

Written Submission from Delta Resident Larry Colero for Roberts Bank Terminal 2 Public Hearing

April 15, 2019

Review Panel Secretariat, Roberts Bank Terminal 2 Project

c/o Canadian Environmental Assessment Agency

CEAA.PanelRBT2-CommissionRBT2.ACEE@canada.ca

Dear Panel,

As a resident of Tsawwassen, pollution from the port at Roberts Bank poses health hazards to me and my family, determined by what is transported, how it's transported, and the quantities/frequency. As a Canadian citizen, I am concerned that US interests may be influencing a business case for *Roberts Bank Terminal 2* (RBT2) that makes little sense for Canadians and may be a threat to Canada's sovereignty. I am also documenting my concerns here because I revere Nature and have a deep respect for the importance of preserving interdependent ecologies that can never be replaced once destroyed.

It appears to me that evaluation of the facts behind the need for and the impacts of building and operating RBT2 have, to date, fallen short when it comes to reliability. My perception is primarily due to inherent conflicts of interest amongst the parties involved to date in the assessment, and secondarily due to concerns related to apparent biases that I believe have perverted the assessment results to date.

I hope my opinion here might provide a unique insight into some of the more subtle aspects of due process. Let me provide some context in that regard. The latter half of my career was in the field of business and organizational ethics. Articles I published on UBC's *Centre for Applied Ethics* website have been used and re-published worldwide, including one on the ethics-related responsibilities of corporate directors. For over a decade, I created course material and taught the subject of corporate ethics on an adjunct basis at the graduate level at both UBC and SFU, as well as in-house for large corporations and government ministries both federal and provincial.

Ethics is relevant, and in fact pivotal, to the ability of the *Canadian Environmental Assessment Agency* (CEAA) to make a sound decision on Terminal 2 because of professional principles such as due diligence, impartiality, full disclosure, and real or apparent conflict of interest. All of these principles are relevant to, firstly, assessing a realistic scope of possible impacts, and secondly, to assessing any business-related rationale that may appear to justify those impacts.

For example, ***what if*** ethical principles such as objectivity and full disclosure have not been observed in either the business case or the environmental impact assessments for RBT2? While I am not in any position to know with absolute certainty whether or not these principles have been upheld, I do know that proceeding with the project on the basis of a flawed assessment would result in taxpayers supporting an unnecessary and potentially extremely harmful project, the negative impacts of which are unknowns that are impossible to mitigate. Some of the ecological impacts have been described by *Environment and Climate Change Canada* as “potentially high in magnitude, permanent, irreversible and continuous”.

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While it is virtually impossible for anyone uninvolved to be certain, the public can still justifiably expect that the CEAA will err on the side of attempting to answer “what if?” questions, i.e., taking the precautionary approach required by the *Canadian Environmental Assessment Act* (sections 4.1 b. and g. and *Mandate*). I believe that the combination of many unknowns and a high degree of potential harm from RBT2 requires a new, more objective and more inclusive overall assessment before this project could ever be approved in good conscience.

For example, consultants contracted to the *Vancouver Fraser Port Authority* (VFPA) to provide information for the CEAA have concluded that significant adverse environmental effects are unlikely. Could this be because these consultants’ reports have been prepared by VFPA contractors instead of independent experts? Regardless of their personal integrity, I believe those contractors have an **inherent conflict of interest** in fulfilling their responsibilities, since they stand to gain or lose future business opportunities with the VFPA.

Compounding their contractors’ conflicts of interest, there are clear indications that the VFPA itself, doing business as *Port Metro Vancouver* (PMV), has had its role as an assessor compromised by an even more direct conflict of interest since the Port stands to gain or lose business depending on the assessment outcome. Could this conflict have led to systemic biases in the information PMV has submitted to the CEAA? Given the results so far, in my opinion, that is highly likely.

On the other hand, one could argue that the people involved in preparing the EIS are professionals, and that their personal integrity as well as professional standards demand impartiality. As in a typical risk analysis, one might say that the **probability** of professionals deliberately omitting, obfuscating, exaggerating or understating facts is low. Even so, there is still a reasonable probability of faulty judgement given the inherent conflicts of interest of the Port (and any agencies contracted to the Port) that likely affected their activities of collecting information, compiling and interpreting expert opinion, and packaging this information into reports submitted to the CEAA.

