

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-05-13 12:45 PM	<p>I am in favour of this pipeline expansion as a resident of Langley Township, and as a past trades man that worked in the pipeline industry. The Operating Engineers is one of the four Building Trades that builds pipelines, we represent over 11 500 members in BC. The jobs and training that come out of this type of work is a benefit to all the people in BC. We have had many discussions directly with Kinder Morgan on this pipeline. If it's done to the best environmental standards and safely we can back this project.</p> <p>Pipeline is the safest way to transport energy, and the Kilometers of Pipeline in Canada is astronomical it's just a vast as the road system. The TOL will benefits from royalties that comes down to being a benefit for all the residents. Many people do not even understand that they have lived safely near a pipeline that runs through their residents for many years. Not to mention they have a small version of a pipeline running into their own homes. I support the new route as well; the new route would be less intrusive to many people than following the original line.</p> <p>BC is an energy Province, people need to start understanding that it's a major player in the economy, I have had several discussions with people wearing petroleum clothing about pipelines some just didn't understand or know much about them. Many just oppose it for unrealistic ideas, not everyone is ready to get rid of their furnaces, or stop driving their cars. I hope the TOL will support this project on moving forward I am very aware of how controversial this subject can be.</p>	No response required.	n/a
Email 2014-04-18 7:22 PM	<p>I just wanted to note my objection to the pipeline being run close to residences on the west side of the Redwoods golf course.</p> <p>When space is available I think there should be a reasonable distance between the pipeline and residences.</p>	Trans Mountain is committed to working with the Owners and Management of Redwoods Golf Course to finalize routing of the pipeline within the pipeline revised study corridor identified in NEB IR No. 1.40a and NEB IR No. 1.12a.	NEB IR No. 1.40a NEB IR No. 1.12a
Email 2014-04-19 6:45 PM	<p>I am extremely upset about the possibility of rerouting the pipeline. I do not approve of the pipeline in such a built up area through Walnut Grove anyway, however I am even more upset that I purposefully did not purchase a home in the current pipeline area to find out that it may be rerouted to right behind my house that I did buy!!!! I purchased this house as an investment towards our family's future. We are hard working people who have really really worked hard to have a great house as an investment for our children's future. Currently the open fields are wonderful with farmland and wild life galore.</p>	<p>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 and telephone calls into the Trans Mountain project office, 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.</p>	Volume 5B, Sections 4.0, 5.3 and 7.2.3 Volume 5D, Socio-Economic Technical Report Volume 7 – Section 2.0 and 6.2. Environmental Effects

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**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

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Email 2014-04-19 6:45 PM	<p>The visits from regular birds that come back every year to settle in our neighborhood is glorious to see. The streams behind us are I believe protected lands and waters. Even though the train comes through life is very serene. I would hate to see this land dug up and wild life displaced. The risk of spills concerns me greatly and the huge plunge in the value of my land which my husband and I worked so hard to pay for takes my blood pressure to another level, especially since we picked this location to avoid the pipeline in the first place.</p>	<p>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</p> <p>Trans Mountain's engagement is ongoing. On March 20, 2014 Trans Mountain filed Consultation Update No. 1 and Errata with the NEB, which reported the outcomes of our ongoing engagement activities with Aboriginal groups, landowners and stakeholders conducted following the filing of the Application through to December 31, 2013. In Q3 2014, Trans Mountain will file Consultation Update No. 2 with the NEB, which will report on the outcomes of Trans Mountain's ongoing engagement activities, including routing, with Aboriginal groups, landowners and stakeholders for the period of January 1, 2014 to April 30, 2014.</p> <p>As described in Section 4.0 of Volume 2a), protection of the environment is essential to the success of the Project and is a key performance objective of Trans Mountain. Examples of Trans Mountain's commitment to preserving and protecting the environment with investments in local environmental initiatives can be found in Section 1.2.1.7 Environmental Stewardship, and Section 1.2.1.8 Award-winning Projects the Anchor Loop Expansion of Volume 2a).</p> <p>Kinder Morgan Canada considers the prevention of spills to be its' primary goal and will employ the necessary management systems and resources to ensure that this goal is achieved for existing operations and on the TMEP. The measures available to prevent and mitigate spills from new pipelines and facilities will depend on the nature of the threat and the associated consequences of a spill. Many of the prevention and mitigation measures considered have been identified in other parts of the Application, primarily Volume 7: engineering designs that minimize integrity threats are detailed in Volume 4A, construction and quality assurance practices that will ensure the integrity of the pipeline and facilities through to commissioning in Volume 4B, and ongoing Integrity Management Programs (IMPs) that will be applied once the pipeline and facilities are operational in Volume 4C.</p> <p>Please see response to Amy C IR No. 1.3g with respect to assessment of impacts to property values. Please see Lin P IR No. 1.1c for information specific to Landowner rights and compensation.</p>	See above

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**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-21 11:03 AM	<p>I am opposed to the pipeline expansion going through neighborhoods. I feel it's too big a chance to take knowing that the safety of our lives and homes, where we feel safe, would be in jeopardy. No money is worth human life. The second reason I am opposed to the expansion is because it increases the risk of damaging our environment and specifically oceans. Again, no money is worth this kind of risk. The assault on our earth for financial gain by the greedy has taken its toll already. Man is good at building things ... but not at managing mishaps. i.e. Nuclear Power Plants, Space junk, and pipelines. air pollution. It's time to decide whether you're on the side of life or destruction of life. Are you good (God) or consumed by greed and evil, (Devil). Just one letter difference divides us.</p>	<p>Trans Mountain has been, and will continue to discuss and apply routing considerations and decision-making criteria in discussions with local stakeholders. Trans Mountain will continue to engage and communicate with communities as new information becomes available. Trans Mountain will continue to contact landowners along the existing TMPL right-of-way, if route alternatives are needed or for input to route refinement on affected properties, Trans Mountain will work with landowners to identify mutually agreeable solutions to concerns.</p> <p>Trans Mountain developed site-specific hydrogeological investigation activities that included field verified surveys, hydraulic response testing, monitoring requirements and water quality parameter surveys. A discussion of groundwater quality and quantity is provided under water quality and quantity in Sections 5.3 and 7.2.3. Mitigation measures are outlined in the Pipeline EPP (Volume 6B).</p> <p>Volume 7 identifies efforts to prevent spills and emergency management programs.</p>	<p>Volume 5B, Sections 4.0, 5.3 and 7.2.3</p> <p>Volume 5D, Socio-Economic Technical Report</p> <p>Volume 7 – Section 6.2. Environmental Effects</p>
Email 2014-04-22 3:48 PM	<p>Pipeline Feedback: Salmon River pump station, dikes and regional flooding:</p> <p>As you know, the Salmon River pump station at the mouth of the river helps drain flood waters from low lying areas around Fort Langley. There are also numerous dikes in the greater region around Fort Langley.</p> <ul style="list-style-type: none"> <li>• With the spectre of global warming, rising sea levels and BC glaciers retreating, will the additional greenhouse gas emissions resultant from Canadian bitumen production and eventual consumption overseas have an added impact on flood-related issues in the township?</li> <li>• The question arises whether tripling the bitumen volume through Langley Township will indirectly exacerbate flooding related concerns right here at home?</li> </ul>	<p>The concern 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.</p>	<p>n/a</p>
	<ul style="list-style-type: none"> <li>• Would the additional taxes raised from pipeline expansion (said to be about \$550,000 per year) be able to pay for the long-term cost of pump station maintenance and upgrades, dike upgrades and flood damage?</li> <li>• Would township even set aside collected taxes for this purpose, or spend it all on other things? To get a small idea of the cost (it's in the tens of millions of dollars) and who was expected to pay last time around, just see 2008 REPORT TO MAYOR AND COUNCIL 08-190 FILE: 5330-21.</li> <li>• Is pipeline expansion beneficial for Langley or will it actually come back to bite the residents? Property owners and residents in and around Ft. Langley have reason to be concerned. Township should sharpen its collective pencils and consider the long-term secondary impact that pipeline expansion would likely have.</li> </ul>	<p>These questions appear to be directed at the Township of Langley, not Trans Mountain Pipeline ULC. For a summary of benefits, including Canada and Regions, including pipeline communities, see Hackett A IR No. 1.22d.</p>	<p>n/a</p>

