

NIRB File No.: 12MN036 NWB File No.: 2AM-BRP1831

August 11, 2020

Matthew Pickard, Sabina Gold & Silver Corp. Suite 202-930 West 1st Street, Suite 202 Vancouver, B.C. V7B 3N4

Sent via email: mpickard@sabinagoldsilver.com

Nunavut Impact Review Board Direction Regarding the "Back River Project 2020 Re: Modification Package" submitted by Sabina Gold & Silver Corp. in relation to the **Back River Project**

Dear Matthew Pickard:

This correspondence conveys the direction of the Nunavut Impact Review Board (NIRB or Board) regarding the outcome and next steps in the NIRB's consideration of modifications to the Back River Project (NIRB File No: 12MN036) proposed by Sabina Gold & Silver Corp. (Sabina or the Proponent) in correspondence received by the NIRB on June 16, 2020.

As explained in more detail in the body of this correspondence, following the NIRB's review and consideration of information provided by Sabina and written comment submissions provided by regulatory authorities, the NIRB has reached the conclusions that follow. The Back River Project 2020 Modification Package does not require changes to the existing terms and conditions of Project Certificate No. 007, but exceeds or alters certain aspects of the project as scoped in the 2015 Final Environmental Impact Statement (FEIS) and the 2017 FEIS Addendum. The NIRB agrees with commenting parties that updates to management and mitigation plans, and modifications to the existing monitoring program for the Back River Project (the Project) are required to manage the potential for varied effects on terrestrial wildlife, water management, vegetation, and the marine environment associated with the proposed modifications. On this basis, the NIRB has decided that the Back River Project 2020 Modification Package would not constitute a significant modification that requires further assessment by the NIRB if Sabina implements the following updates to management and monitoring plans and enhancements to the existing reporting program to reflect the activities in the Back River Project 2020 Modification Package:

(866) 233-3033

1. Wildlife Monitoring and Mitigation Plan

The Proponent shall update the Wildlife Monitoring and Mitigation Plan (WMMP), and ensure that it is updated on the NIRB registry, to include a detailed plan to address the Kitikmeot Inuit Association's concerns (noted below) regarding the security of the Winter Ice Road emergency camps during the remainder of the year when the Winter Ice Road is not in operation. The Proponent shall also ensure that yearly monitoring of the effects on wildlife from any changes in air traffic resulting from expansion of the airstrips at Goose and the Marine Laydown Area is reported.

2. Water Management Plan

The Proponent shall, as may be required by the Nunavut Water Board, update its Water Management Plan to incorporate the changes included in the Back River Project 2020 Modification Package and ensure that if updates are completed that the Plan is updated on the NIRB registry.

3. Mine Closure Plan

The Proponent shall include within the Mine Closure Plan options for the reclamation of the sections of the Winter Ice Road where aggregate has been placed and ensure that it is updated on the NIRB registry.

4. Oil Pollution Emergency Plan

The Proponent shall update the Oil Pollution Emergency Plan to include appropriate emergency response plans and update operational procedures for the fuel transfer station at the Marine Laydown Area and ensure that it is updated on the NIRB registry.

5. Marine Monitoring Plan

The Proponent shall update the Marine Monitoring Plan as required and ensure that it is updated on the NIRB registry to incorporate the construction operation, and monitoring of the shoreline pad in the Marine Laydown Area.

6. Quarry Management Plan

The Proponent shall update the Quarry Management Plan as necessary to include quarries and borrow pits to be used to supply aggregate for the Winter Ice Road enhancements and ensure that it is updated on the NIRB registry.

7. Information Requirements

The Proponent shall provide a response to NIRB regarding the information and clarifications requested in parties' submissions as indicated below, specifically those of the Kitikmeot Inuit Association and Government of Nunavut, by September 30, 2020. The submission should link responses to current or expected changes to mitigation and management plans where appropriate.

