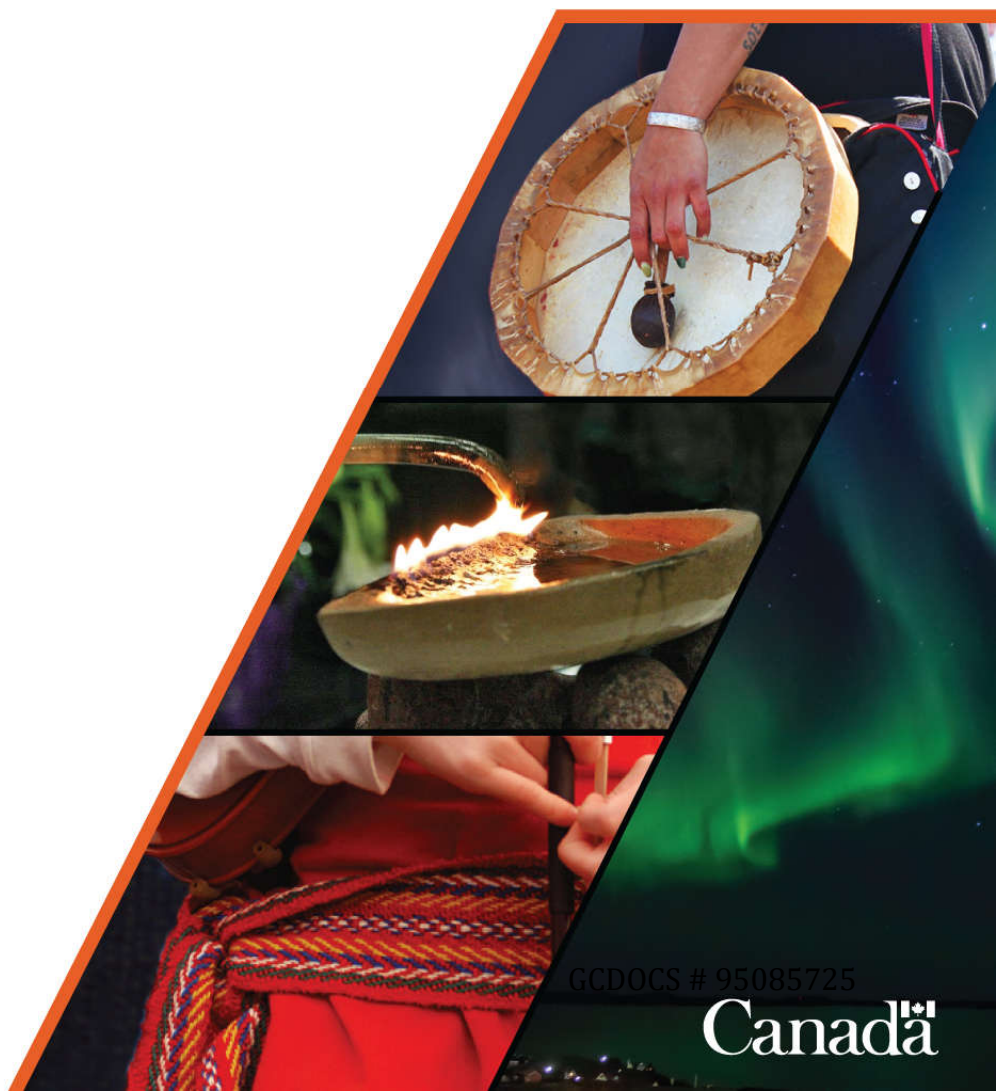
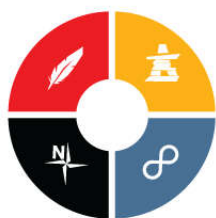




Final submission for amendment of water licence 2AM-BRP1831

Back River Project (Sabina Gold & Silver Limited)
June 15, 2021



GCDOCS # 95085725

Canada

EXECUTIVE SUMMARY

Crown-Indigenous Relations and Northern Affairs Canada has participated as an Intervener in the ongoing review of Sabina Gold and Silver Corp.'s application to amend their Nunavut Water Board type A water licence 2AM-BRP1831 for the Back River gold mine project. This project is situated approximately 400 kilometers southwest of Cambridge Bay in Nunavut's Kitikmeot region.

