

# **Input to the BC Environmental Assessment Office and additional conditions proposed for the TMX project related to protecting the marine environment.**

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Former intervenors with the KM-NEB processes.

As an Environmental Non-Government Organization, (ENGO) the Friends of Ecological Reserves (FER)<sup>1</sup> are encouraged that the provincial Environmental Assessment Office (EAO) has conducted a review of this project including the marine transport portion.<sup>2</sup> This submission by the Board of FER proposes strengthening the permit conditions that the EAO developed. We agree that additional permit conditions are absolutely necessary.

FER proposes the EAO strengthen permit condition 35 and expand its scope from the current requirement for TMX to simply produce ***“a single report regarding the current and future research programs that the Holder is leading regarding the behaviour and recovery of heavy oils spilled in freshwater and marine aquatic”***.

We believe that it is short sighted for the EAO office, acting in the public interest, to put confidence in a single report. This is a 30+ year project and to assess research, direct future research and monitoring, requires the need for on-going research and long-term environmental monitoring obligations for TMX who bring this long-term risk to our marine ecosystems.

**RECOMMENDATION 1. The EAO change the proposed condition to extend over the life of the project and as long as Dilbit is being transported across the Salish Sea.**

Next we examine industry-lead research and what we learned from the previous NEB hearings – the inherent flaws in industry-sponsored research. These flaws include lack of transparency, lack of open disclosure, assertions of proprietary rights, the messaging around research findings and whether there is a need to change standard operating procedures once informed by research. What we learned previously is when an industry such as TMX funds research they:

- a. decide what research is in their best interest,
- b. set the terms of reference,

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<sup>1</sup> <https://ecoreserves.bc.ca/>

<sup>2</sup> <https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/environmental-assessments/commenting-on-projects/tmx-engagement>

- c. set funding limits and duration,
- d. select the researcher(s) and
- e. decide on information availability, interpretation aka message or whether findings are proprietary

None of these concerns will be addressed by the permit condition as proposed by the EAO (included in Table 1 for readers reference). An example of industry-funded oil spill research, purportedly done at arms length, is the report by the **Royal Society of Canada**<sup>3</sup> funded by the oil industry linked to oil spill concerns and research and the Northern Gateway Project. This research report is no longer accessible but was posted by the Royal Society of Canada and was available when FER participated in the earlier NEB hearings. It is presumed that its findings are still relevant, but those seeking to understand the findings must now disclose who they are and then ask permission to access this report. So why is this arms-length research which was previously available, no longer publicly accessible? Are the Canadian Energy Pipeline Association (CEPA) and the Canadian Association of Petroleum Producers (CAPP) managing the supposedly arms-length research done by the Royal Society and asserting oil industry influence over supposedly independent researchers such as the Royal Society? Must the Royal Society co-operate with this control of release of information or risk any future contracts? Is the oil industry then made aware of third party inquiries for access to the report? We hope the EAO sees the benefits of ending this big business control of information and potential threats to supposedly independent credible research institutions. This big oil control and lack of transparency is embedded in the wording of current condition and does not appear to be in the public interest nor should it be supported by the EAO.

**RECOMMENDATION 2. The EAO change the proposed condition so that dilbit and aqueous research is managed by an independent steering committee on which TMX has membership but does not control.**

The arms length steering committee needs to include the agencies identified in the draft EAO condition such as NEB, ECCC, Canadian Coast Guard, MOE, MNGD, OGC, Aboriginal Groups, and potentially affected coastal local governments in the research programs.

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<sup>3</sup> A report by the Royal Society of Canada **COULD** be found at: (<https://rsc-src.ca/en/expert-panels/rsc-reports/behaviour-and-environmental-impacts-crude-oil-released-into-aqueous>) (access denied Feb 2021). The Expert Panel was set up in response to a request from the Canadian Energy Pipeline Association (CEPA) and the Canadian Association of Petroleum Producers (CAPP) and was commissioned to help Enbridge meet Northern Gateway Project permit conditions. This report is mentioned in order to demonstrate that ongoing research needs be part of a permit condition. There will always be a need for a forum in which new information can be evaluated and incorporated into the TMX project; but access to this information will not meet the test of meeting the “public interest if the information release is managed by the industry”.

