

July 8, 2020

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**RE: Back River Project 2020 Modification Package Clarification**

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Dear Sophia/Keith,

Sabina wishes to thank the Nunavut Impact Review Board (NIRB) for the letter dated June 29, 2020 requesting comments on the Back River Project 2020 Modification Package. Upon review of the information contained in your letter there are various points which we believe require clarification to ensure that reviewing parties understand the scope of the modification package.

- 1) Goose Property increase in water usage from 502,000 cubic meters (m<sup>3</sup>) to 822,450 m<sup>3</sup> annually, with water continue to be sourced from Goose Lake and Big Lake
  - Sabina wishes to clarify that the proposed increase in water usage is from 518,000 m<sup>3</sup> to 822,450 m<sup>3</sup> annually (see Section 2.3.3 of Modification Package).
- 2) Reduction in open pits from four (4) to three (3) [Umwelt open pit, Llama open pit and Goose main open pit]
  - Sabina wishes to clarify that the reduction in open pits should not be viewed as a requested modification to the current approved Project. While it is true that Echo open pit is currently not in the mine plan it may be reintegrated at a later date as originally envisioned. As mentioned throughout the NIRB Environmental Assessment, Sabina is proceeding with an initial refined mine plan at the Goose Property which provides a reduced capital investment and financially de-risks the Project. The refined mine plan is a subset of the previously approved permitted mine, and Sabina highlights that, with the continued advancement in detailed engineering and market considerations, the previously approved deposits may be reintegrated into the mine plan at a later date. Sabina acknowledges that if this were to occur, all applicable management plans will be updated to reflect these changes, and Sabina will adhere to all appropriate requirements of the Back River Project Certificate (PC No. 007) and the Type A Water License (2AM-BRP1831).
- 3) Reduction in underground mines from four (4) to one (1) [Umwelt underground mine]
  - Sabina wishes to clarify that the reduction in underground mines should not be viewed as a requested modification to the current approved Project, as those underground mines may still proceed at some point in future. Please refer to point 2 for additional clarification.



- 4) Additional two (2) years of operations while other phases remain the same
  - Sabina wishes to clarify that the potential additional 2 years of operations (based on current projected mining rates and prices) should not be viewed as a requested modification to the current approved Project. The extension of operations from 10 years to 12 years is directly linked to the mine plan which relies on the price of gold at the commencement of a mining area, the size of the process plant and the ore volume processed. . It is not based on any expansion of the project. Sabina has optimized the Process Plant for a smaller throughput (~3,000 - 4,000 tonnes per day (tpd)) which is smaller than the previously approved 6,000 tpd. Sabina notes that if the refined mine plan presented retained the original 6,000 tpd Process Plant, the length of operations would have reduced from the previously approved 10 years. Mine plans vary from year to year and as such should Sabina wish to extend the previously approved mine life of 10 years we will make that request to the NIRB and other authorities closer to that date.
- 5) Reduction in process plant throughput of 6,000 tpd to 3,000 - 4,000 tpd
  - Sabina wishes to clarify that the reduction in process plant throughput should not be viewed as a requested modification to the current approved Project. As mentioned throughout the NIRB Environmental Assessment, and above, Sabina is proceeding with a refined mine plan at the Goose Property which provides a reduced capital investment and financially de-risks the Project. The reduced process plant throughput is a direct result of this, and should Sabina wish to scale the process plant up to the approved throughput of 6,000 tpd, Sabina will update all applicable management plans and adhere to the terms and conditions of our NIRB Project Certificate and Type A Water License.
- 6) Usage of small diameter flexible pipe as MLA desalination plant intake and discharge instead of approved permanent pipes
  - Sabina wishes to clarify the usage of small diameter pipes as MLA desalination intake and discharge pipes, instead of the approved permanent pipes, should not be viewed as a requested modification to the current approved Project. Sabina notes that the limited seasonal water supply needs of the MLA have proven to be easily supported with the use of small diameter flexible pipes for desalination. These pipes are laid out on an as-needed basis, either on the ice (in winter) or directly into the nearshore water (during the open-water season) to supply the desalination plant. Sabina notified the NIRB of our intention to use these temporary lines on June 25, 2018. While these temporary lines currently eliminate the need for the approved permanent lines, Sabina may choose to install in the future if operationally required.



Should you have any questions, please do not hesitate to contact Merle Keefe by email at [mkeefe@sabinagoldsilver.com](mailto:mkeefe@sabinagoldsilver.com) or by telephone at 604-240-6619.

Best Regards,

A handwritten signature in black ink, appearing to read "M. Pickard", with a long, sweeping horizontal stroke extending to the right.

Matthew Pickard B.Sc., MBA, P.Geo, CRSP, EP  
Vice President, Environment & Sustainability  
*Sabina Gold & Silver Corp.*

CC: *Kelli Gillard, Nunavut Impact Review Board*  
*Sergey Kuflevskiy, Nunavut Water Board*  
*Karén Kharatyan, Nunavut Water Board*  
*John Roesch, Kitikmeot Inuit Association*  
*Godwin Okonkwo, Crown-Indigenous Relations and Northern Affairs Canada*  
*Merle Keefe, Sabina Gold & Silver Corp.*

