**Hearing Order MH-052-2018**

**File OF-Fac-Oil-T260-2013-03-59**

**Reconsideration of Trans Mountain Expansion Project (Project)**

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# Final Argument of the District of North Vancouver

**January 22, 2019**

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## Introduction

The District of North Vancouver (the "District") was opposed to the Trans Mountain Expansion Project OH-001-2014 (the "Project") in the original hearing and remains of the opinion that the Project poses an unacceptable threat to the natural environment and human health due to the increased spill risk resulting from the increased tanker traffic. None of the evidence filed by Trans Mountain and the Federal Agencies in the Reconsideration has changed the District's opinion regarding the environmental impacts of a marine oil spill. Accordingly, the District remains opposed to the Project.

The primary concerns of the District with respect to the Project were – and continue to be - the adverse environmental and human health effects from a large-scale tanker spill and the effectiveness of spill response measures. The District also has broader climate change concerns about the increased greenhouse gas emissions (GHGs) associated with the Project, particularly in light of the 2018 report by the International Panel on Climate Change (Filing A97400 ).

The issue in the Reconsideration is the "environmental effects of Project-related marine shipping". This issue was the main focus of the District's submissions in the original hearing in which the District demonstrated that there were serious gaps and limitations in the emergency response measures. The District recognizes that improvements have been made in the spill response measures (as demonstrated in the evidence filed in the Reconsideration), particularly the recently completed Greater Vancouver Integrated Response Plan (GVIRP). However, ultimately, even with the best possible spill response efforts, oil will likely reach our shores in the event of a spill and serious and irreversible damage would result.

## Spill Response

Evidence filed in the Reconsideration continues to identify limitations associated with the spill response regime. The report by Nuka Research and Planning Group, *Further Technical Analysis of Oil Spill Response Capabilities and Limitations of the Trans*

*Mountain Expansion Project* (the Nuka Report) states that none of the Reconsideration evidence addresses response gaps or response viability (Filing A96446-2). The Nuka report notes that there are times when on-water recovery may be impacted by conditions such as darkness or localized fog banks which preclude aerial reconnaissance making it very difficult to track and target oil for recovery.

A number of initiatives relating to spill response were in the evidence of the Federal Agencies. These include:

(a) **Greater Vancouver Integrated Response Plan (GVIRP)** – a guide for multi-agency on-water response to serious oil pollution events. Human health concerns from evaporating spilled oil/dilbit is incorporated into the guide, but there are minimal details on the public health considerations. The Plan should be updated to address air quality assessment and evacuation planning.

(b) **Oceans Protection Plan (OPP)** - A number of projects will inform the District's existing spill response concerns but most are not expected to be completed to meet the timelines of the Reconsideration.

(c) **Model of Impact of Dilbit and Oil Spills in the Salish Sea (MIDOSS)** –a research project underway now at UBC to improve evidence-based planning for oil spills and improve modelling of dilbit in the coast ocean, including risk communication strategies. Completion expected by 2021.

The District is supportive of these initiatives and recognizes that they go some way toward addressing concerns about the effects that a marine oil spill would have on our marine and foreshore habitat. However, these initiatives will not be complete in time for the Reconsideration. And even with optimal spill response measures, spilled oil is likely to cause significant and permanent damage to foreshore areas, particularly given the challenges surrounding submerged oil recovery.

**Submerged oil recovery**

The District has continued to seek clarification on the efficacy of cleaning up submerged oil. We understand that WCMRC has a draft plan for sunken and submerged oil (A97008-11), but it is unclear when the plan might be finalized. The District made specific Information Requests to Trans Mountain regarding the anticipated efficacy (e.g. % of submerged and sunken oil that can be recovered) and the limitations (conditions on when it cannot be used (e.g. depth of water, weather, etc.) of the cleanup techniques. The information that was provided was the same information as we received in the OH-001-2014 proceeding - a list of on-water recovery equipment and no information on actual equipment that can recover sunken or submerged oil – and our specific question was not addressed.