**RECOMMENDATION 3. The EAO change the proposed condition to include wider representation from Transport Canada (TC), Regional Districts, State of Washington and ENGOs.**

**Transport Canada is vital as TC sets the standards and manages the contract of marine response organizations such as Western Canada Marine Response Corporation.**<sup>4</sup> It would be TC who, potentially based on new research, may change WCMRC standards. Regional Districts such as the CRD and GVRD represent local governments. There needs to be ENGO representatives. The Canadian Government now owns TMX so the Federal agencies may be somewhat compromised in suggesting changes. U.S. agencies have consistently led advances in science on marine research and this cross-border sharing would bring significant long term benefits to B.C. Figure 1 shows a possible organizational structure for a multi stakeholder steering group at arms length and inclusive of representation from TMX.

**Figure 1 is a possible Marine Research and Monitoring governance model.**

**Endowment Reporting and Multi-stakeholder Trustee Board this structure reference KMX which is no longer involved. Kiner Morgan TMX now reads Government of Canada-TMX**



Figure 1: Endowment Reporting and Multi Stakeholder Board as proposed by FER to the NEB in our Final Arguments Report.

<sup>4</sup> <http://wcmrc.com/>

**RECOMMENDATION 4. The EAO change the proposed condition to include reliable long-term research and monitoring funding in which TMX fully supports in the long term, costs of research.**

There needs to be a long-term commitment for TMX, embedded in the proposed permit condition. This shift is needed so that the future research and monitoring costs are shifted from the Canadian public (Federal and Provincial agencies largely paying for research beyond what TMX decides to fund). The costs of future dilbit research, if borne largely by the Federal agencies, is a subsidy from those most at risk (British Columbians) to the risk bringer (TMX). This does not appear to be good public policy and is an affront to those who did not support this project. Not only would the public subsidize research on dilbit in addition to taking the risk, but they would be expected to also fund how to mitigate this risk. Even the risk bringer acknowledged its fiscal role during the NEB hearings. For example, the former pipeline owner Kinder Morgan states in their final oral argument (Page 424, line 7616) that:

*The Board (NEB) expects applicants to identify burdens associated with the project and to implement measures aimed at reducing the risk and impact of the burdens. In many cases, the Board will make the approval of a project conditional on the implementation of measures designed to further mitigate the burdens of the project. Projects should be built in a way that protects the public interest*

We agree with this statement by KM that the EAO needs to protect the public interest and with regard to investments in knowledge and mitigation measures over the life of the TMX project, shift more of the burden to TMX than the current proposed condition does.

We understand that KM sold this project to the government of Canada but the previous expected returns from this project are relevant to the decision of how much long term financial obligations TMX should shoulder on behalf of the Canadian public. In the previous NEB hearings, KM stated in their Written Argument in Chief on page 8, line 36 that the project was financially viable because it had:

**a. Signed contracts**

*Trans Mountain signed long-term firm transportation contracts of 15 and 20 years with 13 shippers, for a total volume of 707,500 barrels per day, which represents approximately 80 per cent of the nominal capacity of the expanded TMPL resources to meet or exceed any Board requirements. AND it was a member of*

**b. Big Family of Companies. And page 9, line 65**

*Trans Mountain has sufficient financial resources to safely construct and operate the Project. Trans Mountain is a wholly-owned subsidiary of Kinder Morgan Energy Partners, L.P. (“KMEP”). KMEP is the largest midstream and the fourth largest energy enterprise in North America. When the Application was filed, the KMEP family of companies had a combined enterprise value of approximately \$105 billion. And in an additional Footnote 12 that further states.*

*Through its relationship with KMEP and KMC, Trans Mountain has the financial wherewithal and experience to ensure the Project meets or exceeds any Board requirements.*

*Trans Mountain’s evidence demonstrates the significant economic benefits of the Project to Canada and its regions, including oil producers in Western Canada and all Canadians. Western Canadian oil producers are expected to see an increase in netbacks of approximately \$73.5 billion over the first 20 years of the Project’s operations.*

Our argument to the EAO is that TMX needs to have a long-term commitment to research required through a permit condition and we believe that this would be consistent with public expectations.

