope of EIA in guidelines, terms of reference, or similar scoping documents, which are usually based largely on templates or the most recent similar project. Unfortunately, the use of a template combined with short mandatory timelines for EIA completion in some jurisdictions has led to limited discretionary scoping for EIAs, with the result that the scope of EIA may be unnecessarily broad, as noted by Barnes *et al.* (2013) regarding guidelines prepared under CEAA 2012.

In particular, project-specific information about applicable environmental regulatory and management frameworks is often not considered when determining the scope of EIA. For example, in British Columbia, EIAs must consider potential effects on health, even though that province has a robust occupational health and safety regulatory framework that addresses key health issues like potable water, wastewater, waste management, and so on. Where regulation is known to be effective in preventing or reducing adverse effects to an acceptable level, the consideration of such matters within the scope of an EIA is likely duplicative.

The scope of EIA also often requires assessment of potential effects on Valued Components (VCs) and/or discussion of mitigation measures that are already well understood and effectively managed through existing codified practice. For example, Alberta has established a mandatory Code of Practice for Watercourse Crossings that specifies measures to protect the aquatic environment from such activities and to avoid significant adverse effects. Where adherence to codified management frameworks is mandatory and enforceable, inclusion in EIA of matters that fall within the scope of such frameworks creates unnecessary inefficiency. Excluding matters pertaining to the protection of water quality from the EIA would not mean that such codified practice would not be implemented or obviate the need to secure necessary water quality-related permits.

Ironically, some scoping templates even require the EIA to describe the applicable environmental regulatory and management frameworks, yet there is often little or no evidence that the information was taken into consideration in scoping the EIA.

Challenges in administering an EIA review process

EIA is normally undertaken early in the planning cycle of a project, before details, like the exact location and size of project components, have been confirmed through detailed engineering and design. However, some jurisdictions require detailed mitigation plans in the EIA. For example, the Environmental Impact Statement (EIS) Guidelines for the Roberts Bank Terminal 2 project in Vancouver, British Columbia, required the EIS to include a detailed Follow-Up Program, even though key design details, like the type of dredging equipment to be used or the type of piling to

be installed, will not be determined until after the EIA process is completed. Stantec (2009) noted the importance of aligning the EIA process with the planning cycle.

Regulatory authorities frequently request permit-level detail at the EIA stage, either to help them determine the need for their participation in the EIA or to expedite subsequent permitting or for other reasons. If the EIA process administrator does not exercise its scoping discretion and defer details of permitting matters to the subsequent permitting stage, the EIA process can become inefficient and duplicative, as issues are addressed without the benefit of project details during the EIA stage and then again during permitting. The challenge arises in some cases due to a lack of familiarity on the part of EIA process administrators of the scope and applicability of permitting processes. There is also the question of the legality of requiring in an EIA, information that is required in permits within a post-EIA, established legislative framework.

Notwithstanding, it is acknowledged that sufficient information about the availability and effectiveness of mitigation may be required to determine the significance of residual adverse effects. However, it is important the EIA focus on an appropriate level of detail for this purpose and minimize duplication and inefficiency where possible. For example, it may be enough to know that a particular permit or codified practice will provide adequate mitigation to make significant adverse effects unlikely.

Challenges in EIA Decision-Making

Inadequate consideration of complementary environmental regulatory and management frameworks at the time of decision-making at the end of an EIA process can result in duplicative, overlapping, or conflicting conditions being included in the EIA decision document. This can lead to a need to amend the EIA decision document later to ensure consistency with permitting conditions, for example.

Relying on a Robust Environmental Regulatory and Management Framework

In Canada, as in many mature jurisdictions, there exists a robust environmental regulatory framework. Legislative authority for environmental management is shared between federal, provincial, and in some cases, other governments. Federally, in addition to CEAA 2012, environmental jurisdiction is exercised through the *Fisheries Act*, the *Species at Risk Act*, the *Canadian Environmental Protection Act*, 1999, the *Migratory Birds Convention Act*, and various other statutes and regulations. Most provinces and territories, in addition to EIA legislation, have statutes governing specific environmental components, such as water, forests, and other natural resources, as well as laws of general applicability for environmental protection and management. Some may also establish environmental codes of practice that stipulate specific environmental protection measures that must be implemented in relation to certain types of facilities or activities (e.g., Alberta has Codes of Practice for waterworks, concrete and asphalt facilities, landfills, sawmills, incinerators, and many other activities with environmental implications). As modern treaties are settled with Aboriginal peoples, some final agreements also include co-management or other provisions for Aboriginal governance over environmental matters on settlement lands.

Regulatory and management frameworks establish prohibitions, permit requirements, and other obligations with which a project must comply before it can proceed. For example, the federal

Fisheries Act, the Species at Risk Act, and the Migratory Birds Convention Act, 1994 prohibit actions that would result in specific adverse environmental effects unless those actions are permitted. Because environmental regulatory and management frameworks, including standards and codes of practice, typically have been developed based on a wealth of information and knowledge about the activity and/or environmental component to which the frameworks apply, and are intended to prevent significant adverse effects, as noted by the Government of British Columbia (EAO 2013), additional detailed analysis within the context of an EIA may be redundant.

