

File No.: 2AM-BRP----

To: Back River Distribution List

Date: May 29, 2018

Subject: Type "A" Water Licence 2AM-BRP----: Pre- Hearing Conference Decision

Regarding an Application for a new Type "A" Water Licence

On May 29, 2018 by Motion #2018-P19-08-03, the members of the Back River Panel (P19), duly appointed by the Nunavut Water Board (NWB or Board) to consider the Application for a new Type "A" Water Licence 2AM-BRP---- approved and directed the release of this Pre-Hearing Conference Decision Report and procedural direction associated with the upcoming in-person Public Hearing to be held in the community of Cambridge Bay during the first full week of August 2018.

In order to facilitate the licensing process for considering the Type "A" Water Licence 2AM-BRP---- Application (Application), submitted to the Board by Sabina Gold & Silver Corporation (Sabina or the Applicant), the Panel directed that, in accordance with Rule 14 of the NWB *Rules of Practice and Procedure* (the *Rules*), the staff of the NWB hold a Technical Meeting (TM) and a Pre-Hearing Conference (PHC) for the Application.

As indicated in the Notice of Application, dated February 23. 2018, the TM and PHC for the Application were held in person in the community closest to the undertaking, Cambridge Bay, Nunavut on May 1 and 2, 2018. On the evening of May 1, 2018, the Board's staff also hosted a Community Session regarding the Application. The Agendas for the TM, Community Session and PHC are attached as Appendix A to this Decision.

As set out in Rule 14.1 of the *Rules*, the PHC dealt with the following matters relevant to the Application:

- Timetable for the Pre-Hearing exchange of information;
- Identification of interested parties;
- Submissions of interested parties;
- List of issues to be dealt with at the Hearing;



- Desirability of amending the Application for the purpose of clarification;
- Procedures for the Hearing; and
- Identification of any other matters that may assist in the simplification and disposition of the Hearing.

Introduction and Registration

The following parties participated in the Board's TM, Community Session and PHC:

- Sabina Gold & Silver Corporation (Sabina or the Applicant);
- The Kitikmeot Inuit Association (KIA);
- Indian and Northern Affairs Canada (INAC);
- Environment and Climate Change Canada (ECCC); and
- Fisheries and Oceans Canada (DFO).

The Board also benefitted from having members of the community of Cambridge Bay in attendance at various times throughout the TM, Community Session and PHC. No questions and/or comments about the Application were provided to the NWB by the community members. The listing of attendees at the TM/Community Session/PHC held in Cambridge Bay (summarized from the sign in sheets recorded at these sessions) is attached as <u>Appendix B</u> to this Report.

1.0 The Application Before the Board

The Application being considered by the Board was filed by Sabina Gold & Silver Corporation (Sabina or the Applicant) on October 5, 2017, seeking a new Type "A" Water Licence (No. 2AM-BRP----), which would authorize the use of water and deposit of waste associated with a Mining undertaking (as defined under the *Nunavut Waters Regulations*¹), including associated project infrastructure as set out in Sabina's Back River Project Proposal (the Project).

The Project is located approximately 400 kilometres (km) southwest of Cambridge Bay, 95 km southeast of the southern end of Bathurst Inlet, and 525 km northeast of Yellowknife, Northwest Territories (NWT), within the Kitikmeot Region of Nunavut. The Project is comprised of two main areas with an interconnecting winter ice road: the Goose Property which is the proposed site

¹ SOR/2013-69, Schedule 1, Item 2, Column 2, which describes a "Mining undertaking" as: Exploration or prospecting — including bulk sampling — for minerals other than petroleum or gas, the operation of a mine, the processing of minerals other than petroleum or gas, the restoration of the site of a mine and any other mining activity other than an industrial activity described in item 1, column 2 [of Schedule 1].



of various open pit and underground gold mines; and the Marine Laydown Area (MLA) supporting project-shipping, and situated along the western shore of southern Bathurst Inlet. The Goose Property Potential Development Area (PDA) is predominantly on Inuit Owned Land (IOL). The Project involves mining of four (4) gold deposits: Llama, Umwelt, Echo, and Goose Main via a series of open pit and underground mines for each deposit. Mine development is proposed to follow an integrated sequence to ensure that there is sufficient ore for the processing plant and space for the deposit of tailings and waste as the completed underground mines and open pits will be used to store groundwater and tailings. Sabina is proposing the life of the Project to be twenty-seven (27) years, consisting of four (4) years of construction, ten (10) years of operation, and thirteen (13) years of closure and post-closure monitoring.

As the Project falls outside an area with an approved Land Use Plan in effect, as set out in the Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement) and the Nunavut Waters and Nunavut Surface Rights Tribunal Act, S.C. 2002, c. 10 (NWNSRTA) the Nunavut Planning Commission was not required to conduct a land use conformity assessment in 2012. On July 11, 2012, the Nunavut Impact Review Board (NIRB) received the referral of the Back River Project Proposal for screening. The NIRB subsequently recommended (and the Minister agreed and referred the Project to the NIRB) for review by the NIRB under the Nunavut Agreement, Article 12, Part 5 (the Review). The NIRB's assessment of the potential ecosystemic and socio-economic effects of the Project, and subsequent reconsideration took place from late December 2012 through to December 2017, culminating in the NIRB's completion of the Review, recommending that the Project be allowed to proceed to the licensing stage and issuing NIRB Project Certificate [No. 007] to Sabina on December 19, 2017.

Regarding the Application before the NWB, Sabina is seeking the grant of a new Type "A" Water Licence 2AM-BRP---- for a term of 14 years to authorize the water uses and waste deposits associated with the Project, including the construction and operation of the following components at the Goose Property:

- four (4) open pits and four (4) underground mines at the Llama, Umwelt, Echo, and Goose Main deposits;
- ore processing/milling facilities;
- a power plant;
- warehousing, administration and personnel accommodation facilities;
- a fuel tank farm; and



an all-weather airstrip;

The scope of the Application also includes water uses and waste deposits that will take place at the Marine Laydown Area (MLA), where materials will be received by air and sea transport including the construction and operation of the following components at the MLA:

- floating barge terminal;
- laydown area and fuel storage facility; and
- warehousing, administration and personnel accommodation.

The Application also includes various water and waste management facilities and activities at both the MLA and the Goose Property, including the following:

- water management facilities and activities including water diversion structures; culverts; ponds; water intakes and outlets; lake dewatering; saline water collection and storage; and water treatment facilities; and
- waste management facilities including above ground tailings storage, in pit tailings storage, waste rock storage, sewage treatment, grey water disposal, desalination brine disposal; oily water treatment; incineration; collection, storage and offsite disposal.

The Application also includes the water uses and waste deposits associated with the Winter Ice Road, which provides seasonal access between the MLA and the Goose Property.

The gold mine and milling operation is estimated to require four (4) years of construction, and will involve ten (10) years of active mine life to process approximately 19.8 million tonnes (Mt) of ore, 59.0 Mt of waste rock, 5.3 Mt of overburden waste, and 19.8 Mt of tailings. As Sabina has proposed that term of the Licence be 14 years, Sabina would be required to submit a renewal application prior to the Project moving into the final closure and post-closure stages.

Application and Supporting Materials Submitted by the Applicant

On October 5, 2017, Sabina submitted an updated Application and supporting documentation for a new Type "A" Water Licence for the Back River Project (the Application). Appendix C provides a listing of the specific information provided with the Application, all of which is available from the Nunavut Water Board's public registry at the following link:

ftp://ftp.nwb-oen.ca/registry/2%20MINING%20MILLING/2A/2AM%20-%20Mining/2AM-BRP----%20Sabina/



On February 23, 2018, the Applicant provided responses to the comments provided by KIA, INAC, ECCC and DFO in the context of their completeness review of the Application.

