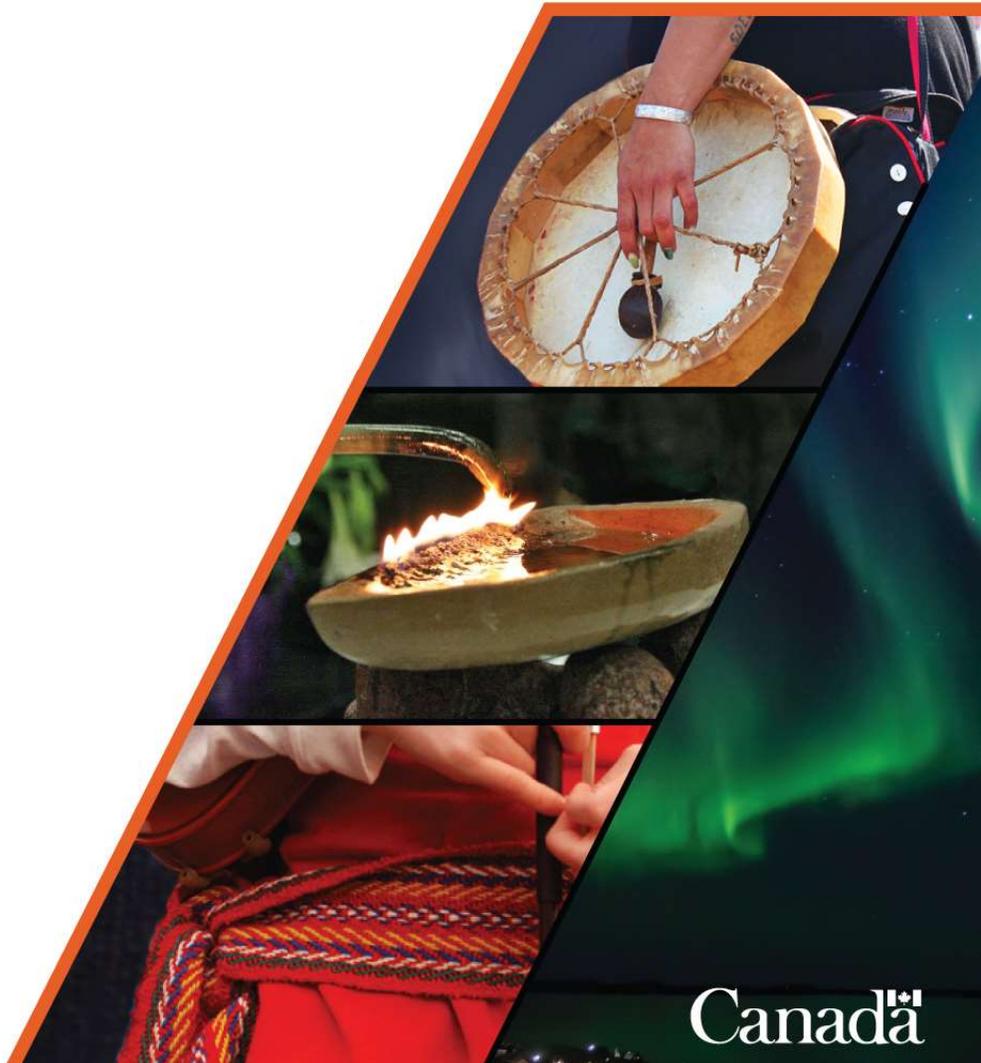




# CIRNAC Comments to NIRB Re: Sabina Gold and Silver Corp.'s Back River Project 2021 Annual Report



Nunavut Regional Office  
P.O. Box 100  
Iqaluit, NU, X0A 0H0

Your file - Votre référence  
12MN036  
Our file - Notre référence  
GCDOCs- 103931593

June 30, 2022

Kelli Gillard  
Manager, Project Monitoring  
Nunavut Impact Review Board  
P.O. Box 1360  
Cambridge Bay, NU, X0B 0C0  
Via electronic mail to: [info@nirb.ca](mailto:info@nirb.ca)

Dear Kelli Gillard,

**Re: Comment Request for Sabina Gold and Silver Corp.'s Back River Project 2021 Annual Report**

On April 11, 2022, as per Section 12.7 of Nunavut Agreement (the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*) and the Back River Gold Mine Project Certificate [No. 007], the Nunavut Impact Review Board (NIRB) requested parties to review Sabina Gold and Silver Corp. (Sabina)'s Back River Project 2021 Annual Report with respect to effects and compliance monitoring.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) conducted a review of the 2021 Annual Report and related documents in areas under its mandate and jurisdiction pertaining to effects and compliance monitoring. On this basis, CIRNAC would like to provide the comments below for NIRB's consideration.

CIRNAC appreciates the opportunity to review Sabina's Back River Project 2021 Annual Report and looks forward to working with the NIRB and Sabina through any future reviews for this project. Should you have any questions, please do not hesitate to contact Amal Roy by email at [amal.roy@rcaanc-cirnac.gc.ca](mailto:amal.roy@rcaanc-cirnac.gc.ca) or David Abernethy by email at [david.abernethy@rcaanc-cirnac.gc.ca](mailto:david.abernethy@rcaanc-cirnac.gc.ca).

Sincerely,



Felexce Ngwa  
Manager, Impact Assessment



## 1. Effects Monitoring

The 2021 Annual Report has been evaluated to assess the measurable changes to the valued components/indicators under CIRNAC areas of interest, compared to the potential effects that were predicted to result from a proposed development of Back River Project, taking into account the Final Environmental Impact Statement (FEIS), previous years' monitoring reports and the requirements included in the Project Certificate. The assessment considered the following:

- a. **Whether the conclusions reached by Sabina Gold & Silver Corp. in the Back River Project 2021 Annual Monitoring Report are valid; and,**
- b. **Any areas of significance requiring further supporting information or any changes to the monitoring program which may be required**

Within the areas under its mandate and jurisdiction, CIRNAC did not identify any information or data that would invalidate the conclusions reached by Sabina in the 2021 Annual Report. Nonetheless, CIRNAC has identified areas that require clarification and is providing the following comments for the NIRB's and Sabina's consideration:

