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March 20, 2018
Project No: 1CT022.016

Vice President Environmental Affairs
TMAC Resources Inc.
Suite 1010 – 95 Wellington Street West
Toronto, Ontario, M5J 2N7

Attention: Oliver Curran, MSc, Vice President Environmental Affairs

Dear Oliver:

RE: Doris Project 2017 Annual Geotechnical Inspection

TMAC Resources Inc. contracted SRK Consulting (Canada) Inc. to conduct a geotechnical site inspection on their Doris Project (the Project) in Nunavut. This geotechnical inspection is an annual requirement in response to Part J, Items 16 and 17 of TMAC's Water Licence 2AM-DOH1323, Amendment #1 issued by the Nunavut Water Board (NWB) on November 4, 2016 which was in effect at the time of the inspection.

Project construction started in 2007, but was suspended periodically as the project went through two ownership transitions. Commercial production started in January 2017, and was still ramping up to full production at the time of the inspection.

The 2017 geotechnical site inspection was carried out by Principal Consultant Maritz Rykaart, PhD, PEng between July 11 and 14, 2017. The inspection included a comprehensive drive and walkover over the entire Doris site, followed by a helicopter aerial reconnaissance. In addition, Maritz inspected the 10 km all-weather road (AWR) to the former Windy camp, and the Secondary Road from the Doris camp to the Tailings Impoundment Area (*aka* Tail Lake Access Road) via truck, with frequent stops for physical inspections at key areas. TMAC Environmental Technician Jamie Ihakkaq accompanied Maritz during most of the walkover survey. Gord Morrison, President and Chief Technology Officer for TMAC and Kelly Schwenning, Surface Operations Manager for TMAC accompanied Maritz for parts of the driving survey. Gord Morrison again accompanied Maritz during the aerial survey which included a fly-over of the remediated Patch Lake drill shop area. Weather conditions during the inspections were mostly warm and sunny with light winds, and some light rain on July 13.

In addition to the physical inspections, whilst on-site, Maritz also had detailed discussions with the following TMAC staff to gather comprehensive information pertaining to the inspection:

- Mr. Kelly Schwenning, Surface Operations Manager;
- Mr. Kyle Conway, On-Site Environmental Coordinator; and
- Mr. Chad Parent, Mill Operations Manager.

On the last day of the inspection, Maritz facilitated a meeting with many of TMAC's operational and environmental staff to present the findings of the inspections and discuss the recommended maintenance issues as described in this letter.

Formal annual geotechnical inspections of the Project have been carried out by SRK eight times between 2009 and 2016. The inspection reports are filed on the Nunavut Water Board (NWB) public registry. This letter presents the findings of the 2017 geotechnical inspection, which includes the 10 km all-weather road linking Doris camp with the former Windy Exploration Camp and the former Patch Lake drill shop area (only inspected aerially). This inspection report; however, excludes the North Dam and Tailings Impoundment Area (TIA), which is reported under separately.

Changes to surface infrastructure relevant to the geotechnical site inspection, since the 2016 geotechnical site inspection, include:

- Completion of construction of the mill building;
- Ore was being processed through the mill and both flotation and filtered tailings was being produced. Flotation tailings was pumped to the TIA and filtered tailings was temporarily stockpiled adjacent to the mill building before being mixed with waste rock and backhauled underground for use as backfill;
- Increased volumes of ore and waste rock stockpiled in Pad T;
- Continued construction of the reagent and cyanide storage facility near the North Dam adjacent to the Secondary Road;
- Completion of construction of the permanent explosive storage area at the junction between the Secondary Road and the spur road to Quarry #3. This facility was in active use;
- Extension of the Secondary road past the permanent explosives storage area near Quarry #3 towards the South Dam location;
- Continued construction of the new Doris airstrip apron at the south end of the airstrip, which would accommodate a liner for de-icing of aircraft; and
- Construction of Emergency Dump Catch Basins at both ends of the Doris Bridge. At the time of the inspection both facilities were still under construction.

In response to the 2015 annual geotechnical inspection, SRK recommended that TMAC adopt a Surface Infrastructure Geotechnical Monitoring Program (SIGMP), as documented in the 2016 annual geotechnical inspection.

The intent during the 2016 and 2017 annual geotechnical site inspections were for SRK to audit the completed checklist and focus the inspection efforts on the areas where changes have been observed, or where unique or extraordinary observations were noted. TMAC, however, did not conduct any inspections in accordance with the SIGMP, and as a result SRK proceeded with a comprehensive geotechnical inspection in 2016 and again in 2017.

