

TO: CITY MANAGER **DATE:** 2015 August 19**FROM:** DIRECTOR PLANNING AND BUILDING **FILE:** 33200-10
DIRECTOR ENGINEERING *Reference:* Kinder Morgan
CITY SOLICITOR**SUBJECT: PROPOSED TRANS MOUNTAIN EXPANSION PROJECT - UPDATE****PURPOSE:** To provide Council with an update on the scheduled hearing dates, summary of some notable findings from the National Energy Board (NEB) process and comments on the draft NEB conditions with respect to the proposed Trans Mountain Pipeline Expansion Project.**RECOMMENDATION:**

1. **THAT** this report be received for information purposes.

REPORT**1.0 INTRODUCTION**

On 2013 December 16, Trans Mountain applied to the National Energy Board (NEB) for a certificate of public convenience and necessity, and related approvals, pursuant to s. 52 of the *National Energy Board Act*, for the Project (the "Application"). The Project is a proposal to expand the existing Trans Mountain pipeline system between Edmonton, AB and Burnaby, BC. For Burnaby, the proposed expansion primarily for exportation of crude oil would result in:

- a) A new pipeline along a new route to the Burnaby Terminal;
- b) Addition of 13 new tanks, and one replacement tank, at the Burnaby Terminal resulting in an increase of storage volume from existing 1.6 million barrels to 5.6 million barrels;
- c) Two new 30 inch delivery lines connecting the Burnaby Terminal to the Westridge Marine Terminal; and,
- d) A new dock complex with three new berths at the Westridge Marine Terminal which would see the number of tankers at the Terminal increasing from 8 to 34 per month.

The Application provided that the proposed pipeline corridor for the two new delivery lines connecting the Burnaby Terminal to the Westridge Marine Terminal would follow alongside Burnaby Mountain Parkway, Hastings Street, and Cliff Avenue before turning east into the Marine Terminal (the "Original Route"). Trans Mountain subsequently confirmed that their preferred route was through Burnaby Mountain. The Original Route remains an "alternative route".

On 2014 April 02, the NEB issued a completeness determination for the Application and began the hearing process for the Application. Burnaby, which is opposed to this proposed project, was granted Intervenor status in the hearing for the Project.

Throughout this process, the City made extensive effort to ensure that its citizens are represented in the NEB Hearings, after less than half of the applicants were given an Intervenor status. The City has conducted a number of information sessions and meetings with its residents, and has had extensive discussions and received a great deal of input from residents. The City has also released numerous press releases and has maintained an updated website for the residents to obtain current information regarding the Project.

The purpose of this report is to provide Council with an update on the scheduled hearing dates, summary of some notable findings from the National Energy Board (NEB) process and comments on the draft NEB conditions with respect to the proposed Trans Mountain Pipeline Expansion Project.

2.0 HEARING DATES FOR THE PROPOSED TRANS MOUNTAIN EXPANSION PROJECT

On 2015 July 28, the NEB announced that it will hear oral summary argument for the proposed Trans Mountain Expansion Project on the following dates, and at the following locations:

- Trans Mountain on Monday, 2015 August 24 at the NEB Hearing Room in Calgary, Alberta.
- Intervenors from Wednesday, 2015 September 09 to Wednesday 2015 September 30 at the Delta Burnaby Hotel and Conference Centre.

Based on the information provided, Trans Mountain and each of the Intervenors will be allocated 90 minutes and 60 minutes respectively to present its oral argument to the Board. Furthermore, the Board has decided to limit access to the hearing rooms in both Calgary and Burnaby to Intervenors, Trans Mountain and accredited media. Intervenors and Trans Mountain may each have two representatives in the hearing room when the hearing is in session, regardless of whether they are speaking that day or simply watching the hearing. The Board will be broadcasting video of each hearing day live over Internet, via its website.

For Council's information, the City is scheduled to present its oral summary argument on Monday 2015 September 14 afternoon (see Attachment #1). Furthermore, in response to the attendance limit placed by the NEB for the hearings, the City filed a Notice of Motion with the NEB and has received approval which allows the Mayor and the City's Deputy Director Engineering to participate in the hearing in addition to the City two external legal counsels (see Attachment #2).

3.0 NOTABLE FINDINGS FROM THE NEB PROCESS

As the City's external legal counsel is working with staff to prepare Burnaby's written argument, the following facts have come to light as this process continues.

