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Tantalum Mining Corp. of Canada Ltd.  
Bernic Lake, Box 2000  
Lac du Bonnet, Manitoba R0E 1A0  
CANADA

September 9, 2014

Ms. Tracey Braun, M.Sc.  
Director, Environmental Assessment & Licensing Branch  
Manitoba Conservation and Water Stewardship  
123 Main Street, Suite 160  
Winnipeg, Manitoba  
R3C 1A5

Dear Ms. Braun,

**Regarding: Addendum to Tantalum Mining Corporation of Canada Ltd.  
Notice of Alteration File 1906.30  
Tanco Mine Geotechnical Instrumentation Installation**

We write to notify you of an additional piece of information concerning our approach for continued operation of the Tantalum Mining Corporation of Canada Limited (TANCO) Mine located near Lac du Bonnet, Manitoba. Please treat this information as an addendum to the letter we provided on August 29, 2014, the purpose of which was to seek a minor alteration to Manitoba *Environment Act* License No. 973 to permit us to install and operate minor surface infrastructure that will be needed to support continued operation of the mine (Project West). Specifically, an additional element is needed in the mine geotechnical instrumentation that comprises the ground monitoring system which we currently operate. This addendum describes the additional element, explains its installation and use and assesses its environmental effects.

## **1. Purpose of the Additional Instrumentation**

The purpose of the additional instrumentation is to further enhance the crown pillar rock mass monitoring system which we currently employ. Cabot's external advisory board, known in the company as the Geotechnical Mining Review Board (GMRB), recommended that Time Domain Reflectometry (TDR) cables be installed from the surface at the mine site into the crown pillar above the current Fall of Ground (FOG) area to aid in monitoring the occurrence of failure (dilation on joints/faults). These TDR cables will also help to assess the depth of failure if additional falls do occur within the 14N FOG area.

Following a review by SRK Consulting (Canada) Ltd. (SRK) of the accuracy of the seismic system and discussions with ESG Solutions (ESG), it was recommended that a triaxial geophone be installed closer to surface in the East Main Zone Area of the mine. It is believed that this geophone and the improved 3D velocity model will help improve the location accuracy and enable a better understanding of the micro-seismic data - which could possibly provide an indication of potential instability.

Further enhancing the crown rock mass monitoring system will help manage the risk to personnel by increasing the monitoring capability in the 14N FOG area, and by providing a better understanding of rock mass changes (exhibited as seismicity) that may occur in the East Main Zone and the West Zone of the TANCO Mine. The addition of the elements described below will accomplish this objective.

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## 2. Additional Surface Components

The additional work is comprised of the installation of monitoring equipment, namely two TDR cables and a seismic triaxial geophone, within drill holes advanced from surface into the crown pillar. Three holes (one for each instrument) will be drilled above the East Main Zone from a barge located on Bernic Lake.

All drill holes are located within TANCO's Mineral Leases ML4, ML5 and ML6 and Surface Leases M127-SL, M128-SL, M130-SL, and SL1.

Once the holes are drilled, the instrumentation will be cemented into the drill holes, which will seal the hole from the lake, and the cables will then be laid along the lake bottom to connect to existing geotechnical monitoring systems via connections in the West Pump House (connected to Mine AC-supply). The work is described in detail in the attached SRK memo titled "TDR and Triaxial Geophone Installation Project - Safety Aspects" dated June 25, 2014. (SRK, 2014)

The TDRs are to be installed by SRK personnel assisted by Rodren Drilling Ltd. (Rodren), the drilling contractor selected by TANCO to conduct this work. The geophone installation will be conducted under the supervision of ESG.

## 3. Environmental Impact Assessment

We submitted the above-noted information to AECOM Canada Ltd. (AECOM) and requested their advice with respect to environmental mitigation measures incorporated into this operation and their opinion with respect to its environmental impacts. As indicated in the attached letter of opinion from AECOM, it is their opinion that that the environmental impact of this additional work will be insignificant if it is undertaken in accordance with the management measures set out in our project plan, together with the additional measures they have proposed to us.

## 4. Decommissioning

The decommissioning of the TDR cables and a seismic triaxial geophone will take place either before or during the final decommissioning of the TANCO Mine. Decommissioning and closure activities will be carried out in accordance with the Manitoba *Mining and Minerals Act* and the approved Closure Plan that has been developed for the TANCO Mine.

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## 5. Schedule

In order to complete this work, Bernic Lake will need to remain ice free. Therefore, Cabot needs to initiate drilling of the three drill holes in September 2014, well in advance of any ice-up conditions.

## 6. Closing

We look forward to hearing from you with any comments you may have regarding this project, and we would be pleased to provide any other information that you may require.

Thank you very much for your attention.

Sincerely,

A handwritten signature in blue ink, which appears to be "Wentzel Coetzer", followed by the date "2014/09/09".  
Wentzel Coetzer  
Facility General Manager