

**TERMS OF REFERENCE FOR THE INDEPENDENT SCIENTIFIC BODY
ESTABLISHED BY THE IMPACT ASSESSMENT AGENCY OF CANADA**

Introduction

The Vancouver Fraser Port Authority (VFPA) has proposed the construction and operation of a new three-berth marine container terminal located at Roberts Bank in Delta, British Columbia (the Roberts Bank Terminal 2 Project). The Project underwent a review panel type environmental assessment under the *Canadian Environmental Assessment Act, 2012*. Among its findings, the panel was not able to conclude with certainty whether the project would result in an adverse effect on polyunsaturated fatty acid production in biofilm, a potentially critical nutritional component of biofilm that is consumed by western sandpipers and other shorebirds during their migration stopovers at Roberts Bank. Consequently, the Panel was unable to conclude with reasonable confidence that the Project would or would not have a residual adverse effect on western sandpiper.

Condition 10.4 of the Decision Statement in respect of the proposed project requires VFPA to develop a follow-up program to verify predicted changes caused by the Project on salinity and predicted effects of those changes on biofilm and western sandpiper. The follow-up program must include provisions for adaptive management and information related to the follow-up program (including methodology, parameters, thresholds, baseline conditions information and monitoring results which must be reviewed by an **Independent Scientific Body** (ISB) established by the Impact Assessment Agency of Canada (the Agency)). The Terms of Reference for the ISB have been developed by the Office of the Chief Science Advisor of Canada with input from the Agency.

Mandate

The ISB's work will be limited to the tasks identified in Condition 10.4 of the Decision Statement and associated sub-conditions. These are:

- Review and provide advice to the Agency on VFPA's proposed monitoring parameters, methods and thresholds for the proposed follow-up program on salinity, biofilm and western sandpiper.
- Review and provide advice to the Agency on baseline conditions information and the results of the 36-month monitoring period following the construction of the east basin containment dyke of the marine terminal; and
- If changes to the monitoring parameters attributable to the project indicate an exceedance of the threshold, confirm the exceedance.

In accomplishing these three tasks, the ISB may, at its discretion, consult with external experts with specialized knowledge or expertise relevant to the body's deliberations.

The Independent Scientific Body

The ISB will initially be chaired by the Chief Science Advisor of Canada, Dr. Mona Nemer. Should the ISB's work continue beyond her mandate, it will be chaired by her successor.

In addition to the Chair, the ISB will comprise subject matter experts in the following areas:

- Environmental monitoring and assessment: demonstrated expertise in the design and implementation of environmental monitoring programs and systems and the empirical modelling of monitoring or surveillance data, including methods for trend detection.
- Shorebird population ecology: demonstrated expertise in and knowledge of biophysical factors affecting shorebird distribution and abundance.
- Evidence assessment and evaluation: demonstrated expertise in, and knowledge of, the assessment and evaluation of the strength and weight of evidence underlying scientific claims.
- Physical oceanography: demonstrated expertise in, and knowledge of, the physiochemical dynamics of marine intertidal zones and their effects on biofilm communities and productivity.

At the Chair's discretion, the ISB may solicit advice from external experts with specialized knowledge or expertise in areas of relevance to Condition 10.4 of the Decision Statement.

Members will be appointed for a period of three years, with the possibility of extension or reappointment as needed to fulfil the requirements specified in Condition 10.4 of the Decision Statement. If members resign before the end of their mandate, or elect not to renew their mandate, the process for selecting replacement members (if required) will be the same as for the initial member selection. All decisions about replacement, extension or reappointment will be made by the Chair on consultation with ISB members. ISB members may be appointed from academia; business or industry; federal, provincial, territorial governments; or civil society.