<b>Comment Number:</b>	<b>CIRNAC #1</b>
<b>Subject:</b>	Permafrost Mapping and Monitoring
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River Project Certificate (PC) Term and Condition (T&amp;C) #11: Terrestrial Environment – Permafrost Mapping and Monitoring</li> <li>• Back River Project 2021 Annual Report, Page 3-1 and 4-31</li> <li>• Sabina's Responses to 2020 Annual Report Comments</li> </ul>
<b>Issue/Rationale:</b>	<p>T&amp;C #11 states that <i>“During construction, the Proponent shall, on an annual basis, provide additional permafrost mapping information documented in fulfillment of this Term and Condition in the Proponent’s annual report to the Nunavut Impact Review Board.”</i></p> <p>Sabina's Responses to 2020 Annual Report Comments references a request from KIA <i>“that Sabina provides updated information on the permafrost characteristics annually, regardless of construction activities.”</i> It is noted that T&amp;C #11 specifically requires reporting during and after construction. Sabina stated in the 2021 Annual Report, Section 3.1., that fuel tanks were constructed at the Goose site and Marine Laydown Area (MLA).</p> <p>Based on this, it can be inferred that construction activities were carried out in 2021. T&amp;C #11 requires annual reporting on the permafrost mapping, including during construction. No information was included in the 2021 Annual Report with regard to permafrost and ground temperature data during fuel tank construction at Goose site and at the MLA. The annual permafrost monitoring information is required for detailed and final design of other Back River Project infrastructure.</p>
<b>Recommendation:</b>	<p>CIRNAC recommends that Sabina:</p> <ol style="list-style-type: none"> <li>a) Provide ground temperature/permafrost monitoring data for the fuel tank construction and other construction-related activities.</li> </ol>



	b) Provide permafrost monitoring and ground temperature data collected during construction, and any subsequent phases, in the annual reports.
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<b>Comment Number:</b>	<b>CIRNAC #2</b>
<b>Subject:</b>	Permafrost Monitoring
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River PC T&amp;C #12: Terrestrial Environment – Permafrost Monitoring</li> <li>• Back River Project 2021 Annual Report, Page 3-1 and 4-32</li> <li>• Sabina’s Responses to 2020 Annual Report Comments</li> </ul>
<b>Issue/Rationale:</b>	<p>In a letter to the NIRB on the review of Sabina’s 2020 Annual Report, the Kitikmeot Inuit Association (KIA) commented that T&amp;C #12 “<i>is not limited to the construction of tailings facility and/or waste storage facilities but it does include roads, trails, and quarries.</i>”</p> <p>In response, Sabina stated that “<i>...it is not feasible or practical to monitor permafrost conditions over the entire Back River Project Potential Development Area, which is greater than 60km<sup>2</sup>.</i>”</p> <p>CIRNAC acknowledges that it may not be feasible to monitor permafrost conditions over the entire potential development area, but monitoring should take place in key areas that are or will be developed. These include along existing roadways, quarries, and waste storage areas. In the 2021 Annual Report, Sabina stated that construction activities were underway in 2021, including roads and other Goose site and MLA infrastructure. But, no information was included in the 2021 Annual Report with regard to permafrost and ground temperature data. The annual permafrost monitoring information is required to monitor changes in permafrost conditions and to monitor the effects of the Project on permafrost conditions.</p>
<b>Recommendation:</b>	<p>CIRNAC recommends that Sabina:</p> <ol style="list-style-type: none"> <li>a) Begin permafrost monitoring in developed and planned areas throughout the Project to establish baseline information and supplement the data collected during the Environmental Impact Statement phase.</li> <li>b) Submit the updated data to the NIRB as part of the annual reporting.</li> </ol>

<b>Comment Number:</b>	<b>CIRNAC #3</b>
<b>Subject:</b>	Sensitive Landform Mitigation and Monitoring
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River PC T&amp;C #13: Terrestrial Environment - Sensitive Landform Mitigation and Monitoring</li> <li>• Back River Project 2021 Annual Report, Page 3-1 and 4-33 to 4-34</li> <li>• Sabina’s Responses to 2020 Annual Report Comments</li> </ul>
<b>Issue/Rationale:</b>	Reporting requirements for PC T&C #13 state that Sabina shall provide the results of additional geotechnical investigations, along with any



	<p>associated mitigation and monitoring measures implemented by Sabina, in the annual report to the NIRB.</p> <p>Sabina stated that geotechnical investigations were undertaken in 2021, but the results are not provided in the 2021 Annual Report to the NIRB.</p>
<b>Recommendation:</b>	CIRNAC recommends that Sabina provide the results or status update of the geotechnical investigations undertaken in 2021 in the 2022 Annual Report.

<b>Comment Number:</b>	<b>CIRNAC #4</b>
<b>Subject:</b>	Waste Management Plan
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River PC T&amp;C #14 : Terrestrial Environment - Waste Management Plan</li> <li>• Back River Project 2021 Annual Report, Pages 4-32 and 4-35</li> <li>• Sabina's Responses to 2020 Annual Report Comments</li> </ul>
<b>Issue/Rationale:</b>	<p>As per the 2020 Annual Report, Sabina submitted the Landfill and Waste Management Plan to the NIRB in 2017 and was expecting to update and submit again to the NIRB following approval of the amendment to the water licence. The 2021 Annual Report indicates that the plan was updated and approved by the Nunavut Water Board (NWB), but further updates are required to address current practices at the Project site. Sabina is currently updating the plan and will provide it to NWB and the NIRB. Sabina has not indicated when they plan on submitting the updated plan (third version).</p> <p>Additionally, T&amp;C#14 states "<i>the Proponent shall provide a Waste Management Plan that describes how the local environment, including permafrost integrity and water quality, will not be harmed by wastes at project landfills</i>". The Landfill and Waste Management Plan (2017), which was included in the 2020 Annual Report, but not the 2021 Annual Report, appears to discuss how permafrost has influenced design methodology, but it does not thoroughly consider how the Project impacts permafrost integrity as intended in T&amp;C #14. There are only three mentions of permafrost in this plan. To comply with T&amp;C #14, impacts to permafrost integrity and appropriate mitigations should be considered and included in the Landfill and Waste Management Plan.</p>
<b>Recommendation:</b>	<p>CIRNAC recommends that Sabina:</p> <ol style="list-style-type: none"> <li>a) Provide a timeline for the anticipated submission of the updated Landfill and Waste Management Plan to the NIRB.</li> <li>b) Include a statement describing how permafrost integrity will be impacted, and how these impacts will be managed/mitigated, at the project landfill when completing updates to the Landfill and Waste Management Plan.</li> </ol>