On April 11, 2018, the Applicant provided a further submission in response to the technical review comments of KIA, INAC, ECCC and DFO filed by April 4, 2018.

On April 26, 2018, the Applicant provided supplemental and additional submissions in response to technical review comments that had not been resolved with prior submissions.

Scope of the Type "A" Water Licence Application

The application filed with the NWB by Sabina is for a new Type "A" Water Licence 2AM-BRP----- (the Application). The Scope of the Application includes the following items [note: capitalized terms are terms that are defined in the Application or existing Water Licences for the Project]:

At the Goose Property:

- Use of Water from Goose Lake (Attituq) for mining and milling and associated activities;
- Use of Water from Big Lake (Tahikyauk) for domestic purposes;
- Construction and Operation of mine site facilities including mill, open pits and underground mines, core logging facility, emergency facilities (fire and ambulance station), offices, warehouses, maintenance and on-site storage areas, accommodation infrastructure; and site roads:
- Extension and operation of an all-weather airstrip;
- Construction and operation of ice airstrip;
- Quarrying of materials from specified locations;
- Construction and Operation of a Power Generation Plant;
- Construction and Operation of the Fuel Storage Facility;
- Construction and Operation of an Explosives Production and Storage Facility;
- Construction and Operation of Water Management Infrastructure, including:
 - Freshwater Intakes and infrastructure;
 - Water Collection Ponds;
 - Water Retention Dikes and Berms:



- Water Collection Ditches;
- o Saline Water Pond;
- Water Treatment Plant:
- o Sewage Treatment Plant; and
- Effluent discharge outfall;
- Construction and Operation of Waste Disposal Infrastructure, including:
 - o Landfill;
 - o Landfarm;
 - o Incinerator;
 - Ore Storage Facilities;
 - Waste Rock Storage Facilities; and
 - Tailings Storage Facilities;
- Management and disposal of Wastes associated with the Water Treatment Facility, Sewage Treatment Plant, Waste Rock Storage Facilities, Landfill, Landfarm, Incinerator, and other wastes as described in the Water Licence Application;
- Handling and storage of petroleum products and hazardous materials;
- Deposition of tailings into the Tailings Storage Facilities; and
- Controlled and regulated discharge of effluent (treated if necessary) to Goose Lake from lake dewatering.

At the MLA:

- Construction and Operation of MLA facilities including emergency facilities (fire and ambulance station), offices, warehouses, maintenance and on-site storage areas, accommodation infrastructure; and site roads;
- Construction and Operation of the Fuel Storage Facility;
- Construction and Operation of the laydown area;
- Installation of the Marine Barge Terminal;
- Construction and operation of ice airstrip;
- Quarrying of materials from specified locations;



- Construction and Operation of a Power Generation Plant;
- Construction and Operation of Site Roads;
- Construction and Operation of an Explosives Production and Storage Facility;
- Construction and Operation of Waste Disposal Infrastructure, including:
 - o Landfarm; and
 - o Incinerator;
- Management and disposal of Wastes associated with the Pacto Toilets, Greywater system,
 Landfarm, Incinerator, and other wastes as described in the Water Licence Application;
- Handling and storage of petroleum products and hazardous materials; and
- Controlled and regulated discharge of effluent to the environment from the Fuel Storage Facility and the Landfarm.

At the Winter Ice Road:

- Use of Water from specified sources for Construction of the Winter Ice Road; and
- Construction and Operation of the Winter Ice Road between the MLA and the Goose Property.

2.0 Procedural History

Pre-Licensing Requirements

With respect to this Application, as previously noted, the following pre-licensing requirements have been completed:

- On **July 11, 2012**, the Nunavut Impact Review Board (NIRB) received the referral of the Back River Project Proposal for screening. As the Project falls outside an area with an approved Land Use Plan in effect, the Nunavut Planning Commission was not required under the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)* to conduct a land use conformity assessment in 2012 and as such, the NIRB commenced their assessment of the Project.
- On **December 19, 2017,** the Nunavut Impact Review Board (NIRB) completed their assessment of the potential eco-systemic and socio-economic effects of the Project and pursuant to Article 12, Section 12.5.12 of the *Nunavut Agreement* recommended that the



Project be allowed to proceed subject to various terms and conditions as set out in NIRB Project Certificate [No. 007].

Water Board Processing of the Application

The following includes a brief overview of the procedural history for the Application. It should be noted that the following listing captures only the major procedural steps associated with the Application. All documentation and the complete history of the NWB component of the licensing file are available from the NWB's ftp site at the link provided in Section 1.0 of this decision.

October 5. 2017

The Nunavut Water Board (NWB or Board) received a water licence application (Application) for a Type "A" Water Licence and supporting documentation from Sabina Gold & Silver Corporation (the Applicant or Sabina) for the proposed Back River Project. This Application and associated documents replaced the initial draft water licence application package for the Back River Project submitted to the NWB in 2012 as part of the Nunavut Impact Review Board's assessment of the Back River Project.

■ November 23 and December 8, 2017

 Sabina provides additional information to clarify the concordance of the Application with NWB requirements following the NWB's internal completeness check.

■ *December 8, 2017*

The NWB acknowledged receipt of the Application and asked interested persons to review the scope and completeness of information provided, as well as to identify any deficiencies and information requests. NWB requests this information be submitted to the NWB by January 16, 2018, however the deadline was extended to January 22, 2018 at the request of the Kitikmeot Inuit Association (KIA).

January 22, 2015

The NWB was in receipt of comments on the completeness of the Application from the KIA; Indian and Northern Affairs Canada (INAC); Environment and Climate Change Canada (ECCC); and Fisheries and Oceans Canada (DFO). The Board did not receive any indication that the deficiencies were such that the Application should not proceed to the technical review stage.



• February 8, 2018

 Sabina provided responses to the completeness review comments made by the KIA, INAC, ECCC and DFO.

• February 23, 2018

The Board gave notice of the Application in accordance with section 55(1) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA), inviting Interveners and any other interested persons to provide the Board with their comments on or before March 26, 2018, advising the parties of the consequences of failing to identify issues of water user compensation to the Board in accordance with the comment timeline, and advising the parties to prepare for a Technical Meeting and Pre-Hearing Conference to be hosted by the Board staff in Cambridge Bay tentatively the week of April 30th, 2018.

March 21, 2018

 The Board received an extension request to the deadline for technical review submissions from the KIA, and an extension was granted until April 4, 2018.

April 4, 2018

 The NWB was in receipt of written representations from KIA, INAC, ECCC, and DFO.

• April 11, 2018

 Sabina provided responses to technical review comments made by KIA, INAC, ECCC, and DFO.

■ April 16, 2018

The Board confirmed the dates of the in person Technical Meeting and Pre-Hearing Conference as May 1-3, 2018, to be held in Cambridge Bay, the community closest to the Project, and provided parties with a proposed Agenda. Interested parties were asked to provide comments on the proposed Agenda by April 26, 2018.

• April 26, 2018

• The Board confirmed that there were no changes to the proposed Agenda.



 Sabina, KIA, INAC, ECCC, and DFO provided confirmation of their attendance at the Technical Meeting and Pre-Hearing Conference.

April 27, 2018

 Sabina provided supplemental and additional responses to technical review comments made by KIA, INAC, ECCC, and DFO and that had not been resolved with prior submissions.

■ *May 1 and 2, 2018*

 The NWB hosted the Technical Meeting, Community Session, and Pre-Hearing Conference in Cambridge Bay.

Licences Previously Issued to the Project

There are four licences currently issued for the Project covering exploration, all-weather access road and pre-development activities for the Back River Project. These are:

Licence No. 2BC-BRP1919: for the use of water and disposal of waste during development and site preparation activities for the Back River Project, including activities at the Goose Property and the Marine Laydown Area (MLA). If the NWB and the Minister approve the issuance of the new Type "A" Water Licence No. 2AM-BRP----, all these activities will roll from the Type "B" licence into the new Type "A" licence.

