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Sent via Email: [kgillard@nirb.ca](mailto:kgillard@nirb.ca)

## **Re: 2020 Compliance Monitoring**

Dear Kelli,

In response to the Nunavut Impact Review Board's (NIRB) correspondence dated May 7, 2020, TMAC Resources Inc (TMAC) is providing this correspondence to proactively communicate to the NIRB the existing operational impacts of the current COVID-19 pandemic and possible implications to TMAC's 2020 monitoring programs pursuant to NIRB Project Certificates No. 003 and 009. Although logistical, operational and travel restrictions are likely to influence activity based monitoring, TMAC confirms that environmental protection and compliance at Hope Bay will continue to be a top priority and will be maintained.

### **1. Impacts of the Pandemic at Hope Bay**

In response to the health risks associated with the COVID-19 pandemic, TMAC implemented an Infectious Disease Control Plan at Hope Bay on March 12, 2020. On March 17, 2020, TMAC communicated the decision to demobilize Nunavut-based workers to eliminate the ongoing risk of transmitting the virus to remote communities in Nunavut and initiated enhanced pre-boarding health screening of each southern passenger by a medical professional. Southern crew change flights were reduced from twice per week to once per month. All non-essential work and visits to Hope Bay were suspended until further notice.

In line with many other mining operators, TMAC made the difficult decision to scale down operations and reduce its workforce as the best course of action. Exploration activities at Hope Bay and all development activities at Madrid North have been suspended. Underground development at Doris has also been suspended and TMAC is focusing on producing from developed stopes and bringing ore to surface. TMAC will continue to evaluate the situation to determine if the risk of the pandemic and its consequential economic impacts necessitates any further action, including a potential controlled transition into temporary care and maintenance.

Currently, TMAC has reduced the number of employees and contractors on-site to approximately 120, relative to a camp capacity of approximately 345 people. The Cambridge Bay, Nunavut office has been closed to the public; staff are working from home. Employees of the Toronto, Ontario office continue to work from home.

Due to the COVID-19 pandemic and the subsequent initiation of the previously described control measures, there are significant logistical restrictions, site support limitations, and personnel reductions at site. In light of these limiting realities, TMAC is providing this correspondence to outline below how 2020 monitoring may be affected.

## **2. Overview of Hope Bay Infrastructure and Activities**

To provide a better understanding of Hope Bay in the context of monitoring, an overview of current infrastructure and activities is described below. TMAC has developed infrastructure at four main sites: Roberts Bay, Doris, Madrid North, and Boston. Project Certificate No. 003 relates to proposed activities and infrastructure at Roberts Bay and Doris, while Project Certificate No. 009 addresses proposed activities and infrastructure at Madrid North, Madrid South, the proposed all weather road to Boston and the Boston site.

The Roberts Bay area includes the seaport infrastructure which consists of a jetty and large storage and laydown facilities, including two tank farms (one with capacity of 5 million litres and a second with capacity of 20 million litres) and a 75,000 m<sup>2</sup> laydown area for offloaded equipment and materials. The Roberts Bay area also includes the Marine Outfall berm and underwater pipeline that facilitates marine discharge from the Tailings Impoundment Area (TIA) and Doris underground mine. The Roberts Bay area continues to be operational.

The Roberts Bay port facilities are connected by an all-weather road to the Doris area. At the Doris site, there is a 345-person camp (currently there are approximately 120 occupants), administration building, power plant, firefighting facilities, water and sewage treatment facilities, waste incinerator, quarry, an airstrip, 7.5 million-liter fuel tank farm, waste rock pile and contact water ponds. The TIA is located south of the Doris site. At Doris a portal leads to the underground mine. Although there has been a reduction of activities at the Doris site as described in Section 1, surface activities and components remain operational, but at reduced rates.

