

**Trans Mountain Pipeline ULC
Trans Mountain Expansion Project
NEB Hearing Order OH-001-2014
Parks Canada's Written Evidence**

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Executive Summary

The focus of the Parks Canada Agency for the Trans Mountain Expansion Project (TMX, or the Project) is the proposed scope of work and potential effects associated with the reactivation of 80 km of the 24-inch pipeline in Jasper National Park and the Yellowhead Pass National Historic Site, which was deactivated in 2008 when the TMX1-Anchor Loop Pipeline Project was completed.

Parks Canada's mandate is to "protect and present nationally significant examples of Canada's natural and cultural heritage, and to foster public understanding, appreciation and enjoyment in ways that ensure the ecological and commemorative integrity of these places for present and future generations." Under the *Canada National Parks Act*, ecological integrity is the first priority when making decisions about management of the Park. Commemorative integrity is Parks Canada's focus when considering the management of the Yellowhead Pass National Historic Site.

The scope of Trans Mountain's 24-inch pipeline reactivation work in Jasper National Park involves the following:

- The addition of new check valves and selective valve automation.
- Interventions at various locations to protect the pipe from natural hazards.
- In-line inspection; digs and repairs of varying complexity.
- Modifications at the Jasper pump station
- Hydrostatic pressure testing prior to activating the pipeline.

The full magnitude of reactivation work in Jasper National Park will only be known with accuracy following the in-line inspections of the 24-inch pipeline, scheduled for 2016. Generally, the effects of the proposed reactivation activities are similar to routine operations and maintenance activities. Trans Mountain does not propose divergence from the existing pipeline alignment. In some work locations, temporary workspace easements may be required to accommodate construction equipment and logistics. At least one major pipe segment repair/replacement is expected at a river crossing (Snaring River), which will involve more complex planning and construction techniques.

Project activities within Jasper National Park require permits and authorisations under regulations pursuant to the *Canada National Parks Act*. Accordingly, Trans Mountain will prepare detailed submissions for Parks Canada's development review and permitting process. Reactivation activities may be subject to further impact analysis in accordance with *Parks Canada Directive on Implementation of CEAA 2012* for project components not covered in adequate detail by the Project Environmental Assessment under CEAA 2012.

Parks Canada is mindful of the Crown's obligations to engage with Aboriginal communities whose traditional territories overlap with Jasper National Park, and urges that their interests be heard and reasonably accommodated. While the Agency is not the federal lead, Parks Canada has been proactive in ensuring that the Aboriginal groups that it shares a working relationship with are informed of key Project milestones. Trans Mountain has engaged with multiple Aboriginal groups, including those identified by Parks Canada, and has further engagement activities planned for 2015.

Similarly to the TMX1-Anchor Loop Pipeline Project, Parks Canada will work closely with Trans Mountain to develop a framework of Management Objectives and Desired End Results to achieve long term outcomes related to the ecological integrity, commemorative integrity, and visitor experience of Jasper National Park.

Parks Canada is of the view that with the implementation of Trans Mountain's environmental protection procedures and mitigation measures, and the Desired End Results framework, the

reactivation plan is not likely to cause significant adverse effects to ecological or commemorative integrity and visitor experience of Jasper National Park and the Yellowhead Pass National Historic Site.

Finally, while Parks Canada also manages several coastal properties in the Strait of Georgia, the Agency remains of the view that marine shipping aspects are properly addressed through the mandates of Transport Canada and Fisheries and Oceans Canada

1. Introduction

Parks Canada (PCA) is participating in the whole of government approach to the environmental assessment process for Trans Mountain Expansion Project (the Project) pursuant to the *National Energy Board Act* (NEB Act) and the *Canadian Environmental Assessment Act, 2012* (CEAA 2012) as a Federal Authority with an intervener status. PCA has regulatory and statutory duties in relation to the Project pursuant to the *Canada National Parks Act* and its *Regulations* and is contributing specialist and expert knowledge to the review panel for the Project.