Despite possible future changes in ownership, the TMX project should be required through a permit condition, to pay the largest share for dilbit research and monitoring in the long term. To ensure this happens the EAO office needs to amend the current permit condition as written.

**RECOMMENDATION 5. The EAO change the proposed condition to include an Endowment specifically managed in the long term along the lines shown in Figure 1, in order to provide a steady source of funding for research and a monitoring program.**

What should TMX be expected to contribute to long-term monitoring and what should the EAO put forward as a future long term financial research and monitoring obligation? Given the above disclosure by KM (now TMX) on expected net backs, the EAO office on behalf of the public, should require that TMX set up a Research and Monitoring Endowment through a one-time financial obligation.

We argue that the need to continue to do dilbit research is best guaranteed over the coming decades through an Endowment fund managed at arms length from government and industry. Such an Endowment is needed as a permit condition and it needs to be solely the responsibility of TMX who are bringing the risk. There are current examples of arms-length

programs in BC such as the successful Habitat Conservation Trust Fund<sup>5</sup> which is financed by a surcharge on hunting and fishing licenses. We do not know if the best approach within TMX would be a research and monitoring fee based on barrels exported. What is clear however, is that there needs to be stable long-term industry-funded independent research and monitoring.

**RECOMMENDATION 6. The EAO change the proposed condition for an Endowment sufficient to support an annual program with a budget of 10 million dollar for research and monitoring.**

We recommend this amount based on the EXXON Valdez experience and the 30 year research and recovery the Alaskan-funded post-spill costs, using the legal settlements.

To put this Endowment sum in context using TMX's own figures, it is 6/100<sup>th</sup> of 1% of the forecasted netbacks. Investments in Marine Environmental Research and Monitoring should be much higher. Right now there are 0% of netbacks from the oil producers other than the voluntary/discretionary self-directed research programs mentioned previously. It would be most secure if this Endowment were an up-front investment which, over the life of the project, would support research and a monitoring program.

FER believes that acquisition of knowledge to help mitigate the risks of their project is a project cost and we believe there would be wide public support for the 'polluter pays arms-length research and monitoring' we ask the EAO office to endorse. We are concerned with changes in research funding experienced annually by provincial and federal agencies and their annual budget cycles. We hope the EAO office supports the need for long term stable arms-length funding when dealing with poorly known toxic substances in marine environments.

**Table 1 repeats the condition crafted by the EAO office.**

**Condition 35 (as proposed by the EAO) Fate and Behaviour of Bitumen Research**

The Holder must provide a report regarding the current and future research programs that the Holder is leading, jointly leading, supporting, or otherwise involved in regarding the behaviour and recovery of heavy oils spilled in freshwater and marine aquatic environments, including research programs having the objective of providing spill responders with improved information on how to effectively respond to spills. The report must be developed in consultation with the MOE, MNGD, OGC, ECCC, Canadian Coast Guard, Aboriginal Groups, and potentially affected coastal local governments.

<sup>5</sup> <https://hctf.ca/> This fund is independent of government but reports to government annually.

The report must include:

- a) A statement of the funding provided or allocated to ensure the research is undertaken and concluded within a specified period;
- b) Specifics of the Holder's approach to ongoing engagement with the NEB, ECCC, Canadian Coast Guard, MOE, MNGD, OGC, Aboriginal Groups, and potentially affected coastal local governments in the research programs;
- c) Research topics, including the different physical and chemical properties of the oil and other products intended to be shipped from the Westridge Marine Terminal, product weathering, dispersion and oil/sediment interactions, product submergence, product behaviour and cleanup following in-situ burning, and cleanup and remediation options for sediments and shoreline;
- d) The scope, objectives, methods, and timeframe for the research topics;
- e) How the Holder will incorporate applicable results of the research into its emergency preparedness and response plans;
- f) How the Holder will work with spill responders to support the incorporation of the results of the research into their emergency preparedness plans and programs; and
- g) A plan for reporting to the NEB, ECCC, Canadian Coast Guard, MOE, MNGD, OGC, Aboriginal Groups, and potentially affected coastal local governments on the progress of the research program.