Licence No. 2BE-GOO1520: for the use of water (297 m³/d) and disposal of waste during camp operations and activities related to exploration of the Goose Lake area including:

- drilling on land and on ice;
- on site access road;
- a quarry;
- all-weather airstrip; and
- ice air strip.

The Goose Lake Project has components that relate directly to the Back River Project and if the NWB and the Minister approve the issuance of the new Type "A" Water Licence No. 2AM-BRP----, the portions of the scope of this Type "B" licence that are specifically linked to the Project will roll into the new Type "A" Water Licence.



Licence No. 2BE-GEO1520: for the use of water (175 m³/d) and disposal of waste during camp operations and activities related to exploration of the George Lake area including:

- drilling on land and on ice;
- various winter ice roads; and
- a marine area.

The George Lake Project has components that relate directly to the Back River Project and if the NWB and the Minister approve the issuance of the new Type "A" Water Licence No. 2AM-BRP----, the portions of the scope of this Type "B" licence that are specifically linked to the Project will roll into the new Type "A" Water Licence.

Licence No.2BE-MLL1722: for the use of water (200 m³/d) and disposal of waste during camp operations and activities related to exploration of the Wishbone-Malley area including:

- drilling;
- staking, prospecting, and reconnaissance geology;
- geological mapping and geochemical surveys;
- aerial, ground, and down hole geophysical surveys;
- mechanical and hand trenching/stripping; and
- ice air strip.

The Wishbone-Malley Project has no components that relate directly to the Back River Project and as such, even if the NWB and the Minister approve the issuance of the new Type "A" Water Licence No. 2AM-BRP----, there will be no changes to this Type "B" licence.

3.0 Technical Review Comments Received by the Board

Prior to the Technical Meeting and Pre-Hearing Conference, the Board provided interested parties with two opportunities for comment on the Application. The Board's first comment period (December 8, 2017 – January 22, 2018) requested parties to consider whether the Application was complete and to identify any outstanding issues that should prevent the Board from continuing to process the Application. Although this comment period was set to close on January 16, 2018, the timeline was extended to January 22, 2018 as per request of the KIA.

The second comment period (February 23, 2018 to April 4, 2018) requested parties to file substantive technical review comments in advance of the TM/PHC for the file. Although this



comment period was originally set to close on March 26, 2018, the timeline was extended by the NWB to April 4, 2018 at the request of the KIA. The sections that follow briefly outline the comments provided during these comment periods, but also reflect comments provided by the Board staff during the TM and PHC. For a complete review of all comment submissions received by the NWB in respect of the Application consult the NWB's ftp site at the link provided in Section 1.0 of this decision.

Kitikmeot Inuit Association (KIA)

The KIA is the representative of the Inuit beneficiaries of the Kitikmeot Region, at both the territorial and regional levels and supports sustainable economic development opportunities for Inuit beneficiaries. KIA's participation in the review of the Application was focused on ensuring that adequate protection of the environment occurs by requiring the Applicant to implement best practices in their mitigation and monitoring programs.

The KIA technical review raised a number of issues, with a focus on the following topics:

- Licence Term;
- Water and Load Balance Model:
- Water Management;
- Waste Management;
- Waste Rock and Overburden Management;
- Risk Management & Emergency Response Planning;
- Environmental Monitoring;
- Marine Environment and Spill Management; and
- Closure and Reclamation.

Specifically, the KIA provided the Board with comments and recommendations on the following issues:

- Review of Sabina's submissions provided with the Application, providing specific comments on:
 - Aquatic Effects Management Plan;
 - o Borrow Pits and Quarry Management Plan;
 - o Final Environmental Impact Statement;



- Fuel Management Plan;
- Hazardous Materials Management Plan;
- Hydrogeological Model;
- o Interim Closure and Reclamation Plan;
- Landfill Waste Management Plan;
- Main Application Document;
- o Oil Pollution Emergency Plan;
- Ore Storage Management Plan;
- Risk Management and Emergency Response Plan;
- o Road Management Plan;
- o Spill Contingency Plan;
- o Tailings Management Plan;
- o Tailings Management System Preliminary Design Report;
- Water and Load Balance Report;
- Water Management Plan; and
- o Site-wide Water Management Report.
- Recommendations regarding water management and monitoring programs in relation to the following:
 - Recommendation to ensure Water and Load Balance Model (WLBM) accounts for constituents in solution as well as in solid phase;
 - Discussion of WLBM predictions for closure water quality, strategies to mitigate possible problems, and commitments to implement those strategies;
 - Suggestion for incorporation of additional baseline data in to WLBM and work on improved understanding/prediction of seasonal variation;
 - Discussion of saline water management plan sensitivity to possible flows from Enhanced Permeability Zones (EPZ) or permafrost boundaries;
 - o Discussion of water management structures and plans in relation to climate change;
 - Clarification of how runoff and seeps from quarries will be managed;



- Discussion regarding what sources of water are recycled rather than released (e.g. ore stock pile runoff, fuel storage area runoff, hazardous storage area runoff, tailings facilities, etc.);
- Discussion of importance of saline water management and its incorporation into the Water Management Plan;
- o Discussion of landfill management for specific materials (e.g. ash, asbestos);
- Discussion of possible Potentially Acid Generating material (PAG) storage at the MLA;
- O Discussion of need for detailed understanding of site conditions (e.g. fractured base-rock) at the tailings storage facility (TSF) to ensure containment;
- Recommendations regarding biological monitoring within the first year after commencement of dewatering and in the first year and third years in each phase of the Project and in the first, third, and fifth years of the post-closure phase;
- Recommendation to capture freshet water quality conditions during monitoring;
 and
- Recommendations about additional analysis and frequency for quarry runoff and seep monitoring.
- Recommendations regarding Reclamation and Closure in relation to the following specific issues:
 - Recommendation to update hydrological model to better represent water quality at closure with respect to flooded pits, tailings, and receiving water bodies; and
 - o Discussion of required cover for PAG bedrock exposed in quarries at closure.
- Recommendations regarding Risk Management and Emergency Response in relation to the following specific issues:
 - Recommendation to develop realistic, useful, scientifically-based risk criteria that include ecological impacts; and
 - Discussion of appropriate response to sewage spills to ensure safety but also avoid removal of difficult to regenerate soil or vegetation.

Indian and Northern Affairs Canada (INAC)

INAC administers Crown land and resources and enforces regulatory permits affecting land and water resources in Nunavut, including enforcing the provisions of the water licences. Reflecting



INAC's responsibilities and jurisdiction, INAC provided comment submissions on the completeness of the Application, and also in their technical review.

The INAC technical review raised a number of issues, with a focus on the following topics:

- Water Management;
- Waste Management;
- Tailings Management;
- Waste Rock and Overburden Management;
- Winter Ice Roads;
- Risk Management & Emergency Response Planning;
- Marine Environment and Spill Management; and
- Closure and Reclamation.

