

Comments from Dr. Gerald Graham re Trans Mountain Expansion Project Reconsideration Hearing Process

Here are my comments on the following items:

1) *Whether marine shipping should be included as part of the Project.* The answer is yes, as the recent Federal Appeals Court decision determined, and as was the case with the NEB/CEAA Enbridge Northern Gateway Joint Review Panel Terms of Reference. In short, the Trans Mountain Expansion Project should consist of three components: The pipeline; the marine terminal; and marine transportation routes (including Project tankers).

2) *Draft List of Issues.* Add the following issues:

A) “The chances (expressed in terms of probabilities as opposed to, for instance, so-called ‘return periods’) of small, medium and large marine oil spills occurring from Project tankers over the anticipated fifty year lifespan of the project.”

B) Consider a total loss of cargo during the winter months as the worst case scenario for a tanker oil spill. NB The 2013 Tanker Safety Expert Panel Report commissioned by the Government of Canada considered a total loss of cargo as a worst case scenario tanker spill in Canada.

C) Require the proponent to submit a so-called ‘gap analysis’ for tanker oil spill response operations, indicating the number of days each year when such a response operation would not be

possible, because of adverse weather conditions, e. g. winds and waves, or other constraints.

- D) Amend Issue #3 to read as follows (see italics): “Alternative means for carrying out Project-related marine shipping, *including alternative shipping routes, such as through Rosario Strait*, that are technically and economically feasible, and the environmental effects of such alternative means.”
- E) Add after Issue #5: Consider whether- and if so, to what extent, measures can be taken to prevent Southern Resident Killer Whales from becoming oiled during a marine oil spill incident, such as a Project-related tanker spill. Also consider whether there are any measures that can be taken that would allow Southern Resident Killer Whales to recover from such a spill, in both cases drawing upon the experience of the 1989 Exxon Valdez incident in Prince William Sound in Alaska.
- F) Add a second sentence to Issue # 6, as follows: “*In particular, examine whether the previous Panel erred in concluding that while a tanker spill would have a significant adverse impact on Southern Resident Killer Whales, such an incident was unlikely to occur.*”