Since the initial NEB review, the federal government has improved its understanding of the fate and behavior of petroleum products, including diluted bitumen, spilled into fresh or marine waters. Evidence provided by the Province of BC indicates that there is potential for diluted bitumen to sink in both fresh and saltwater. “There is general agreement across these studies that while there have been some incremental improvements in technology, sunken and submerged oils still prove challenging to track and recover, and such responses are typically resource-intense and relatively inefficient” (Filing A96401-3 Heavy Oil Fate and Effects).

The recovery of sunken oil remains a significant concern for the District given the estuarine circulation pattern in the Burrard Inlet-Indian Arm and the areas of turbulent mixing in the vicinity of the First and Second Narrows.

**Air Quality**

Considerations around air quality in the evidence filed have focused on protecting first responders rather than on more broad-based community concerns about air quality impacts in the event of a spill. Pre-developed strategies should be created based on a credible worst case scenario occurring in the summer months when 20% of the spill will evaporate. Also, no modelling has been completed for extreme heat days which are

projected to occur more regularly as a result of climate change. Real time air quality data should be collected and provided to local emergency planners. There are currently no permanent air quality monitoring stations on the North Shore for our community which is located in close proximity to Westridge Marine Terminal.

**Climate Change Initiatives – Local Level**

Responding to climate change requires collective action by all levels of government. The District is contributing to this collective action by undertaking a number of community and corporate level climate change initiatives to make our community more energy efficient, reduce its GHG emissions and reduce its dependency on non-renewable fuels:

(a) **Community Energy and Emissions Plan (CEEP)(draft)** – This is a draft plan to reduce our community's collective contribution to climate change by reducing GHGs and becoming more energy efficient. On January 21st, 2019, District Council directed staff to increase the GHG reduction targets in the CEEP plan as it is recognized that a more ambitious shift to low carbon energy sources is required to ensure that we meet our target of 80% reduction by 2050 (Pavey aff, para. 3.1 – Filing A97400).

(b) **Climate Change Adaptation Strategy (July 2017)**(Filing A97400) – This strategy was adopted after the close of the original hearing OH-001-2014. This strategy notes that increased cumulative impacts to the environment due to climate change are expected to impact foreshore ecosystems. In fact, the District is already witnessing the effects of climate change first-hand. A number of extreme climate-related events have occurred in the District in recent years, including extreme heat (resulting in multiple heat-wave warnings), extreme drought, poor air quality from large regional wildfires, unusually low snowfall levels that restricted winter recreation opportunities and intense rainfall events that caused debris flooding and resulted in significant damage to private and public property (Pavey aff, para. 3.2 – Filing A97400).

**Climate Change Initiatives – Federal and International Level**

The IPCC Report warns that urgent action is needed within the next twelve years to ensure that the global temperature does not rise above 1.5 $^{o}$ above pre-industrial levels. According to the IPCC Report, carbon emissions have to be cut by 45% by 2030 and brought down to zero by 2050 in order to avoid significant climate change impacts.

The federal government has undertaken a number of climate change initiatives:

(a) **Principles to Guide Review of Natural Resource Development Projects** - In January 2016, the federal government announced five interim principles to guide federal decision-making on environmental assessments. One of these principles is a commitment to assess direct and upstream GHG emissions.

(b) **GHG Assessment of the Project by Environment and Climate Change Canada (ECCC)** - ECCC conducted a GHG assessment for the Project which found that the estimated direct GHG emissions from the Project are 1.1 Mt (1,100,000 of CO2e per year). According to the ECCC review, the upstream GHG emissions associated with the entire Trans Mountain pipeline system, transporting 890,000 barrels per day, could be between 21 and 26 megatonnes of carbon dioxide equivalent per year. Considering only the 590,000 barrels per day capacity added by the Trans Mountain Expansion Project, the upstream GHG emissions could range from 13 to 15 megatonnes of carbon dioxide equivalent per year (Review of Related Upstream GHG Emissions Estimates - ECCC - Nov 2016).