In my mind, the heart of the matter with RBT2 is that the **potential impact** of any bias can be very, very high. Low probability of a high-impact risk is still a major risk.

Probable Biases that can Undermine Credibility

Systemic biases (whether or not they are conscious or articulated) can often skew judgement and negate the reliability of hard data such as that provided by PMV in this case. If those biases exist, then the value and reliability of both their data input and their analysis is seriously undermined.

A variety of typical biases can significantly compromise objectivity in decision making, even if due process has been followed like the letter of the law. While due process may not have been followed in the case of RBT2, I will leave that argument to others with more knowledge of the specific process requirements. Where I hope to be of best use here is in determining whether deliberations to date might not have been impartial.

Scope Bias

The scope of the current impact assessment omits relevant and potentially severe risks based on an arbitrary limitation of time and geography.

One example of a geographic limitation is the lacking response to the Musqueam people (CEAR Document No. 368, Submission #241) who requested a “proper” and “full-scale” cumulative effects assessment in their ancestral territory, concerned about unidentified, potentially serious impacts to their Aboriginal right to fish. Instead, the regional environment and communities surrounding the area impacted by RBT2 has been arbitrarily limited in such a way that the waters around the port and its shipping lanes are being treated more like a land-bound lake than an ocean body interconnected far and wide by tides and currents and unpredictable weather conditions.

With regard to arbitrary time limitations, prior to March of this year when federal Minister of the Environment Catherine McKenna issued an *Update to the Guidelines for Preparation of an Environmental Impact Statement*, according to section 41 of GCT Canada’s *Notice of Application for Judicial Review*, “... the Guidelines provided that:

...marine shipping associated with the Project that is beyond the care and control of the Port is not considered to be part of the Project for the purposes of the environmental assessment. As a result, the Minister will not make a decision under CEAA 2012 about whether that marine shipping associated with the Project is likely to cause significant adverse environmental effects, and it will not be subject to conditions issued to the proponent in any decision statement allowing the Project to proceed.”

Since the current Public Hearing process relies on information provided before March 2019 and in fact a set of information based on the much narrower scope specified in April 2015, it is very reasonable to assume that a “limited scope bias” has manifested in terms of this assessment exercise in its entirety.

As an example, Scope Bias affects the current Assessment on cumulative effects. In the March 2015 *Environmental Impact Statement*, it was acknowledged that the cumulative effects of the project were within the scope of the provincial environmental assessment. And yet, to date, federal decisions like the TransMountain Pipeline and provincial policies to allow (and financially support) LNG Canada have been deliberately overlooked as relevant scenarios and declared outside of the scope of the CEAA’s purview. Assessing the compounding impacts of those two titanic shipping projects would likely delay the RBT2 project further, and perhaps raise safety concerns to the point where prudence might dictate that the project needs to be abandoned altogether.

While I appreciate the need to get business done in a reasonable manner, reflected in this case by the human need to place time limits on the information to be included in an extensive assessment of natural risks. But Mother Nature does not care about business schedules, jobs or deflated egos, and I’m sure she considers these two massive projects vital threats to all kinds of plant and animal species. There has simply never been enough attention paid to cumulative impacts from past and pending projects, especially in combination with other projects and developments planned for this region.

The current assessment process appears to me to be highly irresponsible to future generations. To be

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realistic, Canada would need to base the final project go/no-go decision on a broader and much more thorough cumulative impacts assessment that sufficiently explores past, present and reasonably foreseeable future projects as of the point construction is commenced. There is no shame in abandoning what has been done so far, given the potential devastation to Roberts Bank. On the other hand, there is honour in justice and preservation.

Quantification/Measurement Bias

An April 3, 2019 article in the National Post mentioned that Canada's Environment Commissioner Julie Gelfand had "looked into the impact of invasive aquatic species, most of which are accidentally introduced to Canadian waters on the hulls of ships coming from international waters and many of which harm native marine life after arrival. She found that although Canada has made commitments to prevent invasive species from taking hold in Canadian waters, neither Fisheries and Oceans Canada nor the Canada Border Services Agency did what they promised to do. She says a lack of understanding of whether provincial or federal authorities are responsible is interfering with efforts to prevent invasive species from getting established."