The licensed project allows for the operation of four open pits and four underground mines at the Goose property, a marine laydown area on Bathurst Inlet, and a 160 km long winter road. The amendment currently under review by the Nunavut Water Board is called the 2020 Modification Package and includes requests for changes at Goose Property, at the Marine Laydown Area and on the Winter Ice Road.

Discussion during the technical review covered the following topics:

- **Scope of amendment** – what permissions are added to the water licence with this amendment
- **Water management and quality** – how much water can be used and what is done with the wastewater
- **Predictions of water quantity and quality, management plans and reports** – how good models are at predicting how much water will be on site and how clean it will be, and plans for how the mine will be run to protect the environment
- **Monitoring and reporting** – what to look at to make sure things are going according to plans and how to report on findings
- **Closure, reclamation & security** – how the site will be cleaned up at the end and how much money needs to be set aside in case Sabina cannot do that
- **Draft amended water licence** – suggestions of changes that could be made to the current water licence

Crown-Indigenous Relations and Northern Affairs Canada had nine technical comments and most have been addressed by Sabina. Two areas where we have outstanding concerns are the long term water quality in Goose Lake and the cost of cleaning up the site after mining. CIRNAC is continuing discussions with Sabina and the Kitikmeot Inuit Association to sort out the second concern.



AULATTITTINIRNUT NAINAAQHIMAJUQ

Kuin-Nunaqaqaaqhimajuq ilagijaujut unalu Inuliqinirnut Kanata ilauqatauhimajuq Nutqaqtittinahuarniq iluani qimilruraaqhimajaujuq haffumani Sabina Kuulu Havigalik Timiujuq tukhiutijangit ilaginahuaqtangit pivikhangit Nunavut Imaliqiniq Katimaji uuminngatut A laisiata 2AM-BRP1831 haffumani Hanningajuq Kuugaa kuulu ujaraqtarvik havaarijaujukhaq. Una havaaq huqpaniittuq 400 jungnaqhijuuq kilamiitastigut hivuraanit uataa Iqaluktuuttiaq Nunavutim Qitirmiut nunangani.

Hamna laisilingnit havaaq pitquijangit aulattittinirnut hitamaujut angmaumajut haulaaqtut unalu hitamaujut nunap ilauni ujaraqtarvit uvani Goose nanminirijaanit, imarmiuttanit tulagvikhaq uvani Qingauk, unalu 160 kilamiitastigut takijaaqtuq ukiumi apqutaa. Ilaaqtauhimajuq tadsa qimilruqtaujuq ukunanngat Nunavut Imaliqijit Katimajit taidjutiqaqtuq 2020 Ihuaqhijaujuq Ilaliutaat unalu ilagijaujut tukhiutauhimajut aallannguqtiariangani uvani Goosr Nanminirijaanit, uvani Imarmiuttani Tulagvikhaq unalu Ukiungani Hikumi Apqutaa.

Niplautihimajangit uvani qaujihaqtuqhiivlutik qimilruqtangit pulahimajuq malikhugit hivunikhautikhangit:

- **Hivunikhautikhangit haffumani ilaaqtauhimajuq** – hup aturvikhautaujut ilagijaujut uvunga imaq laisikhaanut uvanngat ilagijaujut
- **Imaq munaqhainirnut unalu nakuudjuhia** – qaffiujut imaq aturnaqqaa qanurlu pijaulaaqqa ukunanngat halumaittut imaq
- **Kangiqhidjuhingit haffumani imaq qaffiuningit unalu nakuudjuhia, munarijaujuq upalungaijautingit titiqqangillu** – qanuq nakuujumik aadjiliugait kangiqhihimajaujut qaffiujut imaq najurvingniinniaqtut qanuq halumajumik pijauniaqtuq, upalungaijautingillu qanuq ujaraqtarvit aulapkaihimaniaqqat hapummigiangani avatikhangit
- **Munaqhainirnut unalu titiraqhimajaat** – humik tautukhimajakhaat pidjarikhinahuariangani upalungaijaqhimajuq qanuq unipkaangillu nanihimajaujut
- **Umigutaat, utiqittiniq unalu hivuuranaiqtailiniq** – qanuq najurvinga halummaqtauniaqtuq kinguani qanurlu qaffiraaluk maningnit pigiaqaqqa tutquumajakhait Sabina taimailiulimanngitpat
- **Titirainnaqhimajuq ilagijaujut imaq laisinga** – kiuvikhautaujut aallannguqtiqhimajut ilittuqhimalaaqtut tadsa atuqhimajangit imaq laisinga