The purpose of this document (PCA's Written Evidence) is to provide information about PCA's mandate in general and with regard to the Project. This document analyzes the material provided to the NEB by Trans Mountain (the Proponent) and addresses inaccuracies in the material filed by the Proponent to date on factual issues. It also outlines PCA's concerns and provides the terms and conditions to be included in any approval the NEB may issue.

2. PCA's Focus on Trans Mountain Expansion Project

PCA reviewed the material provided to the NEB with regard to the Project, the Orders-in-Council that authorized construction of the Trans Mountain Pipelines in Jasper National Park in the 1950s and in 2008 in the context of the *Canada National Parks Act* (CNPA), the *Jasper National Park Management Plan, 2010*, and other relevant policies. Based on that review, PCA has determined that its focus on the Project is the proposed scope of work and potential effects associated with the reactivation of 80 km of the 24-inch pipeline in Jasper National Park (JNP), which was deactivated in 2008 when the TMX1 - Anchor Loop Pipeline Project was completed. PCA therefore limits its contribution on matters pertaining to the scope of work and potential effects associated with reactivation plan within JNP.

The proposed approach to the pipeline reactivation includes inspection, repairs, automation of existing manual mainline block valves, and hydrostatic testing. Details on reactivation activities are provided by Trans Mountain in Section 3.6.5 of Volume 4A (Filing ID A3S0Y9). A summary is presented below:

- Modifications at the Jasper pump station: Trans Mountain requires approximately 250 m of 24 inch pipe to be installed between the station isolation valves within KMC's facility. This work is needed to enable pushing the ILI tools from Hinton to Hargreaves unimpeded.
- In-Line Inspection (ILI): ILI tools along with an initial gauging tool will be run through the pipeline. These tools will inspect the pipeline for any metal loss, mechanical damage and cracking as they would like to ensure that the pipeline is safe to resume transport of petroleum products. The ILI is currently scheduled for 2016.
- Repair Activities: The repairs will be completed as cut outs by replacing a damaged section of pipe with a new piece of pipe.

- Valve automation: Trans Mountain will automate several manual valve sites, if not all, and will add more valves in suitable locations. This will allow their Control Centre Operators to isolate a segment of pipeline as soon as possible after the leak detection system identifies a potential leak.
- Hydrostatic Testing: Trans Mountain will qualify the pipeline to its former Maximum Operating Pressure (MOP) by filling it with water and holding it at a pressure 1.25 times the Maximum Operating Pressure (MOP) for a period of eight hours.

The 24-inch pipeline is inactive and maintained in accordance with applicable NEB pipeline regulations and requirements. The final number of ILI tools will be determined in consultation with PCA. Existing access roads and power lines will be utilized as possible and any new infrastructure required to automate or add valves will be vetted with PCA. Trans Mountain does not intend to increase the MOP of the pipeline. The operating conditions of the reactivated pipeline will be similar to what they were prior to deactivation.

3. PCA's Mandate, Legal and Policy Considerations

PCA's mandate is to protect and present nationally significant examples of Canada's natural and cultural heritage, and to foster public understanding, appreciation and enjoyment in ways that ensure the ecological and commemorative integrity of these places for present and future generations.

In Jasper National Park, a 10,878 km² protected area located in Alberta's northern Canadian Rockies on the east side of the Great Divide, the *Canada National Parks Act* (CNPA, 2000) applies to the Project. Subsection 8(2) of the CNPA mandates PCA to consider the ecological integrity of Jasper National Park as the first priority when making decisions about management of parks. The CNPA states that ecological integrity means, with respect to a park, a condition that is determined to be characteristic of its natural region and likely to persist, including abiotic components and the composition and abundance of native species and biological communities, rates of change and supporting processes. Furthermore, the CNPA provides no authority to build pipeline on new ground except in the case of alterations or deviations. Section 15 (1) (a) and (b) states that the Minister may enter into easements over public lands in a park along an existing right-of-way or for the alteration or deviation of an existing right-of-way.