The Doris area is connected by an all-weather road to Madrid North and Windy Lake potable water intake area, 10 km to the south of Doris. The Madrid North site currently includes the Naartok East Crown Pillar area and Madrid North underground decline. Mining support infrastructure includes an overburden stockpile, quarry, contact water pond, waste rock storage pad, laydown space and access roads. Madrid North activities were suspended in March 2020 and the site is not currently in operation apart from water management and monitoring activities. No development has occurred to date at Madrid South.

The Boston site lies 55 km to the south of Madrid and is currently accessible by aircraft using a site airstrip or seasonally via a winter track. The Boston site is used to support advanced exploration and currently has a 65-person camp, power generation and fuel

storage facilities. A portal with underground ramp access leads to approximately 2,300 meters of underground mine development. The Boston site has not been in operation since the 2019 exploration season. No development has occurred at Boston pursuant to Project Certificate No. 009.

### 3. Management and Monitoring Programs

This section outlines the components of TMAC's Environmental Management System, which is primarily documented via 'management plans', and notes which plans may be affected as a result of the pandemic, reduced activities at Hope Bay and restricted access to site. As per the NIRB's May 7, 2020 correspondence, Table 1 below provides an indication of anticipated changes to programs. Further details on programs where changes are anticipated as being required are provided in Section 4. TMAC would like to note that Table 1 has been produced with information available to TMAC to date, and that definitive plans will be confirmed prior to commencement of each component of a program.

**Table 1: Anticipated Changes to TMAC Monitoring Programs**

Program	Change to Approach?	Notes
<b>Biophysical Environment</b>		
Emergency Response	No	Will be maintained and updated as required for changes in responsibilities, availability of equipment and access to the site.
Spill Contingency		
Oil Pollution Emergency Plan	No	No change to approach. This plan is reviewed by Transport Canada annually and updated as required.
Surface Water Management	Yes	Water management and monitoring will be maintained for all facilities holding water. There will be limited access to the Boston site in 2020 due to no exploration program. Dedicated helicopter support for short durations in July and August are being planned, but a reduction in monitoring events will likely be required, without compromising water management objectives or compliance.
Groundwater Management	No	Continue to dewater Doris mine and discharge to Roberts Bay in compliance with the Metal and Diamond Mining Effluent Regulations (MDMER).
Domestic Wastewater Treatment	No	No change required although treatment volumes are substantially reduced.
Tailings Management	No	TIA will continue to be maintained, including water management, and discharging MDMER compliant water to Roberts Bay.
Quality Assurance Quality Control	No	QA/QC program for monitoring still applies.
Waste Rock, Ore and Mine Backfill Management	No	Waste rock, ore and mine backfill is expected to be managed consistent with the current operation.
Non-hazardous Waste Management	No	No change required although volumes are expected to decline substantially.
Hydrocarbon Contaminated Material Management	No	No change required although volumes are expected to decline substantially.
Hazardous Waste Management	No	No change required although volumes are expected to decline substantially.

