

November 21, 2014

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Thompson Creek Metals Company
26 West Dry Creek Circle, Suite 810
Littleton, CO 80120

**Attention: S. Scott Shellhaas
President & Chief Operating Officer**

**Subject: Mt Milligan Mine, Independent Third Party Review of
Dam Safety and Consequence Classification**

Dear Mr. Shellhaas

NewFields has completed a Third Party Review of the Dam Safety Inspection for the Mt. Milligan Mine Site. This review has been completed in accordance with the British Columbia Ministry of Energy and Mines, Notification of Chief Inspector's Orders issued August 18, 2014.

1. BACKGROUND

Knight Piésold Ltd. (Knight Piésold) is the current Engineer of Record (EOR) for the Mt. Milligan Mine Tailing Storage Facility (TSF). The most recent Dam Safety Inspection for the Mt. Milligan Mine is titled "2014 Annual Dam Safety Inspection Report", dated November 14, 2014 by Knight Piésold Ltd. This report is referred to as the 2014 DSI Report for the remainder of this letter report.

2. INDEPENDENT REVIEW OF DAM SAFETY AND CONSEQUENCE CLASSIFICATION

2.1. Independent (NewFields) Inspection of Mt. Milligan TSF

Keith Williams with NewFields, who is a Professional Engineer in British Columbia, completed a site inspection of the Mt Milligan Mine site on September 30 and October 1, 2014. Mr. Williams and NewFields have not been at the Mt. Milligan Mine prior to this assignment.

The following is a list of observations that were made during the site visit.

- Tension cracks were noted along the upstream face of the embankment (parallel to and near the tailing distribution line) near the west end of the South Dam. NewFields was informed that the embankment was overbuilt along the upstream slope with uncompacted fill to allow for erosion during deposition of tailings. The design and as-built drawings do not show this overbuild and we recommend that be shown on future revisions of drawings.
- During the site visit, it was noted that the piezometer readings were being transmitted to the mine operations control room by telemetry but a program still needed to be written to



convert the readings to a corresponding phreatic surface (we have been informed that this was completed after the site visit). This is considered state of the art technology and allows for continuous monitoring of the instrumentation. NewFields recommends that Mt. Milligan operations staff be trained by EOR regarding the instrumentation (piezometers, inclinometers) to gain understanding of the threshold levels as they relate to phreatic surface and movement and if a problem exists based on the information collected.

2.2. Independent (NewFields) Review of Dam Safety Inspection (DSI) by Knight Piésold

NewFields has completed an independent review of the 2014 DSI Report completed by Knight Piésold. Based on our review, we agree with the recommendations listed by Knight Piesold and do not have additional comments.

2.3. Independent (NewFields) Review of Consequence Classification by Knight Piésold

The following table is an excerpt from the 2014 DSI Report by Knight Piésold:

2.4 HAZARD POTENTIAL CLASSIFICATION

The tailings dams at Mt. Milligan are designed, constructed and maintained in accordance with CDA (2007) guidelines which provides a classification of dams in terms of the consequence of failure. The ultimate crest elevation of 1,114 m for the dams and an operating open pit were used in the consequence classification assessment.

The potential for loss of life is likely minor following a dam failure. If failure resulted in the release of tailings and/or process water it would have a significant environmental impact on downstream watercourses, particularly for Rainbow Creek. The economic consequences (including clean-up, repair and remedial works) and socio-economic impact to the mine would also be very high. Consequently, a HIGH consequence category has been assigned to the Main Embankment and a VERY HIGH consequence category has been assigned to the West Separator Berm.

NewFields has reviewed the dam consequence classifications listed above which have been developed in accordance with Canadian Dam Association (CDA) 2007 and agrees with Knight Piésold regarding these classifications.



3. SUMMARY OF RECOMMENDATIONS AND ACTION ITEMS

The following is a list of recommendations presented in 2014 DSI Report by Knight Piésold:

Recommendations from the site inspection and performance review are as follows:

<i>Number</i>	<i>Description</i>
2014-1	Complete construction of the Meadows Creek Seepage Collection System.
2014-2	Repair the downstream embankment slope on the Northeast Seepage Collection and Recycle Pond 2.
2014-3	Continue with instrumentation monitoring as outlined in the OMS manual.
2014-4	Review the OMS manual and update monitoring commitments and frequencies based on current practices and staff commitments.
2014-5	Continue with hydrology stream monitoring and complete the installation of the new weather station.
2014-6	Conduct a dam breach drill on site. This may involve using a helicopter to fly the inundation route along Rainbow Creek, the Nation River and into Williston Lake to confirm forestry roads alignments, bridge crossings and identify any additional downstream users.
2014-7	Review tailings deposition models and check to verify adequate storm storage allowances have been incorporated in the model.
2014-8	Review the embankment raise sequence with the recently updated mine plan to confirm waste rock deposition, tailings deposition and availability of dam construction materials.
2014-9	Determine the Stage 2 raise requirements.
2014-10	Continue with construction of the downstream shell zone step outs designated 2A and 7A using mine waste materials.
2014-11	Continue with updating the tailings deposition plans on site at regular intervals to coordinate spigot locations, pipeline moves and dam raise sequencing.
2014-12	Conduct a bathymetry volume survey of the supernatant pond after the multiple low points are infilled with tailings solids and the main pond has been established.

NewFields has reviewed this list of items and agrees with Knight Piésold.

In addition, NewFields has listed items below based on our independent review that are not included above. Each of our recommendations includes a priority ranking as described below:



Description of Priority Rankings

Priority	Description
1	A high probability or actual dam safety issue considered immediately dangerous to life, health or the environment, or a significant regulatory concern.
2	If not corrected, could likely result in dam safety issues leading to injury, environmental impact or significant regulatory action; or, a repetitive deficiency that demonstrates a systematic breakdown of procedures.
3	Single occurrences of deficiencies or non-conformances that alone would not be expected to result in dam safety issues.
4	Best Management Practice as a suggestion for continuous improvement towards industry best practices that could further reduce potential risks. This typically includes ongoing construction items within the appropriate construction cycle.

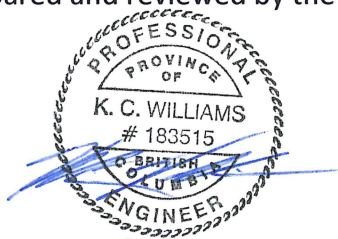
These recommendations are summarized in a tabular form so that the Mt. Milligan Mine Manager can use this information to prepare a separate letter outlining the commitments and schedule to complete the work.

Independent (NewFields) Review Recommendations for Mt Milligan TSF

Structure	Recommendation	Priority
Mt Milligan TSF	Mt. Milligan staff to be trained by EOR regarding the instrumentation installed in the TSF (piezometers, inclinometers) to understand threshold levels and if a problem exists based on the information collected from the instrumentation.	4
	Future revisions of drawings should show the overbuild (allowance for erosion during tailing deposition) on the upstream slope of the TSF.	4

4. CERTIFICATION

This report was prepared and reviewed by the undersigned



Prepared by: Nov. 21, 2014
 Keith C. Williams, P. Eng
 Principal Engineer

Reviewed By: R. Michael Smith
 R. Michael Smith
 Principal Engineer