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Dear Mr. Barry and Ms. Autut,

Re. Revisions to TMAC Resources Inc. Amendment Application No. 1 of Project Certificate No. 003 and Water Licence No. 2AM-DOH1323: Proponent's Response to Information Requests

On June 15, 2015, TMAC Resources Inc. (TMAC) submitted an application to amend Project Certificate [No. 003] issued by NIRB and Water Licence (No. 2AM-DOH1323) issued by the NWB in relation to the Doris North Mine (Project). This application (Amendment Application) reflects proposed changes to the Project upon which the NIRB Project Certificate and the NWB Water Licence were issued. The main project changes being proposed are:

- an increase in the length of the mine by mining the entire Doris deposit;
- change in tailings deposition strategy from sub-aqueous to sub-aerial; and
- improving the water management strategy, including directing effluent from the Tailings Impoundment Area (TIA) and excess groundwater from the mine operations to Roberts Bay (marine) as opposed to Doris Creek (freshwater).

Given the nature of the application (an amendment to an existing Project), TMAC requested in its submission that the NIRB and NWB consider coordinating their respective processes. The NIRB and the NWB both confirmed their commitment to do so to the extent possible so as to support timely and efficient processing of the Amendment Application. TMAC appreciates this commitment.

In parallel, the NIRB and the NWB requested interested parties to review the Amendment Application for completeness and make information requests (IRs), identifying information required for a technical review of the Amendment Application. It was explained to parties that a technical review would be made following completeness determinations by both the NIRB and the NWB, respectively. This letter provides TMAC's response to all IRs submitted by interested parties to both the NIRB and the NWB on or before September 18, 2015.

TMAC has carefully reviewed the IRs submitted; in total 179 IRs were received from Environment Canada, Transport Canada, Natural Resources Canada, Aboriginal Affairs and Northern Development Canada, Government of Nunavut, and the Kitikmeot Inuit Association. Table 1 identifies the party submitting the IR, provides a summary of the comment/question or concern, and provides a written response from TMAC for each IR. Supporting figures, tables, and documents are referenced and appended to this letter, where appropriate. While TMAC has provided a response to each of the IRs, it must be noted that of the 179 IRs submitted, TMAC is of the opinion that 129 of the IRs are more appropriately addressed during the technical review phases of the NIRB and NWB processes. Table 1 includes TMAC's responses to each of the IRs.

In reviewing the IRs, TMAC noted overarching interest in certain aspects of the Amendment Application including: (a) the site-wide water balance, (b) marine water quality objectives in Roberts Bay, (c) tailings management, (d) air emissions and (e) socio-economic conditions. TMAC provides summary comments regarding each of these aspects in the sections below.

1) Site-Wide Water Balance

Parties provided comments regarding the completeness of the freshwater balance and source load identification overall as well as the sensitivity of the results in consideration of general hydrological variability. Particular issues are related to the changes to Doris Lake resulting from changes to the hydrologic regime and resultant environment effects as well as predicted water quality within the TIA. TMAC has provided additional clarification regarding water balance and source loads associated with the groundwater inflow to the mine workings and tailings effluent management, confirming these have been developed and incorporated into the site wide water and load balance model. TMAC is of the opinion this matter is suitably addressed in the Amendment Application and the associated IRs provided in the attached. As the Project progresses construction toward operations, water balance and predictive water quality will continue to be updated and revised as per the current Water Licence terms and conditions.

2) Marine Water Quality Objectives in Roberts Bay

Parties commented on the adequacy of marine water quality objectives in Roberts Bay. Specifically, Environment Canada requested TMAC to develop objectives/thresholds for contaminants of concern for which there are no Canadian Council of Ministers of the Environment (CCME) guidelines for the protection of aquatic life (PAL; marine).

TMAC commits to taking the prudent approach of adhering to *Metal Mining Effluent Regulations* (MMER) protocols. The discharge of TIA effluent and excess groundwater from the mine working into Roberts Bay will meet MMER discharge limits, and will include monitoring end-of-pipe water quality at the frequency prescribed by MMER. The Roberts Bay receiving environment will also meet the CCME PAL guidelines (marine) based on the effluent water quality targets outlined in the Amendment Application (refer to document P4-1, Effects Assessment).