I wondered how this very significant impact from multiplying the number of ocean-going vessels might have been included in the CEAA for RBT2, but could find no mention of invasive aquatic species in a word search. I admit I may have missed it, or it may have been included under a different name. However, I suspect it was omitted because it could never be quantified or measured. Either that, or it was purposely left out in order to bolster the argument that RBT2 can be operated with manageable impact, reflecting the inherent conflicts of interest and a "commitment bias" explained in the next section of this document.

While the Port claims to have identified "plausible worst-case scenarios" (Section 30.2.3) there appear to be many that have been overlooked, as I'm sure many of the other comments from the public will explain in detail. I will leave that to others and simply focus on what I personally know about risk analysis on major development projects from my experience facilitating Project Planning exercises for clients like Vancouver Airport Authority, Sea to Sky Highway, Metro Vancouver, AMEC, and a wide variety of other development clients.

PMV followed general principles of the most common method of Risk Analysis I know of, namely, assessing **probability and potential consequences**, e.g., in Section 30 of their *Environmental Impact Statement*. However, those two typical factors appear to have been based on past averages such as a "50-year storm event". I noticed there was no specific acknowledgement of the unpredictable impacts of Climate Change, which of course cannot be quantified and makes them seem less real because they can't be predicted. And yet unknown impacts of course still pose a very real risk of exacerbating any disastrous effects and the degree of risk associated with those effects which will likely occur more frequently and with increasingly greater severity than in the past.

This is what I'm calling Quantification Bias in this case because only that which can be measured can be included given the present methodology. Since the synergistic impacts of Climate Change cannot be measured, zero might have been substituted for "x" in the equation to calculate future climate-related

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events.

Furthermore, regarding what has been reported, my sense is that the cumulative impacts identified in the Assessment may have been simply linear combinations of unfortunate events based on historical averages, which would be mathematically unsound due to two widely-accepted numerical truths. (If these two longstanding conventions of mathematics were used consistently to predict the future, I apologize for suggesting they were not. Obviously, I suspect otherwise.)

First, *Benford's Law* (the law of anomalous numbers) should have been used to determine the frequency and time-distribution of future events. It essentially states that random occurrences are not spaced over time evenly, but typically occur in clusters. *Benford's Law* is used for a variety of purposes, including fraud identification in forensic accounting. What this means for risk analysis is that adverse events are not evenly spread apart, but should be expected to occur as multiple events happening simultaneously or in close enough proximity time-wise to be virtually simultaneous, thereby compounding any anticipated effects and causing incidents to happen in “a perfect storm” manner.

I may not be able to understand the actual calculations behind PMV's projections, but the second reason these might be mathematically unsound (and thereby overly conservative estimates) is if they were derived from linear methods instead of based on the Fibonacci spiral of expansion, which is Nature's formula for growth in ever expanding increments.

Commitment Bias

PMV acknowledged the need to apply a “precautionary approach” as per the requirements of the *Canadian Environmental Assessment Act* (sections 4.1 b. and g. and *Mandate*). Yet they may well have demonstrated an effectual disregard for this requirement by applying what I will call a Commitment Bias when compiling and presenting data. For example, the VFPA's overly optimistic business volume projections in the past have not materialized in they years since they were made. When an impact is identified that might present an obstacle or impediment to building Terminal 2 (like an unjustifiable business case) the PMV's mindset is typical of a for-profit business.

Their objective is to find a way to overcome the obstruction rather than ever consider some more benign conclusions that a public service mandate might lead to. Their incentives (bonuses, promotions, accolades, etc.) are tied to increased business activity. Their personal sense of self-worth is tied to achieving something they consider to be progress, i.e., their egos motivate them as both individuals and as loyal team members to build something they can be proud of.

In contrast, the primary purpose of any government's mandate is ideally to maximize the well-being of all of its citizens. And so, it is reasonable to expect that individuals serving in a public capacity will be open to considering the possibility that the best final outcome of this assessment exercise might be to totally abandon all plans to build a monstrosity like Terminal 2 if that is for the greater good.

The same commercial bias might apply to other participants in the process who might believe the project is essential to providing economic benefits for Canadians, or that Climate Change is a hoax, or

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be under any other number of overarching delusions. The major costs of the results from these delusions will be borne primarily by Canadian citizens on behalf of the few people taking profits.

Those profits are powerful incentives that should be balanced with appropriate deterrents for irresponsible corporate behaviour. Deterrents need to be in place early, since it has not yet been decided which corporation would operate RBT2, which even further increases the unpredictability of risk for this particular project. What I know is that taxpayers would be responsible for the lion's share of any cleanup costs if there is a dire incident such as a major marine spill. So the financial penalty for a faulty assessment will be paid not by the Port, but by Canadian citizens.

