

Trans Mountain Presentation

- Introduction
- Context within Community Safety Plan
 - ONEC
- Report Findings
- Dynamic Modelling
- Next Steps
 - Questions

INTRODUCTION



Context within Community Safety Plan

Report addresses two key priorities in the CSP

 Emergency Services – Increase the responsiveness of emergency services (ability to be efficient & effective)

Emergency Management

 \bullet

- 1. Reduce & prevent impact of emergencies
- 2. Increase preparedness to respond to major emergencies
- 3. Enhance response to and recovery from emergencies



ONEC

Joe Riordan

Principal Engineer

40 years in Oil & Gas Alyeska Terminal & Pipeline Embridge Pipeline Trans Canada Pipeline

Dr. Niall Ramsden

ENRG Consultants UK

Worlds Premier Expert on Tank Fire Management Coordinator of LASTFire Board Member NFPA 11

Neil Wong

Project Manager

Trans Canada Energy TransMountain Projects



REPORT FINDINGS



RIM SEAL FIRE





CONTAINMENT BAY FIRE



Izmut, Turkey 1999



TANK ROOF DISPLACEMENT



Wynnwood, USA 2007



FULL SURFACE TANK FIRE



Israel 1997 Hokkaido, Japan 2003







Tacoa, Venezuela 1982





Jetty Fires



Banjarmasin, Indonesia 2018 Busan, South Korea 2021



Insufficient TMX Response Resources



Insufficient on site Firefighting Resources.



Insufficient TMX Response Resources

2.

For Large Scenarios, it is doubtful that TMX resources could be deployed safely.



Insufficient TMX Response Resources



It is doubtful that TMX resources could be deployed within a timeframe to minimize potential for escalation to catastrophic events.



Direct Public Impact

4.

The fuel type could result in Vapour Cloud Explosions or Boilovers, both of which could result in major catastrophic damage inside and outside the fence.



Direct Public Impact

5.

A major incident could lead to public panic, jeopardizing access and evacuation routes and resulting in considerable pressure on emergency resources.



Health Impacts

6.

There are potential short and long term health effects as a consequence of the compounds produced by combustion, especially for those with respiratory issues.



Environmental Impacts

7.

The foam used on site contains Per- and Polyfluoroalkyl (PFAS) chemicals which are facing increasing regulatory controls, due to their "forever" nature and long-term environmental consequences.



Environmental Impacts

8.

A spill at the jetty, could result in a significant incident to the environment, which may have long lasting impacts to the local wildlife.



DYNAMIC MODELLING



Dynamic Modelling

Add Link to Video



NEXT STEPS

Subject to input and direction from Council:

- Inform Burnaby MLA's, EMBC and SFU regarding completion of ONEC study and reporting out of the findings in near future;
- Present staff report at the Open Council meeting with media release following shortly there after;
- Consider timing of the table top exercise inviting, in particular, province and federal emergency response staff.



QUESTIONS?