Furthermore, TMAC commits to adaptively manage potential effects to the Roberts Bay marine environment through collaborative development of an aquatic monitoring framework including the scope typically found in an Aquatic Effects Monitoring Program (AEMP) and in consideration of MMER requirements. The aquatic monitoring framework will include physical and biological environmental monitoring as well as establishment of assessment endpoints and an adaptive management framework.

TMAC is of the opinion that the information presented in the Amendment Application, with the associated IRs attached, sufficiently addresses the protection of marine water quality.

3) Tailings Management

Parties requested information and clarification on tailings management including: clarification on the design and stability of the containment structures; provision of detailed design information pertaining to closure cover. Containment structure design included in the Amendment Application (document P6-13 Tailings Management System) presents the necessary level of engineering analysis to demonstrate the short and long term stability of the containment structures. The proposed closure cover design as presented in the Amendment Application (document P5-2 Interim Closure and Reclamation Plan) is intended for dust control and is conceptual, which is the appropriate level of engineering to support the current level of review. The final closure cover design will be provided to the NWB prior to its construction at closure.

TMAC submits that the information presented in the Amendment Application, and the associated IRs attached, sufficiently addresses the tailings containment structure and cover design considerations.

4) Air Emissions

Comments were received requesting more information detailing the potential impacts of airborne particulate matter, dust deposition (dust fall) and dust mitigation measures associated with proposed project amendment infrastructure, and particularly dust fall emissions generated by sub-aerial tailings deposition. In consideration of the potential for dust deposition, changes to the Project footprint is relatively minor relative to the potential from the TIA. Therefore, site wide modeling is unnecessary. TMAC acknowledges that the change in tailings technology to subaerial has the potential for increased dust from this source. For the effects assessment, a conservative approach was taken and a broad potential aerial extent of dust deposition was considered. Detailed modeling would only refine the area (i.e. make it smaller) and as such TMAC submits that the Amendment Application has adequately assessed and incorporated design mitigation measures and monitoring measures, as detailed in the revised Air Quality Management Plan (document P5-1) and Tailings Management System report (document P6-13) provided with the Amendment Application.

As the Project advances additional air quality modelling and particulate monitoring will be completed to inform Project planning and design and be used as a management tool to further evaluate the effectiveness of the dust control mitigation and adaptive management.

5) Socio-Economic Conditions

With respect to socio-economic considerations, parties requested that supplemental socio-economic analysis on areas such as labour force demand, labour supply, training and education, housing and impacts due to temporary or mine closure be conducted.

A screening assessment of the potential effects of the proposed project amendment was conducted and considered whether the proposed changes to the Project would alter the previously documented (2005 FEIS) effects of the Project; the assessment was included in the Amendment Application (refer to document P4-1, Effects Assessment). The analysis indicates that the proposed amendments to the Project, as they affect valued socio-economic components, are not anticipated to result in any new effects and that mitigation and monitoring measures currently in place are sufficient.

Furthermore, TMAC has worked closely with the KIA to enhance opportunities for, and mitigate potential impacts of the Project on, Kitikmeot Inuit resulting in a new Inuit Impact and Benefit Agreement (IIBA) between TMAC and the Kitikmeot Inuit Association; a copy of the IIBA is attached to this submission for reference. TMAC is of the opinion that the terms of the IIBA meet the intent of parties' comments and demonstrate that TMAC is committed to helping ensure that employment opportunities are identified and support is provided to maximize local employment and minimize potential socio-economic related effects.

TMAC is of the opinion that the information presented in the 2015 Amendment Application is adequate to perform the level of review required for reconsideration of the Project Certificate.

TMAC respectfully offers to the NIRB and the NWB its opinion that the Amendment Application, supplemented by this submission, includes sufficient information for the determination of completeness and the undertaking of technical reviews by interested parties.

Finally, TMAC would like to emphasize that as a responsible developer, TMAC continues to supplement its information database in readiness of Project execution should the requested amendments be approved. Some of the information requested by parties, while not necessary for the purposes of review and regulatory decision making surrounding our Amendment Application, will support the operational phase of the mine, including validating predicted residual effects and the effectiveness of proposed controls, and implementing adaptive management measures aimed at continuous improvement. Some of these data will be available through the course of the NIRB and the NWB processes and will be provided as supplemental information, as appropriate.

TMAC appreciates the input of the interested parties and the opportunity to provide our response.

Regards,



M John Roberts
Vice President, Environmental Affairs