<b>Comment Number:</b>	<b>CIRNAC #5</b>
<b>Subject:</b>	Waste Management Pre-construction, Construction and Operations Standard Operating Procedures (SOP)
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River Project 2021 Annual Report – Part 2 - Appendix F, 2021 Pre-Construction Wildlife Mitigation and Monitoring Program Report Appendix 5D, Waste Management Pre-construction, Construction, and Operations SOP, Section 6</li> <li>• FEIS Volume 10, Part 12 – Hazardous Materials Management Plan, Section 7.3.4</li> <li>• FEIS Volume 10, Part 10 – Waste Management Plan, Section 7.3</li> <li>• FEIS Volume 10, Part 10 – Waste Management Plan, Section 7.4</li> </ul>
<b>Issue/Rationale:</b>	<p>Sabina stated under Section 5.4 of the Waste Management Pre-construction, Construction, and Operations SOP - submitted in Appendix F of the 2021 Annual Report - that “hazardous materials” with potential to attract wildlife must be securely stored indoors in labelled containers and that hazardous materials that pose no risk of attracting wildlife may be stored within lined containment facilities.</p> <p>The term “hazardous materials” can include non-waste products and recyclable materials which are hazardous, which should be stored separately from hazardous waste. Additionally, it is unclear which of the waste materials listed in bullet point 4 of Section 5.4 must be stored indoors versus within the lined containment facilities.</p> <p>Sabina also stated in Section 6 of the Waste Management Pre-construction, Construction, and Operations SOP that the <i>“Camp Manager is responsible for coordinating waste consolidation, including designating responsible Personnel, where appropriate”</i> and that <i>“Waste will be consolidated from collection sites”</i>.</p> <p>While the FEIS Volume 10, Parts 10 and 12 describes how waste segregation based on waste stream compatibility will occur, the SOP does not provide this context. The Camp Manager and other designated site personnel (i.e., contractors, labourers, operators, etc.) will likely be referring to the SOP for direction over Volume 10 of the FEIS, and so the SOP should be consistent with statements on waste segregation in the FEIS, i.e. FEIS Vol 10, Part 10, Section 7.3.4: <i>“Hazardous materials will be segregated by chemical compatibility within the storage area to prevent contact of incompatible materials in the event of a release.”</i> and FEIS Vol 10, Part 10: <i>“Each site will have both indoor and outdoor storage, and waste will be segregated according to its susceptibility to exposure to the elements, etc.”</i></p>
<b>Recommendation:</b>	<p>CIRNAC recommends that Sabina:</p> <ol style="list-style-type: none"> <li>a) Clarify which of the waste materials listed in bullet point 4 can be stored indoors as opposed to at the lined containment facilities.</li> </ol>



	<ul style="list-style-type: none"> <li>b) Replace references to “hazardous materials” with “hazardous waste materials” where appropriate.</li> <li>c) Update the SOP to clarify that hazardous waste materials or incompatible waste streams will be kept separate from non-hazardous wastes while the Camp Manager (or designated Personnel) performs the waste consolidation to align with the FEIS Volume 10, Part 10 and 12.</li> </ul>
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<b>Comment Number:</b>	<b>CIRNAC #6</b>
<b>Subject:</b>	Hydrogeology and Groundwater Quantity and Quality - Geotechnical Characterization Program
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River PC T&amp;C #18: Hydrogeology and Groundwater Quantity and Quality - Geotechnical Characterization Program</li> <li>• Back River Project 2021 Annual Report, Pages 4-41 to 4-42</li> </ul>
<b>Issue/Rationale:</b>	Reporting requirements for PC T&C #18 state that Sabina shall provide the results of an infill geotechnical characterization program, along with associated mitigation measures, in the annual report to the NIRB. Sabina stated that geotechnical investigations were undertaken in 2021, but the results are not provided in the 2021 Annual Report to the NIRB.
<b>Recommendation:</b>	<p>CIRNAC recommends that in the 2022 Annual Report Sabina:</p> <ul style="list-style-type: none"> <li>a) Provide the results of the geotechnical investigations undertaken in 2021, including a summary of all geotechnical work completed to date and any interpretations arising from the available data. Where available, this should include depth and extent of geologic units, stratigraphy, hydraulic head data, thermal data, duration/depth/direction of active flow zones, distribution of baseline chemical parameters such as arsenic.</li> <li>b) Provide a conceptual model of groundwater flow, including potential source zones and receptors.</li> <li>c) Provide results of continued (or resumed) monitoring work, including water levels/vibrating piezometer data, thermistor monitoring, data available from the Westbay monitoring well, and water samples from the active zone, in order to improve the monitoring dataset and demonstrate annual variability.</li> </ul>

<b>Comment Number:</b>	<b>CIRNAC #7</b>
<b>Subject:</b>	Hydrological Features and Hydrogeology -Thermal Monitoring
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River PC T&amp;C #20: Hydrological Features and Hydrogeology</li> <li>• Back River Project 2021 Annual Report, Pages 4-40</li> <li>• Back River Project 2020 Annual Report, Pages 4-45</li> <li>• FEIS Addendum-Vol 6-Pt 1-IA2E Freshwater Environment, Pages 6-4 and 6-11</li> <li>• NIRB Final Hearing Report Back River Gold Mine Project, Section 4.6 – Hydrological Features and Hydrogeology</li> </ul>



<p><b>Issue/Rationale:</b></p>	<p>In the 2021 Annual Report, Sabina indicated that a thermal monitoring plan is in preparation. CIRNAC notes that though the plan is in preparation, there are deficiencies in the thermal modelling that has been completed to date, and care should be taken to ensure the adequacy of the thermal baseline data.</p> <p>Under Tailings Management Plan of the 2021 Annual Report, Sabina indicated that Tailings Storage Facility (TSF) Design is based on Sabina’s 2017(a) submission, F-4.</p> <p>Sabina’s FEIS Addendum, Volume 6, Part 1 includes a discussion on the Hydrological features and hydrogeology in Section 6.1 Surface Hydrology page 8. This discussion highlights the NIRB’s views:</p> <p><i>“In considering the views of the Proponent and those of parties throughout the assessment of the Project and as outlined above, the Board has concluded that due to the limited baseline available in the FEIS [FHR-NIRB-4.6(A)] and the probability of taliks forming under the pits or the Tailings Impoundment Area [FHR-NIRB-4.6(B)], the Board is not confident that the proposed mitigation measures in conjunction with a commitment from Sabina to collect additional baseline data would sufficiently mitigate the project-specific impacts. The Board appreciates Sabina’s commitments to collect additional baseline data, however, views this data as necessary at the environmental assessment stage to provide the required assurance that negative impacts to hydrogeology and hydrological features would be adequately mitigated [FHR-NIRB-4.6(A)].”</i></p> <p>Sabina has highlighted two aspects to which it has responded: the limited baseline data, and the potential for Taliks to be formed under the pits or the Tailings Impoundment Area.</p> <p>For the limited baseline data, Sabina indicated <i>“Sabina believes a sufficient level of hydrological and hydrogeological baseline data was collected and provided during the environmental assessment phase.”</i></p> <p>CIRNAC notes that, though there seems to be baseline data between 2007 and 2014, hydrological and hydrogeological processes are not static and can vary widely from season to season, year to year, and decade to decade. For this reason, data collected between 2007 and 2014 is insufficient to adequately characterize the baseline hydrological characteristics.</p> <p>For the potential to create taliks, Sabina stated <i>“Sabina completed additional thermal modelling and submitted a Technical Comment to NRCAN regarding through taliks beneath open pits (F-INAC-TC-8), and Sabina has shown through thermal modelling that no through talik will exist under the TSF (FEIS Appendix V2-7G, Appendix G). Sabina believes this appropriately addresses the Board’s concerns.”</i></p>
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	As noted in the FEIS Addendum (Volume 6, page 6-8), which refers to the FEIS Final Hearing document, NRCan’s response to this modelling noted that “ <i>Natural Resources Canada is of the view that the results of this analysis support the development of appropriate groundwater models and assessments of the effects of the project on water quality and quantity</i> ”. CIRNAC notes that even though the results of the analysis are adequate, it is expected that they are to be used to support the development of groundwater models for further assessment, including extension of the model domain to -900 metres, and work to model and evaluate total metals concentrations in groundwater prior to and during operations. The groundwater model results and further assessments appear to not have been completed, even though the comment is noted by Sabina as being addressed.
<b>Recommendation:</b>	CIRNAC recommends that Sabina: <ul style="list-style-type: none"> <li>a) Explain the rationale for discontinuing Hydrology Baseline Reports beyond the year 2014.</li> <li>b) Resume the Hydrology Baseline Reports where construction has not started.</li> <li>c) Provide a discussion of hydrology data collection in future annual reports.</li> <li>d) Conduct further groundwater modelling based on the results of the analysis and discuss the preparation of a resulting plan to fully address NRCan’s comment.</li> </ul>

