



ᓄᓇᓂᓪ ᐃᓕᓕᓂᓪ ᑲᓂᓕᓂᓪ
NUNAVUT WATER BOARD
NUNAVUT IMALIRIYIN KATIMAYINGI
OFFICE DES EAUX DU NUNAVUT

File No.: **2BC-BRP1819**

March 13, 2018

Matthew Pickard
Vice President, Environment and Sustainability
Sabina Gold & Silver Corp.
#1800 – 555 Burrard Street
Box 220
Vancouver, BC V7X 1M9

Email: mpickard@sabinagoldsilver.com

RE: Water Licence No. 2BC-BRP1819; Development Works - Back River Project, Sabina Gold & Silver Corp.

Dear Mr. Pickard:

Please find attached Licence No. **2BC-BRP1819** issued to Sabina Gold & Silver Corp. (Sabina) by the Nunavut Water Board (NWB) pursuant to its authority under Article 13 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada (Nunavut Agreement)*. The terms and conditions of the attached Licence related to the use of Water and the deposit of Waste are an integral part of this approval.

In accordance with s. 154(1) of *Nunavut Planning and Project Assessment Act (NuPPAA)*, the NWB may issue licences to use waters or deposit waste for an interim, short term period under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, in respect of exploration or developmental activities that relate directly to a project that is subject to a review under this Part. However, as per s. 154(3) of *NuPPAA* licences referred to in subsection (1) are not to be renewed or amended and their period of validity is not to be extended if the responsible Minister has come to a decision under this Part that the project to which the activities relate either could be modified and an amended project proposal submitted to the Commission or is not to proceed.

If the Licensee contemplates or requires an amendment to this licence, the NWB may decide, in the public's interest, to hold a public hearing. The Licensee should submit applications for amendment as soon as possible to give the NWB sufficient time to go through the amendment process. The process and timing may vary depending on the scope of the amendment; however, a minimum of **sixty (60) days** is required from time of acceptance by the NWB. It is the responsibility of the Licensee to ensure that all application materials have been received and are acknowledged by the Manager of Licensing.

Note that upon expiry of the Licence, the use of water use and the deposit of waste must cease, or the Licensee may be in contravention of the Nunavut Agreement and the Nunavut Waters and Nunavut Surface Rights Tribunal Act. However, the expiry or cancellation of a licence does not relieve the holder from any obligations imposed by the licence.

The NWB strongly recommends that the Licensee consult the comments received by the KIA, INAC, ECCC, and the DFO on issues identified¹. Due to the size of the documents, this information has not been attached, but is available on the NWB public registry at the following link for your consideration for issues both within and outside of the NWB mandate:

<ftp://ftp.nwb-oen.ca/registry/2%20MINING%20MILLING/2B/2BC%20-%20Construction/2BC-BRP1819/2%20ADMIN/3%20SUBMISSIONS/>

Sincerely,

Lootie Toomasie
Nunavut Water Board,
Chair

LT/db/rqd

Enclosure: New Licence No. **2BC-BRP1819**

Cc: Distribution List – Kitikmeot

¹ Indigenous and Northern Affairs Canada (INAC), January 8, 2018; Environment and Climate Change Canada (ECCC), January 29, 2018; Kitikmeot Inuit Association (KIA), January 15 and 29, 2018; and Fisheries and Oceans Canada (DFO), January 22, 2018.

TABLE OF CONTENTS

DECISION..... ii

I. BACKGROUND iv

II. PROCEDURAL HISTORY v

III. GENERAL CONSIDERATIONS vi

 Term of Licencevi

 Water Use viii

 Waste Disposal..... viii

 Construction and Operationix

 Environment and Spill Contingency Planningxi

 Closure and Reclamation xii

 Monitoring xiii

WATER LICENCE 1

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT 2

 1. **Scope**2

 2. **Definitions**3

 3. **Enforcement**5

PART B: GENERAL CONDITIONS 5

PART C: CONDITIONS APPLYING TO WATER USE 8

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL 8

PART E: CONDITIONS APPLYING TO CONSTRUCTION OPERATIONS 9

PART F: CONDITIONS APPLYING TO DRILLING OPERATIONS 12

PART G: CONDITIONS APPLYING TO MODIFICATIONS 12

PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING 13

**PART I: CONDITIONS APPLYING TO CLOSURE AND RECLAMATION OR
TEMPORARY CLOSURE**..... 14

PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM..... 15

DECISION

LICENCE NUMBER: 2BC-BRP1819

This is the decision of the Nunavut Water Board (NWB) with respect to an application dated September 13, 2017, for a new Water Licence made by:

SABINA GOLD & SILVER CORP.

to allow for the use of water and deposit of waste, for development works (site preparation and equipment mobilization) in support of the Back River Project. These activities include:

- **GOOSE PROPERTY**
 - Construct and operate winter ice roads
 - Goose Exploration Camp to Umwelt Quarry/Goose Plant Site (WIR 2a/2b)
 - Goose Exploration Camp (or other ice road) to the Explosives Storage (WIR 3)
 - Develop and operate Umwelt Quarry
 - Construct all-weather service roads and water crossings
 - Construct Goose Plant Site and Fuel Storage Area Pad
 - Construct airstrip extension
 - Realign Rascal Stream and/or install fish bearing culverts at airstrip extension
 - Relocate Explosives Storage Area
 - Install water intake

- **MARINE LAYDOWN AREA (MLA)**
 - Construct and operate ice airstrip in the marine environment
 - Mobilize fuel, equipment, and supplies (by air)
 - Install and operate temporary fuel storage area
 - Develop and operate MLA Quarry
 - Construct all-weather service roads, laydown areas, and fuel storage area
 - Mobilize additional fuel, equipment, and supplies (by vessels)
 - Install one steel bulk fuel tank
 - Install water intake/discharge

The Back River Project located within the Kitikmeot Region, Nunavut, generally located at the geographical coordinates as follows:

Project Extents:

Latitude: 66°42' N	Longitude: 107°50' W
Latitude: 66°42' N	Longitude: 106°11' W
Latitude: 65°29' N	Longitude: 106°12' W
Latitude: 65°29' N	Longitude: 107°50' W

DECISION

After having been satisfied that the Application is for a project proposal that was previously reviewed as part of the Nunavut Planning Commission (NPC) file “Back River Project”. The NPC determined that this project proposal is outside the area of an applicable regional land use plan¹ and that the works and activities associated with this proposal were previously screened by the Nunavut Impact review Board (NIRB File No.: 07YN030). The above-noted project proposal is exempt from screening by the NIRB under section 235 of *Nunavut Planning and Project Assessment Act* (NuPPAA) as well, under section 12.4.3 of the *Nunavut Agreement* as amended, because it is for a component or activity that was part of the original proposal and its inclusion is not a significant modification of the project.

In accordance with s. 55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA or Act) and Article 13 of the *Nunavut Agreement*, public notice of the Application was given and interested persons were invited to make representations to the NWB.

After reviewing the submission of the Applicant and considering the representations made by interested persons, the NWB, having given due regard to the facts and circumstances, the merits of the submissions made to it and to the purpose, scope and intent of the *Nunavut Agreement* and of the NWNSRTA, waived the requirement to hold a public hearing, and determined that:

New Licence No. 2BC-BRP1819 be issued subject to the terms and conditions contained therein. (Motion #: 2017-B1-042)

Signed this 13th day of March 2018 at Gjoa Haven, NU.