The Holder must provide the report to the EAO, MOE, MNGD, OGC, ECCC, Canadian Coast Guard, Aboriginal Groups, and potentially affected coastal local governments prior to the commencement of Operations, and must provide progress updates pursuant to g) above at one year following commencement of Operations and every five years following during the period of Operations, or as otherwise authorized by the EAO. The EAO may amend these timelines and may request additional reports at any time by providing written notice to the Holder.

Table 2 shows the wording changes recommended by the Board of FER for a revised EAO permit condition. The intent of these changes is to make TMX financially responsible for long-term research into dilbit, ensure research and monitoring are arms length from TMX, costs borne by TMX and not by the Canadian Public as a subsidy to this project.

**Table 2: FER recommended changes for a revised permit condition .**

<b>AMMENDED Condition 35</b>	<b>Fate and Behaviour of Bitumen Research</b>
<p>The Holder must provide long term funding for future research programs (30+ years) that the Holder will participate in a Steering Committee that is in involved the behaviour and recovery of heavy oils spilled in freshwater and marine aquatic environments, including research programs having the objective of providing spill responders with improved information on how to effectively respond to spills. A long-term research and monitoring program must include financial obligations to support an independent at arms length research and monitoring program that will be maintained over the life of the TMX project. This permit condition requires to TMX transfer 450 million to an Endowment Fund that will be managed at arms length by a Steering Committee on which it sits. The interest from this Endowment will be used to fund long term research program and report annually to the BC government and the public the priorities, budget allocation and results from research and monitoring. The Steering Committee must include representatives from MOE, MNGD, OGC, ECCC, TC, Canadian Coast Guard, Aboriginal Groups, State of Washington, ENGOs familiar with marine systems and Regional Districts, for potentially affected coastal local governments.</p>	
<p>The long-term research and monitoring program must include:</p>	
<ul style="list-style-type: none"><li>a) An annual review of research topics, including the different physical and chemical properties of the oil and other products intended to be shipped from the Westridge Marine Terminal, product weathering, dispersion and oil/sediment interactions, product submergence, product behaviour and cleanup following in-situ burning, and cleanup and remediation options for sediments and shoreline; and priorities of research and reporting</li><li>b) The multi-stake holder council priorities and scope, objectives, methods, and timeframe for the research topics for the life of the TMX project;</li><li>c) The annual report of the independent research and monitoring group on how the holder will incorporate applicable results of the research into its emergency preparedness and response plans;</li><li>d) A report annually to the public on what changes have been made to better respond to and mitigate environmental risks</li></ul>	

### **Concerns about Dilbit Spills.**

The Board of FER is concerned about the ability of Response Organizations to respond to an oil spill in high winds. As mentioned previously, Transport Canada is a central player as it manages the contracts for the industry supported Western Canada Marine Resource Corporation. We are particularly concerned about the following statements on oil spill response, as Trans Mountain says it relies on the existing oil-response regime and the standards set by Transport Canada for spill responders.

Board of FER in our final report to the NEB in 2018, went to great lengths to show that the ability to manage oil spills in the Strait of Juan de Fuca was based on inadequate data that was obtained from their consultant for wind speed. (Remember the earlier concerns raised

on industry selected and controlled consultants and the recommended remediation for arms-length research for anything funded by the Oil industry). The industry-selected consultant had obtained its data from measurements made at the Western Entrance of the Strait of Juan de Fuca. The Board of FER looked at the information from Environment Canada’s website and found that wind speeds at the Eastern Entrance, at Race Rocks were considerably higher than that in the industry consultants report. The Board of FER recently looked at hourly data for every day in 2020 and found that 40% of the time in the year wind speeds were 28 kilometers per hour or higher. The standards set by Transport Canada for oil spill response agencies such as WCMRC is that they do not need to deploy or respond when wind speeds are greater than 28 km/hour as current technology renders booms ineffective. Table 3 shows the number of hours per month that no clean-up operations with existing technology would be possible. This is a very serious situation and not explicitly made known by either WCMRC or TC.

**Table 3: Hours when wind speed were greater than 28 km/hour during 2020.**

Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
341*	239	255	223	333	392	464	400	195	259	190	263
hrs	hrs	hrs	hrs	hrs	hrs	hrs	hrs	hrs	hrs	hrs	hrs

\* since 10 days of data were not recorded in January due to equipment problems, an estimation was made of the speed based on adding the 5 previous and the 5 following days for a total of 88 hours when the wind was 28 km/hr or greater.

