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NEB/ONE

VIA HAND DELIVERY

10 May 2017

National Energy Board  
Suite 210, 517 Tenth Avenue S.W.  
Calgary, Alberta T2R 0A8

**To: Ms. Sheri Young, Secretary, National Energy Board**

Dear Ms. Young:

**Re: Trans Mountain Pipeline ULC  
Request for Refiling of Corrective Action Plan of the Final Audit Report of Trans Mountain Pipeline ULC ("Trans Mountain") Pipeline Patrol Activities  
NEB File: OF-Surv-OpAud-T260-2016-2017 01**

As per the National Energy Board's (the "Board" or "NEB") request, Trans Mountain is refiling its Corrective Action Plan ("CAP") it filed on 21 April 2017 to the Final Audit Report dated 27 March 2017, focused on patrol activities conducted as required by sub-element 4.1 *Inspection Measurement and Monitoring* of the NEB Management System and Protection Program Audit Protocol ("Final Audit Report"). Please ensure a copy of this CAP is provided to Marnie Sparling, Lead Auditor.

Should you have any questions or wish to discuss further, please contact the undersigned at (403) 514-6428.

Yours truly,

Regulatory Advisor  
Kinder Morgan Canada Inc.

Enclosures



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**VIA HAND DELIVERY**

21 April 2017

National Energy Board  
Suite 210, 517 Tenth Avenue S.W.  
Calgary, Alberta T2R 0A8

**To: Ms. Sheri Young, Secretary, National Energy Board**

Dear Ms. Young:

**Re: Trans Mountain Pipeline ULC  
Request for Corrective Action Plan of the Final Audit Report of Trans Mountain Pipeline  
ULC ("Trans Mountain") Pipeline Patrol Activities  
NEB File: OF-Surv-OpAud-T260-2016-2017 01**

Trans Mountain is in receipt of the National Energy Board's (the "Board" or "NEB") Final Audit Report dated 27 March 2017, focused on patrol activities conducted as required by sub-element 4.1 *Inspection Measurement and Monitoring* of the NEB Management System and Protection Program Audit Protocol ("Final Audit Report"). Within the Final Audit Report, the Board directed Trans Mountain to provide a Corrective Action Plan ("CAP") within 30 days of receiving the report. Trans Mountain encloses one (1) hard copy of the CAP.

As requested by the Board, the CAP addresses the findings of non-compliance from Appendices I and II of the Final Audit Report. Trans Mountain has maintained the Board's layout of appendices and reference numbers while completing the CAP.

Should you have any questions or wish to discuss further, please contact Jessica Tran, Regulatory Advisor at (403) 514-6428.

Yours truly,

Hugh Harden  
Vice President, Operations and Engineering  
Kinder Morgan Canada Inc.

Enclosure

**Trans Mountain Pipeline ULC**  
**National Energy Board Pipeline Patrol Audit**  
**Corrective Action Plan**

Finding	Reference	NEB Audit Finding	CA#	Corrective Action	Implementation	Target Completion Date	Actual Completion Date
1	Appendix I, 2.1 Monitoring of Adjacent Lands	TMPU's draft Land Monitoring Standard was not implemented at the time of this audit.	I.2.1.1	Document Trans Mountain's process for monitoring adjacent lands, currently reflected in the draft Land Use Monitoring Standard and communicate the standard to applicable staff and contractors.	The Land Monitoring Standard will be issued to senior management for formal approval and in accordance with Trans Mountain's document control and change management requirements. The standard will be communicated to applicable staff and contractors involved in land use monitoring to review and acknowledge their understanding.	31-Jul-17	
			I.2.1.2	Train applicable staff and contractors on the Land Use Monitoring Standard.	Damage Prevention will incorporate training of the Land Use Monitoring Standard requirements into the training module (or skill packet) being developed for patrol observation awareness. (refer to CA # II.3.4.5).	31-Dec-17	
2	Appendix I, 2.2 Observing Conditions and Activities (CSA clause 10.6.1.1)	TMPU did not demonstrate that it is documenting its assessment of all the issues listed in CSA Z662-15 clause 10.6.1.1.	I.2.2.1	Develop new Trans Mountain patrol observation reporting criteria and approach that includes an assessment of all issues noted in CSA Z662-15 clause 10.6.1.	Damage Prevention will update its current reporting of patrol observations by developing one patrol observation reporting form for both aerial and ground patrols that addresses all issues noted in CSA Z662-15 clause 10.6.1. The requirements of the new patrol observation reporting form will be communicated to all applicable staff and contractors involved in patrol activities to review and acknowledge their understanding.	31-Jul-17	
			I.2.2.2	Train Trans Mountain staff and contractors involved in patrol activities on the new patrol assessment criteria and reporting approach. Implement for use for all Trans Mountain Aerial and Ground Patrols.	Damage Prevention will conduct a formal in-class training session on the new patrol observation reporting form for all staff and contractors involved in patrol activities. The training will review the assessment criteria noted on the form and the new reporting approach for assessing against the issues noted in CSA Z662-15 clause 10.6.1. Aerial and ground patrols will start using the new patrol observation reporting form on 1 September 2017.	30-Sep-17	
3	Appendix II, 2.2 Legal Requirements	TMPU's legal list as it pertains to patrols is maintained at an insufficient level of detail. Therefore this list is non-compliance with OPR 6.5(1)(h).	II.2.2.1	Implement Legal Requirements Standard and Procedure	The Legal Requirements Standard establishes a set of requirements for the identification, monitoring and assessment of legal requirements pertaining to safety, security and protection of the environment. The Legal Requirements Procedure establishes the process for implementing the Legal Requirements Standard. The Legal Requirements Standard and Procedure will be approved in accordance with the Controlled Document Standard.	31-Jul-17	
			II.2.2.2	Legal Requirements Standard and Procedure Training	Training on the Legal Requirements Standard and Procedure will be provided to Trans Mountain staff and management through presentations and one-on-one training where needed (for example, for subject matter experts and management who are providing the compliance assessments). Training identifies the requirements for compliance assessments and what information must be included. Trans Mountain commenced one-on-one training in 2016 and will continue on an as needed basis.	31-Dec-17	

