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January 29, 2021

Derek Donald
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Sent via Email: derek.donald@nwb-oen.ca

**Re: TMAC Response to ECCC Comments regarding Water License 2AM-DOH1335 –
Notice of Modification – Installation of Madrid North Portal Pad Contact Water Pond**

Dear Mr. Donald,

TMAC Resources Inc. ("**TMAC**") is providing this letter in response to the comment received from Environment and Climate Change Canada ("**ECCC**") on January 26, 2021. TMAC's response is detailed below:

Topic: Discharge of Contact Water Pond to Tundra

Reference: Cover Letter - Monitoring

ECCC Comment: The Proponent is planning to install a new contact water pond (CWP) and surface water diversion berms in proximity to the existing Madrid North Portal Pad. As noted by the Proponent, this pond is required to capture runoff observed from the downstream toe of the Madrid Portal Pad, which contained elevated levels of chloride and ammonia. The cover letter states that, "an updated Hope Bay Project Doris-Madrid Water Management Plan will be provided to the NWB prior to operation of the CWP. The management plan will require a tundra discharge location under Water Licence 2AM-DOH1335 Part F, Item 18, a., which includes the same discharge criteria granted for the existing CWP located adjacent to the Madrid North waste rock pile." ECCC notes that the Licence condition referenced, and the effluent quality criteria included in that condition, does not include the contaminants of potential concern that were observed in the seepage from the Madrid North Portal Pad. Given that the contaminants of concern are not reflected in the existing tundra discharge requirements, it may be appropriate to transfer water collected in the contact water pond to the Tailings Impoundment Area (TIA) in order to minimize potential impacts associated with discharge to the tundra and nearby surface waters due to chloride and ammonia.

ECCC Recommendation: ECCC recommends that contact water collected in the new contact water pond be transferred to the Tailings Impoundment Area for discharge, rather than be discharged directly to the tundra.

TMAC Response: TMAC appreciates this recommendation from ECCC and requests the NWB to consider expanding the parameter list for Madrid Portal Pad CWP effluent discharge onto the tundra to include chloride and total ammonia. As such, TMAC will update the Hope Bay Project Doris-Madrid Water Management Plan to include a tundra discharge location which includes the same discharge criteria granted for the existing CWP located adjacent to the Madrid North waste rock pile as per Water Licence 2AMDOH1335 Part F, Item 18.a., and effluent quality limits for chloride and total ammonia as per Part E Item 2 of the Madrid Advanced Exploration Program Water Licence No. 2BB-MAE1727. The discharge criteria requested is outlined below in Table 1.

Table 1. Tundra Discharge Criteria for Madrid Portal Pad CWP

Parameter	Maximum Authorized Monthly Mean Concentration (mg/L)	Maximum Authorized Concentration in a Grab Sample (mg/L)	Licence Reference
pH	6.0-9.5	6.0-9.5	2AM-DOH1335 Part F, Item 18.a
Total Suspended Solids (TSS)	50	100	2AM-DOH1335 Part F, Item 18.a
Oil and Grease	5, no visible sheen	10, no visible sheen	2AM-DOH1335 Part F, Item 18.a
Total Arsenic	0.5	1.0	2AM-DOH1335 Part F, Item 18.a
Total Nickel	0.5	1.0	2AM-DOH1335 Part F, Item 18.a
Chloride	1,200	2,400	2BB-MAE1727 Part E Item 2
Total Ammonia (NH ₃)	15.3	30.0	2BB-MAE1727 Part E Item 2

ECCC's recommendation of transporting water to the TIA regardless of quality is operationally restrictive and would result in increased residence time in the pond due to haulage capabilities at site. TMAC removed the offending waste rock from the Portal Pad (confirmed through geochemical testing) in 2020 which will remove future source loadings and result in an improvement in the quality of portal pad seepage. For this reason, TMAC believes that the NWB should honour existing criteria that exist for other licences at Madrid that were granted on the basis of being protective of the environment.

TMAC is appreciative of the NWB's attention to this request and for the review ECCC and other intervenors have provided. We look forward to future correspondence on this matter.

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

Sincerely,

A handwritten signature in blue ink, appearing to read 'O. Curran', with a small dot at the end.

Oliver Curran

Vice-President, Environmental Affairs TMAC Resources Inc.

Cc:

Licencing (NWB)

Sarah Warnock (TMAC)

Ashley Mathai (TMAC)