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NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

Licence No: 2AM-BRP1831

February 19, 2024

Merle Keefe
Manager – Environmental Permitting
B2Gold (formerly Sabina Gold & Silver Corp.)
Suite 3400 – 666 Burrard Street
Vancouver, BC, V6C 2X8

Email: mkeefe@b2gold.com

RE: NWB Technical Review of the 2022 Annual Report for Back River Gold Mine Project Licence 2AM-BRP1831.

Mr. Keefe,

The Nunavut Water Board (NWB or Board) has completed the technical review of the 2022 Annual Report (Report), for the Water Licence 2AM-BRP1831 issued for the operation of the Back River Gold Mine Project. The 2022 Annual Report and 2022 Annual Geotechnical Inspection Report were received from B2Gold (Sabina Gold & Silver Corp.) on March 31, 2023.

The NWB distributed the submissions to interested parties on April 13, 2023, for a ninety (90) day public review.

By July 13, 2023, the NWB received comments from Crown-Indigenous Relations and Northern Affairs (CIRNA), Kitikmeot Inuit Association (KIA) and Environment and Climate Change Canada (ECCC). B2Gold was requested to provide a response by August 25, 2023. B2Gold requested extensions on August 30, 2023 and September 22, 2023. The NWB sent additional reminders on October 4, 2023 and October 19, 2023. B2Gold submitted their response to comments on October 19, 2023 and January 31, 2024.

On October 19, 2023, the NWB sent B2Gold's responses to the interveners to confirm whether their comments, concerns and information requests were met.

By November 3, 2023, ECCC confirmed that their concerns were addressed by B2Gold's response and KIA requested some additional clarifications.

CIRNA submitted follow-up information requests on December 4, 2023. The Licensee submitted a second set of responses to CIRNA and KIA on January 31, 2024. On February 9, 2024, KIA confirmed that all their concerns were resolved. CIRNA responded with one outstanding Information Request (IR). The Licensee is advised to respond to CIRNA's IR in the 2023 Annual Report.

Copies of all documents, including Interveners' comments, concerns, information requests and responses received during the review can be accessed through the NWB's Public Registry and FTP site using the following link:

<ftp://ftp.nwb-oen.ca/registry/2%20MINING%20MILLING/2A/2AM%20-%20Mining/2AM-BRP1831%20Sabina/3%20TECH/B%20GENERAL/2%20ANNUAL%20RPT/2022>

The following table provides a brief summary of the issues identified during the Report review that pertain to the NWB's mandate, which require follow up. The table provides comments/deadlines for the Licensee to provide information. For the Interveners' discussion of these items, please refer to the comment submissions referenced above. It should be noted that a number of questions/comments from Interveners were addressed during the review process; therefore, these items are not included within the table.

#	Comment / Recommendation	NWB comment / note / deadline
Crown-Indigenous Relations and Northern Affairs (CIRNA)		
R-1	CIRNAC recommends that B2Gold update the Goose Lake Hydrodynamic and Water Quality Model by incorporating the results of the 2022 field program reported in the Back River Project - 2022 Aquatic Baseline Report. The updated Hydrodynamic Model should be made available for review prior to submission of the 2023 Annual Report to allow for review to be completed and recommendations on Aquatic effects developed.	B2Gold (Sabina) will make this change in the 2023 Annual report.
R-2	CIRNAC recommends B2Gold report the following in the next Annual Report: <ul style="list-style-type: none"> • a discussion of climate change effects on the hydrological forecasts • a discussion of risks associated with selenium exceedances • Quantify the contribution of elevated Phosphorus levels in Goose Lake's trophic status over time 	B2Gold (Sabina) will include requested discussions in the 2023 Annual Report. B2Gold disagrees that quantification of phosphorus uptake is necessary at this time.
R-3	CIRNAC recommends that plans that are provided to the NWB with out a revision list to track significant change should not be considered for review.	B2Gold (Sabina) stated that edits were made throughout the plan due to extensive changes. For future updates, revision list will be provided.

R-4	CIRNAC requests clarification as to why the waste rock generated from Echo Pit and underground decline are not reported as waste rock. Rationale and data should be provided to confirm that the waste rock used in construction is NPAG.	<i>"B2Gold apologizes for the confusion and confirms that PAG rock was not used as construction material in 2022."</i> More information to be provided in the 2023 Annual Report.
R-5	CIRNAC requests the following information: <ul style="list-style-type: none"> • source location and end use location for waste rock used in construction as well as volumes of rock excavated from quarries and roads, • lab certification • map showing locations of geochemical analysis samples 	B2Gold (Sabina) will include requested information in the 2023 Annual Report.
R-6	CIRNAC recommends that B2Gold confirm classification criteria as NPAG. CIRNAC requests that the Licensee confirm (in 2023 Annual Report) the source location(s) corresponding to the data presented in Table 2.6-1 of the Annual Report and provide supporting evidence that clearly demonstrates that the rock generated from the Echo Pit and underground decline is acceptable for construction.	B2Gold (Sabina) informed that it was an error and stated the correct classification criteria for NPAG. B2Gold (Sabina) will provide confirmation of as requested, in the 2023 Annual Report.
R-7	CIRNAC recommends that B2Gold confirms that there is no Monitoring Activity to report.	B2Gold (Sabina) confirmed that there is no Monitoring Activity to report.
R-8	CIRNAC recommends that the Licensee provide appropriate numbering and table titles in Appendix B of the Annual report.	B2Gold (Sabina) will include requested update in the 2023 Annual Report.
R-9	CIRNAC requests clarification on Section 2.20 (Landfill and Waste Management) reference that responses were received and feedback is pending and include a detailed explanation of how the comments received have been incorporated into the plan to date.	B2Gold (Sabina) will update the Landfill and Waste Management Plan and submit it with the 2023 Annual Report.
R-10	CIRNAC recommends that the Licensee provide an approximate timeframe for development and a proposed workplan for the coming year, including milestones for submission of plans to be reviewed.	A design and construction report will be filed 60 days prior to construction as per Part D, Item 2 of Water Licence. At this time, construction is anticipated in Q1 2024.