Lootie Toomasie
Nunavut Water Board,
Chair

LT/db/rqd

¹ NPC file #148294 issued June 8, 2016 and file #148419, dated February 27, 2017

I. BACKGROUND

On September 13, 2017, the Nunavut Water Board (NWB or Board) received from Sabina Gold & Silver Corp. (Sabina or Applicant or Licensee) a Type “B” Water Licence Application (Application) for development works (site preparation and equipment mobilization) in support of the Back River Project (Project). The development works Project is intended to precede the proposed Back River Project, located approximately 160 km south of Kingaok, 250 km southeast of Omingmaktok, and 400 km southwest of Cambridge Bay within the Kitikmeot Region of Nunavut. The development works Project is classified under Schedule 1 of the Regulations as “Other”, and it involves the construction of infrastructure at the Bathurst Inlet Marine Laydown Area (MLA) and Goose Site, in advance of mobilizing equipment and supplies that would be required for developing the wider Back River Project that is currently undergoing relevant regulatory processes.

Prior to application received for this development works Project, the NWB had previously received from Sabina an application for a Type “A” Water Licence, to use water and deposit waste in support of proposed mining activities at the Back River Project. Should the Board decide to issue a Type “A” water licence for the Back River Project; the scope of activities under this Type “B” Water Licence will be incorporated into the Type “A” Licence.

The Board notes that on December 19, 2017, the Nunavut Impact Review Board (NIRB) issued to Sabina Project Certificate No. 007 (NIRB File No. 12MN036) for the development of the Back River Project. Further, the Board aware that the activities and undertakings proposed under development works Project are consistent with that captured under Certificate issued for Back River Project.

Related Authorizations

Previously approved activities that **are not authorized** under this licence that will support

- **GOOSE PROPERTY** (activities under Licence No. **2BE-GOO1520**)
 - Operate Goose Exploration Camp
 - Construct and operate Winter Ice Road between Goose Exploration Camp and Airstrip Quarry (WIR 1)
 - Construct and operated ice airstrip
 - Mobilize fuel, equipment, and supplies
 - Operate Airstrip Quarry
 - Locate temporary fuel storage

- **MARINE LAYDOWN AREA (MLA)** (activities under Licence No. **2BE-GEO1520**)
 - Upgrade and operate existing temporary exploration camp

II. PROCEDURAL HISTORY

On September 13, 2017, the NWB received from Sabina a water licence application (the Application) for development works (site preparation and equipment mobilization) in support of the Back River Project (Project). The Application consisted, after updates, of the following documents:

- Cover Letter – Version 2.0, September 13, 2017;
- Main Application Supporting Document (MASD) for Type B Development Works and Appendices – Version 2.0, September 2017;
 - Appendix A: Completed General Water Licence Application for Type B Development Works – Version 2.0
 - Appendix B: Concordance Assessment for Type B Development Works
- Supplemental Documents:
 - D.1 Road Management Plan: Type B Development Works Water Licence Version 2.0, August 2017;
 - D.2 Fuel Management Plan: Type B Development Works Water Licence Version 2.0, August 2017;
 - D.3 Quarry Management Plan: Type B Development Works Water Licence Version 2.0, August 2017;
 - D.4 Comprehensive Spill Contingency Plan, August 2017;
 - D.5 Interim Closure and Reclamation Plan: Type B Development Works Water Licence Version 2.0, August 2017;
 - D.6 Environmental Management and Protection Plan: Type B Development Works Water Licence Version 2.0, August 2017; and
 - D.7 Oil Pollution Emergency Plan, August 2017.

On November 15, 2017, Sabina provided clarification and updated a number of the Application documents in response to questions raised by NWB.

After the NWB's initial technical review of submitted information, on December 7, 2017, a notice of the Application was posted and the application information was made available for a thirty (30) day public review/comment period. Submissions were received from:

- Indigenous and Northern Affairs Canada (INAC) on January 8, 2018;
- Environment and Climate Change Canada (ECCC) on January 29, 2018;
- Kitikmeot Inuit Association (KIA) on January 15, 2018; and
- Fisheries and Oceans Canada (DFO) on January 22, 2018.

Following the receipt of interveners' submissions, Sabina provided its responses and clarifications for the KIA, ECCC, and the DFO on January 29, 2018. Sabina provided its responses and clarifications for INAC on January 30, 2018. This submission included, as Attachment A3.², the document entitled:

- Quality Assurance / Quality Control Plan, October 2017

² Refer to NWB Registry file: 180129 8BC-BRP----Attachment A.3 Type B Technical Comment Responses-IMLE

Following the receipt of Sabina's responses and clarification, the KIA provided an additional submission to NWB on February 9, 2018. On February 15, 2018, Sabina provided NWB with responses to the second round of comments from the KIA.

On January 19, 2018, the NPC issued conformity determination for the development works Project. NPC determined that this project proposal is outside the area of an applicable regional land use plan. The activities associated with this proposal were previously reviewed by NPC; file 148294, issued 8 June 2016, and file 148419, issued 27 Feb 2017. In addition, the works and activities listed above were previously screened by the Nunavut Impact Review Board (NIRB FILE No. 07YN030). The above-noted project proposal is exempt from screening by the NIRB because the NPC is of the understanding that it does not change the general scope of the original or previously amended project activities, and the exceptions noted in Section 12.4.3 (a) and (b) of the Nunavut Agreement do not apply.

In accordance with s. 55.1 of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA or Act) and Article 13 of the *Nunavut Agreement*, public notice of the Application was given and interested persons were invited to make representations to the NWB.

This file was originally named 8BC-BRP because the proposed scope fits into Category 8 (other undertaking) as per Schedule 1 of the regulations. However, since the requested licence supports the Type "A" Mining project, it is more appropriate for this file to fit into Category 2 (mining undertaking). With this in mind, and considering that the Environmental Assessment required of the mining operations has been completed, the Board has renamed the file 2BC-BRP.

Based on a thorough and detailed assessment of the Application and supporting information, the Board approved the Application and decided to issue Water Licence No. 2BC-BRP1819.

III. GENERAL CONSIDERATIONS

The following section outlines the issues identified by the NWB and/or raised by interested parties and provides the background on the terms and conditions included within the body of the Licence:

Term of Licence

In accordance with the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* s. 45, the NWB may issue a licence for a term not exceeding twenty-five (25) years. In determining an appropriate term for a water licence, the Board considers a number of factors including, but not limited to, the results of INAC site inspections and the corresponding compliance record of the Applicant, as well as intervener comments provided during the Application review process.

Sabina requested a one (1) year term for the Licence to allow for construction of some basic infrastructure and to undertake site preparation or pre-development work for the Project. Sabina also requested that the Board incorporate the scope of this Type "B" Application/Licence into the Type "A" Water Licence should a Type "A" Water Licence be eventually issued for the Project in the near future.

In accordance with s. 154(1) of *Nunavut Planning and Project Assessment Act (NuPPAA)*, the NWB may issue licences to use waters or deposit waste for an interim, short term period under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, in respect of exploration or developmental activities that relate directly to a project that is subject to a review under this Part. However, as per s. 154(3) of *NuPPAA*, licences referred to in subsection (1) are not to be renewed or amended and their period of validity is not to be extended if the responsible Minister has come to a decision under this Part that the project to which the activities relate either could be modified and an amended project proposal submitted to the Commission or is not to proceed.