8. Operational Status and Required Plans

Sabina considers the Back River project to be in pre-construction, with the justification that the nature of ongoing activities and upgrades to existing infrastructure do not constitute construction. As noted by Board in the 2019 Monitoring Report (largely discussed with submissions from the Kitikmeot Inuit Association) and in comments provided by the Government of Nunavut related to this modification, the existing Terms and Conditions for Project Certificate No. 007 include provisions for monitoring and operational plans that are required prior to or during the construction phase. These plans and monitoring reports would provide sufficient certainty regarding some of the information required by parties at this point, and address other issues raised. Given the nature of ongoing operations and upgrades to existing infrastructure approved under the mine plan, the Board is confirming that it considers the Back River project to now be in the construction phase, especially with regards to the winter road operations and Marine Laydown Area. As such, all required plans for the construction phase under Project Certificate No. 007, notably the Vegetation Monitoring Program and Plan associated with the Marine Laydown Area and Winter Ice Road, be submitted to the NIRB prior to these modifications being undertaken.

The Board has concluded that the implementation of the updated plans and enhanced monitoring and reporting will ensure that the potential for effects due to the activities as proposed in the Back River Project 2020 Modification Package can be prevented, managed and mitigated without the need for further assessment by the NIRB.

BACKGROUND

The Back River Project is a gold mine operation in the Kitikmeot region of Nunavut, located approximately 400 kilometres (km) southwest of Cambridge Bay, and 95 km southeast of Bathurst Inlet. It was approved to proceed in July 2017 under Project Certificate No. 007.

On June 9, 2020 the NIRB received correspondence from the Nunavut Planning Commission (Commission) regarding the Back River Project 2020 Modification Package proposal from Sabina and the Commission noted the project proposal was outside the area of an applicable land use plan and involved modifications to works and activities previous reviewed by the Board. The scope of activities noted by the Commission included:

- A 600 meter (m) extension to the airstrip at the Marine Laydown Area;
- A 300 m extension to the airstrip at Goose;
- Waste rock storage increased from 53 to 91 million tonnes (MT);
- 150,000 cubic meters (m³) of aggregate added to road construction material;
- Three permanent emergency camps along the road from the mine site to Bathurst Inlet replacing three (3) temporary shelters;
- Increase of water usage for ice road construction and maintenance from 675 m³ per kilometer to 2,025 m³ per kilometer; and
- An increase of water usage at Goose from 502,000 m³ to 822,450 m³ annually.

The Commission determined the proposal represented a significant modification to the Project as each of the proposed modifications individually would require a screening and cumulative effects may need to be re-assessed in relation to these updated activities.

On June 10 and 16, 2020 Sabina provided the following information on the proposed "Back River Project 2020 Modification Package":

Document	Document ID No.
Sabina Cvr Ltr Re Modification Package	330404
Sabina Modification Package-Pt 1	330405
Sabina Modification Package-Pt 2	330406
Sabina Follow-up Clarification Ltr Re Mod Pkg Final	330507

SCOPE OF ACTIVITIES PROPOSED UNDER THE BACK RIVER PROJECT 2020 MODIFICATION PACKAGE

As proposed by Sabina, the scope of the "Back River Project 2020 Modification Package" include:

- Extending Unwelt underground workings from 650 m depth to 900 m;
- Increasing the size of the Goose airstrip from 1,500 m by 47 m (5,000 by 150 feet) to 1,800 by 61 m (6,000 by 200 feet);
- Increasing the size of the Marine Laydown Area (MLA) airstrip from 915 m by 47 m (3,000 by 150 feet) to 1,500 m by 61 m (5,000 by 200 feet);
- Adding 500,000 litres (L) of fuel storage on a new pad at the Marine Laydown Area;
- Placing aggregate over approximately 15 kilometers (km) on rough terrain along the Winter Ice Road between the MLA and Goose;
- Increasing water use at Goose from 502,000 m³ to 822,450 m³ annually;
- Increase of water use for ice road construction and maintenance from 675 m³ per km to 2,025 m³ per km;
- Increase of waste rock volume from 59 to 86.6 Mt located on the same total footprint;
- Use of mined-out open pits as tailings storage;
- Replacement of three (3) temporary emergency shelters along the Winter Ice Road with permanent emergency camps;
- Additional two (2) years of operations;
- Reduced process plant throughput from 7,000 tonnes per day to between 3,000 4,000 tonnes per day;
- Reduction in open pits from four (4) to three (3), and reduction in underground mines from four (4) to one (1);
- Usage of small diameter flexible pipe for MLA desalination plant intake and discharge instead of approved permanent pipes; and
- Extension to MLA shoreline pad approximately 41 m long, 5.5 m to 9.5 m wide and 2 m depth.