Specifically, INAC provided the Board with comments and recommendations on the following issues:

- Review of Sabina's submissions provided with the Application, providing specific comments on:
 - o Aquatic Effects Management Plan;
 - o Fuel Management Plan;
 - o Hazardous Materials Management Plan;
 - Interim Closure and Reclamation Plan;
 - Landfill and Waste Management Plan;
 - Marine Monitoring Plan;
 - Mine Waste Rock Management Plan;
 - o Oil Pollution Emergency Plan;
 - o Risk Management and Emergency Response Plan;
 - Road Management Plan;
 - Spill Contingency Plan;
 - o Tailings Management Plan; and



- Water Management Plan.
- Recommendations regarding water management and monitoring programs in relation to the following specific issues:
 - Recommendation for improving clarity by providing additional details on pumping plans and water transfer destination for contact and non-contact water;
 - Recommendation for providing additional design details on culvert sizing and diversion structures;
 - Discussion of saline water pond containment and possible monitoring;
 - Discussion of TSF containment and possible monitoring;
 - Clarification of requirement for Tailings Storage Facility and Waste Rock Storage Area (TSF WRSA) runoff to mimic the catchment prior to WRSA placement;
 - Discussion emphasizing need for saline water management plan capacity to accommodate flows from Enhanced Permeability Zones or higher than predicted flows; and
 - Discussion of risk of 'cascading failure' and required design evaluation for water management structures, catchment areas, etc.
- Recommendations regarding waste disposal and management in relation to the following specific issues:
 - Discussion of landfill management plan requirements to address potential settlement;
 - o Recommendation to locate landfill cells away from existing drainage pathways; and
 - Discussion of tailings deposition techniques to maximize use of tailings storage space.
- Recommendations regarding waste rock and overburden disposal and management in relation to the following specific issues:
 - Discussion of the value of determining overburden and waste rock ice content and management strategies for avoiding siltation when working with this material;
 - o Discussion of waste rock placement strategies for the TSF WRSA; and
 - Recommendations for handling practices, separation, and tracking of PAG and NPAG materials,



- Recommendations regarding the Winter Ice Road (WIR) in relation to the following specific issues:
 - Discussion of the value of early winter observation of WIR alignment to assess snow conditions and micro-topography as well as identifying sources for additional snow for fill if required; and
 - Evaluation of maximum safe speed on WIR in comparison to other WIR and traffic load.
- Recommendations regarding Reclamation and Closure in relation to the following specific issues:
 - Recommendation to evaluate and/or implement active revegetation as part of reclamation; and
 - O Discussion related to prediction and management of saline influenced soils in the base of the saline water pond and water quality impacts at closure.

Environment and Climate Change Canada (ECCC)

The focus of ECCC's involvement in respect of the Application is based on their jurisdiction under the *Canadian Environmental Protection Act*, 1999,² the *Migratory Birds Convention Act*, 1994,³ the *Species at Risk Act*⁴ and the "pollution prevention provisions" within the *Fisheries Act*.⁵

The ECCC technical review raised a number of issues, with a focus on the following topics:

- Water and Load Balance Model;
- Water Management;
- Environmental Monitoring; and
- Closure and Reclamation.

³ S.C. 1994, c. 22.

⁴ S.C. 2002, c. 29.

² S.C. 1999, c. 33.

⁵ R.S.C. 1985, c. F-14.



Specifically, ECCC provided the Board with comments and recommendations on the following issues:

- Review of Sabina's submissions provided with the Application, providing specific comments on:
 - o Aquatic Effects Management Plan;
 - o Environmental Management and Protection Plan;
 - o Interim Closure and Reclamation Plan;
 - Mine Waste Rock Management Plan;
 - o Ore Storage Management Plan; and
 - o Water Management Plan.
- Recommendations regarding water management and monitoring programs in relation to the following specific issues:
 - Discuss water load and balance model (WLBM) predictions for Nitrates, source controls, and model assumptions. Discuss strategies to mitigate possible problems, and commitments to implement those strategies to ensure levels are not a concern;
 - Discuss WLBM predictions for Arsenic, site-specific water quality objective (SSWQO), and model assumptions. Discuss strategies to mitigate possible problems, and commitments to implement those strategies to ensure levels are not a concern;
 - o Ensure WLBM accounts for constituents in solution as well as in solid phase;
 - Ensure ore stock pile runoff, and any possible metal leaching or acid rock drainage is managed to avoid release of contaminants;
 - Ensure WRSA construction allows for freeze back prior to any possible formation/release of metal leaching or acid rock drainage;
 - Recommend further detail on mitigation and management for erosion and sediment control during in-water works (e.g. intakes);
 - Recommends continued collaborative development of Aquatics Effects Management Plan;
 - Clarification of water quality requirements (MMER, CCME, SSWQO) at closure with a focus on fish/fish barriers and delineating discharge points/receiving water bodies; and



 Discussion of water quality during reclamation of saline water pond with focus on removal of contaminated soil, refilling with clean water, assessment, and further mitigation measures should water quality objectives not be met.

Fisheries and Oceans Canada (DFO)

The focus of DFO's involvement in respect of the Application is based on their jurisdiction under the *Fisheries Act*⁶ and the *Species at Risk Act*.⁷

The DFO technical review raised a number of issues with the focus on possible impacts to fish and fish habitat. Specifically, DFO provided the Board with comments and recommendations on the following issues:

- Review of submissions with specific comments provided on:
 - o Borrow Pits and Quarry Management Plan;
 - Conceptual Fish Offsetting Plan;
 - o Final Environmental Impact Statement;
 - Main Application Document;
 - o Nunavut Impact Review Board, Project Certificate (No.: 007);
 - o Water Management Plan; and
 - Winter Ice Road Withdrawal Evaluation.

4.0 Technical Meeting

The Technical Meeting (TM) for the Application was held in person in Cambridge Bay, Nunavut, on May 1, 2018 and the morning of May 2, 2018. As is the Board's practice, the TM was an informal meeting and was chaired by Karén Kharatyan, the Board's Director of Technical Services. The meeting was attended by the Board staff, the Applicant, the KIA, INAC, DFO and ECCC (collectively referred to as the Interveners) and community members.

It should also be noted that, as is the Board's normal practice, the Panel Members of the Board (Back River Panel, P19), the duly appointed Panel of the Board who will be the decision-makers for the Application, were not present at the TM, the Community Session or the subsequent PHC, having delegated the conduct of these meetings to the Board's staff.

⁶ R.S.C. 1985, c. F-14.

⁷ S.C. 2002, c. 29.



At the commencement of the TM the objectives of the meeting were outlined by the NWB's Director of Technical Services as follows:

- Examine technical data and other materials submitted as part of the Application, including Interveners' submissions that the Board had received to date for the Application;
- Informally discuss and resolve, to the extent possible, any technical matters / issues raised between Interveners and the Applicant, particularly those matters that could affect the Board's determination of any PHC issues, in advance of the PHC;
- Provide an opportunity for the Applicant and Interveners to identify for the Board the issues
 and concerns that have been resolved and to discuss any unresolved or ongoing issues
 related to the Application;
- Identify opportunities for streamlining the issues and process so as to eliminate existing or potential duplication or delay; and
- Document any commitments made by the various parties involved in the TM, with the aim
 of carrying forward those commitments to the PHC.

The participants were advised that upon completion of the TM, the Board expected any outstanding issues in respect of the Application would be resolved, or if not resolved, that some form of agreement, including commitments would be provided by the parties to enable the Application to proceed to the next step of the licensing process, the Pre-Hearing Conference, notwithstanding any unresolved issues.

At the TM, the following topics were discussed:

- Water Use and Management;
 - Saline Water Management;
 - o Saline Pond Containment;
 - Tailings Storage Facility (TSF) Containment;
 - TSF Waste Rock Storage drainage design;
 - Primary Pond Sizing; and
 - MMER Listing.
- Monitoring;
 - Aquatic Effects Monitoring Program;
 - Water Quality and Monitoring; and



- Radium 226 monitoring not necessary under Water Licence as reported to ECCC under MMER (as per ECCC).
- Closure and Reclamation Planning;
 - o Fish Access to post-closure waterbodies;
 - o Active revegetation;
 - o Security Cost Estimate; and
 - Umwelt Lake discharge water quality.
- Water and Load Balance Model (WLBM);
 - Mixing assumptions;
 - o Predicted water quality issues at closure;
 - o Model update schedule and rationale;
 - Update to include 2017 or 2018 baseline data;
 - Update to assess seasonal WQ variation; and
 - Water quality criteria discussion and adjustments.
- Hydrodynamic Model;
 - Model update schedule and rationale.
- Waste Management;
 - Waste management plans to reflect timing of landfill availability.