Kuin-Nunaqaqaaqhimajuq ilagijaujut unalu Inuliqinirnut Kanata arvinilik hitamat qaujiharniq kiujauhimajut amigaittut turaaqtauhimajut ukunanngat Sabina. Malruk inikhautikhangit humiliqaak hivitujumik ihumaaluutigijaujut aturaaqtakhangit hivitunia imaq nakuudjuhingit uvani Goose Tahia akikhangillu halummaqtiriangani havagviata ujaraqtarviutaaqqata. CIRNAC huli katimadjtauvaktuq ukunani Sabina unalu Qitirmiut Inuit Katudjiqatigiit ihuaqhainahuarlugillu tuglirutaanit ihumaaluutigijaaat.



RÉSUMÉ

Relations Couronne-Autochtones et Affaires du Nord Canada a participé en tant qu'intervenant à l'examen en cours de la demande de Sabina Gold and Silver Corp. de modifier leur permis d'utilisation des eaux de type A n° 2AMDOHO713 de l'Office des eaux du Nunavut pour le projet de mine d'or de Back River. Le projet est situé à environ 400 kilomètres au sud-ouest de Cambridge Bay dans la région de Kitikmeot, au Nunavut.

Le projet approuvé permet l'exploitation de quatre mines à ciel ouvert et de quatre mines souterraines à la propriété Goose, d'une aire marine de dépôt à Bathurst Inlet, ainsi que d'une route d'hiver de 160 km. La modification actuellement examinée par l'Office des eaux du Nunavut est appelée la trousse de modification de 2020 et comprend des demandes de changement à la propriété Goose, à l'aire marine de dépôt et à la route de glace en hiver.

La discussion pendant l'examen technique a porté sur les sujets suivants :

- **Portée de la modification** : les permissions ajoutées au permis d'utilisation des eaux à la suite de la présente modification;
- **Gestion et qualité de l'eau** : la quantité d'eau qui peut être utilisée; ce qui est fait avec les eaux usées;
- **Prévisions liées à la quantité et à la qualité de l'eau, rapports et plans de gestion** : la capacité des modèles à prédire la quantité d'eau qui sera sur place et la qualité de celle-ci; les plans de gestion de la mine pour la protection de l'environnement;
- **Surveillance et rapports** : ce qu'il faut vérifier pour s'assurer que tout se passe comme prévu; la manière de faire les rapports sur les constatations;
- **Fermeture, remise en état et sécurité** : la manière dont le site sera nettoyé à la fin; la somme d'argent qu'il faut mettre de côté au cas où Sabina ne peut s'en occuper;
- **Permis d'utilisation des eaux provisoire modifié** : des suggestions de changements qui pourraient être appliqués au permis d'utilisation des eaux actuel

Relations Couronne-Autochtones et Affaires du Nord Canada a présenté neuf commentaires techniques, et Sabina a répondu à la plupart d'entre eux. Les deux domaines les plus préoccupants sont la qualité de l'eau à long terme à Goose Lake et le coût de nettoyage du site après l'exploitation de la mine. Le Ministère continue les discussions avec Sabina et l'Association inuite du Kitikmeot afin de régler la deuxième préoccupation.



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INTRODUCTION

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), pursuant to its mandated responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Crown-Indigenous Relations and Northern Affairs Act*, is an Intervenor in the Nunavut Water Board water licensing process for the amendment of water licence 2AM-BRP1831 for the Back River gold mine project, as proposed by Sabina Gold and Silver Corp. (Sabina).