Generally, the 2016 geotechnical inspection suggests that conditions, as it pertains to geotechnical performance of surface infrastructure, are essentially unchanged from what was observed in 2016. Items of note that fall outside of routine maintenance activities, and require action by TMAC include:

- As stipulated in the 2015 inspection report, TMAC should complete at least four surveys annually of the two survey monuments on Pad B. These are to be done in May, June, August and September, which corresponds to the periods when thaw starts, and up to the time when the active layer thickness is at its greatest. This matter requires immediate attention;
- As stated in the 2016 inspection report, as a precautionary measure TMAC should continue to carefully monitor Pad G near the sinkhole that developed and was backfilled in October 2014 for any additional sign of deformation, at least until the fall of 2018.
- During the 2016 inspection a small depression was observed along the south-east abutment of the Doris bridge. In the 2016 report, SRK provided a comprehensive description of ground conditions in the area, as well as a review of thermal data and potential geotechnical risk factors. Subsequently, SRK recommended that TMAC maintain a close watch on the depression. SRK inspected the area again in 2017 and observed no notable change. Similarly, the bridge abutment thermistor near the area of concern shows no anomaly to suggest foundation thaw. Notwithstanding the fact that the system appears to be behaving as designed, and the depression is not likely to be of concern; TMAC should continue to monitor if there is any indication of the depression increasing in size. Should any change be noted a geotechnical engineer should be consulted to further investigate the cause, and appropriate remedial measures need to be implemented.
- The repairs and upgrades detailed for Sump #1 and Sump #2 in the 2016 inspection report has not been completed. This work needs to be addressed as a matter of priority as the extent of permafrost degradation is increasing rapidly.
- TMAC responded to a Nunavut Mines Inspector order regarding the stability of the original waste rock pile (Pad I) and the ore stockpile constructed on top of it in 2017. This response included a stability assessment by SRK and a recommendation for a safety berm at the toe of the facility where it borders the mill building. SRK noted during the 2017 inspection that a portion of this safety berm still needs to be completed. This should be done as a matter of priority for the reasons stated in SRK's stability analysis.

- SRK observed that along the North end of the waste rock pile constructed on Pad T, there is a slight overbuild of the waste rock pile resulting in some waste rock spilling over onto the upstream diversion structure. TMAC needs to implement improved dumping practices to avoid such overbuilding, and any waste rock upstream of the diversion berm needs to be relocated to the waste rock pile.

- Construction of the clean quarry rock base for Pad T was not completed prior to starting stockpiling of ore. The ore stockpile has reached the extent of the pad at the western end, and TMAC is reminded to complete Pad T pad construction prior to advancing the ore stockpile further west.

- SRK reminded TMAC that care needs to be taken when constructing permanently heated buildings on the rockfill camp pads. Prolonged heat generated from these buildings will result in the active layer below the pad deepening which in turn could lead to degradation of the underlying permafrost which will manifest as undue settlement. Detailed thermal analysis has been carried out for the project site, which provides guidance on what extent of prolonged heat may cause problems. These analyses also contain appropriate design mitigation measures to prevent onset of permafrost degradation. TMAC should ensure that they consult this reference material when designing and erecting new buildings on the project site.

- The Pollution Control Pond (PCP) appears to be functioning well as evidenced through the inspection, as well as a review of the three ground temperature cables (GTCs) installed to track whether the keyed in liner for the PCP remains in contact with permafrost. The pond base is however very undulated because of surficial permafrost melt, and as a result there are multiple small ponded areas that prevents complete drainage of the pond. These depressions should be carefully filled in using unfrozen overburden salvaged from the overburden pile. In doing so, ongoing permafrost degradation will be minimized prolonging the life of the PCP.

- In 2016 the INAC Inspector noted that surface runoff from the Roberts Bay 20 ML tank farm high wall appeared to find its way behind the liner and requested that TMAC confirm this would not detrimentally impact the integrity of the liner. SRK provided an assessment of this situation in the 2016 report and concluded that there were no concerns pertaining to the integrity of the containment system. This is therefore not considered a critical item. However, precautionary remedial measures in the form of sumps installed through the liner to allow monitoring for water accumulation underneath the liner were recommended, but have not been acted on.

- Rock spalling on the vent raise and 7.5 ML tank farm high walls has previously been raised as a concern for personnel safety. SRK noted during the 2017 inspection that over the last year a substantial number of rocks have fallen from these walls. This poses a safety hazard to personnel working in these areas. Since limited access prohibits construction of a simple catch-berm to retain falling rocks, TMAC should consider a permanent solution such as covering these high walls with mesh, or impose an annual preventative scaling campaign. However, until such time, TMAC should post signage waring people to avoid these areas, or if they must enter the danger zone, they should be made aware of the nature of the hazard.