JNP is part of a 20,000 km² UNESCO Canadian Rocky Mountains World Heritage Site. This designation is intended to recognize areas of exceptional national beauty and aesthetic importance, significant landforms or geomorphic features; outstanding examples of plant and animal communities and ecosystems; and biological diversity and threatened species. Parks Canada is responsible for ensuring that the World Heritage Impact Assessment Principles (i.e.: *The likely environmental and social impacts of the Project on the site's Outstanding Universal Value must be assessed, including direct, indirect and cumulative effects*) are met.

The proposed reactivation also involved the Yellowhead Pass National Historic Site (YPNHS) located in the Miette Valley of JNP. PCA's *Guiding Principles and Operating Policy* (1994) provides a policy framework for all Parks Canada programs, including operational policy components related to the management of national historic sites (i.e. the *National Historic Sites Policy* and the *Cultural Resource Management Policy*). Commemorative integrity is PCA's priority when considering the management of national historic sites. It refers to the health or wholeness of a national historic site. The National Historic Sites Policy states that a national historic site will have achieved commemorative integrity when the resources directly related to the reasons for

the site's designation as a national historic site are not impaired or under threat, when the reasons for the site's national historic significance are effectively communicated to the public; and when the site's heritage values (including those not related to national significance) are respected by all whose decisions or actions that affect the site. The reasons for the designation of YPNHS as a site of national significance are: a) The Yellowhead Pass was used for brief periods from the mid-1820s to the early 1850s by the Hudson's Bay Company; and 2) The Yellowhead Pass became part of the Grand Trunk Pacific and Canadian Northern railway routes and a major highway crossing of the Rocky Mountains.

The *JNP Management Plan, 2010* sets forth policies and land-use direction for the management of the Park. The JNP Management Plan makes special note of concern about linear infrastructure already in the park – e.g., “Most park development, including the highway, rail and pipeline corridors, is located in valleys, which are also the most productive wildlife habitat”; “Road, railway and pipeline corridors affect the scenic quality of the landscape, disrupt aquatic connectivity, and support persistent non-native plant infestations.” The JNP Management Plan also states that careful stewardship and restoration along road, rail and pipeline corridors preserve the visual and ecological integrity of this scenic and historic place.

The scope of work and potential effects associated with the reactivation is clear and known. However, the magnitude of proposed work will only be known with accuracy following the conclusion of the in-line inspections of the 24-inch pipeline. PCA expects that details and specifications of the reactivation plan will be brought forward by Trans Mountain during PCA's permitting review process. At that time, the reactivation activities may be subject to further impact analysis in accordance with *Parks Canada Directive on Impact Assessment, 2015* for reactivation components not covered in adequate detail by the Project Environmental Assessment under CEAA 2012.

PCA's regulatory roles and responsibilities under the CNPA and its *Regulations* include the following:

- Development permit review for the pipeline reactivation plan
- Development and approval of an appropriate land use Agreement, and
- Issuance of applicable permits (development, building, restricted activity, etc.).

Details of PCA's regulatory are outlined in the Project Agreement signed by the Chief Executive Officer (CEO) of Parks Canada on September 6, 2014. Regulatory decisions pursuant to the CNPA and its *Regulations* and relevant policies can take up to 104 days (including land use Agreement) from receipt of a complete application.

4. Potential Environmental Effects

Direct and indirect impacts and proposed mitigation and restoration measures for reactivation activities are detailed in Section 7.7 of Volumes 5A (Filing ID A3S1R0) and 5B (Filing IDs A3S1S7 and A3S1S9). The most likely changes to the project footprint with respect to the reactivation would be in areas where an anomaly will be identified and needs repair or where geohazards will be identified and protection of the pipeline is needed following In-line inspection. This work would however require work on the existing pipeline right-of-way using the existing access routes (Response to GoC Parks IR No. 2.144.2).

Depending on the location and access available to an area where an anomaly or geohazard is located, the complexity of the reactivation work varies. Any work in and around watercourse crossings would need additional planning and preparation. Maintenance work on level terrain with

good access would likely incur fewer environmental constraints. But, typically operation and maintenance activities occur within the previously disturbed right-of-way and no additional clearing or temporary workspace is required (Response to GoC Parks IR No. 2.137.3).