<b>Comment Number:</b>	<b>CIRNAC #8</b>
<b>Subject:</b>	Aquatic Effects Monitoring Plan
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River PC T&amp;C #21: Groundwater and Surface Water Quality, Sediment Quality and Freshwater Aquatic Environment – Aquatic Effects Monitoring Plan</li> <li>• Back River Project 2021 Annual Report, Pages 4-46 to 4-47</li> <li>• Back River Project 2020 Annual Report, Pages 62 - 63</li> <li>• Sabina’s Responses to 2020 Annual Report Comments</li> </ul>
<b>Issue/Rationale:</b>	<p>Project Certificate T&amp;C #21 requires an Aquatic Effects Monitoring Plan (AEMP) to include “<i>sufficient sampling and monitoring programs to appropriately characterize the receiving environment to ensure that adequate data is available to assess impact predictions made within the Final Environmental Impact Statement.</i>” Reporting requirements for Project Certificate T&amp;C #21 state that Sabina should provide results of the AEMP program “<i>annually thereafter or as may otherwise be required by the NIRB.</i>”</p> <p>In the 2021 Annual Report, Sabina notes that the status of the PC is compliant and makes the following statements:</p> <ul style="list-style-type: none"> <li>• “<i>Additional baseline data collection was conducted in 2021 to address commitments made in response to technical comments on the Aquatic Baseline Synthesis Report by Kitikmeot Inuit Association (KIA), Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), and Environment and Climate Change</i></li> </ul>



	<p>(ECCC), and to support the next update to the Aquatic Effects Management Plan.”</p> <ul style="list-style-type: none"> <li>• “Sabina is currently updating the AEMP based on commitments made with respect to submissions received during the Technical and Public Hearing process for the Type A Water Licence Application and according to the terms and conditions of the Type A Water Licence. Updates were also made to re-align the AEMP with recent changes to the Metal and Diamond Mining Effluent Regulations (MDMER), to update the Project description according to the 2019 Modification Package, to incorporate recommendations from the aquatic baseline synthesis report, and to refine details of the sampling design and Response Framework.”</li> </ul> <p>The results of the 2021 data were not included in the 2021 Annual Report. The AEMP was also not included in the 2021 Annual Report. CIRNAC notes that the updated plan, as well as the results of the AEMP, are required to evaluate whether the impact predictions in the FEIS are still valid.</p>
<b>Recommendation:</b>	<p>CIRNAC recommends that Sabina:</p> <ol style="list-style-type: none"> <li>a) Provide the summarized results of the 2021 data collection in the next annual report.</li> <li>b) Provide any updated AEMP reports in any future annual report.</li> </ol>

<b>Comment Number:</b>	<b>CIRNAC #9</b>
<b>Subject:</b>	Vegetation Monitoring Plan
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River PC T&amp;C #34: Vegetation – Vegetation Monitoring Plan</li> <li>• Back River Project 2021 Annual Report, Pages 4-73 to 4-74</li> <li>• Back River Project 2021 Annual Report, Appendix F</li> <li>• Sabina’s Responses to 2020 Annual Report Comments Pages 30-37</li> <li>• Back River Project FEIS Addendum, Volume 5, Page 5-20</li> </ul>
<b>Issue/Rationale:</b>	<p>In response to comments received on the Back River Project 2020 Annual Report, Sabina committed to amending the January 2020 Vegetation Monitoring Plan. An updated or amended Vegetation Monitoring Plan was not included in the 2021 Annual Report and the Vegetation Monitoring Program on the 2021 monitoring activities refers to the January 2020 Vegetation Monitoring Plan.</p> <p>Further, in the Vegetation Monitoring Program (Appendix F of the 2021 Annual Report) results, “Totals” are reported in Table 4 and 5; however, it is unclear what these totals represent. For example, the totals for 150 m in Table 4 are the same as the numbers reported for Undifferentiated Tundra in the same table.</p>
<b>Recommendation:</b>	<p>CIRNAC recommends that Sabina:</p> <ol style="list-style-type: none"> <li>a) Provide a timeline for submitting the updated Vegetation Monitoring Plan to the NIRB.</li> </ol>



	b) Clarify what the “Totals” in Tables 4 and 5 of the Vegetation Monitoring Program represent and how they are being used in the vegetation monitoring.
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<b>Comment Number:</b>	<b>CIRNAC #10</b>
<b>Subject:</b>	Revegetation and Reclamation
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River PC T&amp;C #35: Vegetation - Revegetation and Reclamation</li> <li>• Back River Project 2021 Annual Report, Page 4-75</li> </ul>
<b>Issue/Rationale:</b>	Project Certificate T&C #35 requires Sabina develop a progressive revegetation program and submit the program and results in their annual report to the NIRB. In the 2021 Annual Report, Sabina state that the program was provided to the NIRB on December 13, 2021, but did not include the program or any results in the 2021 Annual Report.
<b>Recommendation:</b>	CIRNAC recommends that Sabina provide the progressive revegetation program and any results with future annual reports.