In review of the comments received on the application, the NWB has noted that no concerns were expressed with respect to the licence term requested by the Applicant. The NWB has taken into consideration the comments received and the nature and scope of activities proposed in determining that the requested term is suitable for the undertaking. Accordingly, the Board has granted the Licence for a term slightly more than one (1) year, expiring April 30, 2019. Should the Board issue a Type “A” water licence for the Back River Project in the future, the entire scope of this Type “B” Water Licence will be incorporated into the Type “A” Licence.

Annual Reporting

The NWB has included under Part B Item 4 in the Licensee, the requirement for the Licensee to generate and submit an Annual Report. The Report ensures that the NWB has an accurate annual update of the Licensee’s activities related to the use of water and deposit of waste during the preceding calendar year. This information is maintained on the NWB’s Public Registry as well as made available to interested parties upon request. A “*Standardized Form for Annual Reporting*” can be used by the Licensee, supplemented by relevant project specific information, when generating its annual report. The form can be accessed using the following link to the NWB’s File Transfer Protocol (FTP) site and Public Registry:

<ftp://ftp.nwb-oen.ca/1%20PRUC%20PUBLIC%20REGISTRY/>

Security

In accordance with s. 76(1) of the NWNSRTA, the Board may require a licensee to furnish and maintain security with the Minister, in a form determined by the Regulations or satisfactory to the Minister. Further, in a matter related to the posting of security, the Board may not issue a licence unless the Board is satisfied that the financial responsibility of the applicant, taking into account the applicant’s past performance, is adequate for the mitigation measures and any costs associated with the closing or abandonment of the undertaking³.

Within the submitted Application, Sabina provided a security estimate of \$1,394,653, utilizing Reclaim Model v.7.0., for the development works Project as Attachment A to their closure and reclamation plan⁴.

³ See subsection 57(b) of the NWNSRTA.

⁴ Supplemental document titled “D.5 Interim Closure and Reclamation Plan: Type B Development Works Water

INAC and the KIA recommended that the applicant provide additional reclamation security to address potential water quality issues that might occur during closure of the quarry.

Sabina agreed to adjust the closure cost estimate to address potential water quality issues that might occur during closure of the quarry by increasing the closure cost contingency from 10% to 20%.

Following the confirmation from the KIA and INAC that they were satisfied with Sabina's response, the Board applied the additional contingency to the closure cost estimate originally provided by Sabina. The Board has included the condition under Part B, Item 2 in the Licence, that requires the Licensee to furnish and maintain financial security in the amount of one million and four hundred eighty five thousand six hundred and sixty-three dollars (\$1,485,663), in the form that is satisfactory to the Minister within thirty (30) days from the date of issuance of this Licence.

Water Use

Sabina requested to use two hundred and ninety-seven (297) cubic meters of water per day from Goose Lake, MLA Pond S1, and MLA Pond S2 for dust suppression, compaction during construction and winter ice road construction under this Licence.

In review of the comments received on the application, the NWB has noted that no concerns were expressed with respect to the water use volume requested by the Applicant. The NWB has taken into consideration the comments received and the nature and scope of activities proposed in determining that the requested water use volume is suitable for the undertaking.

Waste Disposal

Waste Water

Contact Water

The Main Application Document states that the development works Project will include:

- construction of the MLA Fuel Storage Area (including secondary containment structure);
- erection, but not testing or filling, one steel wall tank in the MLA Fuel Storage Area;
- establishment of a temporary fuel storage area adjacent to the camp utilizing:
 - Double wall portable steel tanks; and
 - Temporary tertiary containment structures.

The Main Application Document also states blasting will be used to quarry rock for construction material.

Sabina's Application included as Supplemental Document D5 "Environmental Management and Protection Plan: Type B Development Works Water Licence Version 2.0" dated August 2017, describes monitoring programs to assess contact water from secondary (and tertiary) containment and from quarries and quarried material.

INAC and the KIA recommended that the Applicant provide further information about water management and monitoring to ensure contact water from secondary (and tertiary) containment and from quarries and quarried materials do not lead to environmental impacts due to oil/grease, explosives residue (nitrates), leached metals, and/or acidic conditions.

Additionally, the NWB notes that the Plan includes management and protection measures for the marine environment, which is outside of the NWB jurisdiction and mandate.

The Board has included effluent quality limits for water from secondary (and tertiary) containment under Part D, Item 3 of the Licence. The Board has included effluent quality criteria for water from surface runoff and/or discharge from drainage management systems under Part E, Item 11 of the Licence.

The Board has also included monitoring requirements under Part J, Items 2, 4, 5 and 6 of the Licence for testing of runoff and/or contact water from secondary (and tertiary) containment and from quarries and quarried materials.

Construction and Operation

The Application Main Document includes sections that discuss roads management, quarry management, and fuel management during site preparation works. In addition, the NWB has received the following management plans, as part of the application:

- "Road Management Plan: Type B Development Works Water Licence Version 2.0";
- "Quarry Management Plan: Type B Development Works Water Licence Version 2.0";
and
- "Fuel Management Plan: Type B Development Works Water Licence Version 2.0".

Road Management Plan

The Road Management Plan includes all-weather service roads, winter ice roads, and the airstrip extension. The Plan presents mitigation measures and protocols to be implemented during construction and operations to protect water crossings and wildlife, to prevent permafrost degradation, to control surface run-off and sedimentation, and to mitigate dust.

The NWB notes that the site preparation scope only includes all-weather service roads for the development works and does not include haul roads or all roads for the proposed mine project. In addition, the NWB notes that the Plan includes management for the Winter Ice Road between Goose Exploration Camp and Airstrip Quarry (WIR 1), which is currently authorized under Water Licence No. 2BE-GOO1520 rather than this Licence.

Quarry Management Plan

The Quarry Management Plan describes selection, operations, and closure strategies for the quarries for the development works Project. As stated in the Plan the quarry materials will be used for the construction and maintenance of the service road, pads, and the airstrip extension.

The NWB notes that the Plan includes management for the Airstrip Quarry at the Goose Site, which is currently authorized under Water Licence No. 2BE-GOO1520, rather than this Licence.

Fuel Management Plan

The Fuel Management Plan includes temporary and permanent fuel storage at the MLA, Goose Site, and at temporary exploration sites. The Plan describes strategies for design, siting, fueling, bulk transfer, and training and links to the Comprehensive Spill Contingency Plan and the Interim Closure and Reclamation Plan.

The NWB notes that the Plan includes handling and storage of fuel for exploration activities and for existing Sabina facilities (e.g. fuel storage at Goose Site) which are currently authorized under Water Licence No. 2BE-GOO1520 and 2BE-GEO1520, rather than this Licence.

The Board has approved the above stated management plans under the respective terms and conditions with the issuance of this Licence. It should be noted that these plans' scope exceeds that of the proposed pre-development activities to include activities under other existing licences. Recognizing that the other licences are in good standing; it was reasonable to approve these plans in their current form and in the context of the **scope of activities for this Licence only**. The Licensee is advised that the approval of these plans does not constitute approval of the entire scope of activities and facilities under the plans where the plan's scope exceeds this Licence.