Trans Mountain anticipates that there will be no changes to the existing footprint as a result of the In-Line Inspection on the 24-inch pipeline and that the potential changes and associated environmental effects as a result of the reactivation plan are no different than the routine operations and maintenance activities that have occurred in the park for over 60 years (Response to GoC Parks IR No. 2.140.2.). Divergence from the alignment of the 24-inch pipeline is not expected and no associated disturbances will occur (Response to GoC Parks IR No. 2.139).

A new approximately 325 m power line may be required to provide a power source for automation of the MLBV at Fiddle River (KP 327.2). Trans Mountain will route the Fiddle River power line along the edge of the existing pipeline right-of-way and will consult with PCA and potentially affected Aboriginal communities and stakeholders, as appropriate. Discharge water from hydrostatic testing of the 24-inch pipeline will require more extensive treatment than new pipeline segments due to the presence of residual hydrocarbons. Holding ponds or tanks will be used to provide storage for the discharge water, which will be treated on-site before release into the environment in accordance with regulatory requirements in consultation with PCA in a manner that will not adversely affect human health, cultural values or the biophysical environment, including surface water quality or fish and fish habitat. In addition, at least one major pipe segment repair/replacement is expected at the Snaring River crossing which will involve more complex planning and construction techniques.

Trans Mountain understands that reactivation activities within JNP require permits and authorisations under regulations pursuant to the CNPA and its regulations (Response to GoC Parks IR No. 2.132). Accordingly, Trans Mountain will prepare detailed submissions for Parks Canada's development review and permitting process. Reactivation activities may be subject to further impact analysis in accordance with *Parks Canada Directive on Implementation of CEAA 2012* for reactivation components not covered in adequate detail by the Project Environmental Assessment under CEAA 2012.

5. Potential Impacts on Cultural Resources and Aboriginal Interests

The cultural circumstances of JNP include consideration of the traditional territories, interests and assertions of the Aboriginal communities that have historical ties with the park, from both sides of the continental divide. JNP is highly valued cultural setting for Aboriginal peoples and euro-Canadian history (1810 to recent). There are several locations on the 24-inch pipeline that cross significant archaeological sites. The historic context of the Athabasca and Miette River Valley, and extending on through the Yellowhead Pass National Historic Site (YPNHS) to Moose River is noteworthy. PCA anticipates that the pipeline crosses uncharted pre-contact burial sites. Significant historical railway and Japanese internment camp sites also exist in the Yellowhead Pass.

As described in the Parks Canada Archaeological Resource Impact assessment (ARIA) prepared in response to the TMX1 - Anchor Loop Pipeline Project development in 2005: "Particular attention is drawn to the two Métis-associated homestead sites (Site 283R and Site 435R), the Swift Homestead Site (Site 1054) and the Larocque House/Second Milner Dairy Site (Site 323R). In these areas, mitigation must be avoidance. The Adam Joachim Homestead Site (Site 435R) and Ewan Moberly Homestead Site (Site 283R) must also be viewed as sensitive archaeological sites due to their association with Métis families and with the brief Homesteader Phase in the history

of the Athabasca Valley within Jasper National Park. In addition to structural remains and vestiges of field and irrigation systems, both homestead sites are reported to contain human burials, which require further investigation. Consultation with descendants of Adam Joachim and Ewan Moberly is strongly recommended. Both homestead sites must be avoided" (Parks Canada ARIA 2005).

The Lewis Swift Homestead Site (Site 1054R), now the Palisades Centre, is the one private homestead that survived following the creation of Jasper Forest Park in 1907. There are extant buildings and vestiges of Swift's elaborate irrigation and field system in the surviving cultural landscape that requires protection (Parks Canada ARIA 2005).