PARTIES' COMMENTS AND CONCERNS

On June 29, 2020 the NIRB requested comments on the proposal from interested parties; specifically seeking parties' positions on whether the proposal warranted reconsideration of Project Certificate No. 007 for the Back River Gold Mine Project, in accordance with Section 12.8.2 of the *Nunavut Agreement* and s. 112(1) of the *Nunavut Planning and Project Assessment Act*, S.C. 2013, c. 14, s. 2 (NuPPAA). Parties were requested to provide comments on or before July 13, 2020 which was later extended to July 16, 2020 at the request of Fisheries and Oceans Canada. Comments were received from:

Party	Document ID No.
Kitikmeot Inuit Association (KitIA)	330757
Government of Nunavut (GN)	330759
Crown-Indigenous Relations and Northern Affairs	330747
Canada (CIRNAC)	
Environment and Climate Change Canada (ECCC)	330746

Fisheries and Oceans Canada (DFO)	330758
Transport Canada (TC)	330750

The following are a summary of the comments received from parties:

Kitikmeot Inuit Association (KitIA)

- Changes not likely to alter conclusions within the FEIS regarding Valued Ecosystem Components within KitIA's mandate;
- Agreed with Sabina's assessment that proposed modifications do not diverge from the project or its effects as previously evaluated;
- Modifications will substantially change water management and the proposed activities and documentation including the water management plan should be reviewed by the Nunavut Water Board as part of a water licence amendment or modification;
- Terrestrial modifications are non-significant and NIRB assessment is not required;
- No inconsistencies with the existing Terms and Conditions were noted and so changes to the Terms and Conditions are not required;
- Noted the following on specific topics:
 - Winter Road:
 - Sabina should provide additional information regarding the thermal changes
 of the terrain in response to the aggregate placement and evaluates potential
 long-term impacts associated with the aggregate placement and quarry
 development, including potential water flow alterations and surface
 vegetation;
 - Consideration for closure of the winter road should be provided;
 - More information on site selection of quarries and borrow pits including impacts on eskers as sources should be provided;
 - Sabina state if any portion of the road would be used year-round;
 - o Airstrips:
 - Capacity for larger aircraft could reduce the number of flights needed and thus associated wildlife disturbance;
 - Requested Sabina provide information on potential changes in flights to determine if associated disturbance remain similar to FEIS predictions;
 - Marine Laydown Area shoreline pad extension:
 - Requested Sabina use bubble curtains during construction to reduce fish mortality and sound disturbance to marine wildlife;
 - Winter Road camps:
 - Requested Sabina provide more information on camp placement, construction dates, and security (i.e., grizzlies breaking into camp) when not in use;
 - Requested Sabina provide more information on water testing and treatment at camps;
- Requested KitIA be provided with copies of all submissions to regulatory agencies for review in a timely manner; and
- Explore opportunities to employ local Inuit as independent environmental monitors.

Government of Nunavut (GN)

- Requested Sabina clarify if changes in the airstrips will result in changes in types of aircraft and flight schedules differing from those predicted and assessed in the FEIS, specifically during the summer months when caribou are in the area;
- Requested Sabina clarify if quarry and crushing activities for the Winter Ice Road aggregate will overlap with periods of caribou migration through the area and how caribou disturbance will be avoided during road upgrades;
- Requested Sabina clarify what stage the Back River project is in as activities carried out in 2019 would appear to constitute the construction phase;
- Requested Sabina clarify its definitions of "pre-construction" versus "construction" and identify where these distinctions are provided in the FEIS; and
- Deferred to the NIRB to determine if the proposal constitutes a significant modification.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC)

- Noted the proposed changes were not included in the 2015 FEIS and 2017 Addendum and potential effects have not been assessed;
- Stated that assessment of the proposed modifications may be warranted and concerns raised by affected Inuit should be carefully considered;
- If issues of public concern were raised, Sabina and intervenors should communicate so mutually acceptable mitigation measures would be put in place;
- CIRNAC did not identify any specific terms and conditions to be reconsidered; and
- Assessment of the proposal may identify existing terms and conditions which may require update or new terms and conditions.