General Comments

INAC and the KIA recommended that the Applicant provide further information about quarry related dust control, closure plans, runoff and water management, visual impacts, geotechnical characteristics of the quarried materials (e.g. potential for ARD and/or metal leaching), and permafrost protection.

Additionally, the KIA recommended that the Applicant include in the Plan that the quarried material carried within articulated rock trucks *be covered during... ..transport to minimize dust.*

In response, Sabina stated that *covering [rock trucks] is not a standard requirement in Nunavut, especially over short distances, as it has little benefit and is challenging and expensive to do.* Sabina also noted that *the current Type B and [the] KIA Land License for quarrying also does not require covering the trucks during transport.*

Given consideration of the speed of the trucks (50 km/h), the short distances (total road length at Goose Site 7.4 km), the difficulties covering the load on a rock truck, and the existing permit conditions, the NWB has determined to not add a requirement to this Licence to cover loads in rock trucks.

Under Part E, Item 7 the Licensee shall ensure that all fill material used during construction is free of contaminants and potentially non-acid generating and no metal leaching.

Conditions have also been included under Part J in the Licence requiring the Licensee to monitor runoff or surface water from quarry sites to ensure that such water does not negatively impact the receiving environment.

The Licensee shall be required to submit to the Board design plans and for-construction drawings for any engineering facilities stamped by an Engineer, at least sixty (60) days prior to construction.

The Licensee shall also be required to submit to the Board a Construction Summary Report, within ninety (90) days of completion of the construction of any engineered facilities, to include as-built plans and drawings stamped by an Engineer, and to provide explanation on any deviations from design and construction drawings taking into account construction and field decisions and how they may affect the performance of the engineered facilities.

The Applicant is reminded that all of the applicable Fisheries and Oceans Canada (DFO) regulations including Operational Statements (i.e., culvert installation/maintenance) for protecting fish and fish habitat shall be followed in constructing and operating the proposed infrastructure.

Environment and Spill Contingency Planning

The Application Main Document includes sections that discuss spill contingency planning during site preparation works. In addition, the NWB has received among other application documents the following management plans, as part of the application:

- “Environmental Management and Protection Plan: Type B Development Works Water Licence Version 2.0”;
- “Comprehensive Spill Contingency Plan”; and

The KIA requested that the Applicant amend the Spill Contingency Plan *to ensure consistent terminology and notification procedures for employees to follow in the event of a reportable spill. A notification placard may be helpful to ensure that site personnel follow proper procedures.*

Sabina agreed with the KIA indicating *that consistency is important to ensure proper notification procedures are followed, and... ..that a notification placard might be helpful to ensure that site personnel follow proper procedures.*

The NWB supports the consensus between the KIA and Sabina and has, under Part H, Item 2, required that the Licensee shall submit an addendum to the Spill Contingency Plan to revise notification procedures to ensure consistent terminology and a robust notification process.

The NWB notes that the Plans include management and protection measures related to activities for exploration activities and for existing Sabina facilities (e.g. fuel storage at Goose Site) which

is authorized under Water Licence No. 2BE-GOO1520 and 2BE-GEO1520, rather than this Licence.

Additionally, the NWB notes that the Plans and include management and protection measures for the marine environment, which is outside of the NWB jurisdiction and mandate.

The Board has approved the above stated management plans under the respective terms and conditions with the issuance of this Licence. It should be noted that these plans' scope exceeds that of the proposed pre-development activities to include activities under other existing licences. Recognizing that the other licences are in good standing; it was reasonable to approve these plans in their current form and in the context of the **scope of activities for this Licence only**. The Licensee is advised that the approval of these plans does not constitute approval of the entire scope of activities and facilities under the plans' scope where that scope exceeds that of this Licence.

Design Drawings

The Licensee is required, under Part E of the Licence, to submit, for-construction design drawings to the Board for review prior to constructing any of the facilities allowed for under the scope of this Licence. Upon completion of construction of the facilities under the Licence, the Licensee is required to provide to the Board for review as-built drawings along with a Construction Summary Report.

Closure and Reclamation

Interim Closure and Reclamation Plan

Sabina's Application included the supplemental document D5 "Interim Closure and Reclamation Plan Type B Development Works Water Licence Version 2.0" dated August 2017, that provides for the closure and reclamation approach proposed by Applicant and an estimate of financial liability for the site as it pertains to the facilities and infrastructure associated with the development works Project.

The Applicant requested that "*should a Type A Water Licence be issued for the Project in the future, that the Board incorporate the scope of this Type B Licence into the Type A Water Licence.*" At the same time, it was estimated that "*...if the Type A licence was not issued, it would require one summer season to complete the work noted in this Plan.*"

The NWB concurs that should a Type A Water Licence be issued for the Back River Project in the future, the scope of this Licence will be incorporated into the Type "A" Licence.

The Board finds the proposed Closure Reclamation and Strategy as generally acceptable, and has approved under Part I, Item 1.

Monitoring

The Application Main Document includes sections that discuss environmental monitoring during site preparation works. In addition, the NWB has received among other application documents the following management plans, as part of the application:

- “Environmental Management and Protection Plan: Type B Development Works Water Licence Version 2.0”; and
- “Comprehensive Spill Contingency Plan”

The KIA requested that the Applicant provide *additional detail for the Quality Assurance and Quality Control protocols outlined in the Type B water licence application*. ECCC also requested Quality Assurance and Quality Control information.

Sabina provided the *additional detail as requested for quality assurance and quality control protocols* as Appendix A3 of their response to comments (Quality Assurance / Quality Control Plan, dated October 2017).

To minimize the possibility of any potential undesirable effects to the receiving environment, the Board has included appropriate conditions under Part J to ensure that the Licensee monitors the effect of project activities on the receiving environment.

Conditions have also been included to ensure that effluent from site activities is non-acutely toxic and for the monitoring of ammonia and nitrate concentration in runoff and effluent discharges.

The Licensee shall carry out regular inspections of the road and complete associated monitoring to ensure that the road is upgraded/constructed/maintained for safe travel of personnel, equipment and supplies without adverse impacts on surrounding water bodies



NUNAVUT WATER BOARD WATER LICENCE

Licence No. **2BC-BRP1819**

Pursuant to the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

SABINA GOLD AND SILVER CORP.

(Licensee)

**#1800 – 555 BURRARD STREET, BOX 220
VANCOUVER, BC V7X 1M9**

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water or dispose of Waste for a period subject to restrictions and conditions contained within this Licence:

Licence Number/Type:	2BC-BRP1819 / TYPE “B”
Water Management Area:	QUEEN MAUD GULF WATERSHED (30)
Location:	DEVELOPMENT WORKS - BACK RIVER PROJECT: KITIKMEOT REGION, NUNAVUT
Classification:	2. MINING UNDERTAKING (CONSTRUCTION)
Purpose:	USE OF WATER AND DEPOSIT OF WASTE
Quantity of Water use not to Exceed:	TWO HUNDRED AND NINETY-SEVEN (297) CUBIC METRES PER DAY
Date of Licence Issuance:	MARCH 13, 2018
Expiry of Licence:	APRIL 30, 2019

This Licence, issued and recorded at Gjoa Haven, Nunavut, includes and is subject to the annexed conditions.