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**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-24 1:27 PM	<p>Thank you for voting unanimously on being interveners and also for asking for resident submissions. I am very grateful for the opportunity.</p> <p><i>The potential environmental and socio-economic effects of the proposed project.</i></p> <ul style="list-style-type: none"> <li>By agreeing to have this pipeline built we are saying that continued expansion of the tar sands is ok. The tar sands, as everyone knows, is one of the biggest, if not the biggest, emitter of carbon in the world. If we are in agreement with all the scientific evidence on global warming as it relates to carbon emissions, then continuing to develop and expand this area makes no sense at all.</li> </ul>	<p>The concern 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.</p>	n/a
	<ul style="list-style-type: none"> <li>The Kinder Morgan pipeline will carry diluted bitumen, an incredibly toxic concoction which, in the event of a leak will cause respiratory distress or worse. Children and the elderly are the most vulnerable. In Kalamazoo Michigan 60% of the local community experienced adverse symptoms from the toxic fumes released from the bitumen causing nausea, dizziness, headaches, coughing and fatigue.</li> </ul>	<p>Trans Mountain's existing pipeline has been transporting diluted bitumen through the pipeline since the mid-1980s.</p> <p>Trans Mountain has conducted a screening level human health risk assessment (SLHHRA) describes the nature of potential short-term and long-term health risks to people associated with exposure to the chemicals that could be emitted to the environment from the Project's pipeline and associated facilities under routine operating conditions. The SLHHRA examines the potential health risks attributable to the Project, in combination with existing conditions and all reasonably foreseeable developments in the region.</p> <p>A quantitative Human Health Risk Assessment modelled on the basis of an urban spill is included in Surrey Teachers IR No. 1.5a - Attachment 1.</p>	Volume 5D – Technical Reports
	<ul style="list-style-type: none"> <li>The Township of Langley has no emergency measures in place to cope with a spill or the health effects resulting from a spill.</li> </ul>	<p>This comment appears to be directed at the Township of Langley, not Trans Mountain Pipeline ULC. Trans Mountain has a mature emergency management system as documented in Volume 7 and includes a description of the ICS framework employed for emergency response, as well as Unified Command which allows for integration and input of local governments into the response.</p>	n/a
	<ul style="list-style-type: none"> <li>The Township of Langley is blessed with many rivers and streams all leading to the mighty Fraser River. In the event of a leak, bitumen is incredibly difficult to recover, because unlike other types of oil, it sinks in water. Not only do our fish and wildlife depend on clean water, but well water would be affected as would the traditional lifestyle of First Nations communities who fish the rivers for food. Clean water is a right and we have a responsibility to protect that for future generations.</li> </ul>	<p>Trans Mountain has a comprehensive safety and preventative maintenance program that includes the protection of stream and river crossings. These spill prevention systems are fully documented and can be audited by the NEB, the federal regulator of pipelines in Canada that cross inter-provincial boundaries and available for public knowledge.</p> <p>Volume 7 provides information on pipeline risk assessment, emergency preparedness, fate and behavior of heavy crude oils, assesses hypothetical spill scenarios, and outlines KMC's financial capacity to respond in the event of a spill. In Volume 7, Section 4, KMC commits to enhancements to the emergency management program.</p>	<p>Volume 7, Section 5.0, Fate and Behaviour of a Hydrocarbon Release</p> <p>Volume 7, Section 6.0, Potential effects of a pipeline Release</p>

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Email 2014-04-24 1:27 PM	See above	<p>For information on Fate and Behaviour of a Hydrocarbon Release see Section 5 of Volume 7 - Risk Assessment and Management of Pipeline and Facility Spills.</p> <p>Trans Mountain completed research to study the fate and behavior of diluted bitumen in large simulation spill tanks and was able to demonstrate the effectiveness of conventional equipment in recovering the spilled material. Trans Mountain is committed to continued participation in government and industry research programs to further inform emergency management programs for heavy oil spills. Many past studies are posted to our website at: <a href="http://www.transmountain.com/diluted-bitumen-info">http://www.transmountain.com/diluted-bitumen-info</a>.</p>	See above
	<ul style="list-style-type: none"> <li>The track record for clean-up on previous spills has resulted in a 15% recovery at best. If you take the example of the bitumen spill in Kalamazoo which occurred in 2010, the clean up continues to this day and the costs are upwards of a billion dollars. Who is going to pay for this if it happens in our region? Taxpayers? Kinder Morgan's insurance does not cover the costs of a major spill and I am personally not willing to pay for something that I am vehemently opposed to in the first place.</li> </ul>	<p>Trans Mountain is a supporter of the polluter pay principle and is confident that its liability insurance coverage of \$750M is adequate for the credible worst case spill that could occur. Marine Spill Risk and Response Preparedness is addressed in Allan R IR No. 1.21j.</p> <p>As indicated in Volume 7, Trans Mountain spill modeling illustrates that a full bore rupture of the pipeline is an extremely low likelihood event and economic analysis indicates an estimated spill cost of \$300M assuming worst case. It should be noted that the widely reported costs for Kalamazoo in excess of \$1B are not directly applicable given that it is US based and the geographical and socio-economic differences between countries.</p> <p>Trans Mountain is a strong believer in polluter pay and is working with the BC Provincial government to meet the stated criteria of world class marine and terrestrial spill response systems.</p>	Volume 7 – Risk Assessments and Management of Pipeline and Facility Spills, Section 9.0 Financial Capacity To Respond To A Spill
	<p><i>The suitability of the design and location of the proposed project</i></p> <ul style="list-style-type: none"> <li>The Township of Langley, as previously stated, has a large network of rivers and streams, which L.E.P.S. and other groups have been stewarding for years. Restoring the health and vibrancy of our wetlands takes time and a lot of volunteer energy. Disturbing this restoration by building a pipeline in this area would potentially jeopardize a lot of good work that has been done and a leak would be devastating. There is no suitable route through this region</li> </ul>	<p>The selection of the proposed pipeline corridor included both field and desktop assessments of the existing TMPL right-of-way and alternative routing locations and resulted in a preferred route. Where practical, the route for the proposed expanded pipeline will remain along the existing TMPL right-of-way. Where land use has changed since the pipeline went into operation in 1953, there may be a need to route parts of the new line away from the existing TMPL right-of-way. In these cases, Trans Mountain will look at alternatives through comprehensive routing studies in combination with its consultation process.</p> <p>Volumes 6A outlines Trans Mountain environmental compliance program and Volumes 6B, 6C, and 6D the Environmental Protection Plans (EPPs). These plans identify mitigation to reduce impacts to streams, rivers, and wetlands, Trans Mountain will develop a Restoration Plan that will identify location specific restoration for both the ROW and water bodies, and will work with local stream keepers to solicit input to these plans. Any local restoration works that are disturbed through the project will be restored to its pre-existing conditions.</p>	Volume 2 – Project Overview, Table 4.2.1  Volume 4A – Project Design and Execution – Engineering, Section 2.8  Volume 7 - Risk Assessment and Management of Pipeline and Facility Spills, Section 2.0

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Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-24 1:27 PM	<p><i>Potential impacts of the project on landowners and land use</i></p> <p>Credible Conversations has presented their research to Township Council as well as to two other forums in the Township of Langley demonstrating that property values decline in direct relationship to the location of a pipeline and the resale value of a home directly affected by a spill declines by 5-8%.</p> <p>The Township of Langley is an area of ALR and cultivated farm land. A spill would put a farmer's ability to earn a livelihood at risk.</p>	<p>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 and telephone calls into the Trans Mountain project office, 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.</p> <p>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</p> <p>In determining whether compensation is applicable to a specific landowner, Trans Mountain is guided by legislative and legal requirements. In general Trans Mountain's practice is to first minimize any potential 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. Should residual damages remain, Trans Mountain would provide commensurate compensation for damages directly related to and caused by the acquisition of lands, construction of the pipeline, and inspection, maintenance or repair of the pipeline.</p> <p>Legislative requirements for the Trans Mountain Expansion Project are set out within the NEB Act. Those provisions of the NEB Act apply specifically to directly affected parties and include:</p> <ul style="list-style-type: none"> <li>• Under NEB Act, Section 75, "A company shall, in the exercise of the powers granted by this Act or a Special Act, do as little damage as possible, and shall make full compensation in the manner provided in this Act and in a Special Act, to all persons interested, for all damage sustained by them by reason of the exercise of those powers."</li> <li>• Under the NEB Act Section 86, when a company acquires lands for its operations, they are responsible for any damages directly related to and caused by the acquisition of lands, construction of the pipeline, and inspection, maintenance or repair of the pipeline. Under that Section, compensation related to the installation of a pipeline includes compensation for the acquisition of lands, compensation for damages, and indemnification of land owners from all liabilities related to the company's operations. These requirements would apply to the Trans Mountain Expansion Project.</li> </ul>	<p>Volume 5B – ESA, Section 7.2.5.4</p> <p>Volume 5D TR 5D6 – Agricultural Assessment Technical Report</p>

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Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-24 1:27 PM	See above	<ul style="list-style-type: none"> <li>Under Section 97, factors an arbitration committee would consider in a determination of compensation include the market value of the lands taken both for permanent easement and temporary working space, loss of use of the lands by the owner, damages caused by construction and, noise and inconvenience that can reasonably be expected to arise from the construction. Trans Mountain is incorporating these factors in the compensation framework being developed for the Trans Mountain Expansion Project. Additional information respecting Trans Mountain Expansion Project compensation framework for directly affected landowners can be found in responses to NEB IR No. 1.29 and CGLAP IR No. 1.7b.</li> </ul> <p>The requirements of the NEB Act and company practice is to minimize and mitigate effects upon workers and community members through a variety of construction and environmental practices as documented in the application, including the Pipeline EPP and Facilities EPP. In addition to construction management personnel, Trans Mountain will have environmental inspectors in place during construction to ensure EPP measures are implemented as needed and as committed to.</p> <p>Trans Mountain's responsibility for compensation for impacts to adjacent, not directly affected, members of the community would arise should the activities of the company, after efforts to minimize and mitigate effects result in directly related damages as defined in the NEB Act.</p> <p>Should adjacent landowners be of the opinion that the operations related to the Trans Mountain Pipeline have caused them directly related damages as defined in the NEB Act, Trans Mountain would look to the affected parties to provide the company with information and documentation as to the nature and extent of the perceived damages. That information can be provided to the Manager, Land, Trans Mountain Pipeline. Using the information received, if Trans Mountain determines that damages resulted from the company's operations, it will provide any commensurate compensation due to the affected party.</p> <p>Trans Mountain is working with landowners to reduce the potential disturbance to agricultural lands and disruption of agricultural practices during construction. An Agricultural Management Plan has been developed to particularly reduce effects on agriculture, which includes measures related to weed management, re-seeding, soil compaction, livestock access, drainage and irrigation lines, management of crop disruption, and crop and productivity loss. Trans Mountain has retained Bruce McTavish, a local and regional expert in agricultural practices, to advise the project on agricultural and ALR issues.</p>	See above