It can be concluded that for 3,554 hours out of 8,784 hours in the leap year of 2020, just over 40% of the time, containment and clean up vessels could not have been deployed into the Eastern Entrance of the Strait of Juan de Fuca. It should also be of note that on 58 of the days in 2020 the wind was over 28 km/per hour for 20 hours or more of the day.

If the protection of the waterfront cannot be safeguarded when there are winds under 28 kilometers per hour, should shipping be scheduled into low wind periods only? If the precautionary principle stated as guidance to TC who administer the *Oceans Act*<sup>6</sup> were really an over arching direction that may be what is necessary. What is perhaps disconcerting is that this level of disclosure and the acceptance by the Federal government that it is fine to not respond 40% of the time but to also not disclose the limits and risks to those along shipping routes, but worse for the Federal government to not openly disclose the limits and risks of current standards and response limits.

The provincial government should not be limited in the same way and so the Board of FER recommends that the BC government call for greater transparency about shipping and risks. The Board of FER has recommended arms-length governance structure to obtain a level of transparency needed and that is not currently available and will not be available if

<sup>6</sup> Oceans Act and Preamble. <https://laws-lois.justice.gc.ca/eng/acts/o-2.4/page-1.html>

the conditions contemplated by the EAO are not amended to ensure greater inclusion, greater transparency by the Federal Government and TMX.

TMX has stated that they are not responsible for anything to do with an oil spill and that:

*“marine oil spill preparedness and response is the responsibility of federal departments other than the NEB; that the regime is functioning appropriately; and changes to the oil spill preparedness and response regime would be within the responsibility of those departments and the implementation of which rests with WCMRC”.*

The Board of FER does not accept the argument or logic that the risk bringer has no responsibility as TMX states. There is at a minimum a responsibility for long-term monitoring and research on spill clean up under windspeeds beyond current technical limits. WCMRC understands the limits of booming on rough seas and seeks approval to use dispersants to break up oil spills and have them descend into the water column. We argue that TMX has to fund such research over the life of their project.

The Board of FER emphasizes again that under the current Transport Canada standard that bind WCMRC, it means that WCMRC is in compliance with its contract to Transport Canada even when there is for 40% of the time in a year no possibility of managing an oil spill in the Eastern Entrance of the Strait of Juan de Fuca. Does the BC government and EAO office accept that as good enough? Does the public understand this level of risk and do they understand how poorly the current Federal standard leaves British Columbians open to environmental degradation?

### **What are the responsibilities of the BC government when working with the Federal Agencies?**

After 8 years of engagement with NEB hearings, the Board of FER has not seen sufficient communication from the B.C. government. We conclude that the province of B.C. has not done an adequate job of contributing information on its Parks (including Ecological Reserves) to the Coastal Geographic plans. Where are the environmental values? Provincial concern for the shorelines of BC Parks is not shown to be reflected in the current shoreline information.

A shoreline map must include intensive baseline data for all the ecologically sensitive areas lining the path of the tankers and the shorelines within the predicted distance of oil spill spreading from a catastrophic spill. In the Board of FER submissions to the NEB, we included details on the life forms that would be threatened in the 19 Ecological Reserves on the south half of Vancouver Island and the Sunshine Coast with shorelines. In 2016 the Board of FER sought from the NEB a requirement that TMX support shore zone inventory

and provide a set of baseline data that completely described the valuable natural capital along the tanker route.

So far, the Geographic Response Strategies (GRS) plans of WCMRC shown on their web site only show plans for protection of harbours and marinas, but no sensitive ecological areas, or IBAs, (Important Bird Areas). A 2020 examination of the GRSs currently show little improvement. A red circle surrounds Race Rocks Ecological Reserve, and only Alpha and Griffin Islands of the Oak Bay Islands Group show any form of response planning. Completely missing is any GRS for Trial Island, a reserve that air-born oil spray would affect the location of the most endangered plants in Canada, and the other Oak Bay islands that have rare plant associations and marine bird nesting sites. These ERs and the 15 other Ecological Ecoreserves are not currently shown to have GRS plans. It has not been encouraging that groups like FER are left to point out the absolute high risk of loss of important areas such as ERs recognized in provincial legislation, when faced with possibly the greatest threats to our protected areas. The government of B.C. have been disengaged and silent on how to mitigate the threats from Federal initiatives and the TMX expansion.