(c) **International Maritime Organization (IMO) 2018 Strategy to Reduce GHG Emissions** - Canada has been working with the IMO. In 2018, the IMO agreed to an initial strategy on the reduction of GHGs and a path to reduce total annual GHG emissions from marine shipping by at least 50% by 2050. There is a vision to phase emissions out entirely in alignment with the Paris Agreement (Federal agencies response to NEB questions, October 31, 2018 – Filing A95292)

A lot of valuable work is being done on the local level as well as the national one to address climate change and, more specifically, to reduce GHGs. It is in this context that the NEB must consider the Trans Mountain expansion application. In the original hearing, the NEB decided to not consider the environmental and socio-economic effects from upstream (e.g oil production) and downstream activities (e.g. use of the oil product transported by the Project by consumers) other than marine shipping (Ruling 25 - dismissal of motion to include upstream effects of the Project - A3Z5I4.pdf). The District urges the NEB to take this opportunity to become part of the collective action on climate change and accordingly include an assessment of the direct and upstream GHG emissions in this Reconsideration of the Project.

**Conclusion**

The District remains of the view that the "environmental effects of the Project-related marine shipping" – i.e. the potential for an oil spill in the Salish Sea – pose too great a risk to the environment to be acceptable. If a spill were to occur, oil is likely to reach the District's shores even with the best possible spill response actions and response time. And from a climate change perspective, the expansion of the Trans Mountain pipeline is a step in the wrong direction and undermines the good work being done by many communities, including the District, as well as the federal government to address the environmental effects of climate change. Accordingly, the Project should be rejected by the NEB.

**Draft Conditions and Recommendations**

The District is generally supportive of the Draft Conditions and Recommendations with the following additional comments:

**Condition 91** – Plan for marine spill prevention and response commitments - the District submits that the District and any other interested local government that borders the Salish Sea should be added to the list of parties to whom a copy of the plan must be provided.

**Condition 133** – enhanced marine oil spill response capable of 20,000 tonnes within 36 hours – this time frame should be shortened to 24 hours

**Condition 144** – Ongoing confirmation of marine spill prevention and response commitments - the District submits that the District and any other interested local government that borders the Salish Sea should be added to the list of parties to whom a copy of the plan must be provided.

The District submits that the following should be added as "Recommendations" to the Project:

1. Reinstatement of an inter-governmental and multi-stakeholder committee similar to the Burrard Inlet Environmental Action Program (BIEAP) and the Fraser River Estuary Management Program (FREMP) for each of the sub-regions of the Salish Sea and coordinated as an overall unit. BIEAP and FREMP were two inter-governmental partnerships established to coordinate the environmental management of two significant aquatic ecosystems in the Salish Sea/Lower Mainland of British Columbia. This intergovernmental model provided coordinated environmental management, established important interagency and stakeholder communications and achieved outcomes for its partners. The BIEAP-FREMP project review database and search engines includes more than 3700 entries and is now available on the Community Mapping Network.

2. Formation of regional community advisory committees with indigenous, local communities and other key stakeholders to provide annual review of emergency response plans, reporting of incidents and updates of new technologies to improve spill response.

3. Green house gas emissions. Measures should include the expansion of shore electrical infrastructure to provide renewable energy (electricity) to ships at berth.

4. Develop a specific annex for GVIRP that addresses air quality considerations for public safety and evacuation/shelter in place based on the Health Canada guidance (2018) and involving inputs from Metro Vancouver, the regional health authorities and emergency planners such as North Shore Emergency Management (NSEM) to ensure that concerns raised in OH-001-2014 are fully addressed including new information that is becoming

available in projects such as MIDOSS. This should include modelling for worst case scenarios (i.e. hot summer day with maximum evaporation when larger number of people could be anticipated on or near Burrard Inlet) with winds blowing away from Westridge Marine Terminal towards the North Shore or during a temperature inversion where air is trapped to gain a better understand on how quickly information can be provided to understand neighbourhoods that could be impacted. The review should include whether there is a need for additional permanent fixed and mobile air quality monitoring equipment on the North Shore capable of early detection of volatile organic compounds and development of a real-time plan to inform evacuation decisions.

All of which is respectfully submitted by the District of North Vancouver.