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**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-25 9:07 PM	<p>We are close to the proposed route of the new addition to the Kinder Morgan pipeline as we are in the proximity of the CN line through North West Langley.</p> <ul style="list-style-type: none"> <li>• How can the Province even be considering this huge destructive plan to construct a special pipeline with all the hazards for the sole purpose of sending bitumen abroad?</li> <li>• The impact on the nearby farmlands and water systems will be lasting and intolerable especially when (not it) there is a problem with the pipe. Certainly all properties along the route will be threatened. Please use the 'intervener' status, so wisely chosen, to say No to Kinder Morgan.</li> </ul>	<p>This comment appears to be directed at the Province of British Columbia, not Trans Mountain Pipeline ULC.</p> <p>Trans Mountain's Facilities Application, filed on December 16, 2013, identified a proposed pipeline corridor and in some cases proposed alternative pipeline corridors. The Application reported Trans Mountain's public consultation activities for the period of May 2012 through to July 31, 2013; Aboriginal Engagement activities for the period of May 2012 through to September 30, 2013; and Landowner Relations for the period of April 2012, to July 31, 2013.</p> <p>Following the December 2013 filing, Trans Mountain continued its work to optimize the route and reduce impacts to people and the environment through a combination of technical and environmental studies, engagement activities and on-the-ground fieldwork. On March 20, 2014 Trans Mountain filed Consultation Update No. 1 and Errata with the NEB, which reported the outcomes of our ongoing engagement activities with Aboriginal groups, landowners and stakeholders conducted following the filing of the Application through to December 31, 2013.</p> <p>Trans Mountain has committed to a risk based design with the guiding principle of As Low as Reasonably Practicable (ALARP), committed to enhancements of its mature emergency management program, and through engineering and detailed design is confident that the pipeline will be suitable for safe operation.</p>	<p>Volume 2 – Project Overview, Section 3.0</p> <p>NEB IR No. 1.12a</p>
Email 2014-04-26 8:49 PM	<p>To me this pipeline does not serve any purpose, it does not reduce the high cost of Gasoline, there is a profit only for a selected few. And if there is ever a leak, the Taxpayer has to come up for the repairs. There for I am strictly against this project.</p>	<p>The Project is required from a broader public interest perspective to ensure that producers and governments obtain the highest value for their petroleum resources. Canadians are the ultimate owners of petroleum resources as represented through their provincial governments. The Canadian public is deprived of receiving the full market value for these resources when it is not possible to access the highest value end markets.</p> <p>Please also refer to Hackett A IR No. 1.2.2d. Project benefits are summarized on Volume 2 page Section 3.4 of the facilities application. Some of the highlights of the benefits to BC are:</p> <ul style="list-style-type: none"> <li>• \$2.8Billion of GDP increase for BC during construction</li> <li>• \$8.5 Billion of GDP increase for BC during the first 20 year operations</li> <li>• 36,000 equivalent person years of jobs in BC during construction</li> <li>• 30,000 equivalent person years of jobs in BC during the first 20 years of operations</li> </ul>	<p>Volume 2 – Project Overview, Section 3.0</p> <p>Volume 7 – Risk Assessments and Management of Pipeline and Facility Spills. Section 6.0</p>

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**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-25 9:07 PM	See above	<ul style="list-style-type: none"> <li>• \$309 million in additional provincial taxes to BC during construction</li> <li>• \$727 million in additional provincial taxes to BC during the first 20 years of operations</li> <li>• \$22 million annually in taxes to municipalities in BC during the first 20 years of operations</li> <li>• In contrast,</li> <li>• Trans Mountain has calculated a low probability credible worst case spill scenario of \$300 million, which would be entirely compensated by Trans Mountain.</li> <li>• Trans Mountain has calculated a low probability risk of a tanker oil spill in Vancouver, which would be entirely compensated by the oil tanker owners.</li> </ul> <p>Trans Mountain is a supporter of the polluter pay principle and is confident that its liability insurance coverage of \$750M is adequate for the credible worst case spill that could occur.</p>	See above
Email 2014-04-26 8:49 PM	<p>A few years ago my wife and I were walking on the walk, which is over the pipeline west of 216 St. It had rained the night before, and as I was walking I noticed some oil and the surface of a puddle. There are phone numbers at each street, so when I got home I called Kinder Morgan, and told them about it. They thanked me.</p> <p>Two hours later, the phone rang and it was Kinder Morgan. They told me they had checked their instruments and there was nothing to indicate a leak. Also they had sent an inspector out, and he reported that there was oil on a puddle where I had reported, and said that it was not their oil.</p> <p>This was before there was so much criticism of pipeline companies, so I have to concluded that they were very responsible at that time, and are probably more so now under so much public scrutiny.</p> <p>Therefore, I have to say I have no objection to Kinder Morgan going ahead with their project. The only concern that I have is that elaborate spill protection measures have to be in place, and BC taxpayers should not be expected to fund this unless they are completely compensated for these expenses.</p>	<p>Pipeline safety is Trans Mountain's number one priority, and through the experience gained in 60 years of operation, we have developed a mature suite of programs to maximize the safety of the pipeline. Engineering design, construction and operation of the proposed pipeline will meet the highest of standards and are documented in Volumes 4A, 4B, and 4C respectively.</p> <p>Kinder Morgan Canada has a mature Emergency Management Program (the Program), which is based on a combination of regulatory compliance, operational need, industry best practice, and lessons learned through regular exercises and actual incidents. Trans Mountain has committed to enhancements to what is already considered a high standard program. Trans Mountain supports the principle of polluter pay and is confident it has adequate insurance coverage for a credible worst case spill.</p>	Volume 7 – Risk Assessments and Management of Pipeline and Facility Spills Section 4.1 and

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Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-26 1:06 PM	<p>The potential environmental and socio-economic effects of the proposed project</p> <ul style="list-style-type: none"> <li>I don't believe there will be any negative environmental effects and believe the social-economic effects will be positive.</li> </ul> <p>The suitability of the design and location of the proposed project</p> <ul style="list-style-type: none"> <li>The location of the project does not affect me and so I won't comment on that aspect. I'll leave the suitability of the design to those more knowledgeable than I.</li> </ul> <p>Potential impacts of the project on landowners and land use</p> <ul style="list-style-type: none"> <li>This project does not affect me as a landowner directly. I believe that for those affected that it should be by consultation and compensation. There is already a Kinder Morgan pipeline in existence, I can't see that the land use issues for the present proposed pipeline will be any different than for the present pipeline.</li> </ul>	Comments only, no response required.	
Email 2014-04-27 8:43 PM	<p>This is a summary of my experience, and what I learned, when I attended the Kinder Morgan open house on April 2, 2014.</p> <p>This new pipeline is not to replace the old one, and it does not follow the old path exactly. They had two choices for the path, which were "preliminary". That would indicate the path they have put forward at their open houses can be changed.</p> <ul style="list-style-type: none"> <li>They will pay the Township \$600,000 a year, and have 1 billion in insurance in the event of a spill. This would not even come close to cleaning up a spill.</li> <li>Does anyone know how bitumen can be completely remediated, and the environment restored back to its state before a spill? Is that even possible?</li> </ul>	<p>The NEB has issued a draft Financial Viability and Financial Responsibility Guideline. The key features of the guideline are that the pipeline should have sufficient insurance, letter of credit, corporate guarantees, and/or other financial instruments to mitigate, remediate, and compensate affected parties related to the worst case spill. Secondly, the pipeline should have a dedicated letter of credit that is within the control of the NEB and is sufficient to stop and contain a worst case spill.</p> <p>Trans Mountain is a supporter of the polluter pay principle and is confident that its liability insurance coverage of \$750M is adequate for the credible worst case spill that could occur.</p> <p>This fact, combined with Trans Mountain spill prevention measures and emergency management programs provides confidence that the liability insurance program in place is adequate to cover the cost of any likely spill.</p> <p>Kinder Morgan Canada considers the prevention of spills to be its' primary goal and will employ the necessary management systems and resources to ensure that this goal is achieved. Prevention and mitigation measures are identified in the Application: engineering designs that minimize and mitigate integrity threats are detailed in Volume 4A, construction and quality assurance practices that will ensure the integrity of the pipeline and facilities through to commissioning in Volume 4B, and ongoing Integrity Management Programs (IMPs) that will be applied once the pipeline and facilities are operational in Volume 4C.</p>	Volume 7 – Risk Assessments and Management of Pipeline and Facility Spills Section 2.0