CIRNAC reviewed Sabina's application for the water licence amendment and provided technical comments to the Nunavut Water Board (Board) for their consideration. The review process included Information Requests (IR) and a Technical Review submission, both of which received responses from Sabina. This was followed by a Technical Meeting and a Pre-Hearing Conference on March 26, 2021 held through videoconference. On April 19, 2021 the Board distributed the Pre-Hearing Conference Decision inviting interested parties to submit final written submissions.

The amendment under consideration involves increasing the scope of water licence 2AM-BRP1831 to include greater water use, all-weather airstrip expansions at the mine site and marine laydown area, extension of the Umwelt Underground mine and shoreline pad, changes to timing of construction and use of water and wastewater management infrastructure, and improvements to the winter ice road. Previously approved elements of the Back River project, such as Echo Open Pit, Llama Underground, Goose Main Underground and Echo Underground, are no longer in the current mine plan, though they are to be retained within the scope of an amended licence.

The Board has provided a list of issues to be discussed at the public hearing. The topics have been used as headings in this document to organize CIRNAC's comments. Technical comments are provided in the following section. CIRNAC's current security estimate is provided as a RECLAIM model in Annex A.

During this amendment process, Sabina has provided a draft water licence proposing changes to their current 2AM-BRP1831 water licence. CIRNAC is providing comments on those sections of the proposed draft water licence pertaining to the amendment in Annex B.



TECHNICAL COMMENTS

CIRNAC submitted nineteen Information Requests (IRs) and nine Technical Review Comments (TCs). Exchanges and discussion with Sabina during the water licence amendment process so far have allowed CIRNAC to clarify most of the issues we identified. CIRNAC has outstanding concerns on two topics: water quality in Goose Lake and reclamation security. Ongoing discussions with Sabina and the Kitikmeot Inuit Association should allow us to resolve the second concern, at which time a further submission would be made to the Board.

Comments submitted by CIRNAC have been assigned to one of the topics in the Nunavut Water Board's list of issues, even though several comments could be assigned to more than one heading. Comments have been developed with the support of Tetra Tech Canada Inc.

1. Scope of amendment

CIRNAC is of the opinion the scope of licence amendments described in Pre-hearing Conference Decision Report list of issues match those in the application.

These are:

- Goose Site
 - Airstrip Extension
 - Umwelt Underground Extension
 - Total Water Use Increase
 - Waste and Water Management Infrastructure
- Marine Laydown Area
 - Addition of Fuel Transfer Area
 - Airstrip Extension
 - Shoreline Pad Extension
- Winter Ice Road
 - Subbase Upgrade
 - Service/Emergency Camps
 - Total Water Use Increase

CIRNAC did not submit any comment pertaining directly to the scope of licence

2. Water Management

Under this application, Sabina is requesting authorization for increased water use in three areas:

- Goose Lake: increase by 218,700 m³/year to 608,700 m³/year;
- Big Lake: increase by 195,750 m³/year to 273,750 m³/year; and



- Winter ice road: increase by 1,350 m³/km/year to 2,025 m³/km/year.

Sabina is also proposing some changes to timing of construction and operation of water and wastewater management infrastructure on site. CIRNAC submitted seven comments regarding water management, as summarised in Table 1. They are resolved.

Table 1 Status of comments pertaining to water management

Comment #	Issue	Status
IR1	Groundwater inflow to Llama Pit	Resolved
IR2	Methodology for extrapolated water quality and quantity predictions	Resolved
IR4	Treated sewage attenuation	Resolved
IR10	Water withdrawal errors	Resolved
IR12, TC1	Saline water pond permafrost and balance	Resolved
IR16	Goose property waste and water management	Resolved

Groundwater inflow to Llama Pit (IR1): CIRNAC requested a summary of parameters and methodology to estimate the flooding of Llama Pit including groundwater inflow. Sabina directed us to the 2020 Water and Load Balance Model and explained the assumptions used to calculate flooding of the pit.

Methodology for extrapolated water quality and quantity predictions (IR2): The amendment application includes a 250 m extension of the Umwelt Underground. CIRNAC requested further details on the hydraulic and water quality parameters used for the extension zone in the groundwater model. Sabina explained they used a scaling approach and provided details.