The small landform that contains the site of Larocque's House (a fur trade era site dating to the early 1820s) and the Second Milner Dairy (both sites recorded currently as Site 323R) is adjacent to the primary access road to the Jasper Townsite from highway 16, and has been partially impacted by past projects associated with the construction and maintenance of the pipeline, roadworks and utility lines. Larocque's House has a very high historical significance. Pipeline reactivation planning and operational activities need to be attentive to avoiding further disturbances of this site, as might occur through extra workspaces, staging areas, stockpile sites, access roads etc. (Parks Canada ARIA 2005)." Potential Impacts to heritage resources sites are determined to be within the project footprint with respect to the reactivation plan (Volume 5B (Filing ID A3S1S7) and Appendix B of Volume 6B- Filing ID A3S2S3).

In the spirit of the Honour of the Crown and Reconciliation, PCA is mindful of the Crown's obligations to engage with Aboriginal communities whose traditional territories overlap with JNP, and urges that their interests be heard and reasonably accommodated. PCA maintains an ongoing working relationship with over 25 Aboriginal communities that share historic ties with JNP. While the Agency is not the federal lead, PCA has been proactive in informing its Aboriginal partners about the Project through the most recent meetings of the Jasper Aboriginal Forum and the Upper Athabasca Valley Elders Council. About four correspondences were sent out to its Aboriginal partners providing them with information about the Project, the Participant Funding Program, the NEB hearing process and the Aboriginal consultation as well as the contact information of the NEB, MPMO and Trans Mountain. PCA has also shared the list of its Aboriginal partners with the MPMO and the list of its Aboriginal partners interested in being directly contacted by the Proponent. Some Aboriginal partners (i.e: the *Alexis Nakota Sioux* and *Simpcw*) attended field work with Trans Mountain in JNP. To date Trans Mountain has discussed employment and procurement opportunities related to Monitoring with multiple Aboriginal groups, including those identified by PCA and has further engagement activities planned for 2015 (Response to GoC Parks IR No. 2.146.2).

6. Potential Impacts to Local Tourism Industry

JNP is recognized for its long history of conservation and its importance to the Canadian tourism industry. Every year about two million people visit the Park where they enjoy the town of Jasper, home to approximately 5,000 residents and a range of facilities.

Engagement in pipeline route communities regarding the overall Project has to date focused on topics relating to the proposed new pipeline and facilities. There have been no focused discussions with tourism operators in the Jasper National Park area regarding impact of the reactivation on tourism activities (Response to GoC Parks IR No. 2.147). The reason given by Trans Mountain is that no new pipeline is proposed through Jasper National Park. There have been, however, several opportunities for tourism operators to provide feedback at public events in the Hinton and Jasper.

Starting in Q2/Q3 2015, Trans Mountain will initiate a new phase of stakeholder engagement focused on construction plans, workforce hosting, anticipated impacts and effects of construction and mitigation measures to reduce potential impacts of construction on local communities. This phase of engagement will include discussions regarding potential impacts associated with the reactivation of the existing line within JNP. Although Trans Mountain anticipates that impacts to the tourism industry in JNP will not be significant as construction activities associated with the reactivation are minimal, Trans Mountain will reach out to tourism operators in the Jasper National Park area to make them aware of and involve them in these upcoming engagement activities.

Additionally, Trans Mountain has offered to consider proposals that would allow the Project to leave a positive legacy or “net benefits” to JNP (Response to GoC Parks IR No. 2.148.1). Trans Mountain is willing to consider net benefit initiatives scaled to smaller scope of potential impacts compared to the TMX1- Anchor Loop Pipeline Project and will be in a position to comment and review initiatives once the project footprint and mitigation measures are better defined and developed in consultation with PCA. Trans Mountain will look to PCA for potential ideas to consider which fit within its overall community benefit framework (Response to GoC Parks IR No. 2.148.1).

7. Potential Cumulative Effects

The cumulative effects assessment for the Trans Mountain Expansion Project considered all components of the proposed development, including the proposed reactivated segment from Hinton to Hargreaves (Section 8.0 of Volumes 5A [Filing IDs [A3S1R1](#) and [A3S1R2](#)] and 5B [Filing ID [A3S1T0](#)]). At this time, given that Trans Mountain does not propose divergence from the existing pipeline alignment, existing developments and activities within JNP or the YPNHS are considered to form the baseline conditions for the cumulative effects assessment of reactivation activities (Filing ID [A3S1R1](#)) and 5B (Filing ID [A3S1T0](#)).

