

**Trans Mountain Pipeline ULC
Trans Mountain Expansion Project
NEB Hearing Order OH-001-2014
Responses to Information Request from
Angelika Hackett**

1.1**Preamble:**

The process: I have been using computers for over 30 years and have a degree in languages. Yet the entire process for public input seems designed to make it as difficult as possible for anybody who may be affected by the project but does not have paid staff or a lawyer. I also use email regularly, but my account is limited by what it can do. I cannot send hundreds of emails, and I do not appreciate receiving dozens of automatic “out-of-office” replies to the many emails I do manage to send out.

Trans Mountain states that the application has been available since December 2013. Yet, although we live about 100 metres from the original “preferred route,” the first I heard of the proposal for a new pipeline route through Burnaby, as distinct from the “twinning” that Trans Mountain had previously presented, was from our MP Kennedy Stewart at a community meeting on January 25. The application itself is virtually inaccessible to ordinary people; the 15,000 pages would take 30 workdays to read, even at one page a minute.

Request:

- a) Why did Trans Mountain provide our nearby household with no information until we received a letter, dated January 15 but not delivered (by hand) until January 31?
- b) Given the importance, scale and impact of this project, why is there no oral cross-examination?
- c) Why must each intervenor post his/her Information Request to all other intervenors, rather than have the NEB’s secretariat do so?
- d) Why must I also send a hard copy to the NEB after having filed my document electronically?
- e) Why can the NEB not make the hard copies it requires?
- f) Why is there no index to the application, making it extremely difficult to find references, without the possibility for key word searches?

Response:

- a) With respect to Ms. Hackett’s preamble, Trans Mountain Pipeline ULC (Trans Mountain) would like to offer the following information:

Trans Mountain’s engagement is ongoing. In particular Trans Mountain will continue to meet with stakeholders who will be impacted by the Trans Mountain Expansion Project

to understand and mitigate their concerns where possible. Trans Mountain remains committed to ongoing dialogue and mitigation of issues with its neighbours as the proposed project proceeds.

Process

Ms. Hackett's comments in the Preamble specifically regarding the process appear to be directed at the National Energy Board, not to Trans Mountain Pipeline ULC.

Over the past two years, Trans Mountain has offered many opportunities for input to its proposed project. Trans Mountain regrets that Ms. Hackett does not find the process amenable to public input. Throughout all phases of the proposed project Trans Mountain will continue to provide opportunities for engagement and with stakeholders and will also continue to communicate about the proposed Project.

Our Application

A living communications tool, the Trans Mountain website was refreshed on December 16, 2013, in coordination with the filing of the Application, to provide an added focus on the Facilities Application. The site provides access to all eight volumes of the Application in one of two options that are both searchable by key word/phrase; (1) HTML files and (2) downloadable PDF. This work was undertaken to provide ease of review of the Application as Trans Mountain acknowledges that the 5 MB filing restriction for uploading documents to the National Energy Board's (NEB's) website can make it difficult for intervenors and stakeholders to find documents on the NEB's regulatory documents repository. The Application has been available on the www.transmountain.com website in a searchable PDF format since it was filed with the NEB. As well, searchable USB sticks were provided to local libraries to allow the public to access the Application in a searchable format. A "road map", a table of contents, and a table of concordance indicating where the NEB's filing requirements were addressed in the Application were also included in each volume of the Application for ease of reference. Lastly, the info@transmountain.com email address and Project phone number have fielded dozens of requests from the public, assisting people in finding the information they needed.

Project Notification

With respect to the Ms. Hackett's comments regarding Project notification, Ms. Hackett's residence has never been within the proposed pipeline study corridor. Since the Project's announcement in May 2012 a number of stakeholder engagement and communication initiatives have been undertaken to notify stakeholders of the project and to seek feedback; see Volume 3A. The proposed revised pipeline corridor in the vicinity of Ms. Hackett's residence is the route option that follows the Brunette River valley (i.e., the previously proposed alternative pipeline corridor). The Loughheed Highway alternative pipeline corridor option is no longer being considered for use by Trans Mountain. Please refer to the maps provided in response to NEB IR No. 1.84a for the alignment of these pipeline corridors as well as responses to NEB IR No. 1.12a and

NEB IR No. 1.40a for additional information regarding the changes to the previously proposed pipeline corridor within the City of Burnaby since the Facilities Application was filed in December 2013. Adjustments have been made to avoid existing infrastructure owned by the City of Burnaby and to provide sufficient workspace at crossings (e.g., roads, utilities, etc.). The proposed revised pipeline corridor would reduce impacts to developed urban areas (e.g., traffic disruptions).

Response to Request

In response to the request, the Village del Ponte complex lies adjacent to the Lougheed Highway. The Lougheed Highway route is no longer being proposed. Please refer to Table 1.40A-1 provided in the response to NEB IR No. 1.40a for a list of all deviations from the proposed pipeline corridor that are currently being considered by Trans Mountain.

Please refer to map 54 of 54 in the 1:50,000 scale maps provided in response to NEB IR No. 1.84a (NEB IR No. 1.84a – Attachment 1) that illustrate the proposed pipeline corridor currently being considered by Trans Mountain through Coquitlam and Burnaby.

Because construction along the Lougheed highway was originally planned to be confined to the highway only, no land rights would have been required from the Village del Ponte. However, as part of the communication plan for the Trans Mountain Expansion Project, the company decided that, although they were not required to, Trans Mountain would hand deliver or directly mail Project information about the proposed Project to landowners and residents adjacent to, but not directly affected by, the study corridor. This included the Village del Ponte. Since the Village del Ponte did not lie within the proposed pipeline corridor for the Trans Mountain Expansion Project, or along the existing Trans Mountain pipeline, individual contact information had not been collected by Trans Mountain for the residents of the Village del Ponte. Rather than expending additional time gathering this information, which would have further delayed the delivery of the letters, it was decided to hand deliver notification letters to residents of the Village. Although arranging for hand delivery took time to complete, the letters were delivered in a manner quicker than by mail.

- b) This question appears to be directed at the National Energy Board (NEB) and not to Trans Mountain Pipeline ULC (Trans Mountain). Trans Mountain recommends the intervenor contact the NEB with its question.
- c) This question appears to be directed at the National Energy Board (NEB) and not to Trans Mountain Pipeline ULC (Trans Mountain). Trans Mountain recommends the intervenor contact the NEB with its question.
- d) This question appears to be directed at the National Energy Board (NEB) and not to Trans Mountain Pipeline ULC (Trans Mountain). Trans Mountain recommends the intervenor contact the NEB with its question.

- e) This question appears to be directed at the National Energy Board (NEB) and not to Trans Mountain Pipeline ULC (Trans Mountain). Trans Mountain recommends the intervenor contact the NEB with its question.
- f) A living communications Tool, the Trans Mountain website was refreshed on December 16, 2013, in coordination with the filing of the Application, to provide an added focus on the Facilities Application. The site provides access to all eight volumes of the Application in one of two options that are both searchable by key word/phrase; (1) HTML files and (2) downloadable PDF. This work was undertaken to provide ease of review of the Application as Trans Mountain acknowledges that the 5 MB filing restriction for uploading documents to the National Energy Board's (NEB's) website can make it difficult for Intervenor to find documents on the NEB's regulatory documents repository. The Application has been available on the www.transmountain.com website in a searchable PDF format since it was filed with the NEB. As well, searchable USB sticks were provided to local libraries to allow the public to access the Application in a searchable format. A "road map", a table of contents, and a table of concordance indicating where the NEB's filing requirements were address in the Application were included in each volume of the Application for ease of reference. Lastly, the info@transmountain.com email address and Project phone number have fielded dozens of requests from the public, assisting people in finding the information they needed.

1.2.1**Reference:**

Hearing Order, Appendix I, page 18: List of Issues. Issue #1: The need for the proposed project.

Project Application, Volume 1, Section 2.1.4, page 1-21: "The primary purpose of the Project is to provide additional transportation capacity for crude oil from Alberta to markets in the Pacific Rim including BC, Washington State, California, and Asia."

Brown, Lester R. (2011). *World on the Edge: How to Prevent Environmental and Economic Collapse*. W.W. Norton & Company Inc., New York, N.Y.

Preamble:

Research indicates that clean energy alternatives are out-pacing fossil fuels which must be phased out to prevent run-away climate change, and that there is a growing environmental movement in both China and California opposed to oil imports.

Request:

- a) In light of this, please explain why bitumen needs to be exported to China and California.
- b) What is Trans Mountain doing to offset the direct and indirect contributions of this project to greenhouse gas emissions and global warming?

Response:

- a) The information request is not relevant to one or more of the issues identified in the National Energy Board's List of Issues for the Trans Mountain Expansion Project. However, to be helpful Trans Mountain indicates that by providing access to the West Coast of Canada, the Project would allow oil sands bitumen to serve market demand outside of established markets in North America. Please refer to the report by IHS Global Canada Ltd., in Volume 2 Appendix A of the Application, for a description of the markets served by the Project.
- b) As stated in the List of Issues of the NEB's Hearing Order OH-001-2014 for the Trans Mountain Expansion Project, the Board does not intend to consider the environmental and socio-economic effects associated with the downstream use of the oil transported by the pipeline (NEB 2014). Project effects on climate change and global warming were estimated to be very small as noted in Section 6.4 of Technical Report 5C-4 in Volume 5C, Air Quality and Greenhouse Gas Technical Report (RWDI December 2013) and in Section 7.2.5.6 of Volume 5A. For clarity, the response to this request is divided into four sections: offsetting of global warming; the definitions of direct and indirect greenhouse gas (GHG) emissions; offsetting of direct GHG emissions; and offsetting of indirect GHG emissions.

Offsetting of Global Warming

Global warming contributions from individual facilities can be estimated from cumulative GHG emissions (e.g., Figure 3.8 in National Research Council 2011) but are too small to be measured. Instead, jurisdictions typically regulate GHG emissions from all emitters exceeding an annual threshold such as the Alberta's Specified Gas Reporting Regulation, (Alberta Environment and Sustainable Resources Development 2014) which requires emitters exceeding 50,000 tonnes of carbon dioxide equivalent (CO_{2e}) annually to report to the provincial registry. Emissions of GHGs from the Project do not exceed any provincial reporting requirements in Alberta or British Columbia (see also the responses to NEB IRs 1.32 and 1.33b).

Definitions of Direct and Indirect Greenhouse Gas Emissions

As defined in the 'Specified Gas Reporting Standard' (Alberta Environment and Sustainable Resource Development 2014), "direct emissions" means the release of specified gases into the atmosphere from sources located at a facility and includes CO₂ sent off site, but does not include CO₂ geologically injected on site." For the purpose of the Project, this definition is identical to the definition of Scope 1 direct emissions in 'The Greenhouse Gas Protocol' (World Business Council for Sustainable Development and World Resources Institute 2014). Indirect Scope 2 emissions are those released from the generation of imported/purchased electricity, steam, or heat. Scope 3 comprises all other indirect emissions that "are a consequence of the activities of the company, but occur from sources not owned or controlled by the company" (World Business Council for Sustainable Development and World Resources Institute 2014).

Offsetting of Direct GHG Emissions

Trans Mountain is committed to complying with all regulatory requirements regarding GHG emissions. Of all applicable jurisdictions, only the Province of Alberta has regulatory offset requirements (Province of Alberta 2013). Temporary construction emissions and indirect emissions (Scopes 2 and 3) are excluded from these requirements. Alberta's offset requirements apply to facilities with direct operational GHG emissions exceeding 100,000 tonnes of CO_{2e}, which is much higher than direct emissions estimated for the Project. While the Project is not subject to offset requirements, Trans Mountain commits to common energy pipeline industry practices to minimize direct GHG emissions during construction and operation of the pipeline. Several examples are provided in the response to NEB IR No. 1.31.

Offsetting of Indirect GHG Emissions

In relation to the Project, Scope 2 emissions are indirect GHG emissions from the generation of purchased electricity mostly for the operation of the electric pumps. Trans Mountain has no control over the GHG emissions associated with the generation of purchased electricity. Reporting regulations in British Columbia (Province of British Columbia 2010) and Alberta (Province of Alberta 2013) are structured such that these emissions are accounted for by the generating facilities to avoid double counting. All

other indirect GHG emissions occur from sources not owned or controlled by the company (Scope 3). Trans Mountain is not required to report, reduce, or offset Scope 2 or 3 emissions from the Project.

References:

Alberta Environment and Sustainable Resource Development. 2014. Specified Gas Reporting Standard. Version 8. Edmonton, AB.

National Energy Board. 2014. Trans Mountain Pipeline ULC Trans Mountain Expansion Project. File Number OF-Fac-Oil-T260-2013-03 02. Hearing Order OH-001-2014. 2 April 2014.

National Research Council. 2011. Climate Stabilization Targets: Emissions, Concentrations, and Impacts over Decades to Millennia. The National Academies Press. Washington, DC.

Province of Alberta. 2013. Specified Gas Emitters Regulation 139/2007 with amendments up to and including Alberta Regulation 89/2013. Edmonton, AB.

Province of British Columbia. 2010. Greenhouse Gas Reduction (Cap and Trade) Act. Reporting Regulation Reg. 272/2009 [includes amendments up to B.C. Reg 376/2010, December 20, 2010]. Victoria, BC.

World Business Council for Sustainable Development and World Resources Institute. 2014. The Greenhouse Gas Protocol. A Corporate Accounting and Reporting Standard. Revised Edition.

1.2.2**Reference:**

Hearing Order, Appendix I, page 18: List of Issues. Issue #1: The need for the proposed project.

Project Application, Volume 1, Section 2.1.4, page 1-21: "The primary purpose of the Project is to provide additional transportation capacity for crude oil from Alberta to markets in the Pacific Rim including BC, Washington State, California, and Asia."

Brown, Lester R. (2011). *World on the Edge: How to Prevent Environmental and Economic Collapse*. W.W. Norton & Company Inc., New York, N.Y.

Preamble:

The proposed pipeline is intended to transport unrefined bitumen from the Alberta tar sands to the tanker port in Burnaby, for purposes of export. Yet it is claimed that the project will bring economic benefits to Canada.

Request:

- a) How many job-years of employment will be created in Canada, through the construction and operation of the pipeline, over the next 10 years?
- b) How many job-years of employment will be created in the next 10 years outside of Canada, through the refining of the non-renewable, irreplaceable bitumen transported through the pipeline outside of Canada?
- c) Why does the application not include a proposal to refine the bitumen upstream from Burnaby, thus generating employment benefits for Canada and reducing the risks of transporting the fuel by pipeline and tanker?
- d) What will be the benefits to the City of Burnaby from having this pipeline running through it, other than creating jobs for oil spill cleanup?
- e) What will be the benefits to homeowners along the pipeline route?
- f) How much of the bitumen carried by the pipeline would be for export from Canada?
- g) Given that fossil fuels are a non-renewable resource, and that Canadians will need energy for generations to come, how does the proposed project, intended for export, fit with Canada's own energy needs?

Response:

- a) During the construction phase, the Project would generate 58,000 person years of employment. Once the pipeline is operational it will support between 2,500 and 3,300 jobs per year depending on how fully utilized the pipeline is. Over the first 20 years of operations this amounts to between 50,300 and 65,200 person years of employment.

- b) The information request is not relevant to one or more of the issues identified in the National Energy Board's List of Issues for the Trans Mountain Expansion Project.
- c) Trans Mountain is not in the business of refining. Any proposal for refining (or other crude processing facilities) would be the subject of a separate application typically brought forward by a proponent in that business to a provincial regulatory authority having the appropriate jurisdiction. For example: the Sturgeon Refinery near Edmonton, Alberta is owned by North West Upgrading Inc. This facility is now under construction and received the necessary primary approvals from the provincial regulator in Alberta. The Trans Mountain Expansion Project will be capable of transporting refined products sourced in Alberta from new facilities like the new Sturgeon Refinery and other existing processing facilities to the West Coast.
- d) Regrettably, recent media coverage has caused the reference in the preamble to be taken out of context and some have interpreted it in a way that is not consistent with its original intent. The following clarification is provided in response to this request and to other similar Information Requests. First and foremost, no spill is acceptable to Trans Mountain, nor is it part of the economic justification for our project.

As a resident of communities where construction and operations activities will be carried out, there may be opportunities for individuals to obtain employment or business opportunities, either directly or indirectly. As a citizen and tax payer within a municipality, province and country, individuals would receive the benefits of the economic stimulus and tax revenues generated by the project which will help to either offset personal taxes, or provide those jurisdictions with additional revenues for the provision of public services and infrastructure. Please see Volume 2, Section 3.4 of the Application for additional information.

There are a number of benefits to the City of Burnaby should the Trans Mountain Expansion Project be approved. These include:

- **Municipal Taxes** - Trans Mountain paid \$7,022,000 in annual taxes to the City of Burnaby in 2013, as noted in Table 7.2.7-12, Section 7.2.7 of Volume 5B. If the Project is approved, the projected annual property tax to the City of Burnaby is estimated to be \$13,243,000, also noted in the referenced table. The City of Burnaby is projected as the single largest beneficiary of municipal taxes as a consequence of the Project.
- **Community Investment** - The Kinder Morgan Foundation has donated almost \$2M in grants to youth organizations which support education and art programs benefitting youth in grades K-12 in many communities where Kinder Morgan operates, as is described in Table 1.7.2, Section 1.7.2 and Table 1.7.4, Section 1.7.4, Volume 3A of the Application. This includes more than \$350,000 in community investments in Burnaby since 2007.
- **Community Benefits** - Trans Mountain is committed to investing in community benefits initiatives in municipalities and regions crossed by the Project. Trans

Mountain intends to contribute to community benefits in communities where it operates and has initiated discussions with local governments and organizations to explore community benefit opportunities related to its priority areas of environment; safety, emergency preparedness and response; ecological off-sets, community investment and education.

- **Capital Investment** - The Trans Mountain Expansion Project is a \$5.5B capital investment, as outlined in Section 3.2.2, Volume 2. This includes capital costs of approximately \$450M for the construction of the Westridge Tank Terminal and approximately \$300M for the construction of the Westridge Marine Terminal, to which many of the construction related benefits will accrue to Burnaby and the local region.
- **Employment and Workforce Spending** - The Metro Vancouver region will have the largest workforce requirements, with construction activities anticipated during the full construction period. The required workforce in the Metro Vancouver region will average about 655 workers and will peak about 1,200 workers in October 2016. It is estimated that approximately 30 per cent would be local hires, as described in Table 7.2.7-7, Section 7.2.7, Volume 5B. It is estimated that these workers would spend more than \$100M locally during construction on goods and services such as accommodations and meals, as is described in Table 7.2.7-13, Section 7.2.7, Volume 3A.
- **Ongoing Operations** - A significant number of additional tradespeople, terminal operations personnel and other technical and supervisory staff, relative to current levels, will be directly employed to operate and maintain the expanded Trans Mountain system, as noted in Section 4.1, Volume 4C. It is anticipated that 40 to 45 operations and maintenance personnel will be required at field locations in BC, including Burnaby. The additional field operations and maintenance staff, as well as Control Centre Operators will be recruited in advance of the start-up of the expanded system, to allow for appropriate training to take place. Overall, the direct, supply chain, and induced effects of operations will support between 50,273 and 65,184 person-years of employment over the first 20 years – or between 2,514 and 3,259 jobs per year, as outlined in Appendix B, Volume 2. Burnaby's exact share of these effects will depend on future hiring, contracting, and procurement decisions.

Volume 5B of the Application describes the socio-economic assessment undertaken for the Project that considers potential effects on local and regional employment, business opportunities and government revenues. Additionally, Volume 2 Appendix B of the Application is a report by the Conference Board of Canada describing the economic benefits for Canada and its regions.

There are a number of benefits to the Canada and its regions should the project proceed. Some information from these referenced sections of the Application are summarized below:

- **Construction** - Development of the Project generates direct impacts in the construction sector, supply chain impacts such as purchase of equipment and

induced effects which occur when wages from the direct and supply chain effects are spent.

- **Employment** - Trans Mountain expects to create 108,000 person years of employment from construction plus the first 20 years of operations across Canada. At least 66,000 person years of employment will be in BC and at least 25,000 will be in AB, including direct, supply chain and induced jobs.

At the peak of activity (anticipated to be July 2017), it is estimated the Project will require more than 4,475 direct construction workers in AB and BC combined.

- **Increased Spending** - Project development is anticipated to generate almost \$3.3 billion in labour income across Canada (direct, indirect and induced effects combined). Of this, approximately 58 per cent (or \$1.9 billion of labour income) will be generated in BC and approximately 30 per cent (\$974 million) will be generated in Alberta. The total labour income associated with direct Project-related employment during construction is anticipated to be approximately \$1.8 billion, of which approximately \$1.2 billion will be in BC and approximately \$556 million will be in Alberta.
- **Construction-Related Spending** - Trans Mountain plans to spend \$5.4 billion by the end of 2017 to construct the line and associated facilities, and a further \$2.4 billion to operate it for the first 20 years. BC's economy is forecast to grow by \$2.8 billion (GDP) through construction-related spending, and up to \$11.3 billion including Project operations through to 2037.
- **Access to Global Markets** - More broadly, accessing better-paying global markets through the Trans Mountain Expansion Project would raise oil producer revenues and yield addition taxes as outlined in Appendix A, Volume 2 of the Application. Burnaby and all of Canada would benefit from these additional tax revenues.
- **Federal Tax Increases** - The estimated tax revenues to the Government of Canada are \$2.1 billion over the life of the Project.
- **Provincial and Municipal Tax Increases** - The Project is also anticipated to generate substantial provincial and municipal tax revenue. Provincial governments' revenues associated with the Project are anticipated to be in the order of \$1.7 billion, with BC provincial government receiving \$1 billion in provincial taxes and Alberta receiving over \$0.4 billion in provincial taxes.

Municipal tax revenues that can support community services and infrastructure are estimated to increase approximately \$23 million annually or \$460 million over 20 years of operations. In Alberta, municipal property taxes are estimated to increase approximately \$3.4 million annually or \$68 million over 20 years of operations.

In communities along the proposed pipeline corridor, annual property tax payments to more than 20 local governments and more than 24 Aboriginal communities would jump to \$52.4 million from \$25.9 million per year at present.

- e) Homeowners who are directly affected property owners with a right-of-way on their property will receive compensation for land rights, damages and inconvenience in accordance with requirements under Sections 86, 87 and 97 of the NEB Act. Please see the NEB Guide Pipeline Regulation in Canada: A Guide for Landowners and the Public for more information on these requirements. This Guide can be obtained at the following website:

<http://www.neb-one.gc.ca/clf-nsi/rthnb/pblcprtcptn/pplnrgltncnd/pplnrgltncnd-eng.pdf>.

As residents of communities where construction and operations activities will be carried out, there may be opportunities for homeowners to obtain employment or business opportunities, either directly or indirectly. As citizens and tax payers within their municipality, province and country, Canada, they would receive the benefits of the economic stimulus and tax revenues generated by the project which will help to either offset personal taxes, or provide those jurisdictions with additional revenues for the provision of public services and infrastructure. Please see Section 3.4 of Volume 2 of the Application for additional information. For more information on benefits to Burnaby please refer to response to your request Hackett A IR No. 1.2.2d.

- f) All of the heavy or bitumen based crudes transported on the pipeline are expected to be shipped to Washington State or offshore across the Westridge Marine Terminal to refineries capable of processing heavy crude. The remaining refined products and light crudes transported will be shipped within British Columbia, to Washington State or offshore.
- g) Canada is one of the largest crude oil producers in the world with extensive reserves. Canadian supply far exceeds Canadian demand and production is forecasted to grow. Canada is also part of a North American and world supply and refining market. As noted in the direct evidence by Mr. John Reed supplied in the Application, Volume 2, Appendix C, A32:

“.....the primary purpose of the Project is to provide additional needed transportation capacity to deliver growing oil production to West Coast and offshore markets.”

Mr. Reed continues in Volume 2, Appendix C, A40:

“The Project also provides extensive benefits to Canadians across the country, including producers, residents of the areas through which the pipeline crosses, suppliers in many provinces, local, provincial and federal governments and the overall Canadian economy. The Project allows Canada to maximize the benefits it derives from the development of natural resources, and provides a feasible and efficient means of addressing the asymmetrical risk of too much/too little capacity.”

1.3

Reference:

Hearing Order, Appendix I, page 18: List of Issues. Issue #4: The potential environmental and socio-economic effects of the proposed project, including any cumulative environmental effects that are likely to result from the project, including those required to be considered by the NEB's *Filing Manual*.

Preamble:

Our townhouse complex is situated on the south side of Lougheed Highway, just west of North Road, immediately adjacent to one of the proposed routes. One alternate pipeline route is along the Brunette River conservation area just south of us, which is a salmon-bearing stream, with environmental enhancement of natural habitat recently completed along its banks, and where we regularly jog, walk or cycle. We live right between these two proposed routes.

Request:

If the Lougheed Highway route is chosen:

- a) What provisions are made to reduce production of dust during construction– a significant contributor to allergic reactions and asthma from which I suffer?
- b) What provisions are there for compensation for the negative effects of dust on my lungs?
- c) Does compensation include my having to stay in a hotel for the duration of construction dust?
- d) If not, why not?
- e) What provisions are there for my loss of productivity in my home office during construction noise?
- f) Has Trans Mountain conducted research on the impact of the proposed pipeline on property values of adjacent homes, both during and after construction?
- g) If not, why not?
- h) What compensation will Trans Mountain provide for compensating property owners for permanent loss of property value, or shorter delays in resale of homes?
- i) What compensation is there for traffic disruption and delay along Lougheed Highway and North Road during construction, given that there is only one access road to our townhouse complex?
- j) What compensation is there for delay and inconvenience to pedestrians along Lougheed Highway and North Road, trying to gain access to the SkyTrain station and other amenities?

- k) Lost Creek flows through our complex, right past our home, and into the Brunette River. In the past it has suffered from silt and other pollution entering upstream storm drains during nearby construction. What provisions is Trans Mountain taking to prevent pollution and silt from entering any storm drains during construction, and how is it protecting Lost Creek specifically?

If the Brunette River route is chosen:

- l) What compensation is there for those of us having to give up our recreational activities along the Brunette River conservation area?
- m) What is the likely impact of the project on the salmon-bearing Brunette River?
- n) What is the likely impact on Lost Creek that flows through our townhouse complex and into the Brunette River?
- o) What is the likely impact on Stoney Creek, a salmon-bearing stream just west of us, that also flows into the Brunette River?
- p) How are the streams flowing into the Brunette River going to be protected?
- q) What compensation is there for traffic disruption and delay along North Road during construction?

Response:

- a) The Lougheed Highway alternative pipeline corridor option is no longer being considered for use by Trans Mountain. The proposed revised pipeline corridor in the vicinity of Ms. Hackett's residence is the route option that follows the Brunette River valley (*i.e.*, the previously proposed alternative pipeline corridor).

Please refer to the following for information regarding the changes to the previously proposed pipeline corridor within the City of Burnaby since the Facilities Application was filed in December 2013:

- Table 1.40A-1 provided in the response to NEB IR No. 1.40a for a list of all deviations from the proposed pipeline corridor that are currently being considered by Trans Mountain.
- Map 54 of 54 in the 1:50,000 scale maps (NEB IR No. 1.84a – Attachment 1) provided in response to NEB IR No. 1.84a that illustrate the proposed pipeline corridor currently being considered by Trans Mountain through Coquitlam and Burnaby.
- Responses to NEB IR No. 1.12 and NEB IR No. 1.40a.

Adjustments have been made to the proposed revised pipeline corridor to avoid existing infrastructure owned by the City of Burnaby and to provide sufficient workspace at

crossings (e.g., roads, utilities, etc.). The proposed revised pipeline corridor would reduce impacts to developed urban areas (e.g., traffic disruptions).

Refer to Section 8.2 of Volume 6B (the Pipeline Environmental Protection Plan) for mitigation measures that could be implemented, as necessary, to control dust emissions during the construction phase of the Project.

- b) The Lougheed Highway route is no longer being considered. Please see response to Hackett A IR No. 1.3a.

Trans Mountain's corporate responsibility and regulatory obligation is to first minimize any potential impacts or damages to the extent practical by using and adapting responsive construction and operations practices; and second, provide mitigation to reverse or treat any remaining impacts. A comprehensive assessment of potential impacts is documented in the Environmental and Socio-Economic Assessment included in Volumes 5 and 6 of the application, with Volumes 6B, 6C, and 6D documenting the Environmental Protection Plan with mitigation and Contingency Plans for anticipated impacts. The construction practices and mitigation measures documented have been developed through extensive experience with previous pipeline projects, and have proven to be successful in avoiding and mitigating potential impacts. Through the use of these measures, Trans Mountain believes that potential impacts will be managed and compensation will not be required for temporary construction issues such as access to amenities (such as recreation or transit), traffic disruption, dust, and noise.

- c) The Lougheed Highway route is no longer being considered. Please see response to your request Hackett A IR No. 1.3a. It is expected that mitigation efforts will be effective and that compensation will not be considered.
- d) The Lougheed Highway route is no longer being considered. Please see response to your request Hackett A IR No. 1.3a. It is expected that mitigation efforts will be effective and that compensation will not be considered.
- e) The Lougheed Highway route is no longer being considered. Please see response to your request Hackett A IR No. 1.3b. It is expected that mitigation efforts will be effective and that compensation will not be considered.
- f) The Lougheed Highway route is not longer being considered. Please refer to response to your requested, Hackett A IR No. 1.3a, regarding the Lougheed Highway alternative and for property values, please see response to Amy C IR No. 1.3g and the accompanying attachment.
- g) Please see response to your previous request; Hackett A IR No. 1.3f.
- h) The Lougheed Highway route is no longer being considered. Please refer to the response to Hackett A IR No. 1.3a. With respect to compensation, please refer to the response to Amy C IR No. 1.3h.

- i) The Lougheed Highway route is no longer being considered. Please refer to the response to Hackett A IR No. 1.3a. With respect to compensation, please refer to the response to Hackett A IR No. 1.3b.
- j) The Lougheed Highway route is no longer being considered. Please refer to the response to Hackett A IR No. 1.3a. With respect to compensation, please refer to the response to Hackett A IR No. 1.3b.
- k) The Lougheed Highway route is no longer being considered. Please refer to the response to Hackett A IR No. 1.3a.

Since filing the Application in December 2013, the Brunette River route has become the proposed revised pipeline corridor and Lost (Austin) Creek will be crossed by the Project downstream from the previously proposed crossing corridor.

Wherever feasible, watercourse crossing construction activities will be timed to occur within the least risk biological windows to avoid causing serious harm to fishes. Mitigation measures considered in the assessment for fish, fish habitat and surface water quality are provided in Table 7.2.7-2 of Section 7.2.7 of Volume 5A as well as Section 8.7.3 of the Pipeline Environmental Protection Plan (Volume 6B) and the Fish Species of Concern Contingency Plan in Appendix B of the same volume. Mitigation measures are incorporated within the Project design to reduce the spatial scale, duration and intensity of effects to manage the potential for serious harm to fishes and their habitat. These measures include, for example, limiting disturbance areas within riparian areas and implementing minimum riparian setback distances for temporary and permanent facilities.

Considerations for habitat sensitivity and availability for Pacific salmon are included in the fish and fish habitat assessment process. Trans Mountain is also engaging Fisheries and Oceans Canada (DFO) Species at Risk biologists and a local provincial expert to confirm the extent of potential critical habitat for nocksack dace in tributaries to the Brunette River. As a result, recommendations for construction will include the most suitable construction methods and associated mitigation measures for Pacific salmon and nocksack dace. Overall, the implementation of environmental mitigation measures and best management practices provided are expected to eliminate or reduce potential Project-related effects to fish and fish habitat, while maintaining the overall health and productivity of the aquatic ecosystem.

In addition, avoiding or reducing the introduction of sediments and other pollutants into watercourses is very important to Trans Mountain and, as such, several mitigation measures will be implemented during construction to prevent sediments from entering Lost Creek and storm drains which flow into watercourses. These measures were provided in the Facilities Application that was filed with the NEB in December 2013. Please refer to Section 7.0 as well as Section 8.7 (Watercourse Crossings) of Volume 6B (the Pipeline Environmental Protection Plan) for environmental mitigation measures that could be implemented, as needed to control the release of sediments from the construction right-of-way. Please also refer to the following contingency plans

provided in Appendix B of the Pipeline Environmental Protection Plan (Volume 6B) for additional mitigation measures that would be applied during construction, as needed: Flood and Excessive Flow (Section 4.0); Fish Species of Concern (Section 5.0); Soil Erosion and Sediment Control (Section 8.0); and Spill Contingency Plan (Section 11.0).

- l) For discussion on compensation, please see response to Hackett A IR No. 1.3b.
- m) The proposed revised pipeline corridor (*i.e.*, Brunette River route) does not cross the Brunette River; however, the proposed revised pipeline corridor crosses direct tributaries to the Brunette River, including Stoney and Lost (Austin) creeks. Both these creeks, along with several of the other tributaries, are used by Pacific salmon and other fish species, including species of concern such as nooksack dace. As such, Trans Mountain will adopt specific watercourse crossing mitigation and reclamation measures that address these species, and will adhere to recommended Least Risk Biological Windows (as defined in Technical Report 5C-7 in Volume 5C, Fisheries [British Columbia] Technical Report [Triton Environmental Consultants Ltd. December 2013] designed to protect Pacific salmon and nooksack dace, within the watercourses crossed by the proposed revised pipeline corridor and downstream within the Brunette River. The results of initial field investigations at Stoney Creek (BC-785) is provided in Appendices A and B of the Technical Report 5C-7 in Volume 5C, Fisheries (British Columbia) Technical Report (Triton Environmental Consultants Ltd. December 2013). Additional fish and fish habitat assessments of Lost Creek (BC-784) and tributary (BC-783) to the Brunette River, along both the proposed revised pipeline corridor (*i.e.*, Brunette River route) and the proposed alternative pipeline corridor (*i.e.* Loughheed route), will be conducted in 2014.

Wherever feasible, watercourse crossing construction activities will be timed to occur within the least risk biological windows to avoid causing serious harm to fishes. Mitigation measures considered in the assessment for fish, fish habitat are provided in Table 7.2.7-2 of Section 7.2.7 of Volume 5A as well as Section 8.7.3 of the Pipeline Environmental Protection Plan (Volume 6B) and the Fish Species of Concern Contingency Plan in Appendix B of the same volume. Mitigation measures are incorporated within the project design to reduce the spatial scale, duration and intensity of effects to manage the potential for serious harm to fishes and their habitat. These measures include, for example, limiting disturbance areas within riparian areas and implementing minimum riparian setback distances for temporary and permanent facilities.

Considerations for habitat sensitivity and availability for Pacific salmon are included in the fish and fish habitat assessment process. As a result, recommendations for construction will include the most suitable construction methods and associated mitigation measures for Pacific salmon. Overall, the implementation of environmental mitigation measures and best management practices provided are expected to eliminate or reduce potential Project-related effects to fish and fish habitat, while maintaining the overall health and productivity of the aquatic ecosystem.

- n) The response to Hackett A IR No. 1.3m provides general mitigation measures for crossings of all tributaries to the Brunette River.

Since filing the Application in December 2013, the Brunette River route has become the proposed revised pipeline corridor and Lost (Austin) Creek will be crossed by the Project downstream from the previously proposed pipeline corridor. Assessment results and construction measures for Lost Creek and other tributaries to the Brunette River will be updated in 2014 during ongoing fish and fish habitat investigations along the proposed revised pipeline corridor (*i.e.*, Brunette River route). Trans Mountain is also currently engaging Fisheries and Oceans Canada (DFO) Species at Risk biologists and a local provincial expert to confirm the extent of proposed critical habitat use for nooksack dace in Lost Creek and other tributaries to the Brunette River.

Trans Mountain will adopt specific watercourse crossing mitigation and reclamation measures, and will adhere to recommended least risk biological windows to protect Pacific salmon and all other fish species of concern at watercourse crossings, where applicable. Refer to Table 7.2.7-2 of Section 7.2.7 of Volume 5A as well as Section 8.7.3 of the Pipeline Environmental Protection Plan of Volume 6B and the Fish Species of Concern Contingency Plan in Appendix B of the Volume 6B.

Overall, the implementation of environmental mitigation measures and best management practices provided are expected to eliminate or reduce potential Project-related effects to fish and fish habitat. These measures will protect fish species, including Pacific salmon, and those that are federally and provincially-listed for conservation consideration, while maintaining the overall health and productivity of the aquatic ecosystem.

- o) The response to Hackett A IR No. 1.3m provides general mitigation measures for crossings of all tributaries to the Brunette River. Please also refer to the response to Hackett A IR No. 1.3n in reference to Stoney Creek.
- p) Please refer to responses Hackett A IR No. 1.3m and 1.3n.

Trans Mountain will adopt specific watercourse mitigation and reclamation measures, and will adhere to recommended least risk biological windows to protect Pacific salmon and all other fish species of concern at watercourse crossings, where applicable. Refer to Table 7.2.7-2 of Section 7.2.7 of Volume 5A as well as Section 8.7.3 of the Pipeline Environmental Protection Plan of Volume 6B and the Fish Species of Concern Contingency Plan in Appendix B of Volume 6B for a description of the measures that will be adopted.

Overall, the implementation of environmental mitigation measures and best management practices provided are expected to eliminate or reduce potential Project-related effects to fish and fish habitat. These measures will protect fish species, including Pacific salmon, and those that are federally and provincially-listed for conservation consideration, while maintaining the overall health and productivity of the aquatic ecosystem. Post-construction monitoring will be carried out following

construction to provide continued assessment and verification of the effectiveness of the mitigation.

- q) Please see response to your previous request; Hackett A IR No. 1.3b.

1.4**Reference:**

Hearing Order, Appendix I, page 18: List of Issues. Issue #5: The potential environmental and socio-economic effects of marine shipping activities that would result from the proposed project, including the potential effects of accidents or malfunctions that may occur.

Project Application, Volume 1, Section 3.2.6, pages 1-66 – 1-67: “Ship-related sensory disturbance will continue throughout the operations phase, however, animals affected by vessels will recover immediately after a vessel passes by. Sensory disturbance is concluded to be of low to medium magnitude and not significant for humpback whale and Steller sea lion.”

Preamble:

I am concerned about the expansion of the Westridge marine terminal and the increase in tanker traffic in our waters (Burrard Inlet, the Salish Sea), and the effects on wildlife.

Request:

- a) Please explain how the animals will “recover immediately” from excessive noise from the hundreds of tankers.
- b) What is the scientific basis for this claim?
- c) What studies has Trans Mountain done to prove that marine animals recover immediately from excessive noise?
- d) How is the wildlife in our waters going to be protected from noise, traffic and the danger of spills?
- e) What exactly is the procedure if there is a pod of orcas in Burrard Inlet during the passage of oil tankers?
- f) In case of a spill, what measures are in place for immediate rescue and cleanup of oiled birds and other wildlife?
- g) Who exactly is going to be responsible for this rescue and cleanup?
- h) How will this wildlife rescue operation be funded?

Response:

- a) The potential effects of the increase in Project-related marine vessel traffic on marine mammals, including the effects of sensory disturbance, are assessed in detail in Section 4.3.7 of Volume 8A of the Facilities Application. Reference 2 refers to Volume 1 of the Facilities Application, which provides only a summary of the assessment; however, the key aspect of the sentence quoted is “after a vessel passes by”. Recovery in this instance is being discussed with respect to the passage of a single vessel (for further details see Section 4.3.7.5.1 of Volume 8A). Based on acoustic modeling done

for the Project, under a hypothetical scenario, a stationary marine mammal in proximity to the shipping lane during a single Project-related marine vessel pass could be exposed to sensory disturbance for 24 to 31 minutes (approximately 2 per cent of each day for each passage; see Table 4.3.7.4 of Volume 8A), depending on the speed of the vessel and site-specific physical conditions. However, since some species such as killer whales are highly mobile, there is potential for an individual to interact with the same Project-related marine vessel more than once during a single day (e.g., for marine mammals circling an island and re-encountering the vessel further along the shipping lanes). Overall, it is expected that exposure of any particular individual to Project-based sensory disturbance is unlikely to exceed much more than 0.5 to 2 hours a day (i.e., 2 per cent to 8 per cent of each day assuming up to two exposures per transit for each of the two Project-related marine vessel transits in a 24-hour period). While exposure of a stationary marine mammal in the Marine RSA to a Project-related marine vessel will be intermittent (i.e., two vessel transits per day), this daily exposure will occur throughout the life of the Project. Most studies report that marine mammal behaviour returns to normal after sound production ceases (Richardson *et al.* 1995, Southall *et al.* 2007). In consideration of only routine effects associated with the Project, it is therefore expected that the time between vessel transits would allow marine mammals to recover from the sensory disturbance before the next transit of a Project-related marine vessel.

References:

- Richardson, J., C.R. Greene Jr., C. Malme and D. Thomson. 1995. *Marine Mammals and Noise*. Academic Press. San Diego, CA.
- Southall, B.L., A.E. Bowles, W.T. Ellison, J.J. Finneran, R.L. Gentry, C.R. Greene Jr., D. Kastak, D.R. Ketten, J.H. Miller, P.E. Nachtigall, W.J. Richardson, J.A. Thomas and P.L. Tyack. 2007. Special Issue: Marine mammal noise exposure criteria. *Aquatic Mammals* 33(4):411-509.
- b) Please see response to Hackett A IR No. 1.4a. Sound exposure during the passage of a single Project-related vessel was predicted based on acoustic modeling described in Appendix A of Technical Report TR 8B-1 in Volume 8B, *Marine Resources - Marine Transportation Technical Report* (Stantec Consulting Ltd. December 2013).
 - c) Please see the response to Hackett A IR No. 1.4a.
 - d) Trans Mountain is developing a Marine Mammal Protection Program. Please see response to NEB IR No. 1.56.
 - e) Tankers in Burrard Inlet will be accompanied by 2-3 escort tugs, will be travelling at speeds of 6 knots (11 km/h), and are required to remain within established shipping lanes. Killer whales are able to travel at speeds of up to 26 knots (48 km/h) for short bursts and are thus easily able to avoid slow moving vessels.
 - f) The probability of an oil spill at the Westridge Marine Terminal or any other location along the tanker route has been assessed as low (see the Application, Section 5.2.2, Volume 8A). Spills into the water during cargo transfer at the Westridge Marine

Terminal), should they occur, will be mitigated through the use of protective booming at the dock and around vessels being loaded. The protective booming reduces the chance of spilled oil interacting with the broader environment including birds and wildlife outside the boomed area. The polluter is responsible for the response under oversight of the Canadian Coast Guard. Oil handling facilities in Canada and all vessels over a certain size (which includes all vessels calling at Westridge Marine Terminal) are required to have an agreement with the Western Canada Marine Response Corporation (WCMRC), the Transport Canada certified response organization in BC, for spill response. WCMRC has spill response capability based at the Westridge Marine Terminal and other locations within Port Metro Vancouver. In case of an incident at the Westridge Marine Terminal dock, the terminal's emergency response plan will be immediately executed.

To handle wildlife issues the Responsible Party (RP) will engage an established wildlife group, such as Focus Wildlife, to address region-specific emergency wildlife issues. This group would work closely with federal agencies (Environment Canada/Canadian Wildlife Services and Fisheries and Oceans Canada) and the Provincial Government (Ministry of the Environment), and WCMRC within the Incident Command System to ensure impact on marine birds and wildlife is managed in a responsible manner. A summary of WCMRC's roles, responsibilities, and actions can be found in the Application, Volume 8A Section 5.0, Table 5.5.3. This table also lists proposed improvements to WCMRC capacity, including their ability to manage wildlife issues resulting from oil spill in future.

- g) Please see response Hackett A IR No. 1.4 f.
- h) Canada's oil spill compensation regime is based upon polluter-pay-principles, and all costs, including the any wildlife rescue costs will be paid for by the Responsible Party. In case of ship source spills The *Marine Liability Act* establishes the framework for handling marine liability and compensation in Canada and also establishes the Ship-source Oil Pollution Fund (SOPF) that provides funding for spills from all classes of vessels in Canadian waters. Almost \$1.3 Billion is available through this system and wildlife rescue operations resulting from a marine oil spill will be covered through this funding. More information can be found in the Application, Volume 8A Section 1.4.1.6 and Volume 8C, TR8C-15 (Termopol 3.18). Trans Mountain currently has \$750 million of spill liability insurance to deal with costs in circumstances where Trans Mountain is deemed the Responsible Party (see the Application, Volume 7, Section 9). Please also see the response to Allan R IR No. 1.21j.

1.5**Reference:**

Hearing Order, Appendix I, page 18: List of Issues. Issue #6: The appropriateness of the general route and land requirements for the proposed project.

Project Application Volume 4A, Part 3 (A56002).

Kai Nagata, *thetyee.ca*, 21 January 2014. "Earthquakes versus Pipelines". <http://thetyee.ca/News/2014/01/21/Fraser-River-Oil-Spill/>.

Preamble:

The proposed project runs right through a densely populated urban area at risk for a major earthquake. I am extremely concerned about this.

Request:

- a) Why is Trans Mountain proposing to build the pipeline through a densely populated urban area that is at risk for major earthquakes?
- b) Please explain the likely impact of a 6.0 or greater earthquake in the metro Vancouver area on the proposed pipeline and oil storage tanks in Burnaby.

Response:

- a) The Trans Mountain Expansion Project (the Project) is a proposal to expand the existing Trans Mountain Pipeline System, including the existing terminal facilities. Paralleling and expanding existing facilities reduces new disturbance, uses existing infrastructure and minimizes environmental effects. This is consistent with good project planning and best environmental practices.

While good planning and best practices favour using existing facilities, this does not reduce the rigour of conducting an assessment of the potential impacts associated with the expansion. Early in project planning Trans Mountain Pipeline ULC (Trans Mountain) tested the basic premise that expanding existing facilities is the most responsible approach to the development. Potential alternative marine terminal locations were considered based on the feasibility of coincident marine and pipeline access, and screened based on technical, economic and environmental considerations. These alternative locations included Kitimat, BC and Roberts Bank in Delta, BC. Trans Mountain ultimately concluded that constructing and operating a new marine terminal and new supporting infrastructure would result in significantly greater cost, larger footprint and additional environmental effects, as compared to expanding existing facilities. Accordingly, Trans Mountain did not continue with a further assessment of alternative termini for the Project.

- b) Please see response to Hackett R IR No. 1.4b.

1.6**Reference:**

Hearing Order, Appendix I, page 18: List of Issues. Issue #11: Contingency planning for spills, accidents or malfunctions, during construction and operation of the project.

Preamble:

I am concerned about Kinder Morgan's safety record.

Request:

- a) Please list every spill, rupture, explosion or other environmental hazards that have affected Kinder Morgan pipelines in the past 20 years.
- b) What were the total costs of cleanup and of external damage of each incident?
- c) How much of these costs were covered by Kinder Morgan?
- d) How much did insurance cover?
- e) What was the cost to any level of government?
- f) Provide details on how much people and communities in each affected area were compensated by Kinder Morgan.
- g) What were the causes of each incident?
- h) What amount of insurance does Trans Mountain have to cover the costs of pipeline or oil tanker accidents in the Burnaby area?

Response:

- a) Please see IR Response Eliesen_M_IR_No._1.10a for a list of regulatory reportable spills from 1961 to present, as well as a more detailed list for the last 10 years including causes. Please see IR Response NEB_IR_No._1.70a for a detailed account of each regulatory reportable spill in the last 10 years that required initiation of Trans Mountain's emergency management program.

See IR response Eliesen M IR No. 1.10a. and NEB IR No. 1.70a.

- b) Please refer to the response to Eliesen M IR No.1.10a.
- c) Please refer to the response to Eliesen M IR No.1.10a.
- d) Please see the responses to Eliesen M IR No. 1.10a and NEB IR No. 1.08e.
- e) KMC is unable to comment on any costs that may have been incurred by other parties in response to any of the listed incidents, as that information is not available to KMC. Please also see Eliesen M IR No. 1.10a.

- f) Please refer to Eliesen M IR No. 1.10a.
- g) Please see response to Eliesen M IR No 1.10a.
Please see Hackett A IR No. 1.6a.
- h) The coverage of the cost of an oil spill arising from a tanker accident is described in Volume 8A, Section 1.4.1.6 of the Application and further described in Trans Mountain's response to Allan R IR No. 1.21j.

The insurance coverage for the cost of an oil spill arising from a pipeline accident is described in Trans Mountain's response to NEB IR 1.08b-h.

1.7**Reference:**

Hearing Order, Appendix I, page 18: List of Issues. Issue #12: Safety and security during construction of the proposed project and operation of the project, including emergency response planning and third-party damage prevention.

Preamble:

I am concerned about vandalism to the pipeline during or after construction.

Request:

- a) How is Trans Mountain ensuring that no such acts of vandalism damage the pipeline causing spills?

Response:

- a) During consultation, vandalism was a noted concern for communities as referenced in the Environmental Socio-economic Assessment (ESA) Section 3, Volume 5B. Section 7.9 of Volume 5B notes a Security Management Program (SMP) is in place for the existing Trans Mountain Pipeline (TMPL) with further information available about this SMP in Section 11, Volume 4C of the Application. For construction, Trans Mountain will develop a Security Management Program (SMP) as per 5.3 and 5.3.1, Volume 4B of the Application, which will complement the existing TMPL SMP. The construction SMP will be based on a Security Risk Assessment (SRA) and address the mitigation of security risks, including vandalism. The construction SMP may include such mitigations as on-site security personnel; additional on-site security personnel to those who may already be employed; inspections; signage; and fencing or other similar physical barriers. Ninety days before construction, a construction SMP will be filed with the National Energy Board (NEB) as per NEB draft Condition 37 of the NEB's *Letter—Draft Conditions and Regulatory Oversight* (NEB 2014). Prior to completion of construction and at least 90 days before commencing operations of the new pipeline, an updated operations SMP will be submitted to the NEB also as per NEB draft Condition 37 noted above.

Summary of New Commitments:

- Commitment to NEB Draft Condition 37 as written.

1.8**Reference:**

Hearing Order, Appendix I, page 18, last sentence under List of Issues: “The Board does not intend to consider the environmental and socio-economic effects associated with upstream activities, the development of oil sands, or the downstream use of the oil transported by the pipeline.”

Preamble:

I am concerned about climate change and ocean acidification, caused by too much CO₂ in the atmosphere. We have already surpassed the amount of CO₂ considered safe by scientists (350 ppm is considered safe; it is already around 400 ppm now), and if we continue to pump more CO₂ into our atmosphere, we will reach a tipping point after which there is no way to fix runaway climate change. We are all directly affected by these consequences.

Request:

- a) Why is the Board not considering the environmental and socio-economic effects associated with the development of the tar sands?
- b) Why is the Board not considering the environmental and socio-economic effects associated with burning the oil proposed to be transported by the pipeline?
- c) Where exactly does the CO₂ from the burnt oil end up?
- d) What responsibility does the National Energy Board impose on Trans Mountain for the consequences of these emissions?
- e) Are carbon-capture facilities in place, to reduce the environmental impact of the burning of the fossil fuels that would be transported through the pipeline?

Response:

- a) The information request appears to be directed at the National Energy Board, not Trans Mountain Pipeline ULC.
- b) The information request appears to be directed at the National Energy Board, not Trans Mountain Pipeline ULC.
- c) The information request is not relevant to one or more of the issues identified in the National Energy Board’s List of Issues for the Trans Mountain Expansion Project.
- d) The information request is not relevant to one or more of the issues identified in the National Energy Board’s List of Issues for the Trans Mountain Expansion Project.
- e) The information request is not relevant to one or more of the issues identified in the National Energy Board’s List of Issues for the Trans Mountain Expansion Project.