ISB Governance and Procedures

- The ISB will meet in response to specific requests for review of received materials or advice from the Agency, or under circumstances deemed appropriate by the Chair. Meeting agendas will be determined by the Chair on consultation with ISB members. Meetings may be in person, virtual or hybrid, as determined by the Chair.
- The ISB will endeavour to respond to requests for review or advice from the Agency within 60 days, with a maximum response period of 90 days from receipt of the request.
- Upon receipt of ISB recommendations or advice, the Agency may request additional clarification or explanation. The ISB will respond, in writing, to any such request within 30 days.
- ISB meetings and all internal discussions and correspondence will be considered confidential.
- In any public setting or event, the Chair will act as the ISB spokesperson. The Chair may, at their discretion, designate individual ISB members as spokespersons for issues falling within their subject matter expertise.
- Draft recommendations or advice will be prepared by the Chair based on discussion at ISB meetings as well as follow-up discussion. All members will have the opportunity to review and provide comments on draft advice and recommendations.
- Where possible, recommendations and advice will be based on consensus among ISB members. In cases where consensus cannot be achieved within existing time constraints, the Chair will provide, in writing: (a) a summary of the differing views or opinions, and (b) an explanation of the factors or issues giving rise to the differences of opinion.
- The ISB may, at its discretion, solicit advice from external experts with expertise relevant to Condition 10.4 of the Decision Statement. In cases where such advice substantially informs Board recommendations, the names and affiliations of external experts will be published as part of the ISB recommendations and advice.

- With the exception of internal discussion and correspondence as indicated above, the ISB will ensure that all information used in making its determinations is publicly accessible, except in cases where such information is subject to one or more exclusions under the *Access to Information Act*. All final advice and recommendations will be published on the Canadian Impact Assessment Registry Internet Site.

ISB Member Code of Conduct

All ISB members shall:

- Fully disclose all real, potential or apparent competing interests and, where relevant and applicable, any real, potential or apparent competing duties.
- Treat all fellow members with respect.
- Not disclose information concerning internal ISB discussions, deliberations or communications to any external individual or institution, private or public, unless explicitly empowered by the Chair to do so.
- Fully disclose any personal values which might be perceived as influencing their judgement.
- Exercise impartial judgement in rendering advice and evaluating the evidentiary support for any factual claims directly or indirectly relevant to Condition 10.4 of the Decision Statement.
- Acknowledge the limitations, uncertainties and potential biases of their knowledge and expertise.
- Make clear and explicit the evidence, or lack thereof, on which their opinions, recommendations or advice are based.

Selection Criteria for ISB Members

ISB candidates will be evaluated with respect to four criteria: procedural impartiality¹, subject matter expertise and knowledge; experience; and skills and capacities (Table 1). Criteria that all members of the ISB must satisfy are shown in green; additional optional criteria (i.e., knowledge, expertise or capacities that would be an asset but are not required) are shown in yellow.

Table 1 Selection criteria for ISB members.

Selection criterion type	Criterion
Procedural impartiality	The candidate has declared all real, potential, or apparent competing interests, either financial or non-financial. If real, potential, or apparent competing interests are declared, the Chair shall ensure the appropriate steps are taken to mitigate the resulting risks. If risks cannot be adequately managed, the candidate is to be excluded.

¹ A *conflict of interest* is a situation, whether real, apparent or potential, in which the person employed has private interests that could influence the performance of their official duties and responsibilities or in which the person employed uses their position for personal gain. A *conflict of duties*, however, is a conflict, whether real, apparent or potential, that arises not because of the private interests of a person, but because of one or more concurrent and competing official or vocational duties or responsibilities.

	<p>The candidate has not publicly advanced an opinion on the Roberts Bank Terminal 2 Project in any form (blog post, editorial, interview, etc.).</p>
	<p>The candidate has not agreed to act as an external expert for the Vancouver Fraser Port Authority or for any third party hired by the proponent.</p>
	<p>Where relevant and applicable, the candidate has declared all real, potential or apparent competing duties. If real, potential, or apparent competing duties are declared, the Chair shall ensure that appropriate steps are taken to mitigate the resulting risks. If risks cannot be adequately managed, the candidate is to be excluded.</p>
<p>Subject matter knowledge and expertise</p>	<p>The candidate has extensive knowledge, expertise and/or experience in one or more of the required subject matter domains of expertise.</p>
<p>Experience</p>	<p>The candidate is or has been a member of one or more expert scientific advisory or review panels.</p>
<p>Skills and capacities</p>	<p>The candidate can:</p> <ul style="list-style-type: none"> • exercise impartial judgement (to the best of their abilities) in evaluating the evidentiary support for any factual claims directly or indirectly relevant to Condition 10.4 of the Decision Statement • exercise impartial judgement (to the best of their abilities) in rendering advice, to the best of their abilities • have active listening skills • be open-minded • have well-developed analytic and synthetic reasoning skills
	<p>The candidate is proficient in both official languages.</p>