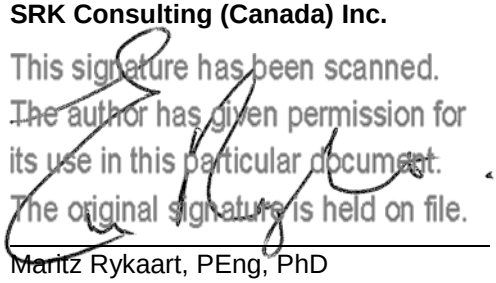
As previously mentioned SRK carefully reviewed results from GTC installed at the Pollution Control Pond (PCP) and in each of the bridge abutments. The thermal data confirms these structures are performing as designed and that the structures have not resulted in degradation of the permafrost in any way. There are no warming trends observed in any of these datasets.

In consultation with SRK, TMAC has decided to continue with external (SRK) comprehensive annual geotechnical inspections, rather than implement the SIGMP for 2018 and the foreseeable future.

For ease of reference, a summary table of all recommendations is provided in Attachment 1.

Sincerely,

SRK Consulting (Canada) Inc.



Maritz Rykaart, PEng, PhD
Principal Consultant

Attachment 1: Summary Table of Recommendations

Summary of Recommendations – Doris Project 2017 Annual Geotechnical Inspection

Observation	Recommendation
TMAC did not conduct surveys of survey monuments on Pad B. See 2015 inspection report.	As stipulated in the 2015 inspection report, TMAC should complete at least four surveys annually of the two survey monuments on Pad B. These are to be done in May, June, August and September, which corresponds to the periods when thaw starts, and up to the time when the active layer thickness is at its greatest. This matter requires immediate attention;
Sinkhole that developed at Pad G in 2014.	As stated in the 2016 inspection report, as a precautionary measure TMAC should continue to carefully monitor Pad G near the sinkhole that developed and was backfilled in October 2014 for any additional sign of deformation, at least until the fall of 2018.
During the 2016 inspection a small depression was observed along the south-east abutment of the Doris bridge	TMAC should continue to monitor if there is any indication of the depression increasing in size. Should any change be noted a geotechnical engineer should be consulted to further investigate the cause, and appropriate remedial measures need to be implemented.
SRK noted during the 2017 inspection the repairs and upgrades detailed for Sump #1 and Sump #2 in the 2016 inspection report have not been completed.	This work needs to be addressed as a matter of priority as the extent of permafrost degradation is increasing rapidly.
SRK noted during the 2017 inspection that a portion of the safety berm at the toe of the original waste rock pile (Pad I) and the ore stockpile constructed on top of it in 2017, where it borders the mill building, still needs to be completed.	Completion of the safety berm should be done as a matter of priority for the reasons stated in SRK's stability analysis.
SRK observed that along the North end of the waste rock pile constructed on Pad T, there is a slight overbuild of the waste rock pile resulting in some waste rock spilling over onto the upstream diversion structure.	TMAC needs to implement improved dumping practices to avoid such overbuilding, and any waste rock upstream of the diversion berm needs to be relocated to the waste rock pile.
Construction of the clean quarry rock base for Pad T was not completed prior to starting stockpiling of ore. The ore stockpile has reached the extent of the pad at the western end.	TMAC is reminded to complete Pad T pad construction prior to advancing the ore stockpile further west.
None - reminder	TMAC should ensure that they consult the provided detailed thermal analysis and design guidance when designing and erecting new buildings on the project site.
The Pollution Control Pond (PCP) base is very undulated because of surficial permafrost melt, and as a result there are multiple small ponded areas that prevents complete drainage of the pond.	These depressions should be carefully filled in using unfrozen overburden salvaged from the overburden pile. In doing so, ongoing permafrost degradation will be minimized prolonging the life of the PCP
TMAC has not implemented precautionary remedial measures in the form of sumps installed through the Roberts Bay 20 ML tank farm liner to allow monitoring for water accumulation underneath the liner.	TMAC should implement the precautionary remedial measures in the form of sumps installed through the Roberts Bay 20 ML tank farm liner to allow monitoring for water accumulation underneath the liner.

Observation	Recommendation
Rock spalling on the vent raise and 7.5 ML tank farm high walls has previously been raised as a concern for personnel safety. SRK noted during the 2017 inspection that over the last year a substantial number of rocks have fallen from these walls. This poses a safety hazard to personnel working in these areas.	Since limited access prohibits construction of a simple catch-berm to retain falling rocks, TMAC should consider a permanent solution such as covering these high walls with mesh, or impose an annual preventative scaling campaign. However, until such time, TMAC should post signage waring people to avoid these areas, or if they must enter the danger zone, they should be made aware of the nature of the hazard.