The non-financial penalties could extend well beyond human beings, and hold the potential for irreparable harm to the natural environment. Many tanker spills can never be remediated. Again, like cumulative impacts, these elements are virtually impossible to predict with any certainty. And so, they are conveniently minimized in the EIS to support completion of a project that the PMV is determined to build partly because of their long-held Commitment Bias.

Future Scenarios

The specific motivation for presenting overly optimistic projections is unknown to me, but two possibilities are plausible. Should RBT2 be built and the anticipated container business turns out to be far below projections or goes to another port like Prince Rupert, two different scenarios present worrying possibilities.

If Terminal 2 is ever built, and then in hindsight it is deemed to not be economically viable, I believe there is a very good chance the unused capacity will be re-purposed to either ship dilbit (diluted raw bitumen) from the TransMountain Pipeline, or to transport many times more coal than what is currently being shipped through Delta from the United States. Specifically:

a) The Oil (Dilbit) Scenario:

The first plausible scenario to re-purpose Terminal 2 after it has been approved for container shipping is as a docking and transfer point for the massive tankers required once the TransMountain Pipeline is built. In the face of First Nations and public resistance from other shipping points such as the Westridge Marine Terminal in Burnaby, the RBT2 re-purposing scenario would solve the Canadian Government's dilemma of how to ship raw bitumen from the Alberta tar sands to overseas markets via the TransMountain Pipeline.

b) The U.S. Coal Scenario:

This may be only conjecture, but I believe there is also a reasonable possibility that since coastal communities in the United States have been effective in stopping American coal shipments directly to overseas markets. Until early this year, the Vancouver Port Authority planned to run mile-long trains from Montana through White Rock and other Lower Mainland communities so they could export the world's dirtiest fossil fuel, thermal coal, to China via the

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Fraser River and its sensitive estuary. Fortunately, that project was abandoned in January.

I like to believe it was due to organized resistance and a winning legal challenge from *EcoJustice* on behalf of *Voters Taking Action on Climate Change* and *Communities & Coal*. In August of 2014, Port Metro Vancouver granted a permit to Fraser Surrey Docks to ship up to 4 million metric tonnes of US thermal coal through BC communities. This project saw tremendous opposition, including warnings from health authorities, scholars, municipal leaders, and the public.

Shipping dirty thermal coal would affect most citizens across the Lower Mainland as well as a wide range of ecosystems along the coast. Yet the Port of Vancouver insisted they had the right to make a unilateral decision on that, ignoring nine municipal governments and eight MLAs who either outright rejected their proposal or demanded a full health impact assessment first. How undemocratic!

Just a few years before, the Lummi nation in Whatcom County had exercised their treaty rights to stop plans to ship 50 million tons of coal per year through Cherry Point in, just across the bay from us. 70 acres of their tribe's burial site had already been cleared without their consent to store the coal prior to shipping. If the Lummi people hadn't been successful, 450 coal ships, each a quarter of a mile long, would have made 900 passages a year. Soon after that avenue was closed off, a 44 million tons/year coal terminal was proposed for nearby Longview, Washington.

The United States is determined to build what would be the largest coal terminal in North America. Now that they've been stymied by local communities in the Pacific Northwest, there is no reason why Canada couldn't serve their purpose, especially since the US already ships coal by train through Delta to Roberts Bank. Canada's largest port would simply be a transit point that generates very little in terms of Canadian jobs and negligible indirect financial benefit for Canadians anywhere close to the public costs of increased threats to human health and the natural environment from a massive increase in coal train traffic.

I am not just concerned about the health and environmental impacts of shipping US Thermal Coal. I'm concerned about national sovereignty. Canadians have an inherent right to protect ourselves, our families and our natural environment from literally lethal threats from foreign business ventures. If this scenario happens (regardless of the likelihood) Canadians need to ask a question. If American communities can reject the coal shipments, why can't we? Is Canada being treated like a colony? I don't know.

If either of these two re-purposing scenarios comes to pass, then I suspect the scope for an Environmental Impact Assessment (EIS) of using RBT2 for these alternative purposes would likely not include the construction phase of RBT2 - only the operating aspects for a purpose explicitly excluded from the current EIS. In other words, two separate assessments at different times, each with limited scope, would be more likely to leave gaps, thereby making a disastrous enterprise more palatable for political approval if the economic argument for RBT2 needs to be salvaged after project completion.