R-11	CIRNAC recommends that the Licensee provide clarity related to Waste Oil and explain why it is not included in Section 2.9 of the Annual Report.	The “waste oil to furnace” column notes the waste oil used in an oil furnace for the generation of heat, B2Gold recycles our waste oil in this manner.
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Kitikmeot Inuit Association (KIA)		
KIA-3	Appendix C was missing from the 2022 Annual Report submission.	Appendix C was attached and submitted with the response.
KIA-4	<p>Dozer fell through the ice. 150 L of hydrocarbons is listed as being spilled. Please provide more information on the type of hydrocarbons and on fish presence in the water body and whether any spill containment or cleanup occurred in 2022.</p> <p>Environment Canada needs to be notified and involved in determining any next steps, along with the KIA.</p>	<p>Due to the significant logistical difficulty and high safety risk in retrieval, B2Gold (Sabina) has determined that the dozer is not recoverable. B2Gold (Sabina) will reach out to the KIA to discuss this further.</p> <p>Information will be provided in the 2023 Annual Report.</p>
KIA-6	<p>Golder should clarify how the modifications to the 2015 SRK numerical model affected the calibration and the overall baseline condition model mass budget.</p> <p>It is unclear how the accuracy has been improved if the model has not been calibrated. An attempt to calibrate the model on baseline condition should be attempted and it can be further refined in the future once operation data is available.</p>	The model based on interpreted baseline conditions but is not calibrated. The model can be calibrated in the future as operation data is collected.
KIA-8	KIA requested clarifications regarding the use of local datum in Page 4, Appendix C.	B2Gold (Sabina) confirmed that there was a typo which created confusion.

KIA-10	KIA requested an explanation for obtaining different groundwater inflow values, from using the same numerical model. Alternatively, please outline any changes to the model parameters that were implemented and their rationale.	It is suspected that the assigned specific storage in the SRK model was inadvertently left unchanged from the default model settings applied by the software when building the model. As a result of the unrealistic specific storage, the 2015 SRK model incorrectly predicts higher inflow than the Golder model for a similarly applied hydraulic conductivity profile.
KIA-13	The KIA requests that B2Gold review previous years comments to Sabina Gold & Silver Corp. on management plans and to meet with KIA to discuss how these comments will be addressed prior to the next annual report to the NWB.	B2Gold (Sabina) accepts KIA's recommendation to meet with KIA and discuss their recommended updates to management plans prior to submitting the 2023 Annual Report to the NWB.

B2Gold is to provide a response to the outstanding queries, noted in the table above, in the 2023 Annual Report. KIA mentioned in their submission on November 2, 2023, that all other questions had been answered by B2Gold's responses.

Environment and Climate Change Canada (ECCC)		
EC-1	ECCC recommends the Proponent provide graphs and summary statistics of the baseline data collected to date to support the conclusions that 2022 data is consistent with previously collected baseline data.	Graphs and summary statistics of baseline data collected up to 2018 are provided in the Aquatic Baseline Synthesis Report (Golder 2019). The purpose of the 2022 Aquatic Baseline Report was to present the methods and results of the 2022 baseline data collection and not to provide a comprehensive re-analysis of baseline conditions.
EC-2	ECCC recommends the Proponent provide a description of planned future aquatic baseline monitoring, including identification of existing data gaps.	The data collection in 2021 and 2022 fulfilled the commitments made by B2Gold for additional baseline data collection to support the AEMP, and no further data collection is planned to address the identified data gaps prior to the initiation of the AEMP.

EC-3	ECCC recommends the Proponent review the available Federal Environmental Quality Guidelines (FEQG) for inclusion in the list of guidelines used for analysis of water quality data at the Back River project.	B2Gold (Sabina) responded they will consider the use of Federal Environmental Quality Guidelines (FEQG) in future water quality assessments.
EC-4	ECCC requests that items subjected to open burning be specified, and recommends that these items be considered for incineration, contingent on incinerator availability, as a preferred alternative to open burning.	B2Gold (Sabina) confirms that only paper products, paperboard packing including boxboard and cardboard, untreated wood including lumber and plywood, and natural fiber textiles are open burned at the Back River Project.

After completing the review of the 2022 Annual Report Submission for the Back River Project Licence 2AM-BRP1831, the NWB has determined that the information provided generally addresses the requirements of current Water Licence. Please ensure the comments provided in the table above are addressed by the deadlines specified.

Should you have any questions, please feel free to contact the undersigned at (867) 360-6338 (ext. 33) or ali.shaikh@nwb-oen.ca, at your earliest convenience.



Mohammad Ali Shaikh
Nunavut Water Board,
Technical Advisor

Enclosed: Comments – CIRNA, KIA, ECCC

Cc: Distribution List – Back River Project