Program	Change to Approach?	Notes
Incinerator Management	No	No change required although volumes are expected to decline substantially.
Quarry Management	No	Quarries may be used for maintenance of site infrastructure. No change required.
Explosives	No	No change required although volumes are expected to decline substantially.
Air Quality	Yes	Mitigations and metrological data collection maintained. 2020 snow core sampling complete. Air quality sampling units accessible by truck will be accessed and maintained with results reported on. Due to the requirement of extensive 3 <sup>rd</sup> Party support, there may be postponement of monitoring equipment upgrades and a reduction in monitoring locations and events where helicopter access is required.
Aquatic Effects Monitoring Program	No	Monitoring will be maintained. It is anticipated that even reference locations can be accessed with the short duration of dedicated helicopter support.
MDMER Environmental Effects Monitoring	No	Being conducted in coordination with ECCC as required for Roberts Bay discharge.
Wildlife Mitigation and Monitoring	Yes	Mitigations will be maintained. Caribou, bears and muskox will be monitored using the camera program. Road-accessible cameras will be accessed and maintained with results reported on. There may be postponement of battery replacements and a reduction in monitoring locations and events since a helicopter will not be available for the duration of the summer. It is expected data prior to battery depletion can be obtained from data cards in 2021. The upland breeding bird, waterfowl and raptor programs were not scheduled for 2020 and therefore are not impacted.
Fisheries Authorization Monitoring	Yes	TMAC was scheduled to conduct the final year of No Net Loss monitoring in 2020 for the Roberts Lake Fish Enhancement Monitoring Program. As this program is personnel intensive and relies extensively on 3 <sup>rd</sup> Party support, it is not feasible to conduct this program in 2020. In consultation with DFO, TMAC has already requested to defer the 2020 program to 2021. No impact to program objectives are anticipated as a result of the deferral.
Annual Geotechnical Inspections	No	No changes anticipated.
Waste Rock Sampling	No	No change required although limited program commensurate with waste rock generation.
Seepage Sampling	No	No change in approach required although limited helicopter access may require reduction in monitoring events at Boston. Overall effectiveness of the program will be maintained.
<b>Socio-economic Environment</b>		
Socio-Economic Monitoring Plan	No	The 2019 Hope Bay SEMP Reporting Process has been interrupted. Planned meetings for the Hope Bay Socio-Economic Working Group and Kitikmeot Socio-Economic Monitoring Committee for Spring 2020 in Cambridge Bay have been cancelled due to the pandemic. As a result, delivery of a reviewed and final version of the 2019 SEMP Compliance Report to the NIRB has been delayed. Project interactions with the human environment and effects on socio-economic VECs have been significantly affected by the pandemic in 2020. The findings of the 2020 SEMP Compliance Report that will be

Program	Change to Approach?	Notes
		compiled in early 2021 will likely reflect these pandemic impacts.
Occupational Health and Safety	No	No change to approach.
Community Involvement	Yes	The implementation of the Community Involvement Plan (CIP) has been impacted. The TMAC Cambridge Bay office has been closed to the public due to the pandemic and therefore it is not possible for the public in Cambridge Bay to physically engage with TMAC staff, although electronic lines of communication remain open. As the pandemic continues, it is probable that other planned CIP engagements and activities will be cancelled in order to preserve public health. There will be no change to the principles of stakeholder engagement. In the absence of in person meetings, Inuit Environmental Advisory Committee (IEAC) will remain informed by the Cambridge Bay office personnel and/or group teleconferences. TMAC will continue to monitor community gathering restrictions for any community tour opportunities. IEAC engagements will continue to be reported on.
Cultural and Heritage Resources	No	No field work expected. Mitigations maintained.
Human Resources	No	No change to approach.
Mine Closure and Reclamation Plan	No	No change to approach.
<b>External Reporting</b>		
Air Quality	No	No change to approach. Still expecting to report to NIRB under PC. 003 and PC. 009 and ECCC under NPRI, GHGRP, and OBPS.
Mine Effluent Reporting System	No	No change to approach, ECCC required quarterly reporting.
NWB Monthly Reports	No	No change to approach.
NWB Annual Report	No	No change to approach.
NIRB Annual Report	No	No change to approach.
KIA Annual Report	No	No change to approach.

Further details on programs where changes are anticipated as being required are provided in Section 4.

#### 4. Discussion on 2020 Program Approach

This section provides insight into what approaches are anticipated to be taken due to impacts of the pandemic. As discussed above, most notable impacts at Hope Bay have been a reduction in the workforce at site by more than two thirds, reduced passenger transport to site, cancellation of all non-essential visitors to site and minimal helicopter support during the field season. In addition to these personnel and logistical restrictions, TMAC was required to stop transport of our northern workforce to site and has suspended any TMAC representatives from travelling to Kitikmeot communities. However, TMAC's Cambridge Bay office remains active in communicating with northern stakeholders including employees, contractors and members of the community to the extent possible. The subsections below discuss the anticipated change in approach for the programs indicated above as potentially being affected in the 2020 monitoring season.