**Table 1. 2020 Modification Package Summary with respect to Previous NIRB and NWB Processes**

Component	Original Back River Project Proposal	2020 Modification Package Proposal	Proposed Changes from NIRB Assessments (as compared to Sabina 2015, 2017a)
Umwelt Underground Extension	<b>Sabina (2012):</b> Up to 680 m depth <b>Sabina (2015, 2017a, 2017b):</b> 650 m depth	900 m depth	Additional 250 m depth (this item relates to mine plan only but is provided for context and NIRB and NWB information purposes)
Goose Property Airstrip Extension	<b>Sabina (2012):</b> Up to 8,200 ft by 150 ft <b>Sabina (2015, 2017a, 2017b):</b> 5,000 ft by 150 ft	6,000 ft by 200 ft	Additional 1,000-ft (305 m) length and 50-ft (15 m) width
Goose Property Total Water Use Increase	<b>Sabina (2012):</b> Fresh water to be sourced from Goose Lake, and other suitable lakes <b>Sabina (2015, 2017a):</b> 518,000 m <sup>3</sup> annually (Goose Lake = 390,000 m <sup>3</sup> ; Big Lake = 128,000 m <sup>3</sup> ) <b>Sabina (2017b):</b> 468,000 m <sup>3</sup> annually (Goose Lake = 390,000 m <sup>3</sup> ; Big Lake = 78,000 m <sup>3</sup> )	822,450 m <sup>3</sup> annually (Goose Lake = 608,700 m <sup>3</sup> ; Big Lake = 273,750 m <sup>3</sup> )	Additional annual water use of 364,450 m <sup>3</sup> (Goose Lake = 218,700 m <sup>3</sup> ; Big Lake 145,750 m <sup>3</sup> )
Waste and Water Management Infrastructure	<b>Sabina (2012):</b> Operations Phase = 10-15 years; Process Plant Throughput = Up to 7,000 tonnes per day (tpd); Mining = 7 open pit and underground mining deposits; and Waste Rock and tailings management facilities. <b>Sabina (2015, 2017a, 2017b):</b> Operations Phase = 10 years; Process Plant Throughput = 6,000 tpd; Open Pit mines = 4; Underground mines = 4; Waste Rock Volume = 59.0 Mt; and Tailings Storage = 3 facilities (Tailings Storage Facility [TSF], mined-out Umwelt Pit [Umwelt TF], mined-out Goose Main Pit [Goose Main TF]); included optionality to use alternative open pits for tailings storage.	Operations Phase = 12 years; Process Plant Throughput = 3,000-4,000 tpd; Open Pit mines = 3; Underground mines = 1; Waste Rock Volume = 86.6 Mt Tailings Storage = 2 facilities (TSF, mined-out Llama Pit [Llama TF])	Additional 2 operational years Reduced Process Plant throughput (33%-50% reduction) 4 Fewer mining areas (1 less Open Pit; 3 less Undergrounds) Additional waste rock volume of 27.6 Mt, stored within the same total footprint areas Exercised optionality described in FEIS to use other open pits as tailings facilities
MLA Fuel Transfer Area	<b>Sabina (2012):</b> Up to 70-ML bulk fuel storage <b>Sabina (2015, 2017a, 2017b):</b> 60-ML bulk fuel storage	Addition 500,000 L fuel storage on separate pad	Additional 500,000 L fuel storage
MLA Airstrip Extension	<b>Sabina (2012):</b> Airstrip to support Dash7/8 aircraft (~4,500 ft) <b>Sabina (2015, 2017a, 2017b):</b> Proposed using an existing all-weather road as airstrip; existing airstrip is 3,000 ft by 150 ft.	5,000 ft by 200 ft	Additional 2,000-ft (610 m) length and 50-ft (15 m) width
MLA Shoreline Pad Extension	<b>Sabina (2012):</b> Included in-water structures (e.g., dock, jetty, moorings, buoys) whose design would depend on the vessels used and shipping requirements <b>Sabina (2015, 2017a, 2017b):</b> Permanent in-water footprint of 9,900 m <sup>2</sup>	Permanent in-water footprint of 420 m <sup>2</sup>	No change - Within previously permitted in-water footprint
WIR Subbase Upgrade	<b>Sabina (2012):</b> Considered construction of all-weather and/or winter roads connecting MLA to Goose Property <b>Sabina (2015, 2017a, 2017b):</b> Stated aggregate may be required along the WIR over rough terrain or where there is insufficient snow cover to create a smooth, level driving surface for highway legal loads	Placing aggregate over approximately 15 km of WIR	15 km of aggregate placement
WIR Service/Emergency Camps	<b>Sabina (2015, 2017a, 2017b):</b> Emergency Shelters placed approximately every 60 km	Three permanent camps	No change - Three permanent camps instead of temporary shelters
WIR Total Water Use Increase	<b>Sabina (2015, 2017a, 2017b):</b> Water use of 675 m <sup>3</sup> /km for 160-km WIR	Water use of 2,025 m <sup>3</sup> /km for 160-km WIR	Additional water use of 1,350 m <sup>3</sup> /km for 160-km WIR

**Sabina. 2012.** Back River Project 2012 Project Description. Submitted to the Nunavut Impact Review Board. June 2012. NIRB File No. 12MN036

**Sabina. 2015.** The Back River Project, Final Environmental Impact Statement. Submitted to the Nunavut Impact Review Board. November 2015.

**Sabina. 2017a.** Final Environmental Impact Statement Addendum. Submitted to the Nunavut Impact Review Board. February 2017.

**Sabina. 2017b.** Revised Type A Water Licence Application for Sabina Gold & Silver Corp. Back River Project. Submitted to the Nunavut Water Board. October 4, 2017.



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