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June 30, 2014

Al Hoffman, Chief Inspector of Mines Ministry of Energy and Mines

## Re: Quintette Coal Operations Response to Memorandum of February 3, 2015 from Ministry of Energy and Mines

Under cover of this letter, please find condition assessments for the two tailings facilities at the Quintette Coal Operations site, as per the request outlined in the memorandum from the Ministry of Energy and Mines (MEM), dated February 3, 2015. The condition assessments were performed by Klohn Crippen Berger.

Teck Coal is committed to ensuring the safe operation of these two tailings facilities and all other dam structures. As such, the condition assessments consisted of a thorough review of existing design and as-built information, including close scrutiny and re-evaluation of historical subsurface investigation information in light of the knowledge gained from the Mount Polley failure. The review specifically evaluated the potential failure modes requested by MEM based on the recommendations in the Mount Polley Panel report:

- 1) Risk of undrained shear failure of silt and clay foundations
- 2) Water balance adequacy
- 3) Filter adequacy

The results from the condition assessments, provided in the attached sealed letters, verify that the two facilities are performing according to design, and based on ongoing monitoring, instrumentation, surveillance and investigation activities they are considered to be appropriately protected against the above referenced potential failure modes.

No immediate safety or stability concerns have been noted for the two tailings facilities at the Quintette site, as demonstrated in the 2014 DSI reports and recent Dam Safety Reviews. Two gaps were identified in the 1982 design analyses for the Plantsite Tailings Dam relative to current standards, and we are taking steps to address these gaps as summarized in Table 1. No potential gaps were identified in the condition assessment of the Shikano North Tailings Dam.

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At Quintette Coal Operations, and across all of Teck, we are focused on meeting the highest standards of safety for communities, employees and the environment. Completing these condition assessments in light of lessons learned regarding tailings dam safety complements the existing comprehensive systems and procedures we have in place for the safe operation and monitoring of our tailing facilities.

Please do not hesitate to contact me if you have any further questions regarding the operation, maintenance and monitoring of our tailings facilities.

Sincerely,

Rob Muise

Acting General Manager, C&M Quintette Coal Operations

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cc: Diane Howe, Ministry of Energy and Mines

Heather Narynski, Ministry of Energy and Mines

Chris Anderson, Teck Jeff Hanman, Teck

Attachments: Plantsite Tailings Dam, Response to February 3, 2015 MEM Memorandum

Shikano North Tailings Dam, Response to February 3, 2015 MEM Memorandum

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**Table 1: Planned Actions** 

Structure	Potential Gap and Corresponding Planned Action	Timeline for Action
Plantsite Tailings Dam	Gap – a stability analysis assuming undrained or residual strength conditions of the silt and clay deposits that were identified within the southwest portion of the Plantsite Tailings Dam foundation was not done during the original design.  Planned Action – perform a stability analysis with assumed undrained and residual strength conditions to confirm that the Factor of Safety values meet current standards.  Gap – a stability analysis based on current seismic assessment standards is required to confirm the response to seismic conditions.  Planned Action – perform a seismic stability analysis to confirm that the Factor of Safety values meet current standards.	Perform in conjunction with the 2015 Dam Safety Inspection work during Q3 and Q4 2015, with final report by end of Q1 2016.
Shikano North Tailings Dam	No potential gaps.	n/a