City of Burnaby Opposition to the Kinder Morgan Trans Mountain Expansion Project

City Staff Presentation
Public Information Events
2014 April 9 + 15
Trans Mountain Expansion Project
Summary of Kinder Morgan Project Scope

Existing TMPL System
- 300,000 barrels per day (bpd)
- Single pipeline (158 km “twinned” as part of Anchor Loop Project)
- 1,150 km pipeline
- Light and synthetic crude oil products
- Expansion primarily in Edmonton

TMEP
- 890,000 bpd
- Two pipelines (Line 2)
- 980 km additional pipeline (reactivation of segments)
- Product focus shift to heavy crude
- Concentration of oil infrastructure expansion in Burnaby
Commercial Basis for the Expansion

• Export

• Open Season 2011 - 2012
  • 13 shippers with firm service transportation agreements for 15- and 20-year terms
  • Total contracted volume under these agreements: 707,500 bpd of the proposed 890,000 bpd

For comparison, 20% of the existing capacity of the TMPL meets 80 – 90% of B.C.’s gasoline and diesel needs
What does the Kinder Morgan Trans Mountain Expansion Project Mean for Burnaby?
Proposed Pipeline Infrastructure through Burnaby
Pipeline Infrastructure

- **Existing Pipeline**: 300,000 barrels per day
- **Proposed Pipelines**
  - 24" diameter: 350,000 barrels per day
  - 36" diameter: 540,000 barrels per day

**Total**: 890,000 bpd
Pipeline Infrastructure

EXISTING PIPELINE

300,000 BARRELS PER DAY

PROPOSED PIPELINES

600,000 BARRELS PER DAY

36" DIAMETER

540,000 BARRELS PER DAY

= 890,000 bpd

Proposed pipeline (Line 2)
Product Being Carried through Burnaby

- Focus shift to **heavy crude**
- **Line 2** (540,00 bpd) dedicated to **heavy crude**
- KM may also use the existing **Line 1** (350,000 bpd) for the shipment of **heavy crude** at lower capacity
Oil Pipelines through Private and Public Properties

• What is in a pipeline right-of-way?

Written Permission/Permit Required for works within the Safety Zone:

• Operating vehicles or mobile equipment over the right of way where a roadway does not exist;
• Reducing the depth of soil covering the pipeline;
• Ploughing below 30 cm (1 foot);
• Ground levelling;
• Installing drainage systems;
• Augering;
• Fencing; etc.

30 metre (100 foot) Safety Zone

18- 45 m in width (60 -148 ft.)
NOTE:

ALL SITUATIONS REQUIRING A VARIANCE TO THIS PROCEDURE MUST BE AUTHORIZED BY A KINDER MORGAN PIPELINE PROTECTION SUPERVISOR.

KINDER MORGAN INSPECTOR

GRADE

EXCAVATIONS USING POWER OPERATED EQUIPMENT WITHIN 5m (17 ft.) (HOT ZONE) OF PIPE REQUIRE PRIOR HAND/HYDROVAC EXPOSURE OF PIPE.

WORK WITHIN 0.6m (2 ft.) OF PIPE, NO MECHANICAL EXCAVATION HYDROVAC/SHOVEL ONLY ZONE

5m (17 ft.)

7.5m (25 ft.)

7.5m (25 ft.)

30m (100 ft.) WORK WITHIN 30m (100 ft.) GROUND DISTURBANCE SAFETY ZONE, MUST BE VERIFIED BY A KINDER MORGAN INSPECTOR 30 METRE (100 FOOT) GROUND DISTURBANCE SAFETY ZONE PERMIT REQUIRED.

30m (100 ft.) WORK WITHIN 7.5m (25 ft.) DISTANCE FROM PIPE, KINDER MORGAN INSPECTOR MUST BE ON SITE.

KINDERSMORGAN

PIPELINE PROTECTION ZONES MINIMUM STANDARDS

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PIPEC LINE TYPICAL DRAWING NUMBER

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Westridge Neighbourhood
Proposed Distribution Lines from the Burnaby Mountain Terminal to the Westridge Marine Terminal

Two additional distribution lines (30” pipes) proposed through the Westridge Neighbourhood

Net Impact to the Westridge Neighbourhood:

3 distribution lines through the existing residential neighbourhood via two separate pipeline corridors
Pipeline Study Corridors through the Westridge Neighbourhood

Reproduced Map January 2014

Kinder Morgan supplied Map March 30 2014
Burnaby Mountain Terminal
13 tanks | 125,000 bbl – 130,000 bbl | Capacity: 1.7 million bbl
2 local watersheds
14 new storage tanks | 250,000 bbl – 325,000 bbl | Capacity: 5.6 million bbl
Storage Tank Capacity

- House
- Existing Oil Storage Tanks: 125,000 - 130,000 barrels
- Proposed Oil Storage Tanks: 250,000 - 325,000 barrels
Distribution of the TMEP
Storage Capacity
Summary of TMEP Storage Tank Capacity