Management of cumulative environmental effects on ecological and cultural resources was an objective of the TMX1- Anchor Loop Pipeline Project. The mitigation measures that were implemented during construction and restoration, and during a five year post-construction monitoring program that was overall successfully completed in 2012, provide evidence that contribution to cumulative effects was minimized. As a result, PCA is of the view that cumulative effects associated with the reactivation activities of the 24-inch pipeline would be limited to interactions with existing developments and activities and that these effects can be avoided or considerably reduced by adopting proven mitigation measures.

8. Suitability of the Design/Pipeline Integrity

Trans Mountain has taken measures to promote the long-term integrity of the 24-inch deactivated pipeline segment to maintain the potential for its future reactivation. As stated above, prior to reactivation, all anomalies exhibiting certain characteristics will be investigated and the specific pipeline segments will be repaired or replaced accordingly. All segments of the pipeline would also be hydrotested prior to resumption. Existing manual mainline block valves (MLBVs) would be replaced with automated MLBVs like those installed along the TMX1-Anchor Loop Pipeline.

Trans Mountain submitted an Updated Engineering Assessment in Q3, 2014 (Filing ID [A4A4E7](#)). A Final Engineering Assessment incorporating the results of the hydrostatic testing and the in-line inspection and repair program prior to the reactivation of the pipeline segments will be submitted in 2016. Given that the in-line inspections are essential to a quantitative estimation of failure likelihood, and in the absence of such current information at this time, Trans Mountain completed a threat-based assessment, which provides a comprehensive list of threats and

identifies threats and mitigation activities that address the threats (Response to GoC Parks IR No. 2.133).

PCA has no in-house expertise in pipeline engineering. The Agency is therefore of the view that its potential concerns related to the pipeline integrity will be adequately addressed through the mandate of the NEB.

9. Contingency Planning for Spills, Accidents or Malfunctions

Trans Mountain has an emergency response program which focuses on First Responder and Community Liaison Programs, Emergency Response Training, Emergency Response Manuals including procedures, inventory and maintenance of response equipment, and program development. These plans will be activated in the event of an incident involving the Trans Mountain System (Trans Mountain's JNP Operations and Maintenance Environmental Protection Plan –EPP).

The Oil Spill Containment and Recovery (OSCAR) Unit, a mobile, spill response equipment, located at Jasper Pump Station, is a tractor-based unit containing booms, skimmers, sorbent and other associated materials required for major spill containment and clean-up on water and land. Trans Mountain also maintains a boom trailer containing approximately 1,500 m (5,000 feet) of floating boom material which is used in conjunction with the OSCAR unit. This trailer is stationed at Trans Mountain facilities in Kamloops, BC. Appropriate spill equipment are maintained at all worksites. In addition, Trans Mountain maintains smaller, more mobile spill kits for use on localized spills. A risk potential for site-specific spills is used to determine the appropriate type of response equipment to be stored onsite and suitable location for storage.

10. Safety and Security during Reactivation and Operation

Pipeline reactivation activities in Jasper National Park will generally be scheduled outside of the summer peak tourist season. Therefore, potential tourist use and pipeline reactivation traffic conflicts along existing access routes will generally be minimized.

Prior to reactivation activities, Trans Mountain will place notices in local and regional newspapers to announce the reactivation project and the reactivation schedule. Website, radio, TV announcements and roadside signs will be used to inform the public of access road upgrading work. Information on labour, equipment, access route closures and activity schedules will be provided to Parks Canada prior to the commencement of work. Trans Mountain will also coordinate and communicate on traffic issues with Park gates personnel. Public safety will be ensured by controlling public access to the work area and installing fencing around the perimeter of discrete and isolated excavations in accordance with provincial and NEB safety procedures. Trans Mountain will adhere to the CN Railway Management Plan for undertaking activities and for worker safety when working in proximity to the CN Railway line.