A third, less likely scenario resulting from overly-optimistic business projections is that, once built,

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much of RBT2 sits idle for years because Prince Rupert makes more sense. Canadians would still incur the full public expense to build it, and incur the lasting loss of farmland and ecosystems that could have been prevented by not building it at all.

The Port's Inherent Conflict of Interest

In “The Coal Scenario” described above, First Nations in the U.S. and local citizens had to organize and take legal action to get results. Here in Canada, *Ecojustice*, representing the groups *Communities and Coal Society* and *Voters Taking Action on Climate Change*, argued in federal court in 2017 that the port's approval process was not impartial, and that senior port officials stood to benefit from the project's approval based on the port's bonus system. ***In other words, the port was in a direct conflict of interest.*** For the same reason, it is clearly in a conflicted position in its dual role of assessing and simultaneously promoting and standing to gain from the proposed RBT2 project.

The Port's board of directors is appointed and given its mandate by the federal government, which is also clearly vulnerable to conflicts of interest imposed by political ambitions and party allegiances. As a publicly-appointed business, the Port has a responsibility to properly assess the impact of their business before making a decision that could affect us all. Instead, they have blatantly shirked that responsibility and have been accused of making things worse by orchestrating a charade to make it appear that they consulted the public, and adequately assessed the health and environmental impacts of their proposal.

Regional input to the VFPS's decision making smacks of insincerity, and regional opposition to development proposals is largely discounted. In their plan to ship US thermal coal, the Port insisted they had the right to ignore nine municipalities and eight MLAs who either outright rejected the US coal shipment proposal or demanded a full health impact assessment.

Hoping to manufacture a different public opinion, the Port orchestrated a charade in the Summer of 2014 to make it appear that they had consulted the public, and adequately assessed the health and environmental impacts. For the sake of a few new jobs (many outside of our area) their proposed projects pose a serious threat to thousands of local jobs in fisheries and tourism, to our quality of life in the short term, and in the long term, to our health. Cumulative impacts can be expected to put an additional strain on our health care system.

Conclusion

In conclusion, I submit that the Proponent has likely conducted an insufficient and inadequate cumulative impacts assessment since past, present and reasonably foreseeable future projects have not been sufficiently explored. As well as being the client and compiler of impact assessments made by their contractors, the Vancouver Fraser Port Authority is both the developer and promoter of the RBT2 Project. This, in my mind, is a clear conflict of interest that has not only led to a faulty assessment to date, and by doing so, has likely neglected to consider more desirable alternatives.

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If assessment deliberations have been compromised by the biases and other factors I mentioned above, then there can be no validity to either the judgements made to date, or any decisions yet to be made by the same parties. Experience shows us that the VFPA cannot be relied upon to safeguard Canadians, let alone the planet. On many occasions they have been willing to skew or withhold information, in effect, misleading the public [see Footnote]. We would never know this if not for a growing number of dedicated people in this community who have questioned the Port's so-called facts and questionable reports.

Can we say with certainty that these **multiple biases and conflicts of interest** have adversely influenced the Port Metro Vancouver's duties as part of this assessment? Will they adversely affect the CEAA's final decision on Terminal 2? While I cannot express either of these concerns with absolute certainty, it is reasonable to believe that there is a **high probability** of decision makers being influenced by the factors I mentioned above, especially if those decision makers are not even aware that their ability to make impartial decisions or to interpret data with an open mind has been compromised by the various conflicts and biases I described above.

Whether or not the decision-makers are conscious of these conflicts, there is simply too much at stake to have such a crucial decision made final by individuals who, due to their income source or their political allegiances, are *likely* swayed by the subtle influence of close association or direct employment with either the PMV or whichever party is ruling the federal government.

To my mind, it is unconscionable that the CEAA panel has not demanded an impartial review of the RBT2 proposal by experts and scientists who are entirely independent of the VFPA d.b.a. PMV.

<Original signed by>

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FOOTNOTE:

- From Real Hearings: <https://terminal2.realhearings.org>
"A number of public comments have shown that VFPA has provided incorrect information and misleading information. Equally VFPA has dodged certain areas such that some important information is missing altogether."