Treated sewage attenuation (IR4): The Water Management Plan proposes the use of land discharge for treated sewage without providing details on attenuation prior to entering a watercourse. Sabina responded that the proposed land discharge was assessed in 2018, concentration in the effluent have not changed since then and the adjusted discharge location is accounted for in the updated Water and Load Balance Model.

Water withdrawal errors (IR10): CIRNAC identified some inconsistencies in the additional withdrawal amounts requested between the table and text in section 2.3.3 of the Modification Package. Sabina clarified the differences were because one quantity referred to the total amount requested and the other was for the additional amount requested.

Saline Water Pond permafrost and balance (IR12, TC1): Umwelt Lake will be used to store saline groundwater and the mine plan involves construction of a dam to increase capacity and form the Saline Water Pond. CIRNAC requested more information on the



talik below the pond and yearly volumes in the pond. Sabina directed CIRNAC to a 2017 memo for information on the talik below Umwelt Lake, provided clarifications on the annual water volumes and underlined their commitment to provide an annual comparison of measured groundwater inflow rates to model predictions in the Annual Report.

Goose Property waste and water management (IR16): CIRNAC requested rationale for the nearly two-fold increase in water requested from Goose Property, and information on how the proportionate increase in wastewater was integrated into the Water Management Plan. Sabina responded the additional freshwater need was identified through detailed engineering during the Feasibility Study and that wastewater volumes should only increase marginally and would be managed to meet licence requirements.

3. Water Quality

Sabina provided an updated Water and Load Balance Model that estimated water quantities and quality on site for the duration of the mine operations. CIRNAC submitted five comments regarding water quality, as summarised in Table 2. They were principally requests for clarification and have all been resolved.

Table 2 Status of comments pertaining to water quality

Comment #	Issue	Status
IR8, IR9	Water and Load Balance Model update and incorporation of climate change	Resolved
IR13	Water quality in Saline Water Pond	Resolved
IR14	Lake mixing model	Resolved
TC3	Arsenic concentration in tailings beach sediments	Resolved

Water and Load Balance Model update and incorporation of climate change (IR8, IR9): CIRNAC requested details on what was updated in the 2017 Water and Load Balance Model to create the 2020 model, and how climate change impacts will be captured in sizing of containment infrastructure. Sabina provided a table that clearly identified the changes between the 2017 and 2020 versions of the model and confirmed that climate change predictions had been incorporated when designing berms, culverts and ponds.

Water quality in Saline Water Pond (IR13): Extreme maximum values for many water quality constituents in the Saline Water Pond were presented in Appendix D of the Water and Load Balance and CIRNAC requested a time series model projections to confirm if the values were spurious. Sabina provided time series model projections for ammonia, chloride, sulphate, arsenic and copper for the duration of use of the Saline Water Pond.



Lake mixing model (IR14): Since the salinity of water discharged from the Saline Water Pond to the pit lake has an incidence on development of meromitic conditions in the pit lake, CIRNAC requested discussion on how the salinity and water quantity in the Saline Water Pond might vary during operations and an unexpected work stoppage. Sabina's discussion included graphs of salinity of the different water sources over the duration of the project.

Arsenic concentration in tailings beach sediments (TC3): CIRNAC identified a discrepancy in the concentration of arsenic in the tailings beach in the Water and Load Balance Model and Sabina confirmed the correct concentration for this geochemical source term is 0.081 mg/L, which was used in the model.

4. Modelling, Management Plans, Manuals and Reports

For the 2020 amendment five management plans were updated including: Water Management Plan, Interim Closure and Reclamation Plan, Tailings Management Plan, Waste Rock Management Plan and Borrow Pits and Quarry Management Plan. The Water Management Plan includes the Saline Water Management Plan and Water and Load Balance Report as appendices. The hydrodynamic model for Goose Lake was also reviewed, and results from the latest version are integrated in the Effluent Quality Criteria Report for Effluent Discharged from Tailings Facilities, Tailings Storage Facilities, or Reservoirs - Version 1.

CIRNAC submitted 12 comments regarding modelling, management plans, manuals and reports, as summarised in Table 3. Most of the comments on the plans were requests for clarifications, and those requiring follow-up have been flagged to ensure commitments made by Sabina are incorporated into subsequent versions of management plans. CIRNAC has one unresolved comment on the hydrodynamic model for Goose Lake and our concerns relate to the long term water quality in the lake.