<b>Comment Number:</b>	<b>CIRNAC #11</b>
<b>Subject:</b>	Marine Environment – General
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River PC T&amp;C #62: Marine Environment – General</li> <li>• Back River Project 2021 Annual Report, Pages 4-117 to 4-118</li> <li>• Back River Project 2020 Annual Report, Pages 4-108 to 4-109</li> <li>• Sabina’s Responses to 2020 Annual Report Comments</li> <li>• Back River Project FEIS, Supporting Volume 7, Page 2-33</li> </ul>
<b>Issue/Rationale:</b>	<p>To ensure potential impacts to the marine environment are identified and appropriately mitigated, PC T&amp;C #62 states that, <i>“The Proponent shall maintain a marine monitoring program at the Marine Laydown Area to enable identification of potential impacts of the Project on the marine environment and to inform adaptive management actions. The monitoring program shall be in line with the proposed monitoring in the Aquatic Effects Monitoring Program, or as required by applicable regulatory authorities. At a minimum, water sampling should include end of pipe and control area samples, collected on a regular basis to confirm salinity levels of the discharge and the receiving environment.”</i></p> <p>The 2021 Annual Report states that Sabina collected control and discharge samples from the MLA desalination plant during desalination activities in 2021 to confirm salinity levels of the discharge and receiving environment. Specifically, <i>“Sabina collected two paired samples from the desalination plan inflow (the Control) and outflow (the Discharge) during 2021 to confirm salinity levels. On July 30, 2021, Control salinity was measured to be 7.5 psu and Discharge salinity was 8.6 psu (a 15% increase). On September 7, 2021, Control salinity was measured to be 13.9 psu and Discharge salinity was 13.6 psu (a 2% salinity decrease). The method detection limit was 1.0 psu. Results are within baseline water conditions in the absence of any desalination.”</i></p>



	<p>The Final EIS Supporting Volume 7: Marine Environment indicates that <i>“Discharge of brine water from the desalination plant will meet the CCME salinity guideline for the protection of marine life and will not cause salinity of the receiving environment to fluctuate by more than 10% of the natural expected salinity (CCME 2015).”</i></p> <p>Although there are many references to both baseline data collection and the 2021 sampling discussed above, the 2021 Monitoring Report did not present the data for analysis (i.e., mapping of sampling locations, sample collection notes, water quality data, analytical chemistry results, etc.).</p> <p>In the 2021 Monitoring Report, Sabina states that <i>“Analysis of the results of Sabina’s full 2021 Marine Monitoring Plan sampling, including the evaluation of the comparability of the newly identified reference location, is still underway. A report on findings is expected to be submitted to the NIRB in April 2022 and will indicate whether the new reference location is suitable.”</i></p> <p>Also, in the 2021 Annual Report, Sabina states that they <i>“will continue to routinely monitor desalination activity and will undertake the sampling outlined in the Marine Monitoring Plan when the MLA is in use.”</i></p>
<b>Recommendation:</b>	<p>CIRNAC recommends that Sabina:</p> <ol style="list-style-type: none"> <li>a) Provide the summarized results of the 2021 data collection, including, where available, mapping of sampling locations, sample collection notes, water quality data, analytical chemistry results in the next annual report.</li> <li>b) Include the annual AEMP reports in any future annual reports.</li> </ol>

<b>Comment Number:</b>	<b>CIRNAC #12</b>
<b>Subject:</b>	Spills
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River PC T&amp;C #89: Accidents and Malfunctions - Spills</li> <li>• Back River Project 2021 Annual Report, Section 4.4.2 – Unauthorized Discharges and Spills, Page 4-3</li> <li>• Back River Project 2021 Annual Report, Appendix F: 2021 Pre-Construction Wildlife Mitigation and Monitoring Plan</li> </ul>
<b>Issue/Rationale:</b>	<p>Section 4.4.2 of the 2021 Annual Report indicates that there were no unauthorized discharges or spills in 2021 that met or exceeded the reporting threshold as outlined in the Nunavut Spill Contingency Planning Regulations.</p> <p>The Pre-Construction Wildlife Mitigation and Monitoring Plan indicates that <i>“there were 61 minor spills at the Project in 2021.”</i></p> <p>While there was a statement indicating that <i>“all spills were managed following the Fuel and Spill Management Plans”</i>, details pertaining to the volume of each spill, date the spills occurred, locations of the spills including whether any spills occurred over water bodies, material of each spill, and what mitigation measures were implemented at each</p>



	spill site were not included in Section 4.4.2 of the 2021 Annual Report. Therefore, the potential impacts of the spills, and validity of the statements related to spills, cannot be assessed based on the information provided.
<b>Recommendation:</b>	CIRNAC recommends that Sabina provide detailed information on spills in future annual reports. This information should include, volume of each spill, date the spills occurred, locations of the spills including whether any spills occurred over water bodies, material of each spill, and what mitigation measures were implemented at each spill site, amongst others.

<b>Comment Number:</b>	<b>CIRNAC #13</b>
<b>Subject:</b>	Tailings Management Plan
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River Project 2021 Annual Report, Page 4-41</li> <li>• Back River Project 2021 Annual Report, Appendix K</li> </ul>
<b>Issue/Rationale:</b>	The Tailings Management Plan in Appendix K of the 2021 Annual Report is dated November 2020. It notes that tailings deposition will occur in the Tailings Storage Facility (TSF) for years 1 through 5. But, Page 4-41 of the 2021 Annual Monitoring Report notes that Sabina's currently approved mine plan no longer includes a TSF.
<b>Recommendation:</b>	CIRNAC recommends that Sabina provide an updated version of the Tailings Management Plan, reflecting the current approved practices to be used on site, in future annual reports.

<b>Comment Number:</b>	<b>CIRNAC #14</b>
<b>Subject:</b>	Tailings Management Plan - Seepage Risks
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River Project 2021 Annual Report, Appendix K</li> <li>• Project Certificate Term and Condition # 18</li> </ul>
<b>Issue/Rationale:</b>	<p>Project Certificate T&amp;C #18 requires Sabina to implement an infill geotechnical program to determine the extent of the fractured bedrock contact zone and apply proposed mitigation measures, as necessary. The program should include permeability testing, seepage analysis, and planning for thermal monitoring of the western ridge, where appropriate. Page 4-41 of the 2021 Annual Monitoring Report only discusses the area of the TSF and not the open pits.</p> <p>It is unclear if there are any plans to identify and mitigate seepage risks related to tailings deposition into the backfilled open pits. CIRNAC notes that this may be a potential concern for groundwater impacts and is also important from a safety perspective for the underground workings located directly below the pits.</p>
<b>Recommendation:</b>	CIRNAC recommends that Sabina provide details on what measures are proposed to identify and mitigate seepage risks associated with geological discontinuities in the open pit prior to tailings disposition, and details on mitigation measures should seepage into the underground workings occur during operations.