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<th>Location</th>
<th>Tanks</th>
<th>Capacity</th>
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<td>Burnaby</td>
<td>13</td>
<td>1.7 mil. bbl</td>
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<tr>
<td></td>
<td>+ 14+1</td>
<td>26 tanks 5.6 mil. bbl</td>
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<tr>
<td>Sumas</td>
<td>6</td>
<td>715,000 bbl</td>
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<td></td>
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<td>7 tanks 890,000 bbl</td>
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<tr>
<td>Kamloops</td>
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<tr>
<td></td>
<td>no tanks proposed</td>
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<tr>
<td>Edmonton*</td>
<td>35</td>
<td>8.0 mil. bbl</td>
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<tr>
<td></td>
<td>+ 5+5+1</td>
<td>39 tanks 9.25 mil. bbl</td>
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* Edmonton Terminal Expansion Project – 15 new storage tanks (one replacement tank) approved under separate application to the NEB in 2008, and amended in 2011 for additional capacity
20 new tanks distributed between the existing terminals

= 

72 storage tanks total with a capacity of 15.8 million barrels

For comparison 3 Aframax tankers can load approximately 1.7 million barrels
Westridge Marine Terminal
7065 Bayview Drive  |  15 acre site, plus 26.5 acre water lot
Existing Westridge Marine Terminal

Photo Credit: Stephen Rees
Conceptual  Westridge Marine Terminal Expansion  - 3.5 acre foreshore expansion
Conceptual Westridge Marine Terminal Expansion - 3.5 acre foreshore expansion
KM visual representation of the proposed Westridge Marine Terminal Expansion
Westridge Marine Terminal Activity

- From 8 tankers per month to 34 tankers per month
- Each tanker transporting between 550,000 – 580,000 bbl

EXISTING

PROPOSED
City of Burnaby Opposition
Burnaby is the wrong place to expand oil pipelines given the urban transformation and significant population growth of the City and broader Metro Vancouver region since the early 1950s.
Highlighted Concern

Land Spills and Accidents
Despite Kinder Morgan’s assurances to safely operate the Trans Mountain Pipeline System, *spills do happen*
KM’s Trans Mountain Track Record (2005 – Present)

Is this What Kinder Morgan Means by Operating the Trans Mountain Pipeline “Safely” for 60 years?

2005
• 1,320 bbl of crude oil leaked out of the Sumas Terminal (Abbotsford), polluting Kilgarg Creek

2007
• Burnaby Oil Spill (1,572 bbl)

2009
• 1,258 bbl oil leaked from Burnaby Mountain Terminal (contained on-site)

2012
• 692 bbl of oil spilled from ruptured pipeline at Sumas Terminal (Jan.)
• Leak in containment area at Sumas Terminal (April)

2013
• 12 bbl of oil leaked from pipeline outside of Merritt BC
• 25 bbl of oil leak detected outside of Hope BC
Burnaby Oil Spill 2007

• **Where:** Inlet Drive, Burnaby

• **Volume:** 250 m$^3$ (1,572 bbl)

• **Response Time:** 24 minutes

• 50 homes impacted; 250 Burnaby residents evacuated; 1200 m of shoreline along the Burrard Inlet impacted – long term impact to local ecosystems & wildlife

• **Cost of Clean-Up:** undisclosed by KM but estimated at + $15 M

• Court findings determined Kinder Morgan and 2 contractor companies at fault
Emergency Response

• Kinder Morgan is seeking the use of Burnaby infrastructure and resources, as part of their emergency response plan:
  
  • Fire Department and other municipal resources as “first-responders” to leaks, spills, fires, and other emergencies

  • Tie into the Curtis-Duthie Water Pump Station as a back-up water feed for the Burnaby Mountain Terminal (among other options)
Highlighted Concern

Who will pay for the cost of cleanup within the Burrard Inlet?
Kinder Morgan has advised that they are not responsible for oil spills that occur within the Burrard Inlet, once the oil tanker has been untied from the Westridge Marine Terminal.
Emergency Spill Response - Liability

• Polluter Pay Approach (Responsible Party)

• International Conventions, *Canada Shipping Act* and *Marine Liability Act* set liability at a $1.312 billion limit.

Four - tier approach to provision of funds:

- Western Canada Marine Response Corporation ($138 M)
- International Oil Pollution Compensation Fund ($174 M)
- International Oil Pollution Compensation Supplementary Fund ($840 M)
- Canada’s Ship Source Oil Pollution Fund ($160 M)
Greater than $1.3 billion, the Canadian government would be responsible for the cost of the oil spill clean-up.
Points of Clarification

Benefits to Burnaby
The taxes Kinder Morgan pays to the City is **NOT** an extraordinary benefit. **It’s business as usual.**

**KM taxes (2013): $ 7.0 M**
- only **$4.8 M** is to the City

If the TMEP is approved, an additional **$6.2 M** in taxes from KM, only **$4.4 M** would be to the City

A total of **$9.2 M** is insignificant when you consider other sources of revenue in the City
Summary: Significant Risks with No Net Benefits for Burnaby

• Kinder Morgan’s proposal seeks to only comply with the regulatory requirements of the NEB

• Off-setting benefits to the City is currently not part of Kinder Morgan’s proposal
End