**Lootie Toomasie
Nunavut Water Board
Chair**

PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

1. Scope

This Licence allows for the use of Water and the deposit of waste of an Undertaking classified as Other (Construction), as per Schedule 1 of the *Regulations* at the Development Works - Back River Project, located approximately 160 km south of Kingaok, 250 km southeast of Omingmaktok, and 400 km southwest of Cambridge Bay within the Kitikmeot Region, Nunavut. The overall Back River Project is a proposed gold mine consisting of the Goose Property, a Marine Laydown Area (MLA) in the southern Bathurst Inlet, and connecting winter roads. Activities and undertakings for development works (site preparation and equipment mobilization) included under this Licence are as follows:

- Goose Property
 - Construct and operate winter ice roads
 - Goose Exploration Camp to Umwelt Quarry/Goose Plant Site (WIR 2a/2b)
 - Goose Exploration Camp (or other ice road) to the Explosives Storage (WIR 3)
 - Develop and operate Umwelt Quarry
 - Construct all-weather service roads and water crossings
 - Construct Goose Plant Site and Fuel Storage Area Pad
 - Construct airstrip extension
 - Realign Rascal Stream and/or install fish bearing culverts at airstrip extension
 - Relocate Explosives Storage Area
 - Install water intake
 - MLA
 - Construct and operate ice airstrip in the marine environment
 - Mobilize fuel, equipment, and supplies (by air)
 - Install and operate temporary fuel storage area
 - Develop and operate MLA Quarry
 - Construct all-weather service roads, laydown areas, and fuel storage area
 - Mobilize additional fuel, equipment, and supplies (by vessels)
 - Install one steel bulk fuel tank
 - Install water intake/discharge
- a. This Licence is issued subject to the conditions contained herein with respect to the taking of Water and the depositing of waste of any type in any waters or in any place under any conditions where such waste or any other waste that results from the deposits of such waste may enter any waters. Whenever new Regulations are made or existing Regulations are amended by the Governor in Council under the Nunavut Waters and Nunavut Surface Rights Tribunal Act, or other statutes imposing more

stringent conditions relating to the quantity or type of waste that may be so deposited or under which any such waste may be so deposited, this Licence shall be deemed, upon promulgation of such Regulations, to be subject to such requirements; and

- b. Compliance with the terms and conditions of this Licence does not absolve the Licensee from responsibility for compliance with the requirements of all applicable Federal, Territorial, and Municipal legislation.

2. Definitions

“**Act**” means the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**Addendum**” means the supplemental text that is added to a full plan or report usually included at the end of the document and is not intended to require a full resubmission of the revised report;

“**Amendment**” means a change to original terms and conditions of this Licence requiring correction, addition, or deletion of specific terms and conditions of the Licence; modifications inconsistent with the terms of the set terms and conditions of the Licence;

“**Applicant**” means the Licensee;

“**Appurtenant Undertaking**” means an undertaking in relation to which a use of water or a deposit of Waste is permitted by a licence issued by the Board;

“**Board**” means the Nunavut Water Board established under the *Nunavut Agreement* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*;

“**Bulk Fuel Storage Facility**” means the fuel storage facility as described in the Application and supporting documents submitted September 13, 2017;

“**Closure and Reclamation Plan**” means a Plan developed to reach the closure goal and taking in account the “Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories” 2013;

“**Effluent**” means treated or untreated liquid Waste material that is discharged into the environment from a structure such as a settling pond, landform, or a treatment plant;

“**Engineer**” means a professional engineer registered to practice in Nunavut in accordance with the *Consolidation of Engineers and Geoscientists Act S. Nu 2008, c.2* and the *Engineering and Geoscience Professions Act S.N.W.T. 2006, c.16 Amended by S.N.W.T. 2009, c.12*;

“**High Water Mark**” means the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the

land (ref. Department of Fisheries and Oceans Canada, Operational Statement: Mineral Exploration Activities);

“**Inspector**” means an Inspector designated by the Minister under Section 85 (1) of the *Act*;

“**Licensee**” means the holder of this Licence;

“**Modification**” means an alteration to a physical work that introduces a new structure or eliminates an existing structure and does not alter the purpose or function of the work, but does not include an expansion;

“**Nunavut Agreement**” means the “*Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*”, including its preamble and schedules, and any amendments to that agreement made pursuant to it;

“**Quarry or Quarries**” means the area of surface excavation for extracting rock material for use as construction materials in the development of infrastructure and facilities for the project;

“**Regulations**” means the *Nunavut Waters Regulations* SOR/2013-69 18th April, 2013;

“**Secondary Containment**” means an impermeable structure, external to and separate from primary containment, which prevents unplanned spills of hazardous materials and provides a minimum capacity of 110% of the original vessel. Where multiple vessels are stored within the containment, it must provide a minimum capacity equal to the sum of the largest vessel and 10% of the aggregate volume of all other vessels located in the containment. This structure shall also provide containment and control of hoses and nozzles;

“**Sump or Sumps**” A structure or depression that collects, controls, and filters liquid Waste before it is released to the environment. This structure should be designed to prevent erosion while allowing percolation of liquid Waste.

“**Spill Contingency Plan**” means a Plan developed to deal with unforeseen petroleum and hazardous materials events that may occur during the operations conducted under the Licence;

“**Waste**” means, as defined in S.4 of the *Act*, any substance that, by itself or in combination with other substances found in water, would have the effect of altering the quality of any water to which the substance is added to an extent that is detrimental to its use by people or by any animal, fish or plant, or any water that would have that effect because of the quantity or concentration of the substances contained in it or because it has been treated or changed, by heat or other means.

“**Water**” or “**Waters**” means waters as defined in section 4 of the *Act*.

“Winter Ice Road” means a road constructed of snow or ice over land or water.

3. **Enforcement**

- a. Failure to comply with this Licence will be a violation of the *Act*, subjecting the Licensee to the enforcement measures and the penalties provided for in the *Act*;
- b. All inspection and enforcement services regarding this Licence will be provided by Inspectors appointed under the *Act*; and
- c. For the purpose of enforcing this Licence and with respect to the use of water and deposit or discharge of Waste by the Licensee, Inspectors appointed under the *Act*, hold all powers, privileges and protections that are conferred upon them by the *Act* or by other applicable law.