<b>Comment Number:</b>	<b>CIRNAC #15</b>
<b>Subject:</b>	Tailings Management Plan - Tailings Deposition Timelines, Management of Parameters of Concern and Wildlife Entrapment in Reflooded Pits.
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River Project 2021 Annual Report, Appendix K</li> </ul>
<b>Issue/Rationale:</b>	<p>Tailings are planned to be deposited in the mined out open pits. Preliminary timing is given for tailing deposition for each pit. Should resources be higher than expected, there may be delays with tailings deposition.</p> <p>Section 5.1.2 notes that Sabina commits to testing a mixture of tailings and water treatment plant sludge to evaluate the potential for remobilization of arsenic from this material. There is no reference to analysis of other parameters.</p>
<b>Recommendation:</b>	<p>CIRNAC recommends that Sabina provide clarification on the following items in the Tailings Management Plan:</p> <ol style="list-style-type: none"> <li>a) The sensitivity of timing of deposition of tailings into the mined-out pits and plans should any pit have higher than anticipated mineral resources.</li> <li>b) Whether there are any other parameters of concern or justification on why only the potential for arsenic remobilization will be evaluated.</li> </ol>

<b>Comment Number:</b>	<b>CIRNAC #16</b>
<b>Subject:</b>	Tailings Management Plan - Discharge Water Quality Objectives
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River Project 2021 Annual Report, Appendix K, P5-11</li> </ul>
<b>Issue/Rationale:</b>	<p>Section 5.3.1 notes that water treatment is not required for the open pits in the closure phase to meet discharge water quality objectives (WQOs) and refers to the water management plan for more details. The water management plan states that <i>“Pit lake water quality monitoring will be conducted to ensure it meets discharge criteria prior to pit overtopping and passive discharge. In the unlikely event that the water in any of the pit lakes is not suitable for discharge, the pit lake would be batch-treated to address any remaining water quality impairments. Five years of post-closure water quality monitoring will continue for each open pit to ensure that WQOs are met.”</i></p> <p>It is unclear what Sabina’s target WQOs are for Tailings management.</p>
<b>Recommendation:</b>	CIRNAC recommends that Sabina provide clarification on the WQOs for discharge from the open pits where tailings have been deposited in the Tailings Management Plan.

<b>Comment Number</b>	<b>CIRNAC #17</b>
<b>Subject:</b>	Definition of a Project Production Decision
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River PC T&amp;C #'s 71, 72, 73, 75, 76, 77 and 84</li> <li>• Back River Project 2021 Annual Report, Page 4-131</li> </ul>



<b>Issue/Rationale:</b>	<p>The 2021 Annual Report makes reference to a project production decision as a milestone that must be achieved before Sabina can provide information associated with a number of T&amp;Cs (Page 4-131). Relevant T&amp;Cs and their assigned categories are as follows:</p> <ul style="list-style-type: none"> <li>• T&amp;C #71: Staff Schedule</li> <li>• T&amp;C #72: Registration of Trades Workers</li> <li>• T&amp;C #73: Training Opportunities</li> <li>• T&amp;C #75: Educational Opportunities</li> <li>• T&amp;C #76: Inuktitut/Inuinnaqtun Training</li> <li>• T&amp;C #77: Monitoring Demographic Changes</li> <li>• T&amp;C #84: Employee Housing</li> </ul> <p>In certain instances, project activities will not be initiated until a project production decision is made. For example, this applies to the administration of an Inuit Employee Survey to collect information in support of T&amp;Cs 75 and 84. Having a clear definition for the term “project production decision” would facilitate the Annual Report review process. It would allow for a better understanding of Sabina’s rationale to not fully implement relevant Project Certificate T&amp;Cs at the present time. The definition should be placed in context with the project phases identified in the project certificate, namely Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance and Post-Closure.</p>
<b>Recommendation:</b>	<p>CIRNAC recommends that Sabina define the term Project production decision referenced in its 2021 Annual Report. Sabina should also provide a rationale for why this milestone is needed before fully implementing certain Project Certificate T&amp;Cs.</p>

Comment Number	CIRNAC #18
<b>Subject:</b>	Transferrable Skills and Certification
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River PC T&amp;C #74</li> <li>• Back River Project 2021 Annual Report, Page 4-134; Appendix H: 2021 Socio-Economic Monitoring Report, Section 7.1.1, Section 7.3.3</li> </ul>
<b>Issue/Rationale:</b>	<p>T&amp;C #74 of the Project Certificate requires Sabina to <i>“develop and maintain an easily referenced listing of formal certificates and licences that may be acquired via on-site training or training during Project employment. The listing shall indicate which of these certifications and licences would be transferable to a similar job site within Nunavut.”</i></p> <p>The reporting requirements for this T&amp;C state that <i>“Updates to the list should be included in the annual Back River socio-economic monitoring reports submitted to the Nunavut Impact Review Board and shared with the wider Kitikmeot Socio-Economic Monitoring Committee throughout the life of the Project.”</i></p> <p>The 2021 Annual Report confirms that Sabina provided an initial listing to the NIRB in November 2018. Sabina also commits to providing updates to this list in future Socio-Economic Monitoring Report submissions, as appropriate (Page 4-134). Section 7.1.1 of the 2021 Socio-Economic</p>



	<p>Monitoring Report provides a discussion of training programs that were offered in 2021 including certificate-based and job-related programs. The 2021 Socio-Economic Monitoring Report also makes reference to Table 7-2 for a summary of the training programs offered through project employment. Upon further review, Table 7-2, is specific to Inuit Apprenticeships. This table may have been mistakenly referenced instead of Table 7-1: Hours of Training (by Type) Completed (2021).</p> <p>Section 7.3.3 of the 2021 Socio-Economic Monitoring Report states that updates to the November 2018 initial listing will be included in future report submissions. It is not clear how future Socio-Economic Monitoring Reports will provide information on training programs any differently from the information already provided in Section 7.1.1 of the 2021 Socio-Economic Monitoring Report. Clarification on how the listing will be presented going forward would be beneficial.</p>
<b>Recommendation:</b>	<p>CIRNAC recommends that Sabina:</p> <ol style="list-style-type: none"> <li>a) Ensure its 2022 Socio-Economic Monitoring Report provides an easily referenced listing of formal certificates and licences that may be acquired via on-site training or training during Project employment pursuant to Project Certificate T&amp;C #74.</li> <li>b) Confirm that future Socio-Economic Monitoring Reports will provide updates to the initial listing submitted to the NIRB in November 2018, as communicated in the 2021 Annual Report and the 2021 Socio-Economic Monitoring Report.</li> </ol>