At the completion of the TM, it was confirmed by all participants that there were no outstanding issues that would prevent the Board from moving forward to the next step of the licensing process in respect of the Application.

Commitments

In their submissions filed with the Board, the Applicant made a number of commitments to address the concerns or issues raised by the Interveners in their technical comments filed with the Board. The NWB expects Sabina to comply with the commitments provided in all submissions.

During the TM, the Applicant and other parties also made additional commitments, and these commitments have been summarized in the Commitment List provided in <u>Appendix D</u> and attached to this Decision. The Commitment List was reviewed and agreed to by the Applicant and



Interveners in attendance at the TM. As previously noted, the NWB expects the Applicant or Interveners, where applicable, to comply with the commitments that have been provided in accordance with the timelines set out in the commitments. As noted in the discussion of the next steps in the Board's processing of the Application, failing to meeting the timelines agreed to in the Commitment List can result in delays in the next steps and can result in the NWB cancelling or rescheduling the Public Hearing if required.

5.0 Community Session

Recognizing that the TM is primarily aimed at discussing and addressing issues identified by the Applicant, Interveners and the NWB's technical staff, the Board determined that the TM alone may not be sufficient to facilitate participation of the general public. As is the Board's practice, following the scheduled first day of the Technical Meeting, a Community Session was held to provide additional opportunities to the members of the public to ask questions, provide comments, or give input.

The Community Session for the Application was held in person in Cambridge Bay, Nunavut on the evening of May 1, 2018. It was chaired by Stephanie Autut, the Board's Executive Director with the assistance of Karén Kharatyan, Director Technical Services.

The Applicant and Interveners were in attendance at the Community Session to address public comments and questions.

At the commencement of the Community Session, the NWB's Executive Director outlined the following objectives of the meeting:

- To provide information to the community members about the water licence in relation to the Back River Project;
- To facilitate participation from the general public;
- To encourage members of the public who are in attendance to ask questions relevant to Sabina's water licence application; and
- To provide opportunities to members of the public to share their comments and give their input.

As set out in <u>Appendix B</u>, 2 members of the public attended the Session. The Session commenced with an overview of the NWB process by an NWB staff member. The Session proceeded with an overview of the Application provided by the Applicant. Since the members of the public present at the Community Session had also attended the afternoon session of the TM and were present for



presentations by the Interveners, Intervener presentations were not repeated in the Community Session.

The Session concluded with a question and answer session during which community members from Cambridge Bay were invited to ask questions of the Applicant, Interveners, and the staff of the NWB. Public members did not ask any questions, express any concerns, or provide any comments with respect to the Application.

6.0 Pre-Hearing Conference

At the conclusion of the TM, the parties confirmed that there were no outstanding issues that would prevent the Application from proceeding to the next step in the licensing process, a Public Hearing. The Pre-Hearing Conference (PHC) portion of the Agenda proceeded in the afternoon of May 2, 2018.

The PHC was chaired by Stephanie Autut, the NWB's Executive Director, with the assistance of the Karén Kharatyan, Director of Technical Services, and Teresa Meadows, Legal Counsel. The same parties who participated in the TM, namely Sabina, the KIA, INAC, ECCC and DFO, also attended the PHC.

The purpose of the PHC was to discuss the various matters as set out in Rule 14 of the *NWB Rules* of *Practice and Procedure for Public Hearings* (May 2005), (the *Rules*) in preparation for the Public Hearing. Pursuant to Rule 14, the following matters were addressed through the PHC:

- To identify issues preventing application provide proceeding to a hearing;
- Procedures for the Public Hearing, including form, timing and location;
- To set a timetable for the Pre-Hearing exchange of information, including document translation requirements, documentation to be included in the hearing record;
- To finalize the list of issues to be dealt with at the Hearing;
- To identify interested parties;
- To consider the desirability of amending the Application for the purposes of clarification;
- To finalize procedures to be followed in the Hearing, including requested modifications to the applicable *Rules*, including language requirements; and
- To consider any other matters that may aid in the simplification and disposition of the application at the Hearing.



Issues preventing the Application from proceeding to a Hearing

The Applicant and parties did not identify any issues that would prevent the Application from proceeding to the Public Hearing.

As a general note on the issue of security cost estimate, the NWB received confirmation from the Applicant, the KIA, and INAC, that discussions on security were in process and anticipated to continue. A commitment was made, that should the parties reach agreement, that Sabina would file an updated security estimate on or before June 25, 2018. However, if an agreement is not reached in time, each party would file an individual security estimate on or before June 25, 2018.

On the issue of water user compensation, KIA indicated that they already have an agreement in place with Sabina.

Procedures for the Public Hearing

The Applicant and parties participating in the PHC were polled on the issue of the timing for the Public Hearing. The Applicant suggested that the week of July 30, 2018 for the Public Hearing would be appropriate. The Interveners noted that although the week of July 30 could be accommodated, that timeline would be quite challenging. The Board indicated that, recognizing the current work load of the Board and the schedules of the Board staff and Panel Members for July, the week starting on Tuesday, August 7, 2018 (recognizing that Monday, August 6 is a holiday) is more appropriate. All parties, including the Applicant, subsequently agreed that they would be able to accommodate participation at a Public Hearing sometime during the week commencing on August 7th, 2018.

Parties were asked for their views on the location and form of the Public Hearing (written, teleconference or in-person). All parties, including the Applicant, agreed that an in-person Public Hearing was the most appropriate form. In terms of venue, the KIA suggested that the Public Hearing be held in Cambridge Bay or Kugluktuk. After some discussion, all parties, including the KIA, agreed that holding the Public Hearing in Cambridge Bay would be most appropriate and Cambridge Bay would best be able to accommodate the logistics of a Public Hearing in August.

At present, based on the time commitments outlined in the discussion of the exchange of documents set out below, the NWB has tentatively scheduled an in person Public Hearing in Cambridge Bay for the week commencing on August 7th, 2018 (tentative dates for the two-day Public Hearing are August 8-9, 2018). These dates are subject to <u>final confirmation</u> by way of the Public Notice to be published on June 1, 2018, and the Board reserves the right to adjust this



schedule if Hearing logistics dictate, if the documentation required to be supplied in advance of the Hearing has not been provided, etc.

The parties have confirmed that they do not anticipate that any deviations from the Board's normal *Rules of Practice and Procedure for Public Hearings* (May, 2005) will be required, and as such, the Board directs all parties that the Public Hearing will be conducted in accordance with Parts III and IV of the *Rules*.

Timetable for Pre-Hearing Exchange of Information

It was noted at the beginning of this discussion that, as required by s. 55(2) of the *Nunavut Waters* and *Nunavut Surface Rights Tribunal Act* (NWNSRTA), the NWB must give the public and parties a minimum of sixty (60) days' notice in advance of a Public Hearing.

In addition, in order to give the Board, all parties, and community members the opportunity to fully consider and respond to information filed in advance of the Public Hearing Sabina had committed to provide additional information on June 25, 2018 so that Interveners would have some time to review and consider the additional information prior to filing their final written submissions in advance of the Public Hearing. On the assumption that the timelines in the Commitment List are maintained, at the PHC the Board staff and Legal Counsel provided a tentative outline of dates. If, however, the timelines proposed are not met, delays to the next steps in the process may result. All parties are strongly encouraged to meet all the schedule set out below.

Regarding the outstanding information requirements that must be supplied in advance of a Public Hearing, the NWB staff highlighted the timing that is outlined in the commitments provided in Appendix D. The Applicant and parties in attendance confirmed that they will make every effort to ensure that the preparation and submission of additional information will not delay a potential Public Hearing.