Oil Spills

- **Trans Mountain Failed to model the realistic scenario for a spill in Burrard Inlet.** Trans Mountain refused (in both the Application and in IR requests) to model a worst case oil spill in Burrard Inlet. The *Genwest* Report (from Burnaby, TWN and Vancouver) found that in the case of a major oil spill in Burrard Inlet, up to 90 per cent of the oil could end up hitting our shores within hours.

Reference: Oil Spill Trajectory Modelling Report in Burrard Inlet for the Trans Mountain Expansion Project, Genwest

- **Port Metro currently only escorts 60% of tankers – and will not commit to escorting all Trans Mountain tankers from the new project.**

Reference: Port Metro Vancouver response to Burnaby Information Request to Port Metro Vancouver, 10

- **Trans Mountain underestimated a major spill (and isn't prepared for the cost)** Trans Mountain's worst case pipeline spill (2,700m³) was nearly doubled by the recent Nexen pipeline rupture (~5,000m³). Cost estimates for the same spill volume that were done for other pipelines show that Trans Mountain's highest cost estimate of a spill (\$300M) is **five times lower** than a credible upper end limit (\$1.5B). Trans Mountain is insured for up to \$750M.

Reference: Trans Mountain response to Burnaby Information Request 1.01.03a, Gunton, T. & Broadbent, S. -Assessment of Spill Risk for the Trans Mountain Expansion Project

- **Trans Mountain has averaged 1.53 pipeline spills a year for a total of 5.8 million litres.**

Reference: Sean Kheraj, Historical Background Report: Trans Mountain Pipeline, 1947-2013

- **Trans Mountain tanker spill risk assessment is three times lower than the international standard approach would produce:** Trans Mountain estimates that the likelihood of a tanker spill is 16% over a 50 year period, while other spill risk studies have found the likelihood to range from 58%-98% over the same period.

Reference: Gunton, T. & Broadbent, S. -Assessment of Spill Risk for the Trans Mountain Expansion Project

Fire Risk

- **Fire risk in the Forest Grove neighborhood would be increased by 70% by the Project.** The proposed Burnaby Terminal expansion would present a significantly larger fire control risk than the existing facility, increasing the risk of community impacts outside the Burnaby Mountain Terminal from a fire event by more than 70%. Note that Dep. Bowcock's report includes a very lengthy review of the many difficulties of fighting the fires that would result from the new, denser tanks.

Reference: Report of Chris Bowcock, Deputy Fire Chief Burnaby Fire Department - Trans Mountain Tank Farm Tactical Risk Analysis

- **SFU danger:**
SFU provided an additional report which concludes: "Worst case scenarios of fires or explosions, and exposure to resulting plumes, have the potential to impact, or even envelop the university, and block access to and from SFU, thus making an evacuation difficult or impossible." The draft NEB conditions again require only that TM 'file a plan' for SFU evacuation after approval (6 months before operations)

Reference: SFU Report: Hazards to Simon Fraser University Associated with the Trans Mountain Expansion Project: A Gap Analysis, Draft Conditions 121

Boil-Over Event

- **Trans Mountain has ignored the risk of a Boil-over Event at the tank farm. The actual risk (of impact on the adjacent neighborhood) is real, and is higher than the allowable UK standard -** The report of Dr. Vince (on behalf of Burnaby), is that the risk is sufficiently high that it would be rejected in the UK (and the EU). In their response, TM debates Dr. Vince's numbers but then *admits* the probability of a boil-over event is higher than the UK standard. (2.1×10^{-6} vs 3×10^{-7} , ie roughly 10 times higher). They disagree with the UK standard. Dr. Vince says a boil-over is a credible worst case scenario, where heated tanks can explode, spraying burning crude over the mountainside.
- **The NEB's response? In their draft conditions, it is only to require that TM file a risk assessment after approval**

Reference: Opinion on Potential Off-Site Risks of the Proposed Expansion of Burnaby Tank Farm (Dr. Vince); Trans Mountain Response to NEB IR No. 6, 6.23, NEB draft Conditions

Alternate Locations

- **Trans Mountain has not properly considered alternative locations for the Project** and the risks and effects of those locations, as required for the environmental assessment for the Project, and the NEB has not demanded that Trans Mountain undertake such an assessment.

Dr. Vince set out in his report that in the UK (a far more crowded land than Canada, after all) this omission in itself would probably suffice to sink such an application.