Comment Number	CIRNAC #19
<b>Subject:</b>	Consultation with Outfitting and Guiding Businesses
<b>Reference:</b>	<ul style="list-style-type: none"> <li>• Back River PC T&amp;C #81</li> <li>• NIRB 2020-2021 Annual Monitoring Report for the Back River Project and NIRB's Recommendations</li> <li>• Back River Project 2021 Annual Report, Page 4-143; Appendix L: Socio-Economic Monitoring Plan</li> </ul>
<b>Issue/Rationale:</b>	<p>T&amp;C #81 of the Project Certificate encourages Sabina to “...consult with outfitting and guiding businesses that operate in the regional study area regarding use of the land and marine areas in proximity to project infrastructure or activities and any noted project effects, particularly for effects in relation to the experience of the natural environment.”</p> <p>The reporting requirements for this T&amp;C state: “Information regarding the consultations and monitoring undertaken by the Proponent in fulfillment of this Term and Condition should initially be provided within two (2) years of Project construction in the Proponent’s annual report to the Nunavut Impact Review Board and any updated information should be provided in the annual report to the Nunavut Impact Review Board every year thereafter.”</p> <p>Sabina has developed an Outfitting/Guiding Business Consultation Protocol, attached as Appendix D to its Socio-Economic Monitoring Plan as a means to support the implementation of this T&amp;C. In its 2021 Annual</p>



	Report (Page 4-143), Sabina communicated that in 2021, it was not necessary to provide initial reporting on consultations with applicable outfitting and guiding businesses pursuant to T&C #81, because this is only applicable within two years of Project construction. The November 9, 2021 NIRB cover letter addressed to Sabina, which accompanies its 2020-2021 Annual Monitoring Report for the Back River Project asserts that the project has entered its construction phase based on site activities conducted to date. This determination conflicts with Sabina's position and creates confusion on when initial reporting will be provided with respect to the implementation of T&C #81.
<b>Recommendation:</b>	CIRNAC recommends that Sabina work toward implementing its Outfitting/Guiding Business Consultation Protocol and report on consultation activities with outfitting and guiding businesses pursuant to Project Certificate T&C #81.

## 2. Compliance Monitoring

### a. *Provide a summary of any compliance monitoring and/or site inspections undertaken in association with the project, including specifically:*

- i. *Identify the terms and conditions from the Project Certificate which have been incorporated into any permits, certificates, licenses or other approvals issued for the project, where applicable;*

CIRNAC has a broad mandate for the co-management of water resources and the management of Crown land in Nunavut under the following applicable acts and regulations:

- The *Department of Crown-Indigenous Relations and Northern Affairs Act*;
- The *Nunavut Land Claims Agreement Act* and the *Nunavut Agreement*;
- The *Arctic Waters Pollution Prevention Act and Regulations*;
- The *Nunavut Waters and Nunavut Surface Rights Tribunal Act and Regulations*; and
- The *Territorial Lands Act and Regulations*.

In terms of water management in Nunavut, CIRNAC has a number of different responsibilities. The Minister of Northern Affairs has a decision-making role with regards to the Nunavut Water Board (NWB)'s issuance of any Water Licences associated with a project. Furthermore, the Department participates as an intervenor in the water licensing process, providing advice and expertise.

When a proposed project is approved to proceed, CIRNAC is responsible for inspecting and enforcing any terms and conditions (T&Cs) contained within any Water Licence associated with the project.

CIRNAC has reviewed the Type 'A' and Type 'B' Water Licences associated with the project with respect to Project Certificate [No. 007] and has included a concordance table (Appendix A) that outlines how these Project Certificate T&Cs have been incorporated in the Water Licence.

In 2021, the projects activities and monitoring were conducted under the following Water Licences:

- Type A Water Licence 2AM-BRP1831,
- Type B Water Licence 2BC-BRP1819,
- Type B Water Licence 2BE-GOO2028,
- Type B Water Licence 2BE-GEO2025, and



- Type B Water Licence 2BE-MLL1722.

**ii. A summary of any inspections conducted during the 2021 reporting period, and the results of these inspections:**

Due to the restrictions imposed by COVID-19, only one inspection of the Back River Goose property was conducted by a field inspector on September 4, 2021. Although, the Inspector identified a few instances of non-compliance, they were immediately addressed by Sabina.

**iii. A summary of Sabina's compliance status with regard to authorizations that have been issued for the project.**

CIRNAC inspectors reported that in 2021, there were no unauthorized discharges or spills that exceeded the reporting threshold as outlined in the Spill Contingency Planning and Reporting Regulations.

**3. Other**

CIRNAC is a participant in two forums that focus on socio-economic outcomes in the Kitikmeot Region which have interests in Sabina's Back River Project:

- Sabina's Back River Socio-Economic Monitoring Working Group which is specific to the Back River Gold Project. This working group is chaired by Sabina and in addition to CIRNAC, includes participation from the Kitikmeot Inuit Association and the Government of Nunavut's Department of Economic Development and Transportation (GN-EDT). On May 21, 2021, the working group met via videoconference to discuss the Back River Socio-Economic Monitoring Program's implementation.
- The Kitikmeot Socio-Economic Monitoring Committee which has a regional scope of interest on socio-economic considerations associated with major projects that are subject to NIRB impact assessment processes. The committee is chaired by the GN-EDT and in addition to CIRNAC, includes the participation of the Kitikmeot Inuit Association, other GN departments, municipal government representatives, community organizations and mining proponents. No committee meeting occurred in 2021 due to the implementation of public health measures aimed at limiting the spread of COVID-19.

**Appendix A: Project Certificate Terms and Conditions (T&C) incorporated into licenses or other approvals issued for the Project**

NIRB Project Certificate No. 007 Term & Condition		Implemented in NWB Water Licence NO: 2AM-BRP1831
4	Sabina shall develop and implement an Incineration Management Plan that takes into consideration the recommendations provided in Environment Canada's Technical Document for Batch Waste Incineration (2010).	<ul style="list-style-type: none"> <li>▪ Part B: Item f</li> </ul>