11. Potential Effects of Marine Shipping Activities

PCA is of the view that its potential concerns over the marine shipping components of the Project are adequately addressed through the mandates of Transport Canada and Fisheries and Oceans. PCA is represented in the TMX-Interdepartmental Working Group and the TMX-Aboriginal Working Group, and is supportive of information requests presented by these two federal departments to Trans Mountain.

12. Terms and Conditions for Approval

PCA anticipates using the TMX1-Anchor Loop Pipeline Project as baseline information where applicable. As such, PCA will place an emphasis on using a result-oriented approach to assessing

and managing the proposed reactivation activities. To this end, working closely with Trans Mountain, PCA will develop Management Objectives/Desired End Results (MO/DERs). These MO/DERs will be related to the ecological integrity, commemorative integrity, and visitor experience of JNP and YPNHS.

Trans Mountain has agreed to working with PCA in developing a set of Management Objectives/Desired End Results with appropriate and applicable monitoring and performance criteria for the proposed reactivation activities (GoC Parks IR No 1, Page 11). While all the Management Objectives/Desired End Results are ultimately what both Trans Mountain and PCA are working towards and aim to achieve, there are some objectives with respect to specifically vegetation composition, structure and processes that need to be discussed further based on the results of the Post-Construction Monitoring Program for the TMX1-Anchor Loop Pipeline Project.

Trans Mountain plans to conduct the Post-Reactivation Environmental Monitoring Program during a period up to the first five complete growing seasons (or during years one, three and five) following commissioning of the Project or as per certificate conditions. Similarly to the TMX1-Anchor Loop Pipeline Project, if outstanding issues still need to be addressed and monitored beyond the five year time frame for most elements, Trans Mountain will continue this work as it has been doing in JNP. In addition, Trans Mountain will follow the standards and environmental protection measures set out in the Pipeline and Facilities Environmental Protection Plans (Volume 6B and 6C) and will revise and update the JNP Operations and Maintenance Environmental Protection Plan prior to reactivation.

The following are potential conditions for possible consideration for inclusion in any approval which PCA issues in respect of the reactivation of the Project:

- A. Trans Mountain shall file with PCA for review and approval, at least 104 days prior to the planned commencement of reactivation, a complete application. The application will include pre-construction site plans, an agreement for the Right-of-Way from other stakeholders (e.g.: CN Railway), a safety codes review conducted by a safety codes company and engineered stamped drawings for any structures.
- B. Trans Mountain shall undertake a quantitative risk assessment for the portion of the Project within JNP, and file a findings and response report with PCA at least 30 days prior to the planned commencement of reactivation. Such quantitative risk assessment is to be in compliance with "Guidelines for Risk Assessment of Pipelines".
- C. Trans Mountain shall implement or cause to be implemented all of the policies, practices, programs, mitigation measures, recommendations and procedures for the protection of ecological integrity and commemorative integrity/cultural resource management that were included in or referred to in its application or as otherwise agreed to during questioning or in its related submissions.
- D. Trans Mountain shall file with PCA for review and approval, at least 30 days prior to the planned commencement of reactivation, an updated project-specific EPP and Restoration Plan. The EPP and Restoration Plan shall be a comprehensive compilation of all environmental protection procedures, mitigation measures, restoration procedures, and monitoring commitments, as set out in Trans Mountain's application for the reactivation, subsequent filings or as otherwise agreed to during questioning or in its related submissions.