Finding	Reference	NEB Audit Finding	CA#	Corrective Action	Implementation	Target Completion Date	Actual Completion Date
3	Appendix II, 2.2 Legal Requirements	TMPU's legal list as it pertains to patrols is maintained at an insufficient level of detail. Therefore this list is non-compliance with OPR 6.5(1)(h).	II.2.2.3	Legal List - Legislation	Trans Mountain's legal list was complete at the time of the audit. The legal list has been further broken down to the section level for compliance assessments. Compliance assessments were under way at the time of the audit.	Complete	20-Feb-17.
			II.2.2.4	Compliance Assessments" Damage Prevention Regulations - Authorizations, Damage Prevention Regulations - Obligations of Pipeline Companies, National Energy Board Onshore Pipeline Regulations	Compliance assessments for legislation pertaining to pipeline patrols will be revised to ensure documentation and procedures are in compliance with the <i>National Energy Board Damage Prevention Regulations</i> as well as revised sections of the <i>National Energy Board Onshore Pipeline Regulations</i> . Trans Mountain plans to have final assessments completed by the dates noted.	Damage Prevention Regulations - Authorizations: Complete by 31-July-17. Damage Prevention Regulations - Obligations of Pipeline Companies: Complete by 31-Jul-17. National Energy Board Onshore Pipeline Regulations: s. 6(b), 47.2, 55(1)(f): Complete by 31-Jul-17.	
			II.2.2.5	Legal List - Standards and Codes: CSA Z662-15 Oil and Gas Pipeline Systems Commentary with Updates, CSA Z247-15 Damage Prevention for the Protection of Underground Infrastructure	Since the audit, Trans Mountain has been reviewing the Legal List of Standards and Codes and working to breakdown Trans Mountain's legal list of standards and codes to the section level for compliance assessments. Compliance assessments for standards and codes pertaining to pipeline patrols will be revised to ensure documentation and procedures are in compliance with the standards and codes. Trans Mountain plans to have final assessments completed by the dates noted.	Breakdown of Standards and Codes to section level and compliance assessments: CSA Z662-15: 10.5.3.1 - 10.5.3.9, 10.5.5.1, 10.5.5.2, 10.6.1.1, 10.6.1.2: Complete by 31-Jul-17. CSA Z247-15: Complete by 31-Jul-17.	
4	Appendix II, 3.4 Training, Competence and Evaluation	TMPU has not established and implemented a process for identifying and verifying competencies of its contractors with respect to its patrol activities.	II.3.4.1	Develop a process as part of Trans Mountain's Integrated Safety and Loss Management System (ISLMS) to identify and verify competencies of contractors, including those engaged in patrol activities.	The Contactor Competency Assurance Plan (CCAP) was developed as a set of processes for verifying that contractors conducting work on behalf of Trans Mountain are qualified and competent to perform their duties. The CCAP requires contractors to provide documentation to support the qualifications of their personnel prior to start of work. If also requires field verification checks are conducted by qualified Trans Mountain representatives to observe and evaluate the contractor personnel are demonstrating competent performance in the execution of assigned tasks, in accordance with Trans Mountain's procedures and/or standards. The CCAP was developed in 2015 and formally approved for use by management on 8 January 2016, in accordance to Trans Mountain's document control and change management requirements.	Complete	8-Jan-16
			II.3.4.2	Communicate and train Trans Mountain staff and contractors on the Contractor Competency Assurance Plan (CCAP).	Communication and training on the CCAP was completed throughout 2016, with approximately 20 in-person information and training sessions with contractors and internal stakeholders. Additionally, CCAP online training was also implemented with stakeholders, including patrol personnel.	Complete	2016

