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November 14, 2019

Keith Morrison
Technical Advisor II
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, NU, X0B 0C0

Re: TMAC's Response to the Nunavut Impact Review Board's 2019 Annual Monitoring Report for Doris North and Phase 2 Hope Bay Belt Projects and Board's Recommendations

Dear Mr. Morrison,

TMAC Resources Inc. (TMAC) is providing the following correspondence in response to Recommendations made in Nunavut Impact Review Board (NIRB) 2018-2019 Annual Monitoring Report for Doris and Phase 2 Hope Bay Projects provided to TMAC on October 25, 2019.

TMAC's response to the NIRB recommendations can be found in Attachment A of this submission.

Should you have any further questions please feel free to contact me at oliver.curran@tmacresources.com.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Oliver Curran', is positioned above the typed name.

Oliver Curran
Vice-President, Environmental Affairs TMAC Resources Inc.

cc:
Ashley Mathai (TMAC)
Shelley Potter (TMAC)
Sarah Warnock (TMAC)
Kyle Conway (TMAC)
Adam Grzegorzczuk (TMAC)

Attachment A: TMAC Response to the NIRB's 2019 Annual Monitoring Report for Doris North and Phase 2 Hope Bay Belt Projects

TMAC'S RESPONSE TO THE NIRB'S 2019 ANNUAL MONITORING REPORT FOR DORIS AND PHASE 2 HOPE BAY PROJECTS

Wildlife Camera Monitoring

Comment

In accordance with the Doris North Gold Mine Project Certificate 003 (September 15, 2006, amended on September 23, 2016), and Phase 2 Hope Bay Belt Project Certificate 009 (November 8, 2018), TMAC (the Proponent) is to periodically provide reports on the environmental performance of the Project and updates of applicable management plans to the NIRB to inform the Board's compliance and effects monitoring responsibilities for the Project. As per Term and Conditions 22 and 15 of Project Certificate No. 003 and Term and Condition 22 of Project Certificate 009, the Proponent shall maintain a Wildlife Monitoring and Mitigation Program. As part of the wildlife monitoring required by the Wildlife Monitoring and Mitigation Program, TMAC has used remote cameras.

In comments submitted in response to the 2018 Annual Report, the Government of Nunavut and Kitikmeot Inuit Association noted the failure to collect imagery from September 2017 to June 2018 due to a programming error in the cameras, and as a result the Proponent was required to extrapolate data from the previous year in its monitoring program. Assuming the previous year's data would continue to be applicable may introduce errors into the analysis, and missing data would increase the probability of incorrect analysis on wildlife interactions with the projects.

Recommendation

The Board requires that within thirty (30) days TMAC Resources Inc. provide to the Nunavut Impact Review Board an update on changes necessary to the camera monitoring program to prevent losses of data in the future, and any improvements to the camera monitoring program being considered to improve data collection. Further, the Board requires the Wildlife Monitoring and Mitigation Plan be updated to include the improved camera monitoring program.

TMAC Response

TMAC has run a monitoring program using cameras at Hope Bay for nine years, starting in 2011. TMAC was an early adopter of monitoring using cameras. Today, many industrial projects use cameras to monitor wildlife distribution, diversity, timing, etc.

Following comments from the KIA and GN on the design of the program 2011-2015, TMAC held a workshop with wildlife biologists from the KIA and GN during the winter of 2016 and re-designed the camera program to address the comments of regulators and provide a robust monitoring program for the future. As part of this program, cameras take two types of photos: 1) triggered photos, which are taken when a animal walks in

front of the camera and 2) a timed photo at noon each day to determine if snow is covering the lens, information that is used to calculate camera effort.

During the period referred to in the comment, cameras collected triggered photos of animals from September 2017 to June 2018. A programming error led to cameras not collecting a timed photo at noon during this time period. In order to address this one time seasonal problem with the camera programming, the camera effort was calculated from the previous year's data. By doing this, ERM was able to help compensate for the missing information and still properly produce a credible analysis for the wildlife monitoring. The programming issue with the camera has already been fixed and TMAC and ERM does not anticipate this error occurring again. More recently collected images indicate that the timed photos were collected during the winter of 2018/2019. This indicates that the problem has been addressed and no further changes to the monitoring program are required.

Potential Dust Generation and Mitigation

Comment

In accordance with the Doris North Gold Mine Project Certificate 003 (September 15, 2006, amended on September 23, 2016), and Phase 2 Hope Bay Belt Project Certificate 009 (November 8, 2018), TMAC (the Proponent) is to periodically provide reports on the environmental performance of the Project and updates of applicable management plans to the NIRB to inform the Board's compliance and effects monitoring responsibilities for the Project. As per Term and Condition 1 in Project Certificate No. 009, the Proponent shall maintain an Air Quality Management Plan requiring monitoring of suspended particulate matter and implementation of dust suppression measures.

In comments submitted in response to the Proponent's 2018 Annual Report, the Government of Nunavut, Health Canada, and the Kitikmeot Inuit Association all identified dustfall as a subject of concern. While TMAC has demonstrated that current monitoring and mitigation measures appear to be sufficient given current activities, the experience of other mining projects has demonstrated that the initial assumptions regarding dust generation, monitoring techniques, and mitigation strategies may not be sufficient for future activity. Based on experience with other Northern projects, the construction and future operation of the Madrid/Patch deposits, which will involve significantly increased traffic along the all-weather road and potential open-pit mining, will significantly increase the probability of dust generation and the need for dust mitigation.

Recommendation

The Board requires that TMAC Resources Inc. include in its 2019 Annual Report to the Nunavut Impact Review Board a discussion of whether new monitoring technologies may be available and practical to measure dustfall. Further, TMAC shall demonstrate that the past and current experience of mining operations in northern conditions,

specifically Meadowbank, Mary River, Diavik, and Ekati, is being taken into account when implementing dust monitoring and mitigation and is implemented within the Air Quality Management Plan.

The Board expects implementation in the next monitoring cycle.

TMAC Response

TMAC appreciates the NIRB's recommendation in relation to dust monitoring and mitigation, and although excessive dust generation has not been observed related to the Hope Bay Project, TMAC takes proactive steps to monitor and minimize dust generation as prescribed by TMAC's air quality monitoring and mitigation program, as outlined in the Hope Bay Project Air Quality Management Plan (AQMP) (TMAC 2019).

TMAC will provide a discussion on new monitoring technologies to measure dustfall implemented at site and their results during 2019 Annual Reporting. TMAC will also review past and current experience of mining operations in northern conditions, and if required will incorporate any lessons learned when implementing dust monitoring and mitigation measures implemented under the AQMP.