



BACK RIVER PROJECT  
**2022 Annual Report**

March 31, 2023



## NIRB Annual Report Executive Summary

## Introduction

This Annual Report (“the Report”) is a requirement of Project Certificate No. 007 issued by the Nunavut Impact Review Board (“NIRB”) to Sabina Gold & Silver Corp. (“Sabina”) outlining the terms and conditions for construction and operation of the Back River Project. This Report provides information on how Sabina is addressing the terms and conditions of the Project Certificate and its performance against them.

## Back River Project

The Back River Project (“the Project”) is an approved gold mine owned by Sabina Gold & Silver Corp. (“Sabina”) in the eastern Kitikmeot region of Nunavut (See Figure 1). It is situated approximately 400 kilometres (“km”) southwest of Cambridge Bay, 95 km southeast of the southern end of Bathurst Inlet (Kingaok), and 520 km northeast of Yellowknife, Northwest Territories. The Project is located predominantly within the Queen Maud Gulf Watershed (Nunavut Water Regulations, Schedule 4).

The Project is comprised of two main areas with an interconnecting winter ice road (“WIR”): Goose Property (Figure 3) and the Marine Laydown Area (MLA) (Figure 4) situated along the western shore of southern Bathurst Inlet. The majority of annual resupply will be completed using the MLA, and an approximately 160 km long WIR will interconnect these sites.

The Project consists of a combination of open pit and underground mining at several gold deposits located at the Goose Property (Umwelt, Llama, and Goose Main).

In April 2018, Sabina and the Kitikmeot Inuit Association (KIA) entered into 20 year benefit and land tenure agreements under a Framework Agreement, setting out rights and obligations with respect to surface land access on Inuit Owned Land (“IOL”) at the Back River Project. These agreements provide Inuit of the Kitikmeot Region with financial and socio-economic benefits including, training, jobs, formation of an Inuit Environmental Advisory Committee (“IEAC”), investments in community infrastructure projects with the objective of supporting regional wealth creation initiatives within Kitikmeot communities, share ownership in Sabina, and a 1% net smelter royalty on future production from the approved mine on the Goose Property.

## Community Engagement

Sabina is committed to developing the Back River Project in an environmentally and socially responsible manner while ensuring that Kitikmeot Communities benefit from Project operations. Sabina strives to ensure meaningful engagement with Kitikmeot residents, communities (Cambridge Bay, Gjoa Haven, **Kugluktuk, Kugaaruk, Taloyoak, Bathurst Inlet, and Bay Chimo**), and other stakeholders. Sabina’s Indigenous and Northern Affairs team leads community engagement efforts for the Company and was hard at work in 2022 after several years of reduced engagement due to COVID19 restrictions. 2022 saw the first in person Community Tour hosted by Sabina in several years, as well as other community engagement activities. The team was very excited to be back in communities across the Kitikmeot Region and looks forward to ongoing in person engagements in the years ahead.

## Highlights and Challenges

In January of 2022, an accident occurred at the MLA during WIR construction which resulted in a Project personnel fatality. Sabina continues to mourn the loss of our colleague.

February saw the Company announce that it had completed final documentation with Orion Mine Finance (“Orion”) and Wheaton Precious Metals Corp. (“Wheaton”) with respect to a construction financing package to fund construction and development of the Goose Mine.

Over the open water season, Sabina successfully and safely completed its first ship to shore fuel off load, and a busy sealift season receiving Phase 1 of the Goose site camp complex (280 accommodation units), as well as critical materials and equipment to ensure a successful 2023 construction program.

**In September Sabina’s Board of Directors made a formal construction decision** for the Goose Mine. This decision was a milestone for Sabina to position the company to begin full construction activities in 2023. As part of these activities, Sabina ramped up its hiring processes increasing the from 30 employees in March to over 170 employees in December. Sabina has also seen steady growth in Inuit Project employment with ~80 Inuit personnel working at Project sites as of December 2022.

The same month, Sabina conducted its first in person Kitikmeot Community Information and Human Resources Tour from September 26-30. The team was successfully able to engage with 248 Kitikmeot residents, in 4 communities. Taloyoak could not be visited due to weather however, a rescheduled visit to Taloyoak is planned for February 2023. During the tour 27 resumes were accepted and a total of 53 interested employment candidates were able to speak to the Human Resources team directly.

With the reduction in COVID-19 measures across the Territory, Sabina was able to once again support community driven events and activities in Kitikmeot communities. Sabina supported community food banks, and daycares as well as sports teams and traditional activities through both in kind and financial contributions.

Throughout the course of 2022 COVID-19 continued to be a concern for Sabina. The Company continued predeparture testing as well as routine checkups for employees on site. We also maintained an isolation protocol should an employee show symptoms or get sick while at a Project site.