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-27 8:43 PM	See above	In the event that dilbit were to be spilled, the procedures for cleaning up the spill would be similar to cleaning up a conventional crude spill. Trans Mountain completed research to study the fate and behavior of diluted bitumen in large simulation spill tanks and was able to demonstrate the effectiveness of conventional equipment in recovering the spilled material. Trans Mountain is committed to continued participation in government and industry research programs to further inform emergency management programs for heavy oil spills.	See above
	<ul style="list-style-type: none"> <li>I was told they have valves that can be closed if they detect a pressure drop. When I asked how long it takes to detect a pressure drop, and how long from detection of pressure drop to having the valves totally closed, their representative said they had to be closed slowly and she didn't know how long it would take.</li> </ul>	Volume 7 Section 4 documents credible worst case spill scenarios and identifies a 10 minute identification and pump shutdown period, and 5 minutes for closure of the valve. The pipeline is monitored 24/7 through a centralized control centre. The spill outflow analysis included in Volume 7 models a credible worst case full bore rupture of the pipeline, which would cause multiple alarms through the SCADA system and be quickly recognized by a trained and skilled Control Center Operator.	Volume 7 – Section 4.0
	<ul style="list-style-type: none"> <li>When I asked how much bitumen would leak out in that time, she wasn't able to answer.</li> </ul>	Volume 7, Appendix B provides oil spill outflow analysis based on a full bore rupture modelled the full length of the pipeline. The model provides spill volumes for all petroleum products transported in the pipeline including diluted bitumen.	Volume 7 – Section 3.0 – Oil Spill Risk Assessment
	<ul style="list-style-type: none"> <li>I asked what their plan was to mitigate damage if there was an earthquake, and she said the pipeline does not follow a fault line. I explained to her that our land is susceptible to liquefaction, and they needed to realize the ground would shake if we had a major quake.</li> </ul>	Through its experience with managing pipelines in the varied terrain of North America, Trans Mountain is very aware of the effect of the geologic environment on its pipeline infrastructure. Our Natural Hazards Management Program is one of the key tools for managing the risks associated with natural hazards to pipeline infrastructure, including the potential risk associated with seismic events. The natural hazards program has included seismic assessments and upgrades of the TMPL, with a replacement of the Fraser River crossing in 2003 a result of the assessment. An Earthquake Action Protocol is also in place to shutdown the pipeline and rapidly prioritize locations for pipeline inspection following an earthquake. More details about our seismic safety measures and plans to ensure the proposed pipeline anticipates and mitigates effects of an earthquake can be found <a href="http://www.transmountain.com/seismicsafety-measures">http://www.transmountain.com/seismicsafety-measures</a> .	Volume 7 – Section 3.0 – Oil Spill Risk Assessment, Section 3.1.4

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-27 8:43 PM	<ul style="list-style-type: none"> <li>I asked what their plans were to mitigate leakage into the aquifer in the event of a leak. I pointed out that Walnut Grove has an aquifer, which feeds into streams and eventually into the Fraser River, and she said the pipeline is 30 feet deep. I pointed out the pipeline is pressurized and a sudden break would force the bitumen in all directions, and could easily contaminate and spread within an uncontained aquifer. This would then contaminate the Fraser River as well. What was their plan to mitigate the damage? She was not able to answer.</li> </ul>	<p>Trans Mountain has reviewed existing geological, hydrogeological and other information to determine potential hydrogeological conditions along the pipeline right-of-way and proposed facilities, which are documented in Volume 5 and 6 of the Application. The comprehensive assessment was based on site-specific hydrogeological investigation activities that included field verified surveys, hydraulic response testing, monitoring requirements and water quality parameter surveys.</p> <p>Trans Mountain developed site-specific hydrogeological investigation activities that included field verified surveys, hydraulic response testing, monitoring requirements and water quality parameter surveys. A discussion of groundwater quality and quantity is provided under water quality and quantity in Sections 5.3 and 7.2.3 of Volume 6B. Mitigation measures are outlined in the Pipeline EPP (Volume 6B).</p> <p>Volume 7 describes the Risk Based Design that will be employed for the project and identifies High Consequence Areas that will include populated areas, aquifers, rivers, and environmentally sensitive resources.</p>	Volume 6B - Water Quality And Quantity, Sections 5.3 and 7.2.3.  Mitigation measures are outlined in the Pipeline EPP
	<ul style="list-style-type: none"> <li>When I asked where the bitumen was going, she said it was going to Asia. So I said, "Let me see if I understand this correctly. we take all the risk, the Township gets \$600,000 a year (about the price of one single family home), the bitumen goes to communist China, which drives up the prices here at home, and I continue to pay ridiculous prices for gas at the pump. So what is in this for me?" She said it was good for Canada. I said, "No, this may be good financially for Alberta, and for those who have money invested in the tar sands".</li> </ul>	<p>The proposed expansion will enable Canada's access to diversified markets with its oil, while also increasing tax revenues that can be used to fund government projects and services Canadians depend on, such as health care, education, roads and infrastructure.</p>	Volume 5B - ESA Socio-Economic
	<ul style="list-style-type: none"> <li>I ended our discussion by saying I thought our resources should stay here, and we should get lower gas prices. This is a finite resource, and there is great concern surrounding the environmental damage that comes with developing the tar sands. I also pointed out that the original pipeline, which currently goes through Walnut Grove, is aging and increasingly susceptible to a breach, what is their plan to fix that? I was told there isn't one.</li> </ul> <p>I pointed out to her that my questions did not even begin to address the risk that occurs in shipping this bitumen through our inner harbour, and the increased danger to our coastline.</p>	<p>Pipeline safety is Trans Mountain's number one priority, and through the experience gained in 60 years of operation, we have developed a mature suite of programs to maximize the safety of the pipeline. The age of the pipeline is not in and of itself a reason for concern, with proper maintenance and monitoring, a pipeline can be safely operated indefinitely.</p>	Volume 4A - Project Design and Execution - Engineering

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-27 8:43 PM	<p>I thanked her for taking the time to speak to me, and left. In my opinion, the answers I received leave much to be desired. I hope the Township demands better answers than the one's I received the night of the open house. If this is the best they can do, then they have no business asking us to allow another pipeline through the Township.</p> <p>I was shocked when I came across this article. Is this what we have in store for us?  <a href="http://thinkprogress.org/climate/2014/02/09/3268751/alberta-tar-sands-leaking/">http://thinkprogress.org/climate/2014/02/09/3268751/alberta-tar-sands-leaking/</a></p> <p>Thank you in advance for your kind consideration of my comments. I hope you include them in your questions/concerns to Kinder Morgan. It is clear they are not prepared to deal with a major spill. They will profit, and the Township will be left with the risks</p>	<p>Trans Mountain has also provided extensive information on its ongoing integrity management programs, which will apply to the existing pipeline segments as well as the proposed new pipeline segments, in Section 8.0, Volume 4C of the Facilities Application. Additional information on the programs and procedures that Trans Mountain currently uses and will enhance to ensure the safety of the expanded pipeline system, including the existing segments are included throughout Volume 4C. The existing pipeline does not have a predetermined lifespan and has been successfully transporting diluted bitumen and synthetic crude oil for more than 30 years. With the continuing application of the programs and procedures described in Volume 4C, Trans Mountain anticipates that the existing pipeline will be able to safely operate for many more years, subject to the permission of the National Energy Board (NEB).</p> <p>Kinder Morgan Canada's (KMC) goal is to protect people and the environment. Safety is our priority. No spill is acceptable to Trans Mountain.</p>	See above
Email 2014-04-28 10:26 PM	<p>I am a resident of the Township of Langley, living in the community of Walnut Grove. My home is approximately 50 m from the current Trans-Mountain right-of-way/pipeline. When I moved into my current neighbourhood, I was fully aware of the proximity of the Trans-Mountain pipeline and was comfortable with its presence. This is of particular note because in my professional life I am a Professional Chemist and a Professional Biologist. My area of expertise is the investigation and remediation of petroleum hydrocarbon contamination and the assessment of hydrocarbon contamination on human and ecological health.</p> <p>It is my understanding that one of the reported benefits of the Trans-Mountain twinning is the opportunity to replace/upgrade existing aged pipeline in areas where the pipeline is being twinned. While this may be the case over the majority of the route, in the Walnut Grove community of the Township of Langley, the pipeline route has been redirected with the original Trans-Mountain continuing through the community while the new route goes further north. I am satisfied that the current operations of the pipeline do not pose an immediate risk to my home and family and that the new pipeline will be built with all the latest advancements.</p> <ul style="list-style-type: none"> <li>My primary concern for the Township of Langley (and my community of Walnut Grove) is the absence of a strong research base on effective methods to re-habilitate or decommission older pipelines in built-up communities.</li> </ul>	<p>The reference in the email that states, "one of the reported benefits of the Trans-Mountain twinning is the opportunity to replace/upgrade existing aged pipeline in areas where the pipeline is being twinned", is incorrect.</p> <p>Pipeline safety is Trans Mountain's number one priority, and through the experience gained in 60 years of operation, we have developed a mature suite of programs to maximize the safety of the pipeline. The age of the pipeline is not in and of itself a reason for concern, with proper maintenance and monitoring, a pipeline can be safely operated indefinitely.</p> <p>Trans Mountain has reviewed existing geological, hydrogeological and other information to determine potential hydrogeological conditions along the pipeline right-of-way and proposed facilities, which are documented in Volume 5 and 6 of the Application. The comprehensive assessment was based on site-specific hydrogeological investigation activities that included field verified surveys, hydraulic response testing, monitoring requirements and water quality parameter surveys.</p> <p>Trans Mountain developed site-specific hydrogeological investigation activities that included field verified surveys, hydraulic response testing, monitoring requirements and water quality parameter surveys. A discussion of groundwater quality and quantity is provided under water quality and quantity in Sections 5.3 and 7.2.3 of Volume 6B. Mitigation measures are outlined in the Pipeline EPP (Volume 6B).</p>	<p>Volume 4A – Project Design and Execution - Engineering</p> <p>Volume 6B - Water Quality And Quantity, Sections 5.3 and 7.2.3.</p> <p>Mitigation measures are outlined in the Pipeline EPP</p>