<b>NIRB Project Certificate No. 007 Term &amp; Condition</b>		<b>Implemented in NWB Water Licence NO: 2AM-BRP1831</b>
7	<p>The Proponent shall maintain a Mine Closure and Reclamation Plan designed to: identify the processes that may act upon the mine components after closure and reclamation so that they can be factored within the design and operation of the mine; ensure physical and chemical stability of mine components that remain after closure; ensure mine components that remain after closure will not require long-term active care; and consider future use and aesthetics of the area with the surrounding lands. This plan should include:</p> <ol style="list-style-type: none"> <li>An adaptive management component that documents monitoring and mitigation measures to ensure long-term containment of the Tailings Storage Facility and Waste Rock Storage Areas;</li> <li>Details for monitoring the thermal condition and stability of storage facilities;</li> <li>Details on the triggers for implementing alternative mitigation options;</li> <li>Details pertaining to ongoing monitoring and research being conducted to supplement the adaptive management protocols;</li> <li>Details on the plans to maintain the integrity of the groundwater quality</li> <li>within and adjacent to the Project; and</li> <li>Details on how the Proponent will carry out continued analyses over time to confirm or update the approximate fill time for the mine pits.</li> </ol>	<ul style="list-style-type: none"> <li>▪ Part B: Item 14g</li> </ul>
12	<p>Sabina shall monitor the effects of the Project on permafrost conditions relative to Project infrastructure, including along the all-weather access road and associated roads, waste rock stockpile, trails and quarries. Should permafrost degradation be observed, the Proponent shall report on measures implemented to restore and promote permafrost integrity.</p>	<ul style="list-style-type: none"> <li>▪ Part 1, Item 10</li> </ul>
13	<p>Sabina shall undertake additional geotechnical investigations as required to identify sensitive landforms, modify engineering design for Project infrastructure (i.e., dikes, tailings storage facility, waste rock pile and landfill), and develop and implement preventative and/or mitigation and monitoring measures to minimize the impacts of the Project's activities and infrastructure on sensitive landforms. Plans for the investigations, mitigation and monitoring measures are to be included within appropriate management plans.</p>	<ul style="list-style-type: none"> <li>▪ Part 1, Item 10</li> </ul>
15	<p>The Proponent shall have in place a plan for the progressive reclamation of project components, areas, and infrastructure throughout the life of the Project. The plan shall detail:</p> <ol style="list-style-type: none"> <li>projected timelines for the reclamation of project features, methodologies for undertaking such activities, and monitoring measures to ensure the effectiveness of reclamation methods employed;</li> <li>specific measures for adaptive management and triggers for their application, should monitoring results reveal trends that could affect the reclamation and closure objectives; and,</li> <li>how Inuit Qaujimagatuqangit and Traditional Knowledge was collected, and used to inform closure plans and the design of project components.</li> </ol>	<ul style="list-style-type: none"> <li>▪ Part B, Item 14 g</li> </ul>
17	<p>The Proponent shall conduct tests of the tailings and treatment sludge's as they are produced to evaluate the potential for remobilization of arsenic from these materials.</p> <p>Commentary: For clarity, the Proponent's testing is limited to grab sampling only and does not impose an obligation for continuous testing of tailings and treatment sludge. The parties also acknowledge that the reporting requirements apply to any remobilization of arsenic beyond levels predicted in the FEIS and FEIS Addendum.</p>	<ul style="list-style-type: none"> <li>▪ Part B, Item 14</li> </ul>



<b>NIRB Project Certificate No. 007 Term &amp; Condition</b>		<b>Implemented in NWB Water Licence NO: 2AM-BRP1831</b>
18	The Proponent shall undertake an infill geotechnical characterization program to determine the extent of the fractured bedrock contact zone and apply proposed mitigation measures as necessary. The program should include permeability testing, seepage analysis and planning for thermal monitoring of the western ridge, where appropriate.	<ul style="list-style-type: none"> <li>▪ Part D, Item 4</li> </ul>
19	The Proponent shall, reflecting any direction from the Nunavut Water Board, maintain a saline water management plan which includes monitoring of thermal conditions, monitoring of saline water at the Goose site, and mitigation measures designed to address the potential for higher-than- predicted volumes of saline water inflows into the open pits and the underground mine, treatment and disposal methods. The plan should include accurate characterization of saline water inflows into the underground mine workings.	<ul style="list-style-type: none"> <li>▪ Part E, Item 2</li> </ul>
21	<p>Sabina shall update its Aquatic Effects Monitoring Plan (AEMP) to include, at a minimum:</p> <ol style="list-style-type: none"> <li>a. Details regarding the monitoring of non-point sources of discharge, selection of appropriate reference sites, measures to ensure the collection of adequate baseline data at Meliadine Lake prior to and during construction activities, including information on chemical loading in the snowpack, and the mechanisms proposed to monitor for and treat runoff and sediment;</li> <li>b. A description of measures to be undertaken as relate to dustfall monitoring, designed in accordance with the following: <ol style="list-style-type: none"> <li>i. To establish Phase 1 all-weather access road baseline data and a description of plans for data collection during Project operations for comparison;</li> <li>ii. To facilitate comparison with existing guidelines;</li> <li>iii. To assess the seasonal deposition (rates, quantities) and chemical composition of dust entering aquatic systems along representative distance transects of the all-weather access road and Rankin Inlet by-pass road;</li> </ol> </li> <li>c. A description of water quality monitoring to be conducted at Little Meliadine Lake; and</li> </ol> <p>Details regarding comparisons of results to be run against predicted values and the analysis of data to be undertaken on an annual basis, or as may be required.</p>	<ul style="list-style-type: none"> <li>▪ Part E, Item 15</li> <li>▪ Part 1, Item 2</li> </ul>
22	The Proponent shall, reflecting any direction from the Nunavut Water Board, maintain a Site Water Monitoring and Management Plan designed to: minimize the amount of water that contacts mine ore and wastes; appropriately manage all contact water and discharges to protect local aquatic resources; and, implement water conservation and recycling to maximize water reuse and minimize the use of natural waters. The plan should include monitoring that demonstrates contact water (runoff and shallow groundwater) from the ore storage and waste rock storage areas is adequately captured and managed, as per the Mine Waste Rock Management Plan.	<ul style="list-style-type: none"> <li>▪ Part B, Item 14</li> </ul>
23	Sabina shall maintain an appropriate setback distance between project quarries and fish-bearing or permanent water bodies, or implement appropriate mitigation measures implemented by the Proponent in fulfillment of this Term and Condition in the Proponent's Annual Report to the NIRB.	<ul style="list-style-type: none"> <li>▪ Part E, Item 3</li> </ul>



<b>NIRB Project Certificate No. 007 Term &amp; Condition</b>		<b>Implemented in NWB Water Licence NO: 2AM-BRP1831</b>
27	The Proponent shall provide bathymetry, depth, and location of proposed water withdrawal sites, volumes to be extracted, anticipated water level decreases, and fish habitat features within each waterbody proposed to be used for winter water withdrawal in support of the annual construction of the winter ice roads. If additional waterbodies are required the Proponent shall provide all required information on the additional proposed lakes prior to the use of the waterbodies.	<ul style="list-style-type: none"> <li>▪ Part E, Item 5</li> </ul>
28	The Proponent 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.	<ul style="list-style-type: none"> <li>▪ Part E, Item 7</li> </ul>
62	The Proponent shall maintain a marine monitoring program at the Marine Laydown Area to enable identification of potential impacts of the Project on the marine environment and to inform adaptive management actions. The monitoring program shall be in line with the proposed monitoring in the Aquatic Effects Monitoring Program, or as required by applicable regulatory authorities. At a minimum, water sampling should include end of pipe and control area samples, collected on a regular basis to confirm salinity levels of the discharge and the receiving environment.	<ul style="list-style-type: none"> <li>▪ Part B, Item 14 Water Management Plan approved by NWB</li> </ul>