It is understood that the B.C. government had a strategy to exhaust legal opposition to the TMX and sought to minimally explore opportunities to influence the decisions through the NEB processes. The EAO office review comes late but nonetheless is welcome but puzzling for the Board of FER as the government of B.C. had so much time and so much opportunity to affect this project but did not do so.

The Board of FER recently attended the TC Oceans Protection Conference. A theme at this conference was inclusion on decisions made by big government and it seems that local governments have been left out of the discussions, as have local individual elders and environmental ENGOs who have a good amount of knowledge about the coastal ecosystems.

***Concerns were raised during the EAO process by First Nations and ENGOs regarding environmental effects of malfunctions or accidents.***

The major concern is that there are few or inadequate baselines and environmental data for intertidal areas of sensitive ecosystems, clam beds and eel grass etc. What we enjoy now, and in the event of an oil spill, what would recovery look like to get back to the current productivity. We agree that sustained environmental monitoring is needed and that TMX has a role in funding understanding pre-spill conditions. Baseline data collection has to be done that would require shoreline mapping, biophysical inventories, and shoreline inventories of economic, cultural, recreational, public space values and Indigenous knowledge.

The BC government has apparently totally dropped its role in the shore zone mapping setting standards and managing the data and making this publicly available. Private entities such as WCMRC now apparently need to manage the shore zone inventory and in the experience of the Board of FER are not doing an adequate job. WCMRC does not know where the environmentally sensitive productive ecosystems are located and apparently neither does the government of B.C.

The B.C. government needs to:

1. document existing marine inter-tidal and foreshore conditions;
2. develop a shoreline protection plan that includes identifying at-risk shorelines and establishing response strategies;
3. develop and implement an ecological investment program focused on environmental health improvement to strengthen ecological resiliency; and
4. when a spill occurs, an environmental restoration and recovery plan to restore and recover local ecosystems following completion of spill clean-up activities.

Two particularly striking examples of risk to coastal ecosystems is that of Trial Island Ecological Reserve where the Ecological Reserve was created to protect what is an ecosystem with the most concentrated assemblage of rare and endangered species of plants in Canada. The Race Rocks ER has the most northerly and only Elephant seal pupping colony in Canada as well as intertidal and subtidal invertebrate colonies of unsurpassed biodiversity. In a 50 km/per hour wind in the Strait of Georgia and Strait of Juna de Fuca, airborne contaminants would seriously affect those ecosystems. So far no plans have been devised for tarping rare plant associations for protection on the Oak Bay Islands and Trial Islands.

Board of FER strongly supports the EAO's proposal that:

*The EAO is proposing to amend Condition 35 to include potentially affected coastal local governments and increasing the frequency of reporting. The consultation requirement will ensure that the scope, objectives, methods and timeframe for the research topics are appropriate, and the applicable results will be incorporated into emergency preparedness and response plans. The reports will be publicly available posted to the EAOs Project information.*

See our earlier recommendations on the need for arms-length, transparent disclosure and a wider representation of interests and the need of TMX to have a role but not the leading role and to have a significant obligation so the risk they bring to BC can be mitigated and they are financially contributing.

In section 7, Appendix A, EAOs Proposed new and amended Conditions,

*“With respect to marine vessel-sourced spills, Trans Mountain does not have control over spill preparedness or response. Those matters are the responsibility of the marine vessel operator and various government agencies (including the WCMRC). Trans Mountain also notes that very similar requests were made during the NEB reconsideration process and were expressly rejected by the NEB in its Reconsideration Report: In the OH-001-2014 hearing, numerous participants raised concerns about the sufficiency of marine resources baseline data. **The Board of the Friends of Ecological Reserves** and the City of Port Moody raised concerns over the adequacy of baseline data of marine resources (i.e., fish, vegetation, etc.) within Burrard Inlet and along the shipping lanes. They emphasized that such baseline data is crucial in considering what might be lost if there is a spill, determining effects after a spill, and in crafting criteria for monitoring during post-spill restoration efforts. In response, Trans Mountain said that it conducted the marine transportation effects assessment based on up-to-date research, does not believe that additional data collection would affect the conclusions presented in the Application, and that vessel traffic associated with the Project would represent a relatively small proportion of total vessel traffic along the marine shipping lanes. The Board notes that there are many marine users in Burrard Inlet and along the shipping lanes, Therefore, in the Board’s view, it is not reasonable for Trans Mountain to take on the sole burden of baseline data collection and monitoring to determine the overall effects of potential accidents and malfunctions associated with all shipping operations. For these reasons, this condition should not be imposed in the EAC.”*