### **a. Surface Water Management**

There are no changes anticipated for surface water management practices at site. All water will continue to be collected, monitored and discharged in compliance with the water licences and MDMER. Due to limited access to the Boston site during the summer period, efficient use of helicopter time will ensure that the site is accessed for monitoring and de-watering requirements of any water containing structures. TMAC's Inspector will be notified as required if any changes to this approach are experienced.

### **b. Air Quality**

In 2020, operations have been substantially reduced. Vehicle and aircraft traffic will be significantly reduced relative to previous operations. No operations are occurring at Madrid North or Boston, thereby eliminating sources of dust generation and engine emissions relative to 2019. Air quality mitigations and metrological data collection will continue to be maintained. 2019-2020 snow core sampling is already complete. Air quality dustfall canisters have been deployed at Doris and Madrid and will be swapped out again in June and retrieved in August. Jars will be deployed longer than the normal 30 days and will not be deployed for the month of September. There may be postponement of monitoring equipment upgrades and a reduction in monitoring locations and events where extensive helicopter access or onsite technical support is required.

### **c. Wildlife Mitigation and Monitoring**

All wildlife mitigation outlined in the Wildlife Monitoring and Mitigation Plan (WMMP) will remain in place despite the reduced potential for interaction with the Project and people because of reduced operations. Many of the mitigation measures are linked to construction of new infrastructure into previously undisturbed wildlife habitat (e.g., nest and den searches) and will only be implemented if the Project footprint expands. Expansion of Project footprints is not planned in 2020.

Caribou, grizzly bear, muskox and wolverine are monitored through the ongoing wildlife camera monitoring program. Road accessible wildlife cameras will be accessed and maintained during the 2020 field season which will ensure that all wildlife monitoring in proximity to Project activities at Roberts Bay, Doris, the TIA and Madrid (no activities, but infrastructure present) will continue as per the WMMP. There will likely be postponement of battery replacements and a reduction in monitoring locations and events where extensive helicopter access is required. Remote cameras will continue to record pictures in 2020 until batteries deplete. It is expected data prior to battery depletion can be obtained from data cards in 2021.

The upland breeding bird, waterfowl and raptor programs were not scheduled for 2020 and therefore not impacted. The future of these monitoring programs is under discussion with the Canadian Wildlife Service, Government of Nunavut and KIA following comprehensive analyses that reported no identifiable effects of the project over a >10 period. Therefore, monitoring objectives have been satisfied.

Snowbank monitoring was completed in the winter of 2020, with no changes required. It is anticipated that the evaluation of methods for future implementation of height of land surveys and snow track surveys along the Doris-Madrid all-weather-road will be initiated in the Spring of 2021 in collaboration with the IEAC.

No other active wildlife monitoring programs were scheduled to occur in 2020, and therefore will not be impacted. Reporting on the 2020 WMMP will be maintained with no change to the anticipated timeline of submission to the NIRB in April 2021.

#### **d. Fisheries Authorization Monitoring**

Under the Doris North No Net Loss Plan (NNLP), TMAC is required to conduct a final year of monitoring in 2020 for the Roberts Lake Fish Enhancement Monitoring Program. The Roberts Lake Fish Enhancement Monitoring Program has assessed the Arctic Char migration in Roberts Lake Outflow since 2002 as part of the NNLP (Golder 2007). The primary objective of the planned 2020 effort was to document the fourth year of post-enhancement monitoring at Roberts Outflow boulder garden, as described by the NNLP and updates (Golder 2007; Rescan 2010). In May 2020, TMAC requested direction from Fisheries and Oceans Canada (DFO) to defer the 2020 program to 2021 given that this program is labour intensive and requires frequent helicopter support, third party consultants and bear monitoring which is not feasible in 2020. Based on preliminary conversations with DFO, it is apparent that DFO is understanding of the situation and is considering TMAC's request. Deferring the final year of monitoring until 2021 is not anticipated to impact on the objectives of the program and may in fact provide better long-term information. At time of writing, TMAC was still awaiting DFO's direction.