Reference: Dr. Ivan Vince, Opinion on Potential Off-Site Risks of the Proposed Expansion of Burnaby Tank Farm and Trans Mountain Response to City of Burnaby I.R. No. 1, pp 1-2

Firefighting Capacity

- **The Burnaby Fire Department does not have the capability or capacity to respond to a hydro carbon event at the Burnaby Terminal and protect the residents of Burnaby.** The NEB's response to the unchallenged evidence of this lack of capability and capacity is to provide a draft condition to require Trans Mountain to "file a plan" (after approval but before operations).
- Similarly, the response to the Dep. Chief's evidence of the lack of an evacuation strategy is to "file a plan" (after approval but before operations) – including 'consultation with local municipalities" and "defining the roles of all parties". There is no mention of required commitments from Trans Mountain to provide firefighting equipment or personnel.

Reference: Report of Chris Bowcock, Deputy Fire Chief Burnaby Fire Department - Trans Mountain Tank Farm Tactical Risk Analysis and NEB Draft Conditions No. 118, 121

Risk Assessment

- **NEB will make a complete risk assessment for the project only a subsequent condition after approval.** The NEB seems to accept that a comprehensive risk assessment is lacking, but instead has made a comprehensive risk assessment only a condition of approval, including consideration of boil-over, flash fires and vapour cloud explosions, for the Edmonton, Burnaby and Sumas Terminals. The NEB does not require Trans Mountain to provide this assessment prior to consideration of whether the Project is in the public interest, indicating that comprehensive risk assessment is not in their view needed to consider the public interest.

Reference: National Energy Board Draft Condition No. 29

Pipeline through Burnaby Mountain

- **NEB does not require Trans Mountain to provide a decision on relocation of the current pipeline from the Burnaby Terminal through the Westridge neighbourhood** Not until after approval -- 6 months before construction. The NEB will clearly make its decision without knowing (or caring) about that outcome.

Reference: National Energy Board Draft Condition No. 28

- **Trans Mountain may have to completely replace the pipeline under Burnaby Mountain if there is a leak.** Trans Mountain acknowledges in a response to an information request of NRCAN that it may have to completely replace the pipeline under Burnaby Mountain through a new tunnel or conventional overland routing if there is a major leak.
Reference: Natural Resources Canada Written Evidence, Section 4.6.1, Review Approach and Results, paras. 134-137, 140

Seismic Risk

- **Trans Mountain's seismic studies for Burnaby are not complete, or field verified.** Trans Mountain is not completing geotechnical site investigations at sites they label "high" liquefaction potential until later 2015 and 2016. The NEB in the draft conditions only requires a final seismic report from Trans Mountain 90 days prior to construction – meaning that the NEB will recommend whether the Project is in the public interest without sufficient information on the seismic risk of the Project to Burnaby.
Reference: Trans Mountain Response to Burnaby IR No. 2(d), 2b and National Energy Board Draft Condition No. 71

Project Benefits

- **Trans Mountain hardly pays any taxes. On average, Trans Mountain paid only \$1.5M annually in corporate taxes from 2009 - 2013.** Over that same period, Trans Mountain sent \$167 Million in distributable cash flow to its US parent company. This is money coming out of Canada.
Reference: Robyn Allan, Trans Mountain Pipeline Big Bucks for US Investors, Peanuts for Us (The Tyee, Nov. 17, 2014).
- **The Trans Mountain Pipeline Expansion Project will add no new permanent jobs to Burnaby.** There are at most 60 jobs now, and will be 60 jobs after.
Reference: Trans Mountain Response to City Burnaby Information Request 1.02.02a
- **Trans Mountain's evidence shows that the project will create a large surplus capacity in the oil transportation sector,** even given its (excessively optimistic) oil production and supply estimates.
Reference: Trans Mountain Response to NEB IR 4.021
- **Trans Mountain has failed to advance any credible evidence on project need.** Trans Mountain's assessment of project need was provided by S. Kelly, who was just appointed to the NEB Board. The netbacks analysis for increased margins per barrel of oil were produced by the new NEB board member, who himself since admitted it was inappropriate to measure for long term shipping contracts. We take the position that evidence should be rejected.
Reference: Reply Evidence of S. Kelly

Department of Fisheries and Oceans Canada's Project Review

- **Department of Fisheries and Oceans Canada relied solely on Trans Mountain studies to provide its evidence.** In response to information requests of Burnaby, DFO acknowledges that its review of the Project is entirely based on the information provided by Trans Mountain and that it did not undertake research or studies of its own.