Table 3 Status of comments pertaining to modelling, management plans, manuals and reports

Comment #	Issue	Status
IR3	Unanticipated groundwater quantities	Resolved
IR11, TC2	Hydrodynamic model	Unresolved
IR15, IR17	Increase in tailings and waste rock	Resolved
IR18	Mass balance assessment	Resolved
TC4	Criteria for segregating rock	Resolved, follow-up
TC5	Use of ponds as tailings facilities	Resolved
TC6	Temporary PAG stockpiles	Resolved, follow-up
TC7	Quarry site development plans	Resolved, follow-up
TC8	Additional infrastructure in Tailings Management Plan	Resolved, follow-up
TC9	Saline Water Management Plan title	Resolved, follow-up

Unanticipated groundwater quantities (IR3): CIRNAC requested Sabina's standard operating procedures (SOP) for when unanticipated groundwater volumes are encountered during mining. Though Sabina did not provide an SOP, they directed us to the Saline Water Management Plan which includes contingency measures for such encounters and committed to incorporating locations of historic drillholes in a future SOP.

Hydrodynamic model (IR11, TC2): The hydrodynamic model of Goose Lake predicts water quantity and quality in the lake and can be used as a tool to assess the impacts of different water management strategies. Sabina provided a hydrodynamic model on February 12, 2021 which had several deficiencies and the concerning conclusion that the concentration of several parameters (nitrate, nitrite, aluminum, arsenic, chromium, copper and iron) were expected to be above chronic water quality benchmarks for the protection of aquatic life at the outlet of Goose Lake, including during closure and post-closure.

Discussion at the technical meeting led to commitments from Sabina to update the model twice:

- once prior to the public hearing to explore the effect of changes to water management on site including discharging during operations instead of waiting for closure to discharge; and
- a second time 90 days following licence approval to incorporate further site data into the model inputs and allow for more time for optimization.

Results from the first update to the model were used to calculate effluent quality criteria in the May 27, 2021 report Effluent Quality Criteria Report for Effluent Discharged from



Tailings Facilities, Tailings Storage Facilities, or Reservoirs - Version 1. It is difficult to compare the results with the previous model because the modelling period is shorter, time series data are not presented for the same point, and benchmarks have changed for some of the parameters.

CIRNAC is still concerned with long term water quality based on the data presented, even though modelling was restricted to the 12 year operational period. Many parameters appear to increase in maximum concentration over the 12 years of operation, particularly in the final 3 years. For example, total lead stays below the 0.001 mg/L line until the final three years of operations, and remains below the applicable guideline because the guideline increases with hardness. Similar dynamics are evident in plots of nickel, cadmium, and aluminum. Other parameters increase towards a constant guideline, including arsenic, copper and iron.

During the May 5, 2021 teleconference regarding updates to the model, Sabina's rationale for not modelling the closure and post-closure periods was based on the anticipated expiration of the current water licence prior to closure. CIRNAC is of the opinion that restricting the model to operations defeats one of the purposes of modelling, and argues that the February 12, 2021 model identified problems during closure and post closure prior to them occurring, which will lead to changes in operations to avoid the problem. Likewise, CIRNAC would like to see projected water quality in Goose Lake during closure and post-closure to have confidence that the currently proposed site water management strategy will protect water quality in Goose Lake during operations, closure and post-closure.

CIRNAC recommends the next update to the hydrodynamic model, due 90 days after potential licence approval incorporate more detailed inputs, including field data to be collected this summer, and the forecast period cover operations, closure and post-closure. Furthermore, CIRNAC recommends the Water Management Plan be updated to integrate changes to water management on site that are being proposed based on hydrodynamic model findings.

Increase in tailings and waste rock (IR15, IR17): The proposed amendment would lead to a 27.6 Mt increase in waste rock and 7.4 Mt increase in tailings, which were not reflected in the Tailings Management Plan and Waste Rock Management Plan. These have since been updated by Sabina.