Further fisheries work to support the development of the Madrid-Boston Project, including monitoring, offsetting studies, and consultations with the IEAC and DFO will be deferred until later in 2020 or when non-essential travel to Nunavut is permitted. Developing a no net loss plan for the Madrid and Boston Project in consultation with the IEAC and DFO was initiated in 2018 and continued in 2019. Deferring consultations on this matter through 2020 is not expected to be material given that mine development potentially impacting on no net loss planning has been delayed.

#### **e. Community Involvement**

TMAC has developed a Community Involvement Plan (CIP) which provides a framework for community involvement in the Project. TMAC is committed to engaging positively and effectively with stakeholders in a manner that emphasizes respect, integrity and demonstrates a willingness to learn from experience and embrace necessary change. TMAC bases its approach to community involvement on the following principles:

- Identify all stakeholders in our operations.
- Effectively engage stakeholders and establish a dialogue.
- Provide stakeholders with means to respond to us.
- Report to our company and regulators on our Engagements.

Realities of the pandemic does not change these principles nor compel any changes to be made to this plan. However, a number of activities and events outlined in the plan have been affected for the duration of the pandemic. These include;

- Our Cambridge Bay office is closed to the public in order to maintain social distancing and avoid risk of infection.
- Planned event engagements under the CIP have also been cancelled, such as participation in the Nunavut Mining Symposium and presentations at Kitikmeot Inuit Association Board meetings.
- In March 2020, TMAC physically isolated Hope Bay operations from the rest of Nunavut, including non-emergency site visitation. This step was taken in consultation with the Government of Nunavut Department of Health and the Ekaluktutiak Hunters and Trappers Association.
- Nunavut employees have been sent home and are now placed on temporary lay-off, and as a result, communications are now focussed on when there can be a return to work as opposed to supporting Nunavut employees engaged in mine operations.
- Participation with Stakeholder Representative Organizations has been curtailed.

Our Cambridge Bay office remains active in speaking to and consulting stakeholders as required. TMAC continues to have frequent dialog with stakeholders by phone, email, teleconference, and video conference. The Department of Economic Development and Transportation (ED&T) has the lead within the Government of Nunavut on pandemic matters with Nunavut Mine Operators such as TMAC. Daily communications take place with officials in this Department in order to remain informed of public health measures, how these affect mine operations including how the CIP can be implemented. In the absence of in-person meetings, the IEAC will remain informed by the Cambridge Bay office personnel and/ or group teleconferences.

TMAC will continue to liaise with ED&T in order to understand and respond to changes in pandemic public health guidelines within Nunavut and in impacted communities. TMAC will continue to implement the CIP to the extent possible using appropriate and safe engagement methods. CIP activities continue to be recorded and remain subject to annual reporting.

## **5. Conclusion**

Due to the COVID-19 pandemic and the subsequent initiation of the previously described control measures, there are significant logistical restrictions, site support limitations, and personnel reductions at site. Although these restrictions are likely to require changes to monitoring to a degree, TMAC reiterates that environmental protection and compliance at Hope Bay will continue to be a top priority and will be maintained. TMAC hopes this correspondence proactively provides the NIRB with the requested insight into what changes are anticipated due to impacts of the pandemic. TMAC does not believe that information contained in this correspondence will impact on the NIRB's monitoring efforts, and we request that the NIRB provide an indication if any realities described above will affect the NIRB's determination of compliance



regarding Hope Bay. TMAC appreciates the opportunity provided by the NIRB on this matter and looks forward to continued dialog throughout the year.

Should you have any further questions please feel free to contact me at [oliver.curran@tmacresources.com](mailto:oliver.curran@tmacresources.com).

Sincerely,



**Oliver Curran**

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