Environment and Climate Change Canada (ECCC)

- Did not identify any modifications within its mandate that would fall outside the existing Project Certificate; and
- Would conduct a detailed technical review should NIRB determine an amendment is required.

Fisheries and Oceans Canada (DFO)

- Confident potential changes in waterflow effecting Arctic Grayling Habitat in Goose Lake can be managed under the Fisheries Act and existing Terms and Conditions;
- Did not consider the Marine Laydown Area shoreline pad extension to be a significant modification and suggest Sabina send a Request for Review to Fisheries and Oceans Canada for the additional shoreline pad;
- Did not consider the increased water withdrawal for the Winter Ice Road a significant modification assuming Sabina continues to adhere to Fisheries guidance and provides an updated evaluation on withdrawal impacts for each source waterbody to DFO as a Request for Review;
- Did not believe the proposed changes represent a significant modification to the original project.

Transport Canada (TC)

- Extension of shoreline pad at the Marine Laydown Area may subject to review and approval under the Canada Navigable Waters Act;
- Proposed fuel transfer area will need to comply with the Canada Shipping Act and may require amendments of the existing Oil Pollution Emergency Plan (OPEP); and
- Will take the direction of NIRB on the significance of other modifications that may require regulatory approval.

ANALYSIS OF THE ISSUES

The following table summarizes the specific comments received from parties related to individual components of the Back River Project 2020 Modification Package. The proposed modifications are categorized into three (3) groups: changes to existing infrastructure/operations or new infrastructure; minor adjustments to approved infrastructure; and changes to mining operations that fall within the levels previously established in the approved Project:

Changes/Updated Infrastructure	Comments
Expansion of the Goose all-weather airstrip from 1,500 m by 47 m (5,000 by 150 feet) to 1,800 by 61 m (6,000 by 200 feet);	• KitIA and GN request information on changes in flight schedules and types of aircraft that may impact wildlife.
Expansion of the Marine Laydown Area (MLA) allweather airstrip from 915 m by 47 m (3,000 by 150 feet) to 1,500 by 61 m (5,000 by 200 feet);	
 Increase in water usage from 502,000 cubic metres (m3) to 822,450 m3 annually, with water continued to be sourced from Goose Lake and Big Lake; Increase in water usage for ice road construction and maintenance from 108,000 m3 (675 m3 per km) to 324,000 m3 (2,025 m3 per km); 	 DFO doesn't believe this represents a significant modification. KitIA believes this should be reviewed by the NWB, but doesn't represent a NIRB significant modification.
 Upgrade select sections of the Winter Ice Road through placement of aggregate over approximately 15 kilometers (km) of the 160 km alignment (1 m thick x 10 m wide) 	 KitIA requests information on: thermal changes, waterflow changes, and vegetation effects due to placement of material More information on site selection of quarries and borrow pits, especially eskers Consideration for post-operation closure GN requests information on when quarries and road upgrade operations will take place re: caribou migration
 Development of fuel transfer area near the Marine Laydown Area Freight Storage Area; Installation of an intermediate fuel pump station; Installation of a 500,000 L fuel tank; 	■ TC notes this must comply with the regulations, and an amendment to the OPEP might be needed
 Replacement of mobile emergency shelter with three (3) permanent camps along the Winter Ice Road. 	 KitIA requests information on: Camp placement Construction dates

	Security out of season re: grizzliesWater treatment
 Increase in waste rock volume from 59 to 86.6 Mt) on same footprint; Increase in overburden volume from 5.3 Mt to 6.5 Mt 	No comments
on same footprint;	
 Extension of existing shoreline pad to facilitate offloading (approximately 45 meters long, 5.5 - 9.5 meters wide and in water 1-2 meters deep); 	 DFO does not consider this a significant modification TC notes this may be subject to review and approval under Navigable Waters
Modifications to Infrastructure	
 Usage of small diameter flexible pipe as MLA desalination plant intake and discharge instead of approved permanent pipes. 	No comments
Mining Plan Changes	
Extension of the Umwelt underground workings from 650 metres (m) depth to 900 m to access additional high-grade reserves;	No comments.
 Reduction of waste rock storage areas (WRSA) from four (4) to three (3) [Umwelt WRSA, Llama WRSA and Tailings storage facility WRSA] 	
Reduction in open pits from four (4) to three (3) [Umwelt open pit, Llama open pit, and Goose Main open pit];	
• Reduction in underground mines from four (4) to one (1) [Umwelt underground mine];	
• Reduction of tailings storage facilities from three (3) to two (2) [Tailings Storage Facility and Llama Tailings Facility] with decrease in storage volumes from 19.8 Mt to 12.4 Mt;	
 Additional two (2) years of operations while other phases remain the same; 	
 Reduction in process plant throughput of 6,000 tonnes per day to 3,000 to 4,000 tonnes per day. 	