We contend that the reasoning used by the NEB in this case is flawed. It is just because there are many users along the proposed route, that those users and Trans Mountain must accept responsibility for knowing ecological conditions exist on the shorelines that would be severely impacted by their accidents and actions and take full responsibility for the results of the actions from which they are profiting at the expense of the citizens of British Columbia. If the ‘polluter pays’ principle is to be upheld, then how can the polluter be held responsible and pay for mitigation and restoration when there is no record of the ecosystem that existed the pre-pollution event?

It is deeply concerning that in several instances in the report, broad sweeping unsupported statements by the NEB and Trans Mountain have not been strongly challenged.

In reviewing the EAOs submission we are struck by the number of times expressions like the following were used:

*“The NEB found that Project-related marine vessels are not likely to cause significant adverse environmental effects on air emissions, marine fish and fish habitat, marine mammals (other than SRKW) marine birds, socioeconomic conditions (including marine commercial,*

*recreational and tourism use), heritage resources, traditional marine and resource use (other than those associated with the SRKW), and human health.”*

*“The NEB found that the effects of a spill would be dependent on circumstances, such as the type of product spilled, the location, response time, effectiveness of response, the valued components impacted, weather, and time of year. The NEB remained of the view that although a credible worst-case spill would result in significant adverse environmental and socio-economic effects, such an event is unlikely.”*

*“With respect to local infrastructure and services, the NEB acknowledged the concerns raised by municipalities around the impact of spills and restated its view that although a large spill would result in significant adverse environmental and socio-economic effects, such an event is not likely.”*

This “don’t worry children, everything is going to be OK” attitude should trigger a strong response from the province and is needed to represent the interest of all its citizens

Trans Mountain raised particular concern around its ability to develop and implement a plan to respond to ship-sourced marine spills (for the purposes of addressing potential public health impacts), stating that Trans Mountain is not qualified or legally capable of doing so as there is an existing marine spill response regime. Trans Mountain said that it is not legally able to comply with a condition that requires it to potentially modify or implement spill response measures for ship-source marine spills in any particular way. Trans Mountain said that the NEB held in its Reconsideration Report that: marine oil spill preparedness and response is the responsibility of federal departments other than the NEB; that the regime is functioning appropriately; and changes to the oil spill preparedness and response regime would be within the responsibility of those departments. Trans Mountain further noted that the extent of its involvement in marine spill preparedness and response is not to fund the enhanced oil spill response regime, the implementation of which rests with the WCMRC who are funded by the shipping industry.

The risks posed to human health are a very important aspect that TMX must take responsibility for. We agree that while TMX may not have direct control of spill response activities pertaining to a Project-related marine vessel, it is well positioned to provide information to inform coordinated planning and spill response measures to ensure the health and safety of the public, including first responders, volunteers, coastal residents and Indigenous communities. In addition, the EAO notes *“that NEB Conditions 91 (Plan for marine spill response commitments) and 133 (Confirmation of marine spill response commitments) impose obligations on Trans Mountain, not other persons.”*

In 7.0 Appendix A. We agree with the EAO's position that a report must be provided that provides important information, as the federal government and its agencies prepare plans that address the potential impacts to human health from spills.

In response to ongoing concerns related to the effects of marine spills on shorelines, and the acknowledgement in the NEB's Reconsideration Report that impacts to certain values would be greater than others, the EAO notes that the province has committed to continued collaboration with the federal agencies on the development of coastal geographic response plans that identify areas of cultural, archaeological, economic, and ecological value to local communities and stakeholders, as well as important Indigenous nations cultural values and sites. The EAO acknowledges that identifying spill vulnerability requires incorporating input from Indigenous nations, local communities, industry, and responsible agencies.