Mass balance assessment (IR18): Terms used in the Water and Load Balance Report created confusion between the tailings production volume and settled tailings volume, but Sabina has clarified that 2 500 m³/day in section 3.2.7 refers to total settled tailings volume and confirmed the correct quantity was used in the model.

Criteria for segregating rock (TC4): CIRNAC identified an inconsistency in how potentially acid generating (PAG) rock was defined in the Mine Waste Rock Management Plan and the 2020 Borrow Pit and Quarry Management Plan. Sabina clarified that PAG rock is defined as having a neutralization potential ratio (NPR) < 3 and



total sulphur (S) > 0.15%, and an addendum will be added to the Mine Waste Rock Management Plan at the next opportunity.

Use of containment ponds as tailings facilities (TC5): The updated Water Management Plan allows for the possibility of using all containment ponds as tailings storage facilities, but Sabina has confirmed this would be restricted to ponds and facilities appropriate for the storage of tailings.

Temporary PAG stockpiles (TC6): The Borrow Pit and Quarry Management Plan allows for the temporary stockpiling of PAG rock, about which CIRNAC requested further information. Sabina has clarified that temporary PAG stockpiles will be within quarry footprints, runoff from the quarries will be monitored, and piles will be in place a shorter period of time than the time for onset of acidic conditions from the rock.

Quarry site development plans (TC7): Sabina still intends to develop quarry development plans specific to each rock quarry, which was unclear but has been clarified.

Additional infrastructure in Tailings Management Plan (TC8): To help track project components still included in the water licence but not part of the current mine plan, CIRNAC recommended the Tailings Management Plan include a section for “other approved infrastructure”, as is found in other plans. Sabina agreed to add this as an addendum to the plan at the next opportunity.

Saline Water Management Plan title (TC9): An inconsistency was identified in the title of the Saline Water Management Plan and will be corrected at the next opportunity.

5. For-construction Drawings and Reports

Drawings provided with this 2020 amendment are for the shoreline pad extension at the marine laydown area on Bathurst Inlet. As well, maps highlighting areas where winter ice road subbase upgrade and realignment are planned were provided. CIRNAC submitted two comments regarding for-construction drawings and reports, as summarised in Table 4. They have been resolved.

Table 4 Status of comments pertaining to for-construction drawings and reports

Comment #	Issue	Status
IR6, IR7	Design criteria for event ponds, diversion berms and culverts	Resolved

Design criteria for event ponds, diversion berms and culverts (IR6, IR7): CIRNAC requested justification on the use of a 24-hour event for containment pond design criteria, further information on design conveyance capacities for diversion berms and culverts, and watershed areas for five culverts. Sabina referred to information presented



in 2018, stating this amendment did not involve changing design criteria, which still follow best practice.

6. Monitoring Program

Most of the discussions on the monitoring program are regarding proposed changes to water management on site and criteria for effluent discharge to Goose Lake. CIRNAC submitted a single comment regarding the monitoring program, as summarised in Table 5. It has been resolved.

CIRNAC supports Environment and Climate Change Canada's efforts to ensure that any effluent discharge criteria are protective of the environment and maintain Goose Lake's aquatic health in both the short and long term.

Table 5 Status of comment pertaining to wastewater management and treatment

Comment #	Issue	Status
IR5	Active layer groundwater monitoring	Resolved

Active layer groundwater monitoring (IR5): CIRNAC requested information on how shallow groundwater would be monitored near mine infrastructure. Sabina replied that any potentially impacted shallow groundwater would be kept within the containment systems, since diversion berms and dams are keyed into permafrost, and therefore monitoring specific to active layer groundwater is not necessary. Moreover, they underlined how the seep surveys and dam inspections will flag any potential shallow groundwater concerns.

7. Annual Reporting Requirements under Schedule B

CIRNAC did not submit any comment regarding annual reporting requirements under Schedule B. However, during discussions on other comments some additions to annual reporting requirements have been identified, including:

1. **Groundwater:** in response to TC1, Sabina has committed to including "*an annual comparison of measured groundwater inflow rates to model predictions in the NWB Annual Report, as described in Section 5.1 of the Saline Water Management Plan*"
2. **Progressive reclamation:** CIRNAC is in ongoing discussions with Sabina and the Kitikmeot Inuit Association regarding how best to evaluate progressive reclamation and how that could be captured in the annual reporting requirements. We hope to make a joint submission on this topic.