THE NIRB'S APPROACH TO CONSIDERING MODIFICATIONS

In general, where a previously-approved project is governed by the existing terms and conditions of a NIRB Project Certificate, the NIRB must consider the following questions to determine the applicable process and procedure guiding NIRB's consideration of any modification proposal:

• Is the proposed modification included within the scope of the original project as previously assessed by the NIRB?

- Is the proposed modification consistent with the terms and conditions of the existing NIRB Project Certificate, or are changes to the Project Certificate necessary to reflect the modification?
- Does the proposed modification constitute a significant modification to the original project that is integrally linked to the original project (or project as subsequently modified by any modification proposals that have been assessed and approved by the NIRB)?
- Does the proposed modification constitute a significant modification to the original project that is not integrally linked to the original project, and that has sufficient scope to be assessed as an independent project proposal?

THE NIRB'S DIRECTIONS

Issue 1: Is the proposed modification included within the scope of the original project as previously assessed by the NIRB?

Views of the Parties

With regard to the scope of the proposed changes, in general, commenting parties concluded that the proposed changes described in the Back River Project 2020 Modification Package did not represent significant modifications to the Project as described in the 2015 FEIS and 2017 FEIS Addendum and did not identify any of the proposed changes which would require amendment of or addition to the existing Terms and Conditions

The NIRB's Views

The Board does not find that any of the proposed modifications in themselves represent a significant modification to the Project, and indeed most fall within the existing scope of the approved Project. As such, even considering the cumulative effects, the Board finds that the proposed modifications do not represent a significant modification to the Back River Project and do not require amendments to, or reconsideration of the existing Terms and Conditions.

Is the proposed modification consistent with the terms and conditions of the Issue 2: existing NIRB Project Certificate, or are changes to the Project Certificate necessary to reflect the modification?

Views of the Parties

Parties indicated that although no specific amendments to the existing terms and conditions of NIRB Project Certificate No. 007 are required, the Kitikmeot Inuit Association and Federal departments noted that additional licensing or amendment of existing licensing (specifically the Water License and DFO authorizations) may be required to effectively mitigate the potential for impacts associated with the proposed changes.

Sabina indicated that the proposed modification is consistent with the existing terms and conditions of NIRB Project Certificate No. 007 and can be carried out in compliance with all applicable regulatory approvals and the existing terms and conditions of Project Certificate No. 007.

The NIRB's Views

The NIRB agrees with commenting parties that some of the proposed changes, specifically involving increased water use, would require amendment of the Water License and that the Proponent shall follow the recommendations of DFO regarding withdrawal of water and fish habitat.

As acknowledged by several commenting parties, the NIRB has concluded that changes to the existing terms and conditions of NIRB Project Certificate No. 007 are not required to accommodate the changes to the Back River Project proposed under the Back River Project 2020 Modification Package.

- Issue 3: Does the proposed modification constitute a significant modification to the original project that is integrally linked to the original project (or project as subsequently modified by any modification proposals that have been assessed and approved by the NIRB)?
- Issue 4: Does the proposed modification constitute a significant modification to the original project that is not integrally linked to the original project, and that has sufficient scope to be assessed as an independent project proposal?

Views of the Parties

Commenting parties did not dispute that the Back River Project 2020 Modification Package is integrally linked to the Back River Project.

Regulatory parties indicated some form of further assessment of the Back River Project 2020 Modification Package may be required. Parties also noted further development and enhancement of management plans, mitigation measures and monitoring should be based on consultation with Inuit organizations and community members and should address the concerns identified by parties during the NIRB's consideration of the Back River Project 2020 Modification Package.