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-28 10:26 PM	<p>One feature underlying the new British Columbia Water Sustainability Act is the protection of potential watersheds/aquifers. In Walnut Grove the groundwater is located less than 3 meters below ground surface in sandy silt. The silt serves as an effective barrier to the movement of contamination as it slows the movement of subsurface releases.</p> <ul style="list-style-type: none"> <li>The pipeline in Walnut Grove runs through the Clayton and Nickelmek-Sepentine Aquifers, both of which were identified as highly vulnerable by Golder Associates in the 2005 Groundwater Vulnerability Mapping Project.</li> </ul> <p>An improperly decommissioned pipeline could pose a serious risk to these aquifers as it could serve both as a source of petroleum hydrocarbon contamination and a preferential pathway for the migration of petroleum hydrocarbon contamination to existing surface water bodies (like Munday and Latimer Creeks) and the identified unconfined aquifers.</p> <p>Any plan to twin the pipeline should include a detailed plan to address the aging infrastructure currently in the ground. It should include a defined set of commitments as to how this aging infrastructure will either be upgraded to meet current standards or decommissioned in a manner that ensures the safety of the groundwater and surface water resources in those portions of the Township of Langley where the line is not being upgraded.</p> <p>If you wish to follow-up on any of my comments, I am available in the evenings at the numbers presented below or can be reached via this email address.</p>	<p>Volume 7 describes the Risk Based Design that will be employed for the project and identifies High Consequence Areas that will include populated areas, aquifers, rivers, and environmentally sensitive resources.</p> <p>Section 12.0, Volume 4C of the Application provides a discussion regarding abandonment planning for the pipelines and facilities to be constructed for TMEP to ensure that they are eventually abandoned to the satisfaction of NEB and any other regulatory authorities having jurisdiction, and in consultation with Aboriginal communities, landowners, and stakeholders. Also included is a description of the NEB's Land Matters Consultation Initiative (LMCI) process and the principles that apply to abandonment of pipelines and facilities.</p>	See above
Email 2014-04-28 1:01 PM	<p>I am a resident of Langley (approximately 20 years), with many friends and family also residing in Langley. I also live 1 block away from the current Trans Mountain Pipeline, and pass over it twice a day, on my way to and from work. I would share my feedback on the proposed Trans Mountain Pipeline Expansion Project.</p> <p>This project is bad for Langley in the following ways:</p> <ul style="list-style-type: none"> <li>Many of the residents in the Township rely on well water. If/when there is a leak in the pipeline; the fresh water aquifer that supplies the wells will be impacted. If the water is contaminated, the residents will no longer have fresh water for drinking, household use, or for agricultural use (including irrigation and water for livestock and other animals). This would also mean that more people would have to connect to the municipal water system, putting further strain on the municipal water supplies.</li> <li>Property values will be negatively affected, as those people near or on the pipeline right-of-way will see their property values decrease.</li> </ul>	<p>Trans Mountain developed site-specific hydrogeological investigation activities that included field verified surveys, hydraulic response testing, monitoring requirements and water quality parameter surveys. A discussion of groundwater quality and quantity is provided under water quality and quantity in Sections 5.3 and 7.2.3 of Volume 6B. Mitigation measures are outlined in the Pipeline EPP (Volume 6B).</p> <p>Factors that may be of concern to residential property owners/occupants are considered in various parts of the Facilities Application. These factors include noise (Section 7.2.6 Acoustic Environment of Volume 5A), air quality (Section 7.2.4 Air Emissions of Volume 5A), sensory/visual disturbance (Section 7.2.4 HORU) and community way-of-life (Section 7.2.3 Social and Cultural Well-being).</p>	<p>Volume 5A -ESA Section 5.3, 7.2.3, 7.2.4 and 7.2.6</p> <p>Volume 5B - ESA Sections 7.2.3, 7.2.4 HORU</p> <p>Volume 5C – Biophysical TR Groundwater Technical Report</p> <p>Volume 6B -Water Quality</p>

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-28 1:01 PM	<ul style="list-style-type: none"> <li>• Langley residents take pride in Langley being a heritage farming community. We have several heritage farms and museums in the area where people come to learn about past farming practices. A leak from an oil pipeline could threaten these areas, as well as other historic sites (Fort Langley), and archaeological sites near or on the pipeline (either inside or outside of the Township's boundary).</li> <li>• Increased risk to the parks and natural environments used by wildlife and residents. Increased air pollution from the increase in tanker traffic on Burrard Inlet. A majority of the air pollution generated in Vancouver is pushed eastward into the Fraser Valley air shed.</li> <li>• Tanker emissions are quite substantial. Increase the vulnerability of the Township to natural disasters, such as earthquakes. Increase the risk to salmon and other fish species that use or reside in the Fraser River (such as sturgeon). Increase the risk of harm to sensitive mammal populations in the Fraser River and vicinity (such as otters and beavers). It is not possible to completely restore the site of an oil spill to its former condition. Impacts to First Nations rights, titles, and cultural practices.</li> </ul> <p>As it has been said, this project is not suitable for British Columbia as a whole, and that includes Langley. We take all the risk (financially and otherwise) on behalf of Kinder Morgan, for the benefit of a few short-term jobs and a slight increase to our municipal tax income. Additionally, if the project goes through and there is a spill event, the impacts of the event are felt for decades. One need only look at the examples in Alaska of the Exxon Valdez spill, or south to the Enbridge pipeline spill in the Kalamazoo River. When balancing those outcomes with the risks I have listed above, it's quite clear that this project is a bad deal for the Township of Langley.</p>	<p>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 and telephone calls into the Trans Mountain project office, primarily by adjacent landowners, rather than directly affected landowners. 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</p> <p>An ESA of the marine transportation and the effects of the Project-related increased vessel traffic was completed (see Section 4.0, Volume 8A). The marine studies covered a wide-range of topics including: marine sediment and water quality; marine fish and fish habitat; marine air and GHG emissions; marine acoustic environment; marine birds; marine mammals; marine species at risk; traditional marine resource use; marine commercial, recreational and tourism use; human health and ecological risk assessments; accidents and malfunctions; and changes to the Project caused by the environment (<i>e.g.</i>, seismicity, climate change).</p> <p>Trans Mountain has loaded marine vessels since 1956 without a single spill from tanker operations. Close collaboration with organizations within the marine community such as Pilotage Authorities, Government organizations (Transport Canada and CCG) and PMV ensure that tankers navigate our local waters safely and are guided in and out of the port by highly-trained and qualified Pilots.</p>	Volume 7 – Risk Assessments and Management of Pipeline and Facility Spills  Volume 8A, Section 4.0 and 5.0
Letter 2014-04-14 8:37 (post mark)	You say in Thursday's April 17th paper that Kinder Morgan applied to almost triple the oil capacity. My input say is no pipeline expansion	No response required.	

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-29 11:11 AM	<p>I am writing to let you know that I oppose the current plans to build a pipeline on the west side of the Redwoods Golf Course.</p> <ul style="list-style-type: none"> <li>The impact on the Hyland Creek neighbourhood and also Madisson Park neighbourhood is huge. Obviously it will affect property values, but more important it will put a high number of people at risk in the event of a rupture, leak, or explosion. In addition, the surrounding neighbourhood has a high density with two elementary schools located nearby.</li> <li>If this were the only possible corridor to place the pipeline in, the more logical placement would be the east side of the golf course. It would place far fewer people in danger were there an issue with the pipeline once it was built.</li> </ul> <p>Thanks for your consideration</p>	<p>Trans Mountain is committed to working with the Owners and Management of Redwoods Golf Course to finalize routing of the pipeline within the pipeline revised study corridor identified in NEB IR No. 1.40a and NEB IR No. 1.12a.</p>	<p>Volume 5A - ESA - Biophysical Sections 5.3 and 7.2.3.</p> <p>Volume 7 – Risk Assessments and Management of Pipeline and Facility Spills</p>
Email 2014-04-29 2:16 PM	<p>Against the Trans Mountain Pipeline Expansion Project (west-side of Redwoods Golf Course). Thank you for the opportunity to share our position on the Kinder Morgan Pipeline expansion. As the existing pipeline passes through our property, we are directly affected, and appreciate the opportunity to share some of our many concerns.</p> <p><i>Potential Environmental Impacts.</i></p> <ul style="list-style-type: none"> <li>Climate change is real, and will impact us all. At what point should we stop making it worse? The best facts I can find convince me that that time is immediately.</li> <li>The tar sands are dirty in themselves. Tailings ponds and downstream air-born pollution is a growing disaster in Alberta. Should we be encouraging that catastrophe?</li> <li>The Athabasca River and its watershed are being impacted. If companies like Enbridge and Kinder Morgan are willing to exploit and destroy one province for money, why should they show more respect for us?</li> <li>Richard Kinder and Bill Morgan are ex-Enron Executives. Enron is the corporation that famously swindled its own shareholders out of approximately 11 billion dollars. The Wall Street Journal called Richard Kinder the "luckiest exEnron employee" - his predecessor Jeffrey Skilling is currently in prison. Both men are now billionaires. Richard Kinder is the 110th richest man alive with a net worth of \$8.2 billion. These are not nice people.</li> <li>US regulators have documented over thirty significant accidents and violations in that country associated with Kinder Morgan's operations. Kinder Morgan pipelines have exploded causing disasters and death. Kinder Morgan has paid out millions of dollars in fines and settlements.</li> </ul>	<p>Some of the concerns expressed are 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.</p> <p>Trans Mountain is assessing the carbon impact of constructing and operating the proposed expansion of the TMPL and its related facilities. The GHG impacts are outlined in the ESA submitted with the NEB Facilities Application</p> <p>Volume 6 provides detailed assessment of all watercourses through the length of the pipeline and identify crossing methodologies and mitigation measures to minimize impacts. All crossings will meet NEB and DFO requirements and will require off-setting compensation for any negative impact or "harm". Protection of streams also includes riparian habitat and watersheds, special precautions, such as completing construction through wetlands and watercourses during the winter months when the ground is frozen, will be conducted on each of the river and stream crossings along the pipeline route. Water quality will be monitored during all instream activity.</p> <p>The TMPL has a 60-year history of safe and responsible operations.</p>	<p>Volume 5 ESA, Section 5.5</p> <p>Volume 4B – Project Design and Execution - Construction</p> <p>Volume 5A – Biophysical</p> <p>Volume 7 – Risk Assessments and Management of Pipeline and Facility Spills</p> <p>Volume 5B – Socio-Economic</p>

