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Cambridge Bay
Ikaluktutiak
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Kugluktuk
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Bathurst Inlet
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Bay Chimo
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Gjoa Haven
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Kugaaruk
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Richard Dwyer

Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, Nunavut
X0B 1J0

June 15th, 2021

Re: Final Submission for Water Licence No: 2AM-BRP1831; Amendment Application by Sabina Gold & Silver Corp.; Back River Project.

Dear Richard Dwyer, the KIA has completed its review of Sabina Gold & Silver Corp.'s Back River amendment application for Water Licence No. 2AM-BRP1831.

As stated previously in our March 2021 review of the hydrodynamic model, the modification package for the Back River Project has been reviewed by our geotechnical engineering, aquatic environment, fisheries, and wildlife consultants.

Our fisheries consultant found that there's very little interaction with fish/fish habitat at the 400 m2 section of rock placement along a shoreline for barge docking and water withdrawals for road and camp construction. The rock placement has been reasonably assessed as not significant, based on the extremely small area relative to the size of Bathurst inlet and the negligible negative effect on fish. They see no problem with the assessment and there are mitigations in place.

Our geotechnical engineering, aquatic environment and wildlife consultants had reviewed Sabina's responses to KIA's Information Requests (IRs) that were provided on November 30, 2020. Our consultants were satisfied with the responses provided.

The update of hydrodynamic model has been reviewed by our aquatic environment consultant and the two remaining issues at the Technical Meeting in March have been tentatively resolved.

As stated in our Technical Meeting presentation there were six issues and recommendations from the hydrodynamic model review that were presented these being:

- Divergence from FEIS predicted impacts to Goose Lake.
- Change in discharge period to include two years of the operational period.
- Water Quality predictions and defining the mixing zone.
- Clarifying the model's warm up period.
- Water quality inputs into the hydrodynamic model.

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- Model calibration.

Four of these six issues were resolved at the time of Technical Meeting while divergence from the FEIS predicted impacts to Goose Lake and Water quality predictions and defining the mixing zone were the last two outstanding issues.

Sabina provided an updated hydrodynamic model results on May 27and KIA provided Sabina our review of the update on June 9. We discussed with Sabina the updated hydrodynamic model results and our review on June 11.

In resolving the last two outstanding issues, Sabina will be providing more information on the Ekati Diamond Mine hardness equation used in the model to substantiate its use for Goose Lake.

Sabina will provide the Site-Specific Water Quality Objects (SSWQO) derivation document and the basis for nitrate SSWQO for Goose Lake. Sabina will also provide the Total Phosphorus Equilibrium Criterion Model (EQC) incorporating nitrogen as a contributor to eutrophication of Goose Lake as per KIA's and ECCC's requests.

There will be only one discharge location for Goose Lake which is location B in the modelling. There will only be one discharge rate of 1,900 m^3/day. Location A in the neck of Goose Lake and the discharge rate of 2,500 m^3/day has been eliminated.

A sensitivity analysis will be provided in the next iteration of the hydrodynamic model. Additional monitoring of cryoconcentrated conditions in the shallow area of the neck of Goose Lake will be undertaken. The AEMP will be updated to reflect this additional monitoring as well as monitoring at the discharge location B in Goose Lake.

An assessment of toxicity of the total ammonia effluent quality will be provided for the full MDMER range of pH. This is intended to support MDMER pH EQC in model predictions.

The KIA continues to work with both Sabina and CIRNAC to update the reclamation security for the Back River Project for the proposed modifications. This will result in an adjustment in the amount of security required, land and water split, and staging given the proposed modifications and changes to the construction schedule.

At present, the KIA seeks to resolve the appropriate amount of security required for water treatment. Given current uncertainties with hydrodynamic model predictions of discharges meeting CCME guidelines, the KIA is of the opinion that water treatment is required for both operational and post closure reclamation discharges to Goose Lake.

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The KIA anticipates that the overall amount of security for the Back River Project will be arrived at relatively soon. Sabina has provided a tentative proposed schedule of staged payments with a more detailed proposal to be provided relatively soon.

The KIA anticipates little or no change in the split of land and water security with these proposed modifications.

As stated at the Technical Hearing, the KIA is willing to receive staged security under particular water license conditions these being:

- KIA must receive security for construction phases sixty (60) days prior to construction.
- Staged security is subject to the NWB process.
- Sabina provides quarterly summary reports on construction progress.
- Reclamation costs to be updated periodically and reviewed.
- Additional security is provided within sixty (60) days of review and determination by the NWB.

The KIA believes that with the last two remaining technical issues of the hydrodynamic model tentatively resolved, resolution of the staged reclamation security will be arrived at shortly.

Thank you.

John Roesch

John Roesch, P.Eng.

Senior Hope Bay Project Officer
Kitikmeot Inuit Association, Department of Lands and Environment