The NIRB's Views

Based on the information provided by Sabina in respect of the Back River Project 2020 Modification Package, the comments provided by regulatory authorities and Inuit organizations, and the NIRB's analysis of the relevant factors, the NIRB has reached the following conclusions:

- The activities proposed in the Back River Project 2020 Modification Package are modifications to the previously-approved Back River Project which are integrally linked to the original project and should be considered by the NIRB in the context of the previously-approved project and not as a separate project proposal.
- The potential for ecosystemic and socio-economic effects beyond those previous examined in the 2015 and 2017 reviews of the Back River Project are likely to be minimal.
- Amendment to the existing Water License and approvals from DFO may be necessary.
- While many commenting parties acknowledge that changes to the existing terms and conditions of the Project Certificate are not required to accommodate the changes to the Back River Project proposed under the Back River Project 2020 Modification Package, commenting parties nonetheless requested additional information be provided by Sabina on:

- Placement of quarries and borrow pits for aggregate to be used for the Winter Ice Road;
- o Information on potential effects of aggregate placement for the Winter Ice Road on water flow, temperature regimes, and vegetation;
- o Information on construction and use of the aggregate for the Winter Ice Road and possible reclamation; and
- Information regarding the location and security of refuge camps along the Winter Ice Road.

The NIRB has concluded that the Back River Project 2020 Modification Package does not require changes to the existing terms and conditions of Project Certificate No. 007. However, to prevent, manage, and mitigate the potential for impacts on air quality, the terrestrial environment and the marine environment identified by commenting parties, the NIRB has identified the following updates to management and monitoring plans and enhancements to the existing reporting program for the Back River Project are required as outlined at the beginning of this letter and summarized below:

- Updates to the following relevant plans to reflect the proposed activities: Wildlife Monitoring and Mitigation Plan, Water Management Plan, Mine Closure Plan, Oil Pollution Emergency Plan, Marine Monitoring Plan, and Quarry Management Plan.
- Those plans required by Project Certificate No. 007 to be submitted by the Proponent when the project is in or begins the construction phase.

The NIRB has concluded that if Sabina implements the updates and enhancements as summarized above and outlined at the beginning of this letter, the Back River Project 2020 Modification Package would not constitute a significant modification and no further assessment by the NIRB is required.

CONCLUSION

In closing, NIRB highlights for Sabina that during the NIRB's consideration of Back River Project 2020 Modification Package, the Board considered information received both through monitoring and this assessment, has noted that the activities of the Back River Project have passed a reasonable threshold of pre-construction and as such the Project should be considered to be in the construction phase.

Reflecting the limits to community consultation due to the current pandemic situation, the NIRB encourages Sabina to make use of alternative means of communication, such as social media platforms, to provide access to up to date information about the Back River Project overall and activities carried out as part of the Back River Project 2020 Modification Package specifically.

The NIRB has concluded that the potential for ecosystemic effects associated with the changes to the Back River Project as proposed in the Back River Project 2020 Modification Package can be addressed via the implementation of updated management and mitigation plans, and enhanced monitoring and reporting as directed above. The NIRB requires that the Proponent provide the Board with an expected date of submission of the requested plan updates within **two (2) weeks** following receipt of this correspondence. Should the Proponent require additional time to prepare their response, Sabina should notify the NIRB immediately to request additional time.

The NIRB sincerely appreciates the efforts of the Proponent and all parties towards ensuring the requirements of the Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement) and the Nunavut Planning and Project Assessment Act, S.C. 2013, c. 14, s. 2 (NuPPAA) are respected and the assessment of proposed development projects are undertaken by the most efficient and effective means possible.

If you have any questions regarding the NIRB's directions in respect of these issues, please contact the NIRB's Executive Director, Karen Costello directly via email at kcostello@nirb.ca.

Sincerely,

Kaviq Kaluraq Chairperson

Nunavut Impact Review Board

M. Kang Kalung

cc: **Back River Distribution List**

> Merle Keefe, Sabina Gold and Silver Corp. Sharon Ehaloak, Nunavut Planning Commission Peter Scholz, Nunavut Planning Commission Stephanie Autut, Nunavut Water Board Karén Kharatyan, Nunavut Water Board Sergey Kuflevskiy, Nunavut Water Board Geoff Clark, Kitikmeot Inuit Association

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