On this basis, the Board has established a proposed timetable for the pre-hearing exchange of information as set below. As noted above, the Board reserves the right to revisit the timing set out below in the event that parties are unable to meet the deadlines in the commitments, in response to the requests of the parties, the community, or as may subsequently be considered necessary by the Board. The following schedule is premised upon the NWB hosting an in person Public Hearing the week commencing on August 7th, 2018 (tentatively August 8-9, 2018). Unless modified as outlined above, the Board requires the participants to observe the following timetable:

• On or before **June 1, 2018**, the NWB will issue Notice of the Public Hearing;



- All further and final written submissions to be provided by Interveners must be filed with the Board on or before July 9, 2018;
- All further and final responses of the Applicant to the information filed to date must be filed with the Board on or before July 23, 2018;
- Any presentations (e.g. PowerPoint Presentations, etc.) upon which anyone intends to rely at the Public Hearing must be filed with the Board on or before July 31, 2018;
- If the Interveners and/or the Applicant file additional written submissions, final responses and presentation materials as outlined above, they are also required to provide an Executive Summary of their written submissions in English, Inuktitut and Inuinnaqtun and fully translated copies of their presentation materials or final responses in English, Inuktitut, and Inuinnaqtun at the same time as they file the full submission; and
- The Board requires any party requesting French translation of any other component of the parties' submissions, presentation materials and/or requesting the Board to provide simultaneous French translation at the Public Hearing to make such requests to the Board in writing on or before July 23, 2018.

All submissions will be posted on the NWB's ftp-site (ftp://ftp.nwb-oen.ca/) and in the public registry upon receipt. A copy of the public registry as it relates to the Application will be available for review at the Public Hearing.

List of Issues

The intervening parties in attendance at the TM/PHC confirmed that none of the issues for discussion associated with the Application and the related information requirements should prevent the Board from proceeding with the Public Hearing.

At the end of the TM/PHC, the parties reviewed the following list of items for discussion at the Hearing and agreed that, subject to adding issues following the review of information that may be exchanged in advance of the Public Hearing, the following general topics should be items for discussion at the Public Hearing:

- Scope of the Licence:
 - o Inclusion of scope of short term construction Type "B"; and
 - o Addressing issues of overlapping scope with existing Type "B" exploration licences.



- Term of the Licence:
- Water Management;
 - Water Management Plan;
 - Saline Water Management.
- Water Use (Quantity and Sources);
 - Quantity of water requested (by phase); and
 - Water sources.
- Water User Compensation;
 - o Confirmation of no outstanding issues (including Inuit Water Rights).
- Waste Management;
 - Landfill and Landfarms;
 - Incinerators;
 - Hazardous Waste Management;
 - o Waste Rock Storage Areas; and
 - Tailings Storage Facility.
- Management Plans, Reports, Operations and Maintenance Manuals, Etc.;
 - Review and approval of plans, reports and manuals submitted with the Application;
 and
 - o Timing of submission of updated plans if a Licence is issued by the NWB and approved by the Minister (e.g. prior to construction of specific project infrastructure, within 60 days of approval of the Licence).
- Monitoring Programs;
 - o Program and Updates (general) and Aquatic Effects Monitoring Program (specifically);



- Closure and Reclamation Planning;
 - o Interim Closure and Reclamation Plan.
- Security;
 - Updated Closure Cost Estimate;
 - Security to be held under the Water Licence;
 - Security arrangements to address potential for over bonding; and
 - o Phased security to reflect stages of activity.

Identification of Interested Parties

Summary listings identifying the attendees at the TM/Community Session/PHC (based on the sign in sheets completed at these sessions) are provided in <u>Appendix B</u> attached to this Report. During the PHC, the following parties confirmed their participation and attendance at the Public Hearing:

- The Applicant, Sabina Gold & Silver Corporation;
- The Kitikmeot Inuit Association:
- Indian and Northern Affairs Canada (Crown-Indigenous Relations and Northern Affairs);
- Environment and Climate Change Canada; and
- Fisheries and Oceans Canada.

Further, the parties indicated that in addition to the general public notice, a specific invitation to the Public Hearing should be extended to the Cambridge Bay Hamlet Council and the local Hunters and Trappers Organization. The NWB also indicated that a specific invitation to the Public Hearing should be extended to the Hunters and Trappers Organization for the community of Omingmaktok (Bay Chimo).

Changes to the Application for the Purposes of Clarification

The Applicant and Interveners in attendance were canvassed regarding any potential changes to the Application, and they responded that there were no anticipated changes. Should any changes become necessary, any additional information that the parties wish the Board to consider during their review of the Application must be filed with the Board in advance of the Public Hearing and in accordance with the timelines outlined above under the heading "Pre-hearing Exchange of Information".



Other Procedural Matters including Language Requirements

The Applicant and parties in attendance were polled and confirmed that there are no additional procedural matters or issues for consideration at the Public Hearing.

The staff of the NWB invited requests for translation and interpretation services at the Public Hearing. In response, the Applicant and the parties in attendance confirmed that they were satisfied with the Board's provision of English, Inuktitut, and Inuinnaqtun translation and interpretation services at the Public Hearing.

The NWB staff also confirmed that as is the Board's practice, the Board will provide notice of the Public Hearing in the official languages. The Notice will also invite any parties planning to participate at the Public Hearing to advise the Board of any additional language requirements, including translation and interpretation requirements by July 23, 2018.

Measures to Simplify the Disposition of the Application

The Applicant suggested that they could submit a Draft Licence Framework document to highlight the Licence approval conditions they believe would align with their commitments and various submissions. Sabina's intends to provide this document to simplify and focus the parties' discussion of the Application. The Board requested that Sabina provide the Draft Licence Framework no later than **June 8, 2018** so that all parties could review it and comment as appropriate in their final submissions due on July 9, 2018.

No other comments or issues were identified with respect to measures to simplify the disposition of the Application.

Steps following the Public Hearing

No comments or issues were identified with respect to steps following the Public Hearing. As such, the Board anticipates following the NWB's usual timelines and practice following the Public Hearing. When the Panel has reached a decision, which is typically within thirty (30) to forty-five (45) days of the close of the Public Hearing Record, the Board will issue its Record of Proceedings and Decision to the Minister of Crown-Indigenous Relations and Northern Affairs (acting on behalf of INAC). If the Panel recommends that the new Type "A" Water Licence as requested by Sabina should be granted, a draft Licence would also be provided for the Minister's consideration with the Decision.



If you require additional information regarding this Application, the Board's specific direction or the Board's processes in general, please do not hesitate to contact the NWB's Director of Technical Services, Karén Kharatyan, karen.kyaratyan@nwb-oen.ca. For any administrative matters related to the Public Hearing, please contact the NWB's Manager of Licensing, Richard Dwyer, at licensing@nwb-oen.ca.

Regards,

Stephanie Autut Executive Director Nunavut Water Board

SA/db/rqd

Attachments:

Appendix A: Technical Meeting, Community Session and Pre-Hearing Conference Agenda Appendix B: Summary Listing of Attendees at the Technical Meeting, Community Session

and Pre-Hearing Conference

Appendix C: List of Application Submissions

Appendix D: <u>List of Commitments Generated during the Technical Meeting/Pre-Hearing</u>

Conference held October 14 and 15, 2015 for Licence Application 2AM-MEL



APPENDIX A: AGENDA

TECHNICAL MEETING, COMMUNITY SESSION, AND PRE-HEARING CONFERENCE - BACK RIVER PROJECT

TYPE "A" WATER LICENCE APPLICATION 2AM-BRP----

TECHNICAL MEETING

Date: May 1, 2018

Time: 8:30 AM - 5:00 PM (MT)

Location: Cambridge Bay Community Hall

- 1. Introduction and Registration
- 2. Application to the Board, NWB Opening Remarks (15 Minutes)
- 3. Purpose of the Pre-Hearing / Technical Meeting
- 4. Technical Review of the Application
 - a. Sabina Gold & Silver Corporation presentation on the Project (30Min)
 - b. Identification of Interested Parties
 - c. Presentations from Interested parties (30min/party)
 - d. Discussion of Commitments to Address Technical Issues
 - e. Formulation of Outstanding Issues

Health Breaks – 20-30 minutes

COMMUNITY SESSION

Date: May 1, 2018

Time: 7:00 - 9:30 PM (MT)

Location: Cambridge Bay Community Hall

- 5. Overview of NWB process by NWB (15 minutes)
- 6. Presentation of Application by Applicant (30 minutes)
- 7. Presentation/statements by Intervening Parties (15 minutes/party)
- 8. Questions and comments from community.