- E. Trans Mountain shall notify the PCA 14 days prior to the commencement of reactivation.
- F. Activity timing restrictions for wildlife (migratory birds and nests, calving and lambing areas, dens, etc.) shall apply unless otherwise advised by PCA.
- G. Trans Mountain shall submit the Fisheries and Oceans Canada Compensation Plan with PCA, at least 14 days prior to the planned start of excavation at watercourses identified in the Plan.
- H. Trans Mountain shall file with PCA for review and approval a post-reactivation monitoring program that can conclusively (including quantification as appropriate) show (either directly or through reasonable surrogates) that all MO/DERs have been accomplished or not. Time frame for showing this accomplishment is a function of the recovery time normally anticipated or specific recovery time found to be necessary for each MO/DER and associated ecological integrity and commemorative integrity component. Until the MO/DER is shown to have been accomplished, on or before the 31st January of each year, Trans Mountain shall file with PCA for review and approval a post-reactivation monitoring report for that MO/DER that:
 - a) provides a general discussion of the effectiveness of the environmental mitigation applied during or after reactivation;
 - b) identifies deviations from plans and alternative mitigation applied as approved by PCA;
 - c) identifies locations on a map or diagram where corrective action was taken during or after reactivation and the current status of corrective actions; and
 - d) provides proposed measures and the schedule Trans Mountain shall implement to address any unresolved concerns.
- I. Trans Mountain shall submit to PCA for review and approval, prior to the commencement of reactivation, a pre- and post- reactivation Follow-up Program for wetland function that includes:
 - Pre-reactivation:
 - a) on a map or worksheet, the locations of the follow-up for wetland function;
 - b) the measures to be applied, and an assessment of the anticipated effectiveness of the proposed mitigation and restoration strategy;
 - c) the schedule for implementing the measures as set out in b);
 - d) evidence demonstrating that Environment Canada has reviewed and commented on the Program;
 - Post-reactivation:
 - e) the results, evaluation and recommendations for managing wetland resources;
 - f) the schedule Trans Mountain shall implement to address any unresolved concerns; and
 - g) a schedule for submitting follow-up reports for wetland function with PCA.
- J. In the event Trans Mountain discovers, at previously unidentified locations any substance present in the soil, surface water or groundwater at a concentration greater than the applicable Federal or Provincial Regulations, Standards or Guidelines, Trans Mountain shall submit to

PCA for its review and approval, within 45 days of discovery, a Remediation Plan including at the minimum:

- a) a summary of the data collected;
- b) a map that outlines the affected areas and sample locations;
- c) design methods and sampling used;
- d) a list of the contaminants of concern to be addressed;
- e) remediation objectives to be achieved;
- f) methods by which remediation will be conducted; and
- g) a detailed schedule for the implementation of the Remediation Plan.

K. Trans Mountain shall ensure to PCA's satisfaction that measures are taken during reactivation to identify and respond to the presence of historic First Nations and Métis cultural resources.

L. Trans Mountain shall generally schedule reactivation activities outside of the summer peak tourist season. Potential tourist use and pipeline reactivation traffic conflicts along existing access routes will generally be minimized.

13. Conclusion

The Parks Canada Agency is of the view that, with the implementation of Trans Mountain's environmental protection and mitigation measures along with any site-specific conditions required by PCA and if Management Objectives/Desired End Results are accomplished, it is unlikely that the Project will cause significant adverse effects to ecological or commemorative integrity and visitor experience of Jasper National Park or the Yellowhead Pass National Historic Site.

Parks Canada understands that details around the location, number, and complexity of anomalies, excavations and repairs in the Park will only be known with accuracy after in-line inspections are completed by Trans Mountain in 2016. Accordingly, PCA's regulatory approach to the reactivation is by necessity a two-phase process. The first phase is participation in the NEB-led hearing process. The second phase begins when Trans Mountain prepares detailed submissions for the PCA's development review permitting process. At that time, the reactivation activities may be subject to further impact analysis in accordance with *Parks Canada Directive on Impact Assessment, 2015* for components not covered in adequate detail by the Project Environmental Assessment under CEAA 2012.

Parks Canada is not in a position at this time to comment on the sufficiency of consultations with the public, stakeholders, and with First Nations and Metis peoples, given that those engagement and consultation processes are still in progress, and any related results and conclusions are under the purview of the National Energy Board. From the Parks Canada Agency's perspective, the appropriate steps are being taken in this regard.

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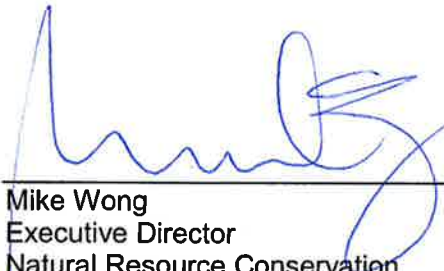
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