PART B: GENERAL CONDITIONS

1. The fees payable to the Receiver General for Canada for the right to use Waters shall be sent to the Board annually in accordance with Section 12 of the *Regulations*.
2. The Licensee shall, within thirty (30) days of issuance of this Licence, furnish and maintain security with the Minister in the form that is satisfactory to the Minister, in the amount of one million four hundred eighty-five thousand six hundred sixty-three (\$1,485,663) dollars.
3. The Licensee shall maintain the security deposit until such time as the Minister is satisfied that the Licensee has complied with all provisions of the approved Abandonment and Restoration Plan. This clause shall survive the expiry of the Licence.
4. The Licensee shall file an Annual Report on the Appurtenant Undertaking with the Board no later than March 31st of the year following the calendar year being reported, containing the following information:
 - a. A summary report of Water use;
 - b. Quantity of Water (in cubic metres/day) obtained for domestic and other purposes from sources on, in or flowing through Inuit-owned lands for the reporting period;
 - c. Quantity of Water (in cubic metres/day) obtained for domestic and other purposes from sources on, in or flowing through Crown Lands reporting period;
 - d. A list of unauthorized discharges and a summary of follow-up actions taken;
 - e. Any revisions as required by Part B, Item 9 to the following:
 - i. Road Management Plan,
 - ii. Quarry Management Plan,
 - iii. Fuel Management Plan,

- iv. Spill Contingency Plan,
 - v. Interim Closure and Reclamation Plan and Assessment of Current Restoration Liability,
 - vi. Environmental Management and Protection Plan; and
 - vii. Quality Assurance / Quality Control Plan.
- f. A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;
 - g. A summary of all information requested and results of the Monitoring Program;
 - h. A summary, including photographic records before, during and after any relevant construction activities or Modifications and/or major maintenance work carried out on facilities under this Licence and an outline of any work anticipated for the next year;
 - i. Detailed discussion on the performance, installation, and evaluation, including the use of photographic record, of the primary and secondary containment functions used in fuel storage to safeguard impacts to freshwaters;
 - j. An updated estimate of the current restoration liability as described in Part I, Item 1, based upon the results of restoration assessment, project development monitoring, and any changes or Modifications to the project;
 - k. A summary of public consultation/participation, describing consultation with local organizations and residents of the nearby communities, if any were conducted;
 - l. An executive summary in English and Inuktitut of all plans, reports, or studies conducted under this Licence; and
 - m. Any other details on Water use requested by the Board by the 1st November of the year being reported.
5. The Licensee shall notify the NWB of any changes in operating plans or conditions associated with this project at least thirty (30) days prior to any such change.
 6. The Licensee shall install flow meters or other such devices, or implement suitable methods required for the measuring of Water volumes as required under Part J, Items 9 and 10.
 7. The Licensee shall include, for all Plans submitted under this Licence, a proposed timetable for implementation. Plans submitted, cannot be undertaken without subsequent written Board approval and direction. The Board may alter or modify a Plan if necessary to achieve the legislative objectives and will notify the Licensee in writing of acceptance, rejection, or alteration of the Plan.
 8. The Licensee shall implement, for all Plans submitted under this Licence, the Plan as approved by the Board in writing.
 9. The Licensee shall review the Plans referred to in this Licence, as required by changes in operation and/or technology, and modify the Plan accordingly. Revisions to the Plans

shall be submitted in the form of an Addendum to be included with the Annual Report.

10. Every Plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a Plan where appropriate.
11. The Licensee shall ensure a copy of this Licence is maintained at the site of operations at all times. Any communication with respect to this Licence shall be made in writing to the attention of:
 - (a) **Manager of Licensing:**
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0
Telephone: (867) 360-6338
Fax: (867) 360-6369
Email: licensing@nwb-oen.ca
 - (b) **Inspector Contact:**
Manager of Field Operations, INAC
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0
Telephone: (867) 975-4295
Fax: (867) 979-6445
12. The Licensee shall submit one (1) paper copy and one (1) electronic copy of all reports, studies, and plans to the Board. Reports or studies submitted to the Board by the Licensee shall include a detailed executive summary in Inuktitut.
13. The Licensee shall ensure that all documents or correspondence submitted by the Licensee to the NWB are received and acknowledged by the Manager of Licensing.
14. This Licence is assignable as provided for in Section 44 of the *Act*.
15. The expiry or cancellation of this Licence does not relieve the Licensee from any obligation imposed by the Licence, or any other regulatory requirement.

PART C: CONDITIONS APPLYING TO WATER USE

1. The volume of Water used for all purposes under this Licence, shall not exceed two hundred and ninety-seven (297) cubic metres per day. Water use sources authorized under this licence include:
 - a. Goose Lake
 - b. MLA Pond S1
 - c. MLA Pond S2
2. The use of Water from streams or any Water bodies not identified in Part C, Item 1, is prohibited unless authorized and approved by the Board in writing.
3. Where the use of Water is of a sufficient volume that the source Water body may be drawn down, the Licensee shall submit, for approval of the Board in writing, the following information: the volume required, a hydrological overview of the water body, details of impacts, and proposed mitigation measures.
4. The Licensee shall submit to the Board for approval in writing, the following information at least thirty (30) days prior to the use of Water of a sufficient volume that the source water body may be drawn down: volume required, hydrological overview of the water body, details of impacts, and proposed mitigation measures.
5. The Licensee shall equip all water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained and shall withdraw Water at a rate such that fish do not become impinged on the screen.
6. The Licensee shall not conduct any work below the ordinary High Water Mark of any water body unless approved by the Board in writing.
7. The Licensee shall not cause erosion to the banks of any body of Water and shall provide necessary controls to prevent such erosion.
8. Sediment and erosion control measures shall be implemented prior to and maintained during the undertaking to prevent entry of sediment into Water.

PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

1. No sewage disposal or solid waste disposal activities are authorized under the provisions of this licence.
2. The Licensee shall locate areas designated for Waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark of any water body such that the quality, quantity, or flow of Water is not impaired, and no additional impacts are created, unless otherwise approved by the Board in writing.

3. The discharge of Effluent onto land from the MLA Bulk Fuel Storage Facility secondary containment at Monitoring Program Station BRP-43 and the MLA Temporary Fuel Storage Facility secondary containment at Monitoring Program Station BRP-49, shall not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration	Maximum Concentration of any Grab Sample
Benzene (µg/L)	370	370
Ethylbenzene (µg/L)	90	90
Toluene (µg/L)	2	2
Lead (mg/L)	0.1	0.1
Oil and Grease (mg/L)	5 and no visible sheen	5 and no visible sheen
Total Suspended Solids (mg/L)	15	30
pH	Between 6.0 and 9.5	Between 6.0 and 9.5

4. The Licensee shall provide at least ten (10) days' notification to an Inspector, prior to initiating the release of Effluent from any facilities listed in this Part. The notice shall include water quality results, an estimate of volume and the proposed receiving location.
5. If the proposed Effluent does not meet the discharge quality limits under Part D, Item 3, it shall be considered hazardous waste and disposed off-site to an approved, licensed facility or as otherwise approved by the Board in writing.
6. The discharge location for all treated Effluent described in Part D, Item 3 shall be located at a minimum of thirty-one (31) metres from the ordinary High Water Mark of any water body and where direct or indirect flow into a water body is not possible and no additional impacts are created.

PART E: CONDITIONS APPLYING TO CONSTRUCTION OPERATIONS

1. The Licensee shall implement the Plan entitled "Road Management Plan: Type B Development Works Water Licence Version 2.0" dated, August 2017 that has been approved by the Board with the issuance of this Licence.
2. The Licensee shall, within thirty (30) days of issuance of the Licence, submit an Addendum to the Plan referred to in Part E, Item 1, addressing the following issue:
- a. Inclusion of a discussion of possible actions that might be taken should an inspection identify a culvert or stream crossing that is impeding spring freshet due to snow or ice (i.e., aufreis).