8. Closure and Reclamation Planning

Sabina shared an Interim Closure and Reclamation Plan with Kitikmeot Inuit Association and CIRNAC in November 2020, accompanied by an updated closure cost re-evaluation. CIRNAC has submitted a single comment regarding closure and reclamation planning to the Board, as summarised in Table 6. This issue is unresolved and CIRNAC is continuing discussions on the topic with the objective of participating in a joint submission to the Board prior to the public hearing scheduled in mid-July 2021.

Table 6 Status of comment pertaining to closure and reclamation planning

Comment #	Issue	Status
IR19	Reclamation plan and cost estimate	Unresolved

Reclamation plan and cost estimate (IR19): Three party discussions have continued with Sabina November 2020 have allowed us to clarify many points, bringing our respective cost estimates closer together. We have yet to agree on a total amount, and have yet to discuss the breakdown of the estimate between land and water owners and between stages/phases. CIRNAC's understanding is that Sabina will be submitting an Interim Closure and Reclamation Plan to the Board that incorporates some of our recommendations. CIRNAC's current reclamation cost estimate is shared in Annex B, though we will be making a further submission that may modify the total amount, and will include split between the holders of security and stages.

The mine plan incorporates progressive reclamation, which is an activity CIRNAC wishes to encourage on all sites. As such, our estimate assumes progressive reclamation will occur as per the mine plan, resulting in a smaller cost estimate than the total of each project component costed individually. CIRNAC and Sabina are discussing mechanisms that would help provide assurance to CIRNAC that progressive reclamation is proceeding as planned. These will likely be presented to the Board in the form of suggested items for the annual report, specifically for Schedule B of an amended water licence.

9. Discussion on Amended Water Licence Framework

CIRNAC has reviewed the Draft Water Licence Framework "Addendum" To Support Water Licence Amendment submitted by Sabina on March 16, 2021. Our review has been limited to those terms and conditions pertaining to the amendment. The lack of comments on other proposed changes does not constitute agreement or disagreement on CIRNAC's behalf. We note many proposed changes do not seem to have been discussed during this amendment process.

Detailed comments are included as Annex B.



Annex A

RECLAIM Reclamation Cost Estimate



Annex B

Comments on draft water licence

CIRNAC has reviewed the draft water licence provided by Sabina on April 19, 2021. Our comments are compiled in the table below.

Part	Item	Page	Comment
A	1	1-3	<p><i>Additions to scope of licence.</i></p> <p>The additions on page 3, as well as the airstrip at the marine laydown area on page 2, match what was discussed during the amendment review. CIRNAC does not recall discussing changes to include reservoirs or de-watering of additional structures and recommends leaving these additions out.</p>
E	2	9-10	<p><i>Removal of condition to provide revised Water Management Plan within 60 days of Minister approval to replace it with a modified repetition of condition 1.</i></p> <p>During the technical meeting, as noted in the list of commitments found in the Pre-hearing Conference Decision Report, Sabina committed to providing updated management plans, including the water management plan 90 days prior to initiation of proposed activity or within 2021 Annual Report. CIRNAC recommends the commitment be captured in an amended licence.</p>
E	3	10	<p><i>Modification of maximum water use quantities from Goose and Big Lakes.</i></p> <p>The modifications match the amendment application. CIRNAC agrees with the proposed change.</p>
E	5	10	<p><i>Modification of maximum water use quantities for the winter ice road.</i></p> <p>The modifications match the amendment application. CIRNAC agrees with the proposed change.</p>



Part	Item	Page	Comment
E	15	11	<p><i>Replacement of condition to submit an updated Water and Load Balance Model, with condition to submit updated hydrodynamic model.</i></p> <p>CIRNAC prefers the wording of commitment #6 in the Pre-Hearing Conference Report list of commitments, then Sabina's proposal in this draft water licence.</p>
Sched. B	new		CIRNAC recommends integrating Sabina's commitment for an annual comparison of measured groundwater inflow rates to model predictions.