AGENDA (CONT.)

TECHNICAL MEETING, COMMUNITY SESSION, AND PRE-HEARING CONFERENCE - BACK RIVER PROJECT

TYPE "A" WATER LICENCE APPLICATION 2AM-BRP----

Date: May 3, 2015 Time: 8:30 AM (MT)

Location: Cambridge Bay Community Hall

- 9. Identify issues preventing application from proceeding to a hearing
- 10. Discuss form, timing and location for any potential Public Hearing
- 11. Establish timetable for the pre-hearing exchange of information, including:
 - a. preparation and service of documents to parties (deadlines, form, public registry);
 - b. document translation requirements; and
 - c. documentation to be included in the hearing record
- 12. Finalize list of issues to be dealt with at the Public Hearing
- 13. Identify interested parties
- 14. Identify any changes to Application for the purposes of clarification
- 15. Final procedures to be followed at the Public Hearing, including:
 - a. requested modifications to the applicable *NWB Rules of Practice and Procedure for Public Hearing* (May 2005); and
 - b. language requirements at the Hearing
- 16. Consider any other matters that may aid in the simplification and disposition of the Application at the Hearing
- 17. Other Issues
- 18. Closing of the Meeting

APPENDIX B: Summary Listings of Attendees at Technical Meeting, Community Session and Pre-Hearing Conference

In Person TM - May 1, 2018 Day 1 Daytime Session Registration Forms

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TECHNICAL MEETING PRE-HEARING CONFERENCE BACK RIVER GOLD PROJECT Cambridge Bay, Nunavut May 1, 2018 Registration Form Day One Organization/ Phone Fax E-mail First Name Last Name No. Address edianio NWIS NEPA Charatvan 2. NWK 3. DILIVEC NWI 14 Li Kichasel 13 NWK 5. Mearbas RYKAART 604681496 MARITZ SPK 6. 720961978 Golder 7. Cam Stevens 4166051391 Starne 6047893113 Tracy States Sabina 9. 604-349-488 Q AOYO CNIARATELLO GOLDER 10. Colder 7786283219 Salzzauler 11. Krishn GOCDER ELAINEM 184609 604 356 6679 12. my 908 81609 Catherine Voul Sabine 13. 250-538-2300 Katsky lenter 10 14. ian , persons Q combar co 15. INAC 867-222-9278 Parson s Tan GCC ange wilson 2 po canada co 967 765 8480 16. W:150 TWAC Rick Heas @ tetratech con 6648134952 200H 17. Kick Phanian OKO 18. MINRIK 90595577 Levra Waterson Eld-mgb. gcca DFO 867-669-4980 19. aura KIA-HESL Panioyak NosbiH 20. Tanes 19-500-50ST 21. Frewad Loterpreter 22. Henry Roesch 867-982-3510 storo iector kita ca KIA John-23. 983-2186 Ukabo nijo hotnail.com tamlet. 24. Kaosoni Dennis Golder - 56B 780-815-5117 dionne filatrauHegolder com Dianne Filatraut 25. combay@ KitiKnest.ca Revolt, Makapik 783-2426 470 26. Yvorne Anol W 27. HTD 28. U ESSIE NAIKAK 29. Otokick Cum Bay Hothony 30. Oto Kiak Cambou HSHIOV 31.

In Person Community Session - May 1, 2018 Day 1 Evening Session Registration Form

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4.	Richard	DWHER	1003	11 15	Ushlikamis		
5.	Teresu	Meadows	11				
6.	RICK	4005	TNAC	604813495			
7.	DIONNE	Filiatrault	Salinie	780-815-510	í	dione-filetrustagolder.com	
8.	Matter	Picker	China	416-605-18			
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TECHNICAL MEETING PRE-HEARING CONFERENCE BACK RIVER GOLD PROJECT Cambridge Bay, Nunavut May 1, 2018 Registration Form COMMUNITY SESSION

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65.	Catherine	Paul	Sabina	604 908 1604		
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In Person TM/PHC - May 2, 2018 Day 2 Daytime Session Registration Forms

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4.	Richard	Dayer		Barrier State Committee	feet (etc.)						
5.	Merle	Kuh	Sabina	604740 6619							
6.	Tracel	Stornes	Sabina	6047893113							
7.	81010	CHIARATTELLO	COLDER	6043494158							
8.	Teresac	Meadows	NW3								
9.	James	taniotak	Interpreter								
10.	Cathune	Poul	Sulema	601 905 8609							
11.	MARITZ	RYKAART	SRK	6049281552							
12.	Anne _	Wilson	4CCC	- C							
13.	DIONNE	Filatrauit	Sabina	780-815-511	4						
14.	John _	Udaryon	Cea-Bay	N/A							
15.	Noah	KUPLAK	CAM. BAY	3911851	1	10					
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TECHNICAL MEETING PRE-HEARING CONFERENCE BACK RIVER GOLD PROJECT Cambridge Bay, Nunavut May 2, 2018 Registration Form DAY TWO

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No.	First Name	Last Name	Organization/ Address	Phone	Fax	E-mail
63.	Laura	Waterson	DFO	867-669-49230)	Laura. Watternsonced to-mpage
64.	Mark	D'Aguar	DFO	867-668-49		
65.	Cam	Stevens	Golder	7879161928		
66.	2,000	Verbitt	HESC	512 500-5055		
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68.	Kristin	Sizzanis	(m/h)	778628311	1	
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APPENDIX C: List of Application Submissions

The following documents were included with the Application:

1. Cover Letter and Application form dated October 4, 2017;

2. Type A Water Licence Application Main Application Document:

- 171005 2AM-BRP----Main Application Document (MAD)
- 171005 2AM-BRP----App A_ base Figures
- 171005 2AM-BRP----MAD App B-1_Concordance
- 171005 2AM-BRP----MAD App B-2_RepReferences
- 171005 2AM-BRP----MAD App C-1_CertIncorp
- 171005 2AM-BRP----MAD App C-2_List of Officers
- 171005 2AM-BRP----MAD App C-3_List of Consultants and Experts
- 171005 2AM-BRP----MAD App C-4_FinancialStatement
- 171005 2AM-BRP----MAD App E-1_SSWQOArsenic
- 171005 2AM-BRP----MAD App E-2_WaterLoadBalanceRpt
- 171005 2AM-BRP----MAD App E-2_WaterLoadBalanceRpt
- 171005 2AM-BRP----MAD App E-2_WaterLoadBalanceRpt
- 171005 2AM-BRP----MAD App E-3_GeochemCharactRpt
- 171005 2AM-BRP----MAD App E-4 _WIR Fish Habitat
- 171005 2AM-BRP----MAD App F-1_Site-WideWaterMgmtRpt
- 171005 2AM-BRP----MAD App F-2_GeotechDesignRpt
- 171005 2AM-BRP----MAD App F-3_WRSADesignRpt
- 171005 2AM-BRP----MAD App F-4_TailsMgmtSystemDesign
- 171005 2AM-BRP----MAD App F-5_HydrogCharactModelRpt
- 171005 2AM-BRP----MAD App F-6_RascalStreamFishway
- 171005 2AM-BRP----MAD App F-7_TechReview