Recommendations

Below, the authors provide administrative and practical recommendations to ensure EIA is focused on important matters and broader planning considerations, and is not duplicative of existing regulatory and management frameworks. Obviously, there are times when EIA will be necessary to consider project- and site-specific considerations that may require modification of standard management practices and specific conditions of approval, as well as project contributions to cumulative effects. However, these recommendations are aimed at leveraging existing regulatory and management frameworks to *focus* EIA, thereby improving the quality and efficiency of the process and its outcomes.

- When preparing a Project Description or similar documentation to initiate an EIA process and enable EIA process administrators to determine the need for and scope of an EIA, proponents should describe existing environmental regulatory and management frameworks that will apply to the project and explain how they will ensure compliance with those frameworks over the life of the project.
- When determining the need for an EIA, and whether the project is likely to have any significant adverse effects (including cumulative effects), EIA process administrators should consider whether such effects can be adequately managed through existing environmental regulatory and management frameworks.
- The timelines for determining the need for an EIA could be extended to allow more in-depth consideration of the extent to which existing environmental regulatory and management frameworks could be relied upon to either obviate the need for an EIA or focus the scope of an EIA, if one is deemed to be required. This should be complemented by skills development, as noted below.
- Amendment of EIA legislation to enable EIA process administrators and statutory decision-makers to impose compliance conditions at the point of screening (pre-EIA), including requiring the proponent to implement mitigation measures described in the Project Description and documenting the required permits and authorizations required, would make it easier to rely on existing frameworks to achieve environmental protection goals.
- If an EIA is determined to be required, when defining the scope of the assessment, EIA
 process administrators should consider excluding those components and/or effects that are
 already subject to established legislation, regulation, standards, and enforceable codes of
 practice that impose a minimum standard of environmental protection performance designed
 to prevent or reduce adverse effects to an acceptable level.
- EIA scoping templates should be revised to acknowledge and integrate relevant environmental regulatory and management frameworks, allowing proponents to focus EIA

- documentation, provided they demonstrate how they will ensure compliance with those frameworks.
- When selecting VCs upon which to focus the assessment, the proponent should consider whether any legally binding government requirement already exists for the purposes of protecting the candidate VC. Federal and provincial EIA process guidance should acknowledge the value of complementary regulatory and management frameworks and allow both the proponent and the EIA process administrator to rely on those frameworks to focus EIA both during scoping and as the assessment proceeds. (We note the British Columbia Environmental Assessment Office (EAO) recently incorporated such guidance into their new VC selection guideline (EAO 2013).)
- Familiarity with the existing federal and provincial regulatory frameworks for environmental management should be an integral component of skills development for EIA process administrators at both the federal and provincial level. As Aboriginal groups continue to realize self-government through existing and modern treaties, and establish resource management policies and laws, familiarity with this additional level of environmental governance also will be necessary. This competency among EIA process administrators should include awareness of both the scope and applicability of environmental regulatory and management frameworks at all levels of government, and training programs and skills development in this regard should be a priority.
- EIA process administrators should work closely with other regulatory agencies to coordinate EIA and permitting processes and information requirements to reduce duplication, overlap, and conflict. (For example, EAO has been working closely with other provincial permitting agencies to improve coordination of EIA approval conditions with permitting requirements, which has led to EIA decision documents with fewer conditions that are better focused on under-regulated matters, areas of uncertainty, and potentially significant adverse effects (EAO 2015).)
- Drawing on knowledge of applicable regulatory and management frameworks, particularly
 post-EIA permitting, EIA process administrators should apply more robust vetting of input
 received from process participants to ensure the scope of the EIA remains focused on EIA
 decision-making, and not duplicate decision-making (e.g., about specific mitigation
 requirements) that is more appropriately undertaken later, during permitting, when project
 design is more advanced.
- During decision-making at the end of an EIA, EIA process administrators should place greater reliance on existing regulatory and management frameworks by imposing enforceable approval conditions that require compliance with those frameworks, without imposing conditions that may overlap, duplicate, or conflict with those frameworks.
- During decision-making at the end of an EIA, EIA process administrators should focus attention (and specific conditions of approval) on those matters that are not already addressed by existing regulatory and management frameworks.

Conclusion

The implementation of these recommendations would reduce redundant consideration in EIA of matters that are already adequately addressed in existing regulatory and management frameworks. For those EIAs deemed to be needed, this would allow greater attention to be paid

by all EIA participants to potential effects and mitigation requirements that are less understood, potentially of greater consequence, or otherwise under-regulated. Improved EIA relevance, quality, and environmental management outcomes are expected to result.

References

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