Reference: DFO response to Burnaby IR, 1(f)

- **Department of Fisheries and Oceans Canada did not consider impacts of an oil spill** in its assessment of the Project effects in relation to marine fish and fish habitat and marine mammals – stating that the “deposition of deleterious substances into fish bearing waters is the responsibility of Environment Canada.”

Reference: DFO response to Burnaby IR, 1(k)

Killer Whales

- **Trans Mountain admits it will cause “significant” impacts to Killer Whales.** Trans Mountain’s own analysis has shown that impacts to the Southern Resident Killer Whales will be significant. DFO accepts that evidence, but no mitigation measures have been proposed.

Reference: Trans Mountain Application 8A, Dr. Clark, Potential Acoustic Impact of Vessel Traffic on SKRW

Natural Resources Canada Review

- **Natural Resources Canada is undertaking studies on the behaviour of diluted bitumen in water environments and techniques for spill response** but won’t complete them prior to the NEB’s decision. NRCAN acknowledges in response to an information request of Burnaby that diluted bitumen “may sink in certain conditions”. Trans Mountain’s proposed spill containment and spill response techniques assume the opposite

Reference: NRCAN Response to Burnaby IR, 5(a)-(l)

NEB Process

- **The IR process has been a complete failure as a substitute for cross-examination.** Trans Mountain refused or failed to answer the vast majority of Intervenor questions (while answering all of the NEB’s questions). The Board then failed to require proper answers. In approximately 3792 motions made by Intervenors to get proper answers, the NEB directed Trans Mountain to provide better answers for only 147 (or less than 4%) in the two rounds of information requests. There is no opportunity to ask more questions. Those all remain unanswered.

Reference: National Energy Board Ruling No. 63, City of Burnaby press release

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- **Dozens of Intervenor (at least 37 to date) have pulled out of the NEB process describing it as unfair and biased,** and describing the NEB as a captured industry regulator. The NEB has not responded or addressed the serious concerns with its process.
Reference: Examples of the issues that Intervenor have expressed in pulling out of the process can be found in the letters of withdrawal of Robyn Allan and Marc Eliesen on 2015 May 19 and 2014 October 30 respectively

Burnaby Bylaws

- **Trans Mountain refused to commit to complying with bylaws.** Trans Mountain has dodged information requests by Burnaby on whether it will comply with Burnaby bylaws, only stating that it will apply for all permits and authorizations “required by law”, while denying in court the obligation to comply with Burnaby’s bylaws.
Reference: Trans Mountain Response to Burnaby IR No. 1, 1.03(a)

4.0 DRAFT CONDITIONS FOR THE PROPOSED TRANS MOUNTAIN PIPELINE PROJECT

On 2015 August 12, the NEB released their updated “Draft Conditions” for the proposed Trans Mountain Pipeline Project and has requested Trans Mountain and Intervenor to provide comments by 2015 August 20 and 2015 September 03, respectively. The City’s external legal counsel has reviewed the “Draft Conditions” and notes that “...the draft Conditions show a clear inclination to approval of the project. Almost all significant issues likely to be raised by the Intervenor, which might be matters of “public interest” demanding the rejection of the pipeline are instead deferred to a post-approval stage by requiring the ‘filing of plans’ (see Attachment #3). Staff has reviewed the draft Conditions and concur with the comments made by the City’s external legal counsel.

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5.0 CONCLUSION

The NEB has released hearing dates for Trans Mountain and Intervenor to submit their oral summary argument for the proposed Trans Mountain Pipeline Project, and the City is scheduled to present its oral summary argument on Monday, 2015 September 14 afternoon. In preparing for the argument, key notable findings regarding the proposed project have come to light which supports Council's opposition and ongoing concerns relating to the proposed project. A review of the recently released updated draft Conditions by the NEB for the proposed project equally supports Council's view of the failings of the NEB process.



Lou Pelletier, Director
PLANNING AND BUILDING



Leon A. Goss, P. Eng. MBA
DIRECTOR ENGINEERING



May Leung
CITY SOLICITOR

DD:ac

cc: Deputy City Managers
Director Parks Recreation and Cultural Services
Director Finance
Fire Chief

The City's opposition to this proposed project is framed by its concern for all citizens, the environment, and the protection of the community from the detrimental impacts of the Kinder Morgan's proposed project. The proposal, if approved, could have significant immediate and long-term risk impacts to Burnaby and surrounding Metro Vancouver region from economic, environmental and community perspective. The proposal would increase the potential risk of oil spills and environmental contamination of British Columbia's waterways and coastline.