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-29 2:16 PM	<p>Here is a list of incidents involving Kinder Morgan's BC operations alone in the past several years:</p> <p><u>July 15, 2005</u>: About 210,000 litres of crude were released into the area surrounding the company's Sumas Mountain storage facility in Abbotsford, making its way into Kilgard Creek.</p> <p><u>July 24, 2007</u>: An oil spill occurred along the Kinder Morgan pipeline in Burnaby when a construction crew inadvertently hit the unmarked pipe with an excavator. Almost 250,000 litres (about 1500 barrels) of oil shot out of the ground, soaking a residential neighbourhood and seeping into the Burrard Inlet. At least 50 homes had to be evacuated.</p> <p><u>May 6, 2009</u>: A sizeable spill was discovered at the company's Burnaby Mountain tank farm, with almost 200,000 litres leaking out into the facility.</p> <p><u>January 24, 2012</u>: A pipeline rupture at the Sumas Mountain tank farm spilled an estimated 110,000 litres of oil. Local residents reported health problems including nausea, headaches and fatigue, and schoolchildren were kept indoors for fear of airborne toxins.</p> <p><u>April 3, 2012</u>: Another spill in a "containment area" at the Abbotsford Sumas Mountain facility caused nuisance odours and air quality concerns in surrounding communities.</p> <p><u>June 12, 2013</u>: A leak was discovered on the Kinder Morgan pipeline near Merritt, BC.</p> <p><u>June 26, 2013</u>: Just two weeks after the spill near Merritt, yet another leak was discovered -this time spilling up to 4,000 litres of oil at a site near the Coquihalla Summit, about 40 km east of Hope, BC.</p> <p>I would like to point out that Kinder Morgan is planning to triple the volume of oil it is shipping; therefore, we should expect even more frequent incidents. As well, the existing pipeline was designed to transport crude oil, not the much more abrasive diluted bitumen. Once the bitumen and it's highly toxic diluents reach the ocean, they will be transported by tanker to China. This is a catastrophe waiting to happen-the best data I can find suggests that bitumen will pollute all three levels of the ocean water, impacting the surface feeders, the mid-water life and the seabed. There is no known way to clean it up- so far as I can tell, no one even knows how exactly it will behave. Exxon Valdez is a continuing disaster, and it pales in comparison to this.</p>	<p>KMC as the operator of the TMPL is committed to transparency involving any and all spills that have occurred along its lines, or on partner vessels carrying KMC transported product.</p> <p>Trans Mountain has a comprehensive safety and preventative maintenance program that includes the protection of stream and river crossings. These spill prevention systems are fully documented and are audited by the NEB, the federal regulator of pipelines in Canada that cross inter-provincial boundaries and available for public knowledge.</p> <p>As a highly regulated company, Kinder Morgan Canada Inc. (KMC) is required to report incidents that meet a reporting threshold to the National Energy Board (NEB). While no spills are acceptable, when one does happen, it is cleaned up with the regulatory oversight of the National Energy Board. Based on our spill history, the majority of spills happen within KMC's terminal facilities, which are equipped with containment and clean-up can be done quickly, with minimal environmental impact.</p> <p>For a detailed list of the Trans Mountain spill history over 50 years, please see our: Spill History webpage: <a href="http://www.transmountain.com/spill-history">http://www.transmountain.com/spill-history</a>. Additionally, the following pages provide information on our most serious spills in the last decade: they discuss real spill details, remediation, and lessons learned: <a href="http://www.transmountain.com/ward-road-2005-spill">http://www.transmountain.com/ward-road-2005-spill</a>&gt; 2005 Ward Road incident.</p> <p>Also see Eliesen M IR No. 1.10a</p>	<p>Volume 3C – Landowner Relations</p> <p>Volume 5A – Biophysical</p> <p>Volume 7 – Risk Assessment and Management of Pipeline and Facility Spills</p>

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-29 2:16 PM	<p><i>Potential Socio-Economic Costs</i></p> <ul style="list-style-type: none"> <li>Lowered property values are a real concern and may impact the township's tax revenue.</li> <li>The historical records show that whenever there has been a serious spill, the company never covers all the costs.</li> <li>Global warming will lead to rising water levels; low-lying areas around Fort Langley will be impacted. What benefit is it to the Township if it is forced to set aside the comparatively small revenues from the pipeline expansion in order to cover those costs?</li> <li>In the case of a natural disaster, such as a major earthquake, Langley Township will have all it can handle dealing with the effects of the quake. How would we deal with a shattered pipeline spewing bitumen on top of all that? Does Kinder Morgan have the insurance to cover damage from an 'act of God'? Is it even possible to clean it up? Enbridge is still cleaning up its 2010 spill in Michigan. (<a href="http://epa.gov/enbridgespill/">http://epa.gov/enbridgespill/</a>).</li> <li>Don't forget that once the oil is on a tanker, the oil companies and pipeline companies can claim they are no longer responsible. As a result, ship owners often register their ships in countries that allow them to set up almost invisible companies. When the ship experiences a big spill, the company just goes bankrupt and disappears.</li> </ul>	<p>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 and telephone calls into the Trans Mountain project office, primarily by adjacent landowners, rather than directly affected landowners. 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</p> <p>Factors that may be of concern to residential property owners/occupants are considered in various parts of the Facilities Application. These factors include noise (Section 7.2.6 Acoustic Environment of Volume 5A), air quality (Section 7.2.4 Air Emissions of Volume 5A), sensory/visual disturbance (Section 7.2.4 HORU) and community way-of-life (Section 7.2.3 Social and Cultural Well-being).</p> <p>Trans Mountain is a supporter of the polluter pay principle and is confident that its liability insurance coverage of \$750M is adequate for the credible worst case spill that could occur.</p> <p>Trans Mountain utilization of spill modelling illustrates that a spill approaching the maximum available liability limits is very low probability event. This fact, combined with Trans Mountain spill prevention measures and emergency response planning leads Trans Mountain to the conclusion that the liability insurance program in place is adequate to cover the cost of any likely spill.</p> <p>Trans Mountain works closely with local police and fire departments, government agencies, regulators and Aboriginal communities in developing and maintaining comprehensive plans to ensure preparedness for any type of potential emergency – land-based or marine-based. ERPs are constantly being updated to keep them current. The plans are location specific, identify locations of emergency response materials and equipment, and are regularly practiced through field deployment exercises. Trans Mountain supports the polluter pay principle and is responsible for all of its legal liabilities.</p> <p>Questions about the impacts of global warming are 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.</p>	<p>Volume 5A –ESA, Section 7.2.4 and 7.2.6</p> <p>Volume 5B – ESA, Sections 7.2.3, 7.2.4 HORU</p> <p>Volume 7 – Risk Assessment and Management of Pipeline and Facility Spills</p>

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-29 2:16 PM	<p>There are national and international "compensation funds" in place that may be accessed in the event of a major ship-source oil spill, but the maximum amount available from all those funds combined is still billions of dollars less than what would be required to recover from a serious marine spill. Therefore, the municipal, provincial and federal governments (and taxpayers) would be left having to pay the majority of the costs associated with an oil spill. That's us.</p> <ul style="list-style-type: none"> <li>• What benefits are we receiving that make taking this huge risk acceptable?</li> </ul> <p><i>Potential Impacts of the Project on Landowners.</i></p> <ul style="list-style-type: none"> <li>• The pipeline passes through our property, thus we are directly affected.</li> <li>• A Kinder Morgan representative who contacted me was not able/willing to tell me whether there was a possibility that groundwater, or my well could be contaminated by a spill, or what the impact would be on surrounding businesses like the Western Turf Farms. He was not able to tell me how much damage would be done to my pasture land, and that of my neighbours, in the event of even a small spill. He did suggest that the company would supply me with bottled water to drink should there be a long-term problem with my well. Seeing as I enjoy taking showers and washing my dishes, and have 8 horses, I was less than impressed, particularly since damage to groundwater would most likely be permanent. He was seeking permission for surveyors to come onto my property to survey, as he said the existing right of way is too narrow to accommodate the heavy equipment necessary to construct the new pipeline. He was unable to tell me how much damage this would do to my pasture land, how long the process would take, and though he promised that everything would be returned to it's original state, he was entirely unable to explain how that could be done; there was no suggestion that I would be compensated for loss of use or damage. He did imply that Kinder Morgan could simply expropriate my land if I was uncooperative. The Real Estate Board of Greater Vancouver published the following quote in August 2012 "Kinder Morgan wants to expand the general corridor to 150 metres (492 ft.) wide and within that, its current 9 metre (30 ft.) right-of-way to an 18 metre (60 ft.) right-of way. This could significantly affect properties along the route". They also pointed out that this was a potential expropriation zone. As I said before, these are not nice people.</li> </ul>	<p>Overall, the proposed expansion will enhance Canada's ability to reach diversified markets with its oil, while also increasing tax revenues that can be used to fund government projects and services Canadians depend on, such as health care, education, roads and infrastructure.</p> <p>Trans Mountain evidence on benefits is summarized on Volume 2 page Section 3.4 of the Application. Please also refer to Hackett A IR No. 1.2.2d. Some of the highlights of the benefits to BC are:</p> <ul style="list-style-type: none"> <li>• \$2.8Billion of GDP increase for BC during construction</li> <li>• \$8.5 Billion of GDP increase for BC during the first 20 year operations</li> <li>• 36,000 equivalent person years of jobs in BC during construction</li> <li>• 30,000 equivalent person years of jobs in BC during the first 20 years of operations</li> <li>• \$309 million in additional provincial taxes to BC during construction</li> <li>• \$727 million in additional provincial taxes to BC during the first 20 years of operations</li> <li>• \$22 million annually in taxes to municipalities in BC during the first 20 years of operations</li> </ul> <p>Trans Mountain has a comprehensive safety and preventative maintenance program that includes the protection of stream and river crossings. These spill prevention systems are fully documented and can be audited by the NEB, the federal regulator of pipelines in Canada that cross inter-provincial boundaries and available for public knowledge.</p> <p>Trans Mountain does not have the right to expropriate land from landowners. In rare cases, the NEB could grant a Right-of-Entry Order to a pipeline company where the landowner and the company are unable to reach agreement and the NEB determines the Project is in the public interest. This type of order is made under the <i>NEB Act</i> that grants a company access to and use of a defined portion of land for the purposes set out in the order – such as the building and maintaining of a pipeline. This is a long and involved process and is not the way Trans Mountain wishes to conduct its business. Trans Mountain's goal is to treat all landowners fairly and equitably and to reach mutually beneficial agreement.</p>	<p>Volume 2 Section 3.4</p> <p>Volume 3C – Landowner Relations</p> <p>Volume 5B - ESA Socio-Economic</p>

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-29 2:16 PM	<p>In summary, let me point out that though currently we need fossil fuels, and may have to tolerate the current pipeline, the current pipeline meets our needs. The second pipeline is being built strictly to transport the dirtiest fossil fuel on the planet for sale to China. This will provide us with a few jobs, and possibly a small amount of tax revenue, but the huge profits will go, not to us, but to Kinder Morgan. Fort Langley will absorb all the risks and damage in return for very little. We urge you to join other Lower Mainland municipalities affected in rejecting this proposal.</p>	See above	See above
Email 2014-04-29 8:17 PM	<p>It is to our great relief that the Township has been granted intervener status to the National Energy Board. We hope that you can provide important input on behalf of the TOL citizens regarding the proposed Trans Mountain Pipeline Expansion Project.</p> <p>Along with the Township of Langley, we have a vested interest in this project, as the back of our property has a right-of-way for the proposed pipeline expansion.</p> <ul style="list-style-type: none"> <li>Of major concern to us is that we are the owners and caretakers of a unique wetlands ecosystem, Hunter Pond. Our property is bordered by the Zeigler Trail. The entire township and its visitors can view this incredibly beautiful area, which is ripe with waterfowl, songbirds, and occasionally beaver. We have recently spotted fish in our pond as well. Please see the attached photos for the property and location of the proposed pipeline.</li> <li>Hunter Pond is a continuation of Sparrow Creek, under which the current pipeline runs. Hunter Pond empties over a dam spillway, travels under Rawlison Crescent and then in to the Salmon River. Any damage to this waterway during construction of the pipeline or with future oil spills would be disastrous, not only to our unique property, but to all waterways down from us, including the Salmon River.</li> </ul> <p>A study of oil spills affecting marshlands states that 30 years after the fact, the land continues to be polluted with petroleum hydrocarbons. The study can be found here: <a href="http://www.ncbi.nlm.nih.gov/pubmed/112487296">http://www.ncbi.nlm.nih.gov/pubmed/112487296</a>. According to Conversations for Responsible Economic Development (CRED), Kinder Morgan has had numerous spills over the last 15 years, largely as the result of human error. Thus, with the proposed expansion of the pipeline, our property will be at serious risk for long-term damage. The CRED has a helpful summary of their findings on the potential environmental impact of the Kinder Morgan pipeline, which can be found here: <a href="http://credbc.ca/assessing-the-risks1">http://credbc.ca/assessing-the-risks1</a>.</p> <ul style="list-style-type: none"> <li>We have serious concerns about the environmental disaster that the Kinder Morgan pipeline could bring to our unique, beautiful property. We hope that the Township will bring these concerns to the National Energy Board and will help to preserve this unique ecosystem. (original included photos)</li> </ul>	<p>Trans Mountain's intention is to propose a route that minimizes impact to residences and communities (Volume 5A, Section 4). In Q3 2014, Trans Mountain will file Consultation Update No. 2 which will report on the outcomes of our ongoing engagement activities, including routing, with Aboriginal groups, landowners and stakeholders for the period of January 1, 2014 to April 30, 2014.</p> <p>Trans Mountain will comply with the applicable permit conditions issued by federal, provincial and local permitting agencies to restore baseline wetland function. As an example of Trans Mountain's commitment to environmental protection and restoration, several major restoration activities were undertaken on the award-winning Anchor Loop Project to ensure a positive project legacy in both Jasper National Park and Mount Robson Provincial Park. Some of the legacy benefits of the Anchor Loop project include:</p> <ul style="list-style-type: none"> <li>Detailed mapping of the parks;</li> <li>Over 30 environmental and socio-economic technical reports. These included extensive wildlife species studies that enhanced the knowledge base for the Parks, as well as new information about bird migrations;</li> <li>Greenhouses to grow indigenous plants for the areas that were subsequently donated to the Hinton Community Garden;</li> <li>Rebuilt roads and bridges; and</li> <li>Functional and stable riparian and wetland area.</li> </ul> <p>Trans Mountain has a comprehensive safety and preventative maintenance program that includes the protection of stream and river crossings. These spill prevention systems are fully documented and can be audited by the NEB, the federal regulator of pipelines in Canada that cross inter-provincial boundaries and available for public knowledge.</p> <p>For a detailed list of the release incidents, please see our Spill History webpage: <a href="http://www.transmountain.com/spill-history">http://www.transmountain.com/spill-history</a>. Please see Eliesen M IR No. 1.10a for comprehensive detail of all spills on Trans Mountain pipeline for the past 10 years.</p>	<p>Volume 5A - ESA - Biophysical</p> <p>Volume 6 – Project Execution</p> <p>Volume 7 – Risk Assessment and Management of Pipeline and Facility Spills</p> <p>NEB IR No. 1.12a</p>

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-30 11:17 PM	<p>I am writing to you in response to the request for input on the Trans Mountain Pipeline Expansion Project. As a homeowner bordering the west side of Redwoods Golf Course, the study corridor Kinder Morgan proposed during their recent open house directly impacts my property.</p> <p>A route along the golf course's west property line would run directly along the edge of approximately 70 homes within the Redwoods area of Walnut Grove, including my own. The area is not composed of rural homes, instead being a developed suburb with a number of higher density residential developments. The pipeline would be extremely close to many houses, in some cases less than 40 meters away.</p> <p>This proposal directly contradicts Kinder Morgan's publicly stated objectives of minimizing disruption to municipalities and residents. Kinder Morgan has made no formal outreach to the affected properties in the Walnut Grove area that will be adjacent to the pipeline.</p> <p>I hold a number of serious concerns about the current proposal, all of which relate to effects on homeowners adjacent to the west property line of the golf course. These concerns include, but not limited to the following:</p> <ul style="list-style-type: none"> <li>• My understanding is that golf course currently has easements and/or restrictive covenants on the bordering homeowners, and as a result the impact the pipeline would have on neighbouring residents' property rights is unclear.</li> <li>• A narrow strip of natural land separates adjacent homeowners on the west property line from the golf course green. Generally referred to as 'the berm' by residents, the land is primarily forested and has dense foliage. The loss of trees and plants here would increase water runoff onto the residents' properties on the west side. Currently, most yards in the area are waterlogged for most of the year and changes to the berm would only increase the problem. Some properties have already experienced basement flooding.</li> <li>• The loss of trees and foliage in the berm would remove a natural privacy barrier. Most homes would find themselves directly exposed to a public establishment. This would have a significant, permanent effect on the quality of life for all residents.</li> </ul>	<p>Trans Mountain is committed to respectful, transparent and collaborative interactions with communities. Trans Mountain will continue to engage with the community, including continuing to share updated project information and addressing concerns about the proposed Trans Mountain Expansion Project as they arise.</p> <p>Trans Mountain's Facilities Application, filed on December 16, 2013, identified a proposed pipeline corridor and in some cases proposed alternative pipeline corridors. The Application reported Trans Mountain's public consultation activities for the period of May 2012 through to July 31, 2013; Aboriginal Engagement activities for the period of May 2012 through to September 30, 2013; and Landowner Relations for the period of April 2012, to July 31, 2013.</p> <p>Following the December 2013 filing, Trans Mountain continued its work to optimize the route and reduce impacts to people and the environment through a combination of technical and environmental studies, engagement activities and on-the-ground fieldwork. On March 20, 2014 Trans Mountain filed Consultation Update No. 1 and Errata with the NEB, which reported the outcomes of our ongoing engagement activities with Aboriginal groups, landowners and stakeholders conducted following the filing of the Application through to December 31, 2013.</p> <p>Trans Mountain's engagement is ongoing. In Q3 2014, Trans Mountain will file Consultation Update No. 2 with the NEB, which will report on the outcomes of Trans Mountain's ongoing engagement activities, including routing, with Aboriginal groups, landowners and stakeholders for the period of January 1, 2014 to April 30, 2014. Consultation Update No. 2 will provide more details on the consultation undertaken related to routing decisions in addition to the information provided in this IR response.</p>	<p>Volume 5A - ESA - Biophysical Sections 4.0, 5.3 and 7.2.3.</p> <p>NEB IR No. 1.12a</p>

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Email 2014-04-30 11:17 PM	<ul style="list-style-type: none"> <li>The berm has a slope along the majority of it. A pipeline routed here would likely require significant work to flatten and reshape the land, which could cause significant structural changes to residents' back yards.</li> </ul>	<p>Trans Mountain is required under NEB Act, Section 75, to do as little damage as possible, and make full compensation for all damage sustained through the exercise of those powers. Under Section 86 of the NEB Act, Trans Mountain is obligated to provide compensation related to the installation of a pipeline, compensation for the acquisition of lands, compensation for damages, and indemnification of land owners from all liabilities related to the company's operations. These requirements apply to all lands including forestry, agricultural and recreational lands. More specifically, Trans Mountain is obligated to and will, if it receives a Certificate of Convenience and Necessity, design and construct the pipeline in a manner that minimizes impacts and mitigates damages to the extent practical, use proven restoration techniques to return the lands to pre-construction condition, and return the land to its previous use. Easement agreements for each parcel specify those activities which are not allowed within a defined 18 metre corridor to avoid damage to the pipeline, but the majority of the lands disturbed during construction are restored. Through these activities, damage from the project is reduced and full compensation is offered for both land use and any damages that may occur. The project will generate significant economic benefits in the form of jobs, business opportunities, economic stimulus, municipal and provincial taxes. Volume 1, Section 4.5 of the application provides additional details on the nature and extent of the benefits that will accrue to BC as a result of the Expansion Project.</p>	See above
	<ul style="list-style-type: none"> <li>Walnut Grove homeowners adjacent to the west side of the golf course would receive no financial compensation due to any of these issues.</li> <li>During the routing phase after the NEB approval, there is a potential for the route being adjusted to place easements or restrictive covenants on homeowners' properties. An oil pipeline appearing on a property title would undoubtedly have a serious and permanent financial impact on property values.</li> </ul> <p>I respectfully ask that the Township of Langley firmly resist any proposals or plans from Kinder Morgan that have a study corridor or pipeline route that includes the west property line of Redwoods Golf Course. Even if Kinder Morgan makes different agreements now, there is the possibility that they will change their routing plans once the NEB gives their acceptance to the project.</p>	<p>Trans Mountain is committed to working with the Owners and Management of Redwoods Golf Course to finalize routing of the pipeline within the pipeline revised study corridor identified in NEB IR No. 1.40a and NEB IR No. 1.12a.</p>	

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
	<p>Out of all of the study corridors that have been presented by Kinder Morgan so far, their preferred corridor through Redwoods Golf Course impacts the greatest number of residential properties. Its clear Kinder Morgan prefers the route mainly due to the reason that they only need to deal with one landowner -the District of Langley -and all other affected landowners with homes directly on the border of the golf course will have no legal right for compensation from them.</p> <p>The current proposal is completely unacceptable for the reasons stated above, and should be unconditionally rejected until the proposal is modified to not include the west property line of Redwoods Golf Course in any capacity.</p>	<p>See above</p>	<p>See above</p>
<p>Email 2014—5-02 4:40 PM</p>	<p>As a Langley Township resident, I have some comments for the Township about the proposed twinning of the Trans-Mountain pipeline by Kinder Morgan.</p> <p>I would like the Township to consider the pipeline within the context of realistic alternatives. The status quo is not a realistic alternative, since the world is in constant change. One likely alternative is that oil will be shipped by rail instead, which I believe is less safe and more likely to cause environmental damage. As a Fort Langley resident I live close to the existing Trans-Mountain pipeline, but I live even closer to various railway lines. I lived here for several years before I realised how close the Trans-Mountain pipeline runs. I did not live here for more than a couple hours before I realised how close the railway is. Even if no oil ever spills from a train, shipping oil by train would be much more disruptive than by a pipeline because of the increase in the number of trains and the corresponding noise pollution and traffic congestion. Shipping oil by pipeline would allow the Township to have more say in the process of ensuring safety and environmental protection than shipping by rail.</p> <p>I am a professional engineer, and although I do not work directly for any oil and gas companies, some of my clients have customers in the oil and gas industry. I therefore see firsthand the indirect economic benefits of the Canadian oil and gas industry and of the pipeline industry.</p> <p>Obviously the pipeline should be located in the same right-of-way as the existing pipeline where possible. Where this is not practical, e.g. Walnut Grove, it makes sense to put the pipeline through the Redwoods golf course rather than through residential property and then along the railway right of way. There is a good deal of existing data in the Township on property values near the existing pipeline compared with similar properties farther away from the pipeline. I have not reviewed this data so I could only hypothesize as to what it says, but this data should be used to predict if there is likely to be any change in property values. Rhetoric and fear mongering in this regard is not helpful.</p>	<p>In developing the Project, Trans Mountain did not consider fundamentally different alternatives such as rail transportation rather than pipelines, or pipeline concepts to different destinations.</p> <p>Trans Mountain's Facilities Application, filed on December 16, 2013, identified a proposed pipeline corridor and in some cases proposed alternative pipeline corridors. The Application reported Trans Mountain's public consultation activities for the period of May 2012 through to July 31, 2013; Aboriginal Engagement activities for the period of May 2012 through to September 30, 2013; and Landowner Relations for the period of April 2012, to July 31, 2013.</p> <p>Following the December 2013 filing, Trans Mountain continued its work to optimize the route and reduce impacts to people and the environment through a combination of technical and environmental studies, engagement activities and on-the-ground fieldwork. On March 20, 2014 Trans Mountain filed Consultation Update No. 1 and Errata with the NEB, which reported the outcomes of our ongoing engagement activities with Aboriginal groups, landowners and stakeholders conducted following the filing of the Application through to December 31, 2013.</p> <p>Trans Mountain's engagement is ongoing. In Q3 2014, Trans Mountain will file Consultation Update No. 2 with the NEB, which will report on the outcomes of Trans Mountain's ongoing engagement activities, including routing, with Aboriginal groups, landowners and stakeholders for the period of January 1, 2014 to April 30, 2014. Consultation Update No. 2 will provide more details on the consultation undertaken related to routing decisions in addition to the information provided in this IR response.</p> <p>Please see Amy 1.3g for research specific to property values.</p>	<p>Volume 2 – Project Overview, Section 4.1 NEB IR No. 1.12a</p>

**TABLE 1.20A-1**
**TOWNSHIP OF LANGLEY, EMAILS RECEIVED FROM THE RESIDENTS (continued)**

Date / Method Engagement	Comments / Concerns Expressed	Trans Mountain Response	Application Reference
Letter 2014-05-02	(Hard copy letter) We are residents of Hyland Creek and we are very concerned about the pipeline to be constructed so close to a residential area and schools. The pipeline should be far from housing and schools as possible.	<p>Pipeline safety is Trans Mountain's number one priority, and through the experience gained in 60 years of operation, we have developed a mature suite of programs to maximize the safety of the pipeline. Engineering design, construction and operation of the proposed pipeline will meet the highest of standards and are documented in Volumes 4A, 4B, and 4C respectively.</p> <p>While no spill is acceptable to us, accidents can happen. Trans Mountain has a comprehensive response plan that includes working with local authorities to make sure the public and the environment are kept safe. Where the pipeline runs near schools, Trans Mountain is open to working with individual schools or districts to fully support their safety efforts and ensure their ERPs and ours are coordinated. Since the TMPL began operating in 1953, many communities have grown and developed around the pipeline right-of-way. It is important to understand that while the pipeline may be near homes and schools, it does not run under any buildings. Living or being active near our pipeline does not pose a health risk. In fact, There are community trails, sporting events, community gardens, businesses and agricultural activities safely co-existing near the TMPL.</p>	Volume 7 – Risk Assessment and Management of Pipeline and Facility Spills, Section 7.2.3