3. The following Management Plans:

- 171002 2AM-BRP----SD19-ExecutiveSummaryGAEMP
- 171005 2AM-BRP----SD01-ExecutiveSummaryIAMP
- 171005 2AM-BRP----SD02-RoadMgmtPlan
- 171005 2AM-BRP----SD03-BorrowQuarryMgmtPlan
- 171005 2AM-BRP----SD04-ExecutiveSummaryWaterMP
- 171005 2AM-BRP----SD05-WaterMgmtPlan
- 171005 2AM-BRP----SD06-ExecutiveSummaryWasteMp
- 171005 2AM-BRP----SD07-OreStorageMgmtPlan
- 171005 2AM-BRP----SD08-MineWasteRockMgmtPlan
- 171005 2AM-BRP----SD09-TailingsMgmtPlan
- 171005 2AM-BRP----SD10-LandfillWasteMgmtPlan
- 171005 2AM-BRP----SD11-IncinerationMgmtPlan
- 171005 2AM-BRP----SD12-LandfarmMgmtPlan

- 171005 2AM-BRP----SD13-HazardousMaterialsMgmtPlan
- 171005 2AM-BRP----SD14-ExecutiveSummaryERP
- 171005 2AM-BRP----SD15-RiskMgmtEmergRespPlan
- 171005 2AM-BRP----SD16-FuelMgmtPlan
- 171005 2AM-BRP----SD17-SpillContingencyPlan
- 171005 2AM-BRP----SD18-OPEP
- 171005 2AM-BRP----SD19-ExecutiveSummaryGAEMP
- 171005 2AM-BRP----SD20-EMPP
- 171005 2AM-BRP----SD21-AEMP
- 171005 2AM-BRP----SD22-ConceptualFishOffsettingPlan
- 171005 2AM-BRP----SD23-MarineMonitoringPlan
- 171005 2AM-BRP----SD24-QAQCPlan
- 171005 2AM-BRP----SD25-ExecutiveSummaryICRP
- 171005 2AM-BRP----SD26-ICRP

4. Additional Submissions from November & December 2017

- 171002 2AM-BRP----SD26-ICRP Version2.0
- 171123 2AM-BRP---- MAD App B-1_Concordance_Version2.0
- 171123 2AM-BRP---- SBB Response Table 1 NWB Comments and Recommendations
- 171123 2AM-BRP----MAD App B-1_Concordance_Version2.0
- 171208 2AM-BRP---- MAD App B-1_Concordance_Version3.0
- 171208 2AM-BRP----MAD App B-1_Concordance_Version3.0

6. February 5, 2018 Response to Information Requests:

- 180205 2AM-BRP----Attachment A Type A_IR Responses
- 180205 2AM-BRP----Attachment A.10 Detection Limits Analytical Methods
- 180205 2AM-BRP----Attachment A.3 WIR Withdrawal Memo
- 180205 2AM-BRP----Attachment A.4 Bathymetric Surveys Lakes In GSE-GEO Property Areas
- 180205 2AM-BRP----Attachment A.5 BernardHarbour2014Baseline
- 180205 2AM-BRP----Attachment A.6 General Arrangements
- 180205 2AM-BRP----Attachment A.7 WIR Maps With Quarries
- 180205 2AM-BRP----Type A Information Request Responses
- 180208 2AM-BRP----Attachment A.1 TSF WRSA Diversion Berm Plan Profile
- 180208 2AM-BRP----Attachment A.2 Design Drawings WRSA Water Mgmt. Structures
- 180208 2AM-BRP----Attachment A.8 Water Control Structures Associated Ore Stockpile
- 180208 2AM-BRP----Attachment A.9 WRSA Areas And WRSA Water Diversions And Ponds

APPENDIX D: List of Commitments Generated during the Technical Meeting/Pre-Hearing Conference held October 14 and 15, 2015 for Water Licence Application No.: 2AM-BRP----

No.	Party Responsible for Commitment	Party(s) who raised (Item#)	TM Commitment	Timeline for Submission	Form of Submission
1	Sabina, KIA, INAC		Additional work to be done on closure cost estimate (especially focused on staging of security)	June 25, 2018	Agreed upon Updated Closure Cost Estimate In the event parties are unable to agree, each party to provide individual submissions in respect of their own Updated Closure Cost Estimate
2	Sabina, INAC, KIA	NWB	Clarification of Security Management arrangements to avoid double bonding	June 25, 2018	
3	Sabina	KIA 29	Provide discussion of treatment/management options and related cost estimates that ensure water quality in the discharge from flooded pits (MMER) and the downstream receiving environment (CCME) and Site Specific Water Quality Objectives (SSWQO) comply with the levels of impact permitted under the NIRB Project Certificate	June 8, 2018	Submission that clarifies that Sabina makes this commitment Addition of closure cost estimate and line item to reflect additional costs that would be result if CCME discharge criteria cannot be made
4	Sabina	NWB, KIA	(Related) Commitment to providing updated load balance model on a periodic basis throughout operations and in advance of closure to reflect actual conditions and monitoring results	During term of licence	Likely to become a term and condition of the Licence
5	Sabina	NWB	Identify, in consultation with the NWB, more clearly where the existing Type "B" Licences overlap with the proposed scope of the Type "A"	June 8, 2018	Post-Technical Meeting Response Package

No.	Party Responsible for Commitment	Party(s) who raised (Item#)	TM Commitment	Timeline for Submission	Form of Submission
6	Sabina	NWB	Update to Water Management Plan	60 days after Licence approval	Updated Water Management Plan
7	Sabina	KIA 27	Commits to re-running the load balance model once the updated information from 2017-2018 baseline sampling has been obtained, and also to include additional discussion to demonstrate seasonal variation has been adequately characterized by the update.	Late 2018- Early 2019	Updated Load Balance Model
8	Sabina	KIA 30	Provide more information regarding Saline Water Management	June 8, 2018	Initial draft of Saline Water Management Plan or applicable sections of the Water Management Plan
9	Sabina	KIA 31	Completion of Hydrodynamic Model that incorporates the updated load balance model.	March 31, 2019	Submission at the same time as the 2018 Annual Report
10	Sabina	INAC 2	Update to the drawings in the Tailings Management Plan (TMP) to show the grading and drainage of the TSF WRSA towards the TSF WRSA Pond	June 8, 2018	Updated TSF Drawings
11	Sabina	INAC 3	Provide post-Technical Meeting Response Package which provides additional details on the sizing and total capacity of the Primary Pond that confirms that the Primary Pond is adequately and appropriately sized.	June 8, 2018	Post-Technical Meeting Response Package
12	Sabina	INAC 5	Provide detailed cross sections and seepage analysis to confirm environmental containment of the Saline Water Pond.	June 8, 2018	post-Technical Meeting Response Package
13	Sabina	INAC 6	Provide detailed cross sections and seepage analysis to confirm environmental containment of the Tailings Storage Facility.	June 8, 2018	post-Technical Meeting Response Package

No.	Party Responsible for Commitment	Party(s) who raised (Item#)	TM Commitment	Timeline for Submission	Form of Submission
14	Sabina	INAC 27	Commits to conduct a comparison of other active revegetation planning at Northern mine sites	June 8, 2018	Update on Sabina's progress in respect of this work in the post-Technical Meeting Response Package
15	Sabina	ECCC 2	To identify contingency measures to mitigate potential sediment/TSS issues when re-watering the Saline Water Pond (SWP) to address water quality issues prior to reconnection to surface waters	June 8, 2018	post-Technical Meeting Response Package
16	Sabina	ECCC 1	Sabina will re-issue the water quality predictions table to address the questions raised by ECCC (Supplemental Response Package, Appendix A: Load Balance Update to Support the Type A Water Licence, Appendix 2, Attachment Tables 1-A and 1-B)	June 8, 2018	Updated Tables included in the Post-Technical Meeting Response Package
17	Sabina	ECCC-1	Identify best practices for source control of nitrogen through explosives management.	June 8, 2018	post-Technical Meeting Response Package