Inflation, global supply chain issues and fuel prices also continue as a challenge for Project development companies, with each being impacted by many national and international factors. As a Project entering the construction phase keeping costs in line with estimates is critical to overall Project success. Sabina continues to manage each of these risks well heading into 2023.

#### Environmental Monitoring Programs

Sabina has achieved several permitting milestones with the receipt of our Nunavut Impact Review Board Project Certificate, our Nunavut Water Board Type A Water License, and our Kitikmeot Inuit Association Framework Agreement. These permits contain terms and conditions as well as management plans, which ensure Sabina develops and operates the Back River Project in an environmentally and socially responsible manner.

In 2022 our environmental monitoring activities continued at the Back River Project in alignment with **Sabina’s Construction Phase and related activities. Environmental fieldwork targeted the disciplines of** Archaeology, Atmospherics, Hydrology, Fisheries, Vegetation, Geochemistry, Terrestrial and Marine Wildlife, Freshwater and Marine Water and Sediment Quality studies at the Back River Project. Our early construction activities in 2022 primarily consisted of earthworks, exploration drilling, and the advancement of an exploration ramp. Therefore, the factors influencing air quality mainly related to the emission of greenhouse gases (GHG) through fuel consumption and dust emissions. Dust mitigation and management measures are implemented to limit the amount generated at Back River, and we calculate our GHG emissions in accordance with the Environment and Climate Change (ECCC) GHG Emission

Reporting Program. Quarry and aggregate materials generated for the construction related earthworks are evaluated on an ongoing basis for geochemical suitability characteristics

Sabina is committed to ensuring wildlife remain safe, and the successful implementation **Project's** mitigation, monitoring, and adaptive management measures related to caribou. In 2022 and early 2023, Sabina collaborated with the Kitikmeot Inuit Association, and the Government of Nunavut, in a Caribou Technical Advisory Group providing technical **oversight of the Project's monitoring and seeking to test and evaluate the Project's measures for reducing disturbance to caribou. With the key activity of Sabina's** Winter Ice Road occurring in Q1 2023, heavy focus is being put on caribou monitoring; Sabina will have a dedicated Inuit transiting the road monitoring for caribou, whom will be supported by wildlife biologists performing behaviour monitoring of caribou in proximity to the Project, establishing remotely activated caribou monitoring cameras along the road route, completing drone monitoring, and ensuring all other wildlife mitigation measures are also in place such as limiting road bank heights, monitoring caribou **collar data for the herd's approach, and ensuring all operators are briefed on the Project's wildlife** requirements.

As **Sabina's shipping activities brought equipment and supplies** to our MLA Port Facility in Bathurst Inlet, Sabina was collecting marine water quality samples. In addition, each vessel transiting through the Arctic Passage and into Bathurst Inlet had onboard observers completing marine mammal and seabird monitoring programs. Archaeology field programs consisting of in-depth mapping of any new or revised development areas proposed outside of the existing footprint and/or previously surveyed areas were completed. Spring migration stand-watch surveys were completed to assess spring bird migration around the Project site, **and vegetation sampling was completed in the summertime along Sabina's winter ice** road route.

In addition, over the last few years Sabina has been working to conduct environmental baseline data collection and generate an impact assessment as we explore a Back River Project hybrid energy system aimed at offsetting diesel-based power generation with renewable wind energy. The project is now in permitting.

## Employment and Training

Sabina saw strong employment growth in 2022 going from 30 employees at the end of the first calendar quarter to almost 170 by the end of the year. Much of this employment growth was fueled by a new 5 person Human Resources team and implementation of a full scale recruitment plan for key positions across the Project leading into 2023. Over the course of 2022, 7213 resumes were received and reviewed with a total of ~500 interviews being conducted. Sabina also maintained a short term (3 rotation) retention rate of 87% over the course of the year.

Inuit employment also rose steadily throughout the year as COVID restrictions were lifted and Sabina could welcome back Nunavut residents to Project sites. As an example of the growth seen over the year as of June 2022, 32 Inuit were working at the Project and by December 2022 that number reached 80 Inuit Project personnel. This means that the Back River Project saw a 150% increase in the number of Inuit Project personnel working at Project sites in the seven month period between June and December 2022.

Cultural Awareness Training was also offered extensively across Project sites in 2022, with plans for more and enhanced Cultural Awareness Training in 2023. A total of 489 Project personnel attended training sessions virtually and in person. 14 in person sessions were held at the Goose and MLA sites over the course of 2022.

## The Year Ahead

2023 promises to be a successful year for Sabina as the Company proceeds with full scale construction of the Project. Monitoring programs are being enhanced to ensure that construction activities conform to **Sabina's licenses and authorizations.**

**The Company's efforts on Inuit hiring, retention, and training are also** set to increase in 2023. The Human Resources team will continue its focus on maximizing Inuit employment across the Project. Another community information and employment tour will be held in September 2023. Detailed work will also be advanced to design and develop a comprehensive Inuit training program for areas of the Project. A new Cultural Awareness Training video is also being developed to aid Sabina as it works to develop a culturally diverse workforce.

Construction activities will see the first phase of the Goose Site accommodations complex completed, work on the primary pond will commence, and concrete and steel will be erected to support camp, process plant, and ancillary infrastructure.

All of this will be accomplished as Sabina continues to enhance safety in all areas of work and strives to ensure the Project is developed in an environmentally and socially responsible manner.











## NIRB-kut Aipagutuagangat Onipkangit Atanguyaita Nainaghimayot

## Hivunighitjutait

Una Aipagutuagangat Onipkangit (“**una Onipkaak**”) piyagiakaktok una Havagiyaoyop Naonaipkutaat No. 007 tunihimayaat ukkua Nunavut Avatilikiyiitkut Katimayiit (“**NIRB-kut**”) tatvunga Sabina Gold & Silver Corp. (“**Sabina-kut**”) titigaghimayok hapkuninga atogiakaktaitnik tatvalo malikayagiakaktaitniklo iglulioknikut tatvalo aolatjutaitnik havagiyaoniaktonik tatvani Hanningayomi Uyagaghiokvighami. Una Onipkaak hatkitaohimayok tohakjitjutighanik kanok ukkua Sabina-kut havagivaliatjuk hapkua atogiakaktaitnik tatvalo malikayagiakaktaitniklo haffuminga Havagiyaoyop Naonaipkutaitnik tatvalo kanok hamna havagiyaoyok ayoghaotikakmangata.

## Hanningayomi Uyagaghiokvighak

The Hanningayomi Uyagaghiokvighak (“**una Uyagaghiokvighak**”) angiktaohimayok gold-nik uyagaghiokvighak nanminigiyaat ukkua Sabina Gold & Silver Corp. (“**Sabina-kut**”) tahamani kivatani Kitikmeoni Aviktoghimayomi Nunavut iloani (Takkulugu Titigak 1). Hamna nayogakaktok 400 kilometres (“**km**”) unghiktigiyomi niggjata oatani haffuma Ikaluktutiap, 95 km unghiktiigiyok hivugata kivatani haffuma Kingaop (Kingaok), tatvalo 520 km unghiktigiyok tunnuata kivatani Yalonaip, Nunatiimi. Una Uyagaghiokvighak nayogakaktok tahamaniitloak Ahiakmi Kuin Nunautani Tagiungani (Nunavut Immaita Maligaitni, Naunaipkuta 4).

Una Uyagaghiokvighami havagiyaat illaliothimayot hapkua malgoknik havagiyaolotik avatingnut okiomi hikkukut apkuhioklotik (“**WIR**”): Goose-mi (Titigak 3) tatvalo una Tagiokmi Tullaktakvighak Umitjat Uhiyakvighaata (MLA) (Titigak 4) nayogakaktok tahamani oatani hinnani tahaffuma niggiani Kingaok. Tamavyaita hapkua aipagotuagangat umitjat uhiyaklotik tatvalo uhilliktoiyotik tatvani tullaktakvighami atoklugo una MLA, tatvalo una WIR Ukkiumi Hikkukut Apkuhioktaoniaktok 160 km takkitigiyok avatingnut akyakatakniaktot tahapkununga havakviyotunot.

Una Uyagaghiokvighak pikaktok kaffinik uyagaghiokvighanik hapkuninga nunnap kangani uyagaghiokvighamik tatvalo nunaap ikkiangani tatva amihut hapkua gold-nik uyagaktakvighat nayogakaktot tatvani Goose-mi Uyagaghiokvikmi hapkua attiktaohimayot (Umwelt, Llama, tatvalo Goose Main).

Tatvani April 2018-mi, Sabina-kkut tatvalo ukkua Kitikmeot Inuit Katuyikatigit (KIA-kut) attilioghimayot 20-nik ukkiunik ikkayohiakutighanik tatvalo nunanik atoktaoyoghanik Angikatigighutik, ihaughakatigighutik piyunaotighanik tatvalo havagiyaoyoghnik tahamani nunaap kangani hapkua Inuit Nanminigiyaaita Nunaotaitni out rights (“**IOL**”) tatvani Hanningayomi Uyagaghiokvighami. Hapkua Angikutaohimayot pitjutaoniaktot hapkununga Inuinait Kitikmeotni Aviktoghimayomi maniliokutighanik tatvalo inulikinikut-pivalialikinikut ikayotighaