

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

1.1**Preamble:**

I have spent many hours of frustration trying to figure this process out. I cannot just sit down and work a computer like an expert. I'm far from it. I don't have a lawyer to do this for me, I'm just an ordinary Burnaby resident who is being bullied by the NEB and Kinder Morgan into an untenable situation. I believe this process is out of control for the average citizen and therefore many "individuals" will not be submitting their filing because of frustration - the frustration being bestowed on us by the NEB. Why has it been made so complicated for the average person. The NEB has made it virtually impossible for intervenors to do this easily. Therefore I will do my best to get my points across but please accept that I have tried and if I make a misreference then I still expect the NEB to accept my concerns.

I live on Northcliffe Cr. In Burnaby and found out from neighbours who had attended an initial KM meeting that a pipeline route was going through our back yard. Kinder Morgan had not contacted us previously nor have they since. They have communicated with me but at my request only. They have not proactively been "a good neighbour". This is a violation of our privacy, personal safety, health, and economic stability. I will be directly affected by the pipeline (on our property), the major inconvenience of potential construction, significant safety concerns, major property value losses, significant unknown potential health issues and many other issues that quite frankly we have no idea of. The massive dock KM is building will be 400-500 feet from my back door. There will be 3 ships parked there at any given time. Noise, lights, pollution, visual ugliness will severely impact our way of life. Only one ship was at anchor the other day and we couldn't sit out on the deck with the noise levels. That will only get worse and unbearable as they move the dock location closer to our house and have three ships in, with two more at anchor.

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- 01) I believe KinderMorgan is in contravention of their submission to the NEB in which they indicated that they have contacted all land stakeholders. We are a direct stakeholder as the pipeline route will be going right through our back yard, less than 75 feet from our back door. At no time has KM proactively contacted us regarding the location of the pipeline. At no time has KM proactively contacted us re land value discussions because of pipeline and dock visibility issues. Why is this?
- 02) What is KM going to do about our property values which have dropped significantly? Does KM expect us to seek legal counsel in order for us to satisfy this concern?

- 03) How is KM going to ensure retention of the value of our house (as of a year ago pre pipeline announcement and based on 2 independent realtors valuations) based on the fact that, instead of looking at a pristine view of Indian Arm, we will now be looking at a massive dock and 3-5 ugly ships totally disfiguring our view? This will significantly devalue our property, not to mention the possibility of 2 huge pipelines running through our yard.
- 04) How is this unsightly massive dock going to enhance the pristine environment that is now Burrard Inlet and Indian Arm?
- 05) What does KM expect me to do to maintain my relatively peaceful and beautiful environment?
- 06) What does KM expect me to do regarding the value of my property and potential losses?
- 07) How does KM feel that by constructing a massive dock, bringing in hundreds more noisy, dangerous, polluting ships in order to satisfy their coffers, they are contributing positively to our community?
- 08) We are extremely concerned about the location of the dock which, it appears from pictures obtained from Kinder Morgan, will be right below our house. That means 3 massive 800 foot long Aframax ships will be less than 1000 feet from our back door 24 hours a day, 7 days a week with potentially 2 more ships at anchor waiting for docking. The noise levels from just one of these ships is untenable and makes it uncomfortable, bordering on impossible, for us to be on our decks. I'd like to know why our personal safety, peace and quiet and way of life should be changed because of a pipeline being put in by a private corporation? We moved here in 1950 and under great protest from the then Westridge community, the Trans Mountain pipeline and tanks were installed in 1957 despite huge concerns from the neighborhood. The NEB had not yet been established to protect the property and rights of landowners so the project went ahead. Over the years, there have been many issues, noise, odors, lights etc. that we have had to put up with, and complain about, many with no resolve. That was with only 3 ships a month. That is now escalating to 3-4 ships a day! There will be no viable way to live here with that scenario. There is a ship out there right now and the droning noise is unbelievable. It is my understanding that each ship will require a minimum of 3 tugs to bring it in and dock it. They also are noisy and belch black smoke. How does KM expect the residents, who were here before they were, to live in this environment?
- 09) How is this project going to benefit me - a resident?
- 10) How is KM going to justify the stress levels our family has already undergone and will be experiencing in the future every day 24 hours a day?
- 11) How is KM going to 100% ensure that I or my family will suffer NO health issues, including heightened stress levels because of this potential untenable change in our lives? Note to NEB – KM has not completed any health studies (per their own admission).

- 12) How does KM believe that this situation – massive noisy docks, ships and tugs, dangerous pipelines etc. is going to positively benefit me and my family?
- 13) Why does KM feel it is acceptable to subject us to their plans without due consideration for our well being?
- 14) How is KM going to 100% ensure that there will be no danger when my grandchildren are playing above the pipeline in my backyard?
- 15) Why does KM feel it is acceptable to significantly impact the pristine environment in this area of the province?
- 16) We've been through one spill in our neighbourhood and it took years for things to get back to a semblance of normalcy. Why does KM feel it is acceptable to potentially subject us to another incident? The answer cannot be "it won't happen", as it already has happened.
- 17) How does KM feel that this project won't significantly impact this area?

Response:

- 01) Trans Mountain's regulatory obligation is to ensure we notify potentially directly affected landowners of our proposed project, inform them of our plans, provide them with opportunities to comment on these plans, and respond to those comments.

Trans Mountain's approach has been to contact potential landowners prior to providing information about study corridors to others. Unfortunately, in this case Trans Mountain was unable to do so and regret the concern this caused the Corcorans and their neighbours. Trans Mountain appreciates the Corcoran's concerns and it has taken a number of actions in response.

In June 2013, Trans Mountain was contemplating a pipeline corridor from the Burnaby Terminal to the Westridge Marine Terminal that would have involved portions of the Corcoran land located between their residence and the Burrard Inlet. Since that time, Trans Mountain has been in ongoing communication with the Corcorans and their neighbours on Northcliffe Crescent in Burnaby through in-person meetings, email, telephone calls, and video conference. The Corcoran's home overlooks waters administered by the Port of Metro Vancouver. With over 3,000 vessel transits per year, Vancouver Harbour is one of the busiest harbours in Canada. Volume 8C contains additional information on vessel traffic through the port.

Through the various meetings and communications we have had with the Corcorans and their neighbours, Trans Mountain understands the Corcorans have concerns specifically regarding the location of the proposed pipeline corridor and the location and design of the Westridge terminal and dock facilities. In response to their expressed concerns, Trans Mountain adopted a proposed pipeline corridor that avoids their lands and is instead routed through Burnaby Mountain. Details of that corridor are included within the response to NEB IR No. 1.40. Trans Mountain believes this change addresses their

concerns respecting the direct impact of the Project on their lands. Respecting their concerns about the Westridge terminal and dock facilities, Trans Mountain has been working with Project marine engineers to design a facility that would reduce the impact to Northcliffe residents, while at the same time addressing the other design requirements the project is required to meet. More specifically, the objectives of the development of the dock complex layout can be found in Section 3.4.4.1.4 of Volume 4A. These include:

- Provide the highest level of navigational safety, both for vessels berthing at Westridge Marine Terminal and for other vessels transiting the inlet or at one of the four anchorages nearby;
- Provide three Aframax capable berths, allowing capacity for vessels to wait for cargo or transit windows and reduce pressure on the anchorages (and the number of vessel movements);
- Allow the existing dock to remain in service during the construction of the new dock complex, and specifically until the new Berth 1 can be commissioned;
- Minimize the overall footprint and the impact to community views; and
- Eliminate deep-water dredging and reduce the amount of dredging for the foreshore expansion.

In summary, Trans Mountain appreciates that the Corcorans and the other Northcliffe residents are concerned with how the Project may impact them. The Trans Mountain Expansion Project team has met multiple times with Ms. Corcoran and her neighbours and have been undertaking specific actions to address their concerns to the extent we can. Trans Mountain remains committed to ongoing dialogue to understand and seek opportunities to address their concerns where practical within the constraints of the proposed Westridge Marine Terminal design concept.

- 02) As indicated in the response to Eliesen M IR No. 1.13a, the issue of impacts to property values has been raised during some open houses and through some emails, telephone calls into the Trans Mountain project office, and in meetings; primarily by adjacent landowners, rather than directly affected landowners. Trans Mountain recognizes that media coverage of this issue and statements by public officials expressing this concern have raised the profile of the issue in the public. As a result, Trans Mountain has undertaken specific research to address this perceived concern.

A review of previous research papers and articles, prepared by Dr. Tsur Somerville of the UBC, has been prepared to ascertain what other researchers and experts have found in their investigations of the potential impacts of pipeline development upon private properties. That literature review is included in the response to Amy C IR No. 1.3g. Please also see Syme N IR No. 1.4e.

- 03) Please see the response to your requests Corcoran K IR No. 1.1.01 and 1.1.02.
- 04) Building on its 60 year history and relationships, Trans Mountain continues to engage locally and work on ways to mitigate the impacts of the proposed expansion on the environment and local communities. Approximately twenty different layouts were considered for the Westridge Marine Terminal (WMT) dock complex. Section 3.4.4.1.4,

Volume 4A of the Facilities Application discusses the general objectives for the development of the dock complex, which include:

- Provide the highest level of navigational safety, both for vessels berthing at WMT and for other vessels transiting the inlet or at one of the four anchorages nearby;
- Provide three Aframax capable berths, allowing capacity for vessels to wait for cargo or transit windows and reduce pressure on the anchorages (and the number of vessel movements);
- Allow the existing dock to remain in service during the construction of the new dock complex, and specifically until the new Berth 1 can be commissioned;
- Minimize the overall footprint and the impact to community views; and
- Eliminate deep-water dredging and reduce the amount of dredging for the foreshore expansion.

For additional discussion on the process of selecting the location and orientations of the dock complex and berths, please see the response to City of Burnaby IR No. 1.31.01c.

For more information regarding Trans Mountain's approach to environmental enhancement, please see response to City of Port Moody IR No. 1.3.17a.

For an example of the environmental benefits of the proposed WMT dock complex design, specifically, an overall reduction in loading emissions, please see response to NEB IR No. 1.31.

- 05) As noted in the response to Corcoran K IR No. 1.1.01, Trans Mountain Pipeline ULC (Trans Mountain) is committed to ongoing dialogue with Ms. Corcoran and her neighbours to understand and seek opportunities to address their concerns where practical within the constraints of the proposed Project.

Trans Mountain has committed to adopting the mitigation measures outlined in its Pipeline and Facilities Environmental Protection Plans (Volume 6B, 6C and 6D) to minimize disturbance during construction and operation.

- 06) Please see the response to your request Corcoran K IR No. 1.1.02.

- 07) Trans Mountain considers that the Project will have significant economic benefits for the City of Burnaby, BC and Canada. Please refer to Hackett A IR No. 1.2.2d for more information.

In addition to the benefits to the federal, provincial and municipal governments, 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; and community growth and well-being.

Trans Mountain acknowledges that some will be affected by the Project and remains committed to ongoing dialogue to understand and seek opportunities to address the Corcorans' concerns where practical within the constraints of the proposed Westridge Marine Terminal design concept.

- 08) Please refer to the response to your request Corcoran K IR No. 1.01.07.
- 09) 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. For more information please refer to the response to your request, Corcoran K IR No. 1.01.07 and Hackett A IR No. 1.2.2d.
- 10) Trans Mountain understands that the proposed Trans Mountain Expansion Project is of significant concern to Ms. Corcoran and her neighbours. The Trans Mountain Expansion Project team has met multiple times with Ms. Corcoran and remains committed to ongoing dialogue to understand and seek opportunities to address concerns where practical within the constraints of the proposed Project design concept.

As Ms. Corcoran is aware, since Trans Mountain originally developed its proposed pipeline corridors, based on input from the Corcoran's and their neighbours, the corridor along their property is now a proposed alternative pipeline corridor and Trans Mountain is pursuing a proposed revised pipeline corridor through Burnaby Mountain that would avoid this neighbourhood.

As noted in response Corcoran IR No. 1.1.01, Trans Mountain Pipeline ULC (Trans Mountain) is committed to ongoing dialogue with Ms. Corcoran and her neighbours to understand and seek opportunities to address their concerns where practical within the constraints of the proposed expansion Project.

- 11) Please refer to the Application, Section 8.8.2 of Volume 5B for a summary of the qualitative human health effects assessment resulting from spills at Burnaby or Westridge Terminals. As explained in this section a more focused and detailed HHRA will be completed and submitted to the NEB on June 16, 2014 to corroborate these conclusions and inform mitigation and emergency response plans.

Please see Surrey Teachers IR No. 1.5a for Human Health Risk Assessment report.

- 12) Please refer to the response to your request Corcoran K IR No. 1.1.09.
- 13) Trans Mountain understands that the proposed Trans Mountain Expansion Project is of significant concern to Ms. Corcoran and her neighbours. The Trans Mountain Expansion project team has met multiple times with Ms. Corcoran and her neighbours to address

this and other concerns and is committed to ongoing dialogue to address concerns and issues related to the proposed Project and ongoing operations.

As Ms. Corcoran is aware, since Trans Mountain originally developed its proposed pipeline corridors, based on input from the Corcoran's and their neighbours, the corridor along their property is now a proposed alternative pipeline corridor and Trans Mountain is pursuing a proposed revised pipeline corridor through Burnaby Mountain that would avoid this neighbourhood.

The social, economic, cultural, and physical well-being of local residents along the proposed pipeline corridor are important to Trans Mountain. Socio-economic studies have examined potential impacts related to a range of different factors of the human environment including the extent to which Project-related activities, toxic components, nuisances and environmental changes could have human health effects, and the consideration of community health and well-being (see Section 7.0 of Volume 5B).

- 14) Kinder Morgan Canada's (KMC) goal is to protect people and the environment. Safety is our priority. Please refer to the response to your request Corcoran K IR No. 1.01.11.
- 15) The Trans Mountain Expansion Project is an expansion of an existing pipeline system, and an expansion of existing terminals, including the Westridge Marine Terminal. The Westridge Marine Terminal is located within the Burrard Inlet, which is under the jurisdiction of Port Metro Vancouver. The Burrard Inlet and the Port Metro Vancouver are home to many other terminals and docks where vessels of different sizes and functions call. The expansion of the Westridge Marine Terminal will take place in the context of similar marine transportation activities already taking place within the Burrard Inlet.

Please also refer to the response to your request Corcoran K IR No. 1.1.04.

- 16) Kinder Morgan Canada Inc.'s (KMC) key priority is for the protection of the public, its employees, contractors and the environment. Although no spill is acceptable and they are a low probability event, accident can happen. KMC has robust integrity management, damage prevention and emergency preparedness programs in place. KMC recognizes the greatest risk of damage to the pipeline is from third party damage and has a group of pipeline protection and public awareness specialists dedicated to protecting our pipelines from this risk.

Trans Mountain understands that the proposed Trans Mountain Expansion Project is of significant concern to Ms. Corcoran and her neighbours. The Trans Mountain Expansion Project team has met multiple times with Ms. Corcoran and her neighbours to address this and other concerns, and is committed to ongoing dialogue to address concerns where practical within the constraints of the proposed expansion Project.

- 17) Please see the responses to your requests Corcoran K IR No. 1.1.04 and 1.1.05.

Summary of New Commitments:

- The Trans Mountain Expansion Project team has met multiple times with Ms. Corcoran and her neighbours to address this and other concerns and is committed to ongoing dialogue to address concerns and issues.

1.2**Vol 6.D. Westridge Marine Terminal**

- 1) How is the Port Authority going to establish the safety of all these new ships and ensure that they have the necessary insurance coverage on every new vessel coming into the Indian Arm area re this project?
- 2) KM continually indicates that they have looked at all possibilities re the pipeline and dock location. I disagree! Why have they not been able to discuss the dock location with Burnaby? Why have they not been able to utilize communication skills in order to move the dock to another location?
- 3) How much consideration has been given to the Delta Port as a viable location – minimal population, open seas, lots of room for ships, minimal impact on humans etc.?
- 4) They have indicated that they need land for the construction of their “tank farm”. I’d like to know why they feel it is ok to build a massive addition to the existing tank farm and endanger thousands of lives when there is a location (Delta Port) that would be more isolated with less impact on humans?
- 5) They say they have taken everything into consideration re the location of their dock. How have they taken into consideration our concerns, which have been reiterated to them over and over again? The answer cannot be “we have taken their concerns into the valuation of the project”. Then why is this massive dock right below our house, significantly impacting us negatively?

Response:

- 1) The first part of this information request appears to be directed at Port Metro Vancouver; please contact Port Metro Vancouver (PMV). All vessels within PMV are required to follow rules and regulations established through the PMV’s Harbour Operations Manual that help ensure safe operations. See *The Harbour Operations Manual* on the Port Metro Vancouver website.

For the second part of the request, Carriage of a “Certificate of Insurance or Other Financial Security in Respect of Civil Liability for Oil Pollution Damage” issued in accordance with the provisions of Article VII of the International Convention on Civil Liability for Oil Pollution Damage, 1992 Certificate of Civil Liability and enrollment with a member of the International Group of P&I Clubs are valid proofs of financial

responsibility for the internationally flagged vessels that will be the majority of vessels that call at the Westridge Marine Terminal and will continue to call in future.

- 2) Trans Mountain has brought the concerns of those living near the Westridge Marine Terminal to the attention of the City of Burnaby and discussed siting options for the expanded dock facility at Westridge. However despite Trans Mountain's continued best efforts to communicate with the City of Burnaby on these and other matters, very little input has been received from the City of Burnaby. City of Burnaby staff indicated to Trans Mountain that they had been directed by Council to only receive information from Trans Mountain. City of Burnaby staff have provided limited verbal and no written input to the proposed Project plans.

Twenty different layouts were considered for the Westridge dock complex. The process of selecting a location and orientation for the berths is influenced by a number of different criteria and involves optimizing a number of often competing interests, including:

- providing sufficient water depth and underkeel clearance for tanker vessel safety;
- providing sufficient space for vessel and tug manoeuvring;
- providing safe and secure vessel moorings under all foreseeable conditions of tide, wind, and currents;
- optimizing berth orientation relative to prevailing winds, currents, and tides;
- avoiding obstructing the navigation channel for passing vessel traffic;
- avoiding encroaching on established anchorage areas;
- minimizing changes to the existing waterlot lease areas;
- avoiding impinging on the waterfront access/waterlot rights of adjacent and neighbouring property owners;
- proximity to and interface with the uplands facilities and process constraints;
- minimizing dredging by placing the structures in deeper water;
- minimizing overall environmental footprint by keeping the facilities as compact as possible;
- engineering considerations such as maximum water depth and soil conditions, seismicity, liquefaction, etc.;
- minimizing impact (e.g. view sheds, lights, noise, odour, traffic) on neighbouring residential areas;
- ability to construct the new facilities without hampering the ongoing operations of the existing berth;
- construction schedule and duration, including fisheries sensitive periods;
- feedback from various stakeholders such as Port Metro Vancouver, the BC Coast Pilots, City of Burnaby, etc. as possible; and
- overall construction and maintenance planning.

In general, it is not possible to optimize all of these criteria simultaneously, as optimizing one criterion often means adjusting another. For example, spacing the berths further apart to provide more room for manoeuvring increases the overall environmental

footprint and intrudes more into neighbouring view-sheds. In assessing the various criteria, the overriding priority is the terminal safety as it pertains to navigation/vessel safety and spill avoidance, as well as safety and of operating personnel.

The dock layout option presented in the Application has been deemed the best suited for the location at Westridge and provides the necessary high degree of safety for the terminal, vessels, workers and other users of Burrard Inlet while minimizing the impact on those residing near the marine terminal to the greatest practical extent.

Please also refer to Section 3.4.4.1.4 of Volume 4A of the Application.

- 3) A response was provided in NEB_IR_No._1.39a which was filed with the National Energy Board on May 14, 2014. The following is the response:

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 where, 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 larger footprint and additional environmental effects, and a greater cost as compared to expanding existing facilities. Accordingly, Trans Mountain did not continue with a further assessment of alternative termini for the Project.

- 4) Please see response to your previous request (Corcoran K IR No. 1.2.3). Trans Mountain understands that the proposed Trans Mountain Expansion Project is of significant concern to Ms. Corcoran and her neighbours. The Trans Mountain Expansion Project team has met multiple times with Ms. Corcoran and her neighbours to address this and other concerns and remains committed to ongoing dialogue to understand and seek opportunities to address their concerns where practical within the constraints of the proposed Westridge Marine Terminal design concept.

Trans Mountain has been operating the existing Burnaby facilities and the pipeline for over 60 years safely and efficiently. Safety of the public and environment is our highest priority. Various risk assessments, including Human Health Risk Assessment have been conducted for Burnaby and Westridge.

- 5) The process of selecting a location and layout of the preliminary dock design as part of the proposed Trans Mountain Expansion Project is influenced by a number of different criteria and involves optimizing a number of often competing interests. See the response to Corcoran K IR No. 1.2.2 for more information.

Trans Mountain understands that the proposed Trans Mountain Expansion Project is of significant concern to Ms. Corcoran and her neighbours. Trans Mountain will continue to optimize the design of the Westridge Marine Terminal, including the dock and design layout. As this work continues, Trans Mountain will share information about the proposed changes with Ms. Corcoran and is committed to ongoing dialogue to understand and seek opportunities to address their concerns where practical within the constraints of the proposed Westridge Marine Terminal design concept.

The Trans Mountain Expansion Project is an expansion of an existing pipeline system, and an expansion of existing terminals, including the Westridge Marine Terminal. The Westridge Marine Terminal is located within the Burrard Inlet, which is under the jurisdiction of Port Metro Vancouver. The Burrard Inlet and the Port Metro Vancouver are home to many other terminals and docks where vessels of different sizes and functions call. The expansion of the Westridge Marine Terminal will take place in the context of similar marine transportation activities already taking place within the Burrard Inlet.