Finding	Reference	NEB Audit Finding	CA#	Corrective Action	Implementation	Target Completion Date	Actual Completion Date
4	Appendix II, 3.4 Training, Competence and Evaluation	TMPU has not established and implemented a process for identifying and verifying competencies of its contractors with respect to its patrol activities.	II.3.4.3	Document Contractor Qualification Specification (CQS) for Trans Mountain contractor personnel engaged in patrol activities.	Damage Prevention has documented a Contractor Qualification Specification (CQS) for Aerial Patrollers in accordance to the requirements of the CCAP. Aerial Patroller qualifications and training requirements are outlined in the document CQS-DP002 - Aerial Patroller. A signed copy of the CQS-DP002-Aerial Patroller is provided by the hiring manager to Trans Mountain's Procurement Department who then includes it in the bid package to contractors as part of the procurement process. The CQS-DP002- Aerial Patroller document was approved by management on 23 November 2016, in accordance to Trans Mountain's document control and change management requirements.	Complete	23-Nov-16
			II.3.4.4	Review CQS-DP002 - Aerial Patroller with Trans Mountain contractor and implement the requirements outlined in the CQS with the Aerial Patrollers.	Damage Prevention has completed a documented review of the Aerial Patrol CQS with its current Aerial Patrol contractor. All Aerial Patrollers currently employed by the contractor have completed all the training and qualification requirements outlined in CQS-DP002 - Aerial Patroller, as of 24 April 2017:  KMC Safety Orientation Personal Protective Equipment Ground Disturbance Level II KEEP – K10110 Demonstrate Knowledge of Pipeline Protection Zones KEEP – K20100 Ground Disturbance Requirements Declaration of Understanding of the KM Aerial Patrol Program Declaration of Understanding of Aerial Patrol Scope of Work Document KEEP – K70090 Knowledge of KMC Right-Of-Way KEEP – K20020 Demonstrate Understanding of Public Awareness Program KEEP – K71046 Conduct Right-of-Way Patrols KEEP – K71043 Responding to ROW Patrol Notifications	Complete	24-Apr-17
			II.3.4.5	Establish and implement training for identifying all the issues noted in CSA Z662-15 clause 10.6.1 during patrol activities and implement the training with Trans Mountain staff and contractors involved in patrols.	The Damage Prevention Program is developing a patrol observation awareness training module (or skill packet) that will incorporate all issues outlined in CSA clause 10.6.1. This training will be provided to staff and contractors involved in patrol activities.	31-Dec-17	
			II.3.4.6	Develop a field verification check form to observe and evaluate contractor personnel conducting patrol activities, as part of the implementation Trans Mountain's CCAP.	The Aerial Patroller Ride Along Observation Form has been developed and is approved by management for use by the Damage Prevention Program to conduct field verification checks on Aerial Patrollers.	Complete	20-Apr-17
			II.3.4.7	Identify the number of field verification checks to be completed annually on Trans Mountain contractors involved in patrol activities.	The Damage Prevention Program Goals, Objectives and Targets document was updated for 2017 to measure the number of field verification checks completed on Aerial Patrollers.	Complete	6-Mar-17

Finding	Reference	NEB Audit Finding	CA#	Corrective Action	Implementation	Target Completion Date	Actual Completion Date
4	Appendix II, 3.4 Training, Competence and Evaluation	TMPU has not established and implemented a process for identifying and verifying competencies of its contractors with respect to its patrol activities.	II.3.4.8	Implement field verifications checks with Trans Mountain contractors involved in patrol activities.	Complete documented field verification checks of Aerial Patrollers, using the Aerial Patroller Ride Along Observation Form.	31-Dec-17	
5	Appendix II, 3.5 Communication	TMPU did not demonstrate that its internal communication plan was fully implemented as required by the OPR.	II.3.5.1	Fully implement a Internal Communications Plan to demonstrate issues concerning Trans Mountain's ROW are communicated from the patrollers to the programs as well as from the programs to the patrols are occurring in accordance to a documented plan.	Damage Prevention completed its annual review of the 2016 Internal Communications (IC) Plan. The annual review checks the effectiveness of executing on the prior year's IC plan. The annual review of its IC Plan was approved and endorsed by management on 1 March 2017. The DPP completed its 2017 IC Plan that documents the plan for communication of issues concerning the ROW. The 2017 IC plan was approved and endorsed by management on 1 April 2017 and communicated to applicable internal stakeholders.	Complete	1-Apr-17