3. The Licensee shall implement the Plan entitled “Quarry Management Plan: Type B Development Works Water Licence Version 2.0” dated August 2017, that has been approved by the Board with the issuance of this Licence.
4. The Licensee shall implement the Plan entitled “Fuel Management Plan: Type B Development Works Water Licence Version 2.0” dated August 2017, that has been approved by the Board with the issuance of this Licence.
5. The Licensee shall, at least sixty (60) days prior to construction, submit to the Board for review, construction plans, specifications and design drawings that are stamped by an Engineer, for the engineered infrastructure designed to contain, divert, and retain waters and/or wastes, allowed under the scope of this Licence. The Licensee shall ensure that such facilities are designed and constructed to engineering standards such that at a minimum they comply with the Dam Safety Guidelines. The submission will include proposed mitigation and monitoring during construction.
6. The Licensee shall submit to the Board for review, within ninety (90) days of completion of any structure designed to contain, divert, and retain waters and/or wastes, a Construction Summary Report prepared by an Engineer that includes as-built plans and drawings, documentation of field decisions that deviated from original plans and any data used to support these decisions.
7. The Licensee shall only use aggregate for construction of infrastructure or facilities under this Licence that is demonstrated to be potentially non-acid generating, non-metal leaching and free of contaminants by carrying out appropriate analyses and retaining the results and reports for submission with the Annual Report under Part B, Item 4.
8. With respect to access roads, laydown area, pad construction or other earthworks, the deposition of debris or sediment into or onto any water body is prohibited. These materials shall be disposed of a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter the water.
9. The Licensee shall maintain a minimum of thirty-one (31) metres undisturbed buffer zone between the periphery of quarry sites and the ordinary High Water Mark of any water body unless otherwise approved by the Board in writing.
10. The Licensee shall not excavate and/or remove material from any quarry beyond a depth of one (1) metre above the ordinary High Water Mark or above the groundwater table, to prevent the potential contamination of groundwater. The quarrying shall be in accordance with all applicable legislation and industry standards including the *Northern Land Use Guidelines, Pits and Quarries* (INAC, 2009).
11. All surface runoff and/or discharge from drainage management systems, at the Monitoring Program Stations BRP-G-01 to TBD, BRP-18, BRP-19, and BRP-23, during the construction/operation of any facilities and infrastructure associated with this project, including laydown areas, where flow may directly or indirectly enter a Water body, shall

not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration	Maximum Concentration of Any Grab Sample
Total Suspended Solids (mg/L)	50.0	100.0
Oil and Grease	No Visible Sheen	No Visible Sheen
pH	Between 6.0 and 9.5	Between 6.0 and 9.5

12. The Licensee shall, during periods of flow and following a major precipitation event, conduct water quality testing on a monthly basis, of any significant water seeps in contact with the roads, earthworks and any flows originating from borrow pits or quarries for criteria listed under Part J, Item 6.
13. The Licensee shall supervise and field check through an appropriately qualified Engineer, all construction of engineered structures in such a manner that the project specification can be enforced and, where required, the quality control measures are followed. The Licensee shall maintain and make available at the request of the Board and/or an Inspector, all construction records of all engineered structures.
14. The Licensee shall conduct all activities in such a way as to minimize impacts on surface drainage and the immediately undertake any corrective measures in the event of any impacts on surface drainage.
15. The Licensee shall locate stream crossings to minimize approach grades. Approaches shall be stabilized during construction and upon completion of the project, to control runoff, erosion, and subsequent siltation to any water body.
16. The Licensee shall limit any in-stream activity to low water periods. In-stream activity is prohibited during fish migration.
17. The Licensee shall not cut any stream bank or remove any material from below the ordinary High Water Mark of any water body, unless otherwise approved by the Board for culvert installation and stream diversion construction.
18. The Licensee shall implement sediment and erosion control measures to mitigate the deposition of debris and sediment into or onto any Water body during construction and operations. These materials shall be disposed at a distance of at least thirty-one (31) metres from the ordinary High Water Mark in such a fashion that they do not enter Water.

19. Machinery is not permitted to travel up the stream bed and fording of any water body is to be kept to a minimum. Machinery and equipment used should be well cleaned and free of oil and grease and other pollutants and maintained free of fluid leaks.
20. The Licensee shall locate equipment storage holding areas on gravel, sand or other durable land, a distance of at least thirty-one (31) metres above the ordinary High Water Mark of any water body in order to minimize impacts on surface drainage and water quality.
21. The Licensee shall designate an area for the deposition of excavated and stockpiled materials that is at least thirty-one (31) metres above the ordinary High Water Mark of any water body.
22. The Licensee shall not utilize any equipment or vehicles in the course of this undertaking unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles shall cease if rutting occurs.

PART F: CONDITIONS APPLYING TO DRILLING OPERATIONS

1. The Licensee is not authorized to drill under the provisions of this Licence.

PART G: CONDITIONS APPLYING TO MODIFICATIONS

1. The Licensee may, without written consent from the Board, carry out Modifications to the Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:
 - a. the Licensee has notified the Board in writing of such proposed Modifications at least sixty (60) days prior to beginning the Modifications;
 - b. such Modifications do not place the Licensee in contravention of the Licence or the *Act*;
 - c. such Modifications are consistent with the NIRB Screening Decision;
 - d. the Board has not, during the sixty (60) days following notification of the proposed Modifications, informed the Licensee that review of the proposal will require more than sixty (60) days; and
 - e. the Board has not rejected the proposed Modifications.
2. Modifications for which all of the conditions referred to in Part G, Item 1 have not been met can be carried out only with written approval from the Board.
3. The Licensee shall provide to the Board for review as-built plans and drawings of the Modifications referred to in this Licence within ninety (90) days of completion of the

Modification. These plans and drawings shall be stamped by an Engineer.

PART H: CONDITIONS APPLYING TO SPILL CONTINGENCY PLANNING

1. The Board has approved the Plan entitled “Comprehensive Spill Contingency Plan” dated August 2017 that was submitted as additional information with the Application.
2. The Licensee shall within thirty (30) days of issuance of this Licence, submit an Addendum to the Plan referred to in Part H, Item 1, in the format set out by the Consolidation of Spill Contingency Planning and Reporting Regulations R-068-93 addressing the following issues:
 - a. Inclusion of a map for each operating site, at an adequate scale (e.g. 1:50,000) that shows topography, grade, flow direction of nearby water bodies, potential spills etc., spill kit locations;
 - b. Inclusion of a commitment to post, at every operating site, the map from Part H, Item 2a for that site;
 - c. Revise notification procedures to ensure:
 - i. consistent terminology and
 - ii. a robust easy to implement notification process (e.g. addition of site placards or a 24 hr contact number)
 - d. Inclusion of a commitment to communicate with the KIA in the event of a spill and inclusion of the KIA in the emergency contact list;
 - e. Inclusion of a typical or maximum anticipated inventory of chemicals/products for all sites covered by the plan; and
3. The Licensee shall prevent any chemicals, petroleum products or Wastes associated with the project from entering Water. All Sumps and fuel caches shall be located at a distance of at least thirty-one (31) metres from the ordinary High Water Mark of any adjacent water body and inspected on a regular basis.
4. The Licensee shall conduct any equipment maintenance and servicing in designated areas and shall implement special procedures (such as the use of drip pans) to manage motor fluids and other Waste and contain potential spills.
5. If during the term of this Licence, an unauthorized discharge of Waste occurs, or if such a discharge is foreseeable, the Licensee shall:
 - a. Employ the approved Spill Contingency Plan;
 - b. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and
 - c. For each spill occurrence, submit to the Inspector and the NWB, no later than thirty (30) days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS location of the spill, and the measures taken to contain and clean up the spill site.

6. The Licensee shall, in addition to Part H, Item 5, regardless of the quantity of releases of harmful substances, report to the NWT/NU Spill Line if the release is near or into a Water body.

PART I: CONDITIONS APPLYING TO CLOSURE AND RECLAMATION OR TEMPORARY CLOSURE

1. The Board has approved the Plan entitled “Interim Closure and Reclamation Plan Type B Development Works Water Licence Version 2.0” dated August 2017, including the appended Security Estimate, that was submitted as additional information with the Application. The Security Estimate contingency will be set to 20%, as agreed upon between Sabina, INAC, and the KIA rather than the 10% proposed in the original submission.
2. The Licensee shall, within thirty (30) days of issuance of this Licence, submit an Addendum to the Plan referred to in Part I, Item 1, to address the following:
 - a. Inclusion of a commitment to post closure reporting, and a discussion of plans for post closure documentation (e.g. photographs, inspections, etc.).
3. The Licensee shall complete all restoration work prior to the expiry of this Licence.
4. The Licensee shall carry out progressive reclamation of any components of the project no longer required for the Licensee’s operations.
5. The Licensee shall backfill and restore all sumps, sewage/ washwater pits to the pre-existing natural contours of the land.
6. The Licensee shall remove from the site, all infrastructure and site materials, including all fuel caches, drums, barrels, buildings and contents, docks, water intakes, pumps and lines, material and equipment prior to the expiry of this Licence.
7. All roads and airstrip, if any, shall be re-graded to match natural contour to reduce erosion.
8. The Licensee shall remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.
9. In order to promote growth of vegetation and the needed microclimate for seed deposition, all disturbed surfaces shall be prepared by ripping, grading, or scarifying the surface to conform to the natural topography.
10. Areas that have been contaminated by hydrocarbons from normal fuel transfer procedures shall be reclaimed to meet objectives as outlined in the Government of Nunavut’s Environmental Guideline for Site Remediation, 2010. The use of reclaimed soils for the

purpose of back fill or general site grading may be carried out only upon consultation and approval by the Government of Nunavut, Department of Environment, and an Inspector.

11. The Licensee shall contour and stabilize all disturbed areas to reduce erosion and sedimentation to Water, upon completion of work and restored to a pre-disturbance state, where practicable.

PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

1. The Board has approved the Plan entitled “Environmental Management and Protection Plan Type B Development Works Water Licence Version 2.0” dated August 2017, that was submitted as additional information with the Application.
2. The Board has received the Plan entitled “Quality Assurance / Quality Control Plan”, dated October 2017, that was submitted as additional information with the Application. The Licensee will ensure that environmental monitoring is carried out following the principles and procedures outlined in the plan.
3. The Licensee shall, at a minimum, maintain Monitoring Program Stations, at the locations listed in the following table:

Monitoring Program Station	Description	Purpose
BRP-G-01 to TBD	General Site Runoff during Construction	Applies anywhere on the site (Goose and MLA); monitoring for erosion and sedimentation
BRP-S-01 to TBD	Seeps or runoff (to be determined); Temporary storage areas (non-hazardous material) Quarry sites	Applies anywhere on the site (Goose and MLA); monitoring for potential seepage or runoff from excavated and/or stockpiled material Applies to any runoff from temporary storage areas Applies to any runoff from quarry sites
BRP-18	Llama Watershed Outflow (PN04 from water and load balance)	Monitoring water quality during road construction and culvert installation
BRP-19	Echo Outflow (PN09 from water and load balance)	Monitoring water quality during road construction and culvert installation
BRP-23	Gander Pond Outflow (PN07 from water and load balance)	Monitoring water quality during road construction and culvert installation
BRP-24	Goose Lake Intake	Source intake water quality and volume for development works use

BRP-43	MLA Fuel Tank Farm	Test quality of runoff water in the Fuel Tank Farm containment area
BRP-49	MLA Temporary Fuel Storage Facility	Test quality of runoff water in the Temporary Fuel Storage Facility secondary containment (e.g. insta-berms)

4. The License shall install additional Monitoring Program Stations, as may be required, to effectively and adequately monitor surface runoff from the project site(s) or discharge from water management systems associated with the project. Within thirty (30) days of establishment of additional Monitoring Stations, the Licensee shall inform the Board and the Inspector.
5. The Licensee shall, for the Monitoring Stations listed in Part J, Item 2 and 4, monitor for the parameter groups and at the frequency listed in the following table:

Monitoring Program Station	Parameter Group Code	Frequency
BRP-G-01 to TBD	B	During construction: twice per day and when a plume or a visible difference in turbidity is observed
BRP-S-01 to TBD	A, C	Monthly during flow, or as found
BRP-18	B	General: once during freshet; monthly during flow; During construction: twice per day and when a plume or a visible difference in turbidity is observed
BRP-19	B	General: once during freshet; monthly during flow; During construction: twice per day and when a plume or a visible difference in turbidity is observed
BRP-23	B	General: once during freshet; monthly during flow; During construction: twice per day and when a plume or a visible difference in turbidity is observed
BRP-24	E	Weekly during intake period
BRP-43	A, D	As required for discharge
BRP-49	A, D	As required for discharge

6. The following table summarizes the parameters to be monitored with respect to the Groups identified for the Monitoring Program Stations listed in Part J, Item 5:

Parameter Group Code	Parameter Group Description	Specific Parameters
A	Field Chemistry	pH, specific conductivity, and temperature.
B	Surface Runoff	Total Suspended Solids (TSS) and turbidity
C	General Chemistry	Conventional: turbidity, hardness, alkalinity, calcium, chloride, fluoride, magnesium, potassium, sodium, sulphate, total dissolved solids (TDS), turbidity, and TSS. Nutrients: ammonia, nitrate, nitrite, total phosphorus (TP), and total dissolved phosphorus (TDP). Total metals: aluminum, arsenic, barium, cadmium, chromium, copper, iron, lead, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, and zinc
D	Secondary Containment	TSS, pH, ammonia, total arsenic, total copper, total lead, total nickel, total zinc, benzene, toluene, ethylbenzene, xylene, and total petroleum hydrocarbons (TPH), plus nitrate and ammonia when necessary
E	Flow	Flow datalogger, calculated volume

7. Additional monitoring requirements may be requested by the Inspector.
8. The Licensee shall monitor all activities for signs of erosion.
9. The Licensee shall measure and record, in cubic metres, the daily quantities of water that is used from sources located on, in or flowing through Crown Land, utilized for all purposes.
10. The Licensee shall measure and record, in cubic metres, the daily quantities of water that is used from sources located on, in or flowing through Inuit Owned Land, utilized for all purposes
11. The Licensee shall provide the GPS co-ordinates (in degrees, minutes, and seconds of latitude and longitude) and datum of all locations where sources of Water are utilized for all purposes, and wastes deposited.
12. All sampling, sample preservation, and analyses shall be conducted in accordance with methods prescribed in the current edition of *Standard Methods for the Examination of Water and Wastewater*, or by such other methods approved by the Board in writing.

13. All analyses shall be performed in a laboratory accredited according to ISO/IEC Standard 17025. The accreditation shall be current and in good standing.
14. The Licensee shall include in the Annual Report required under Part B, Item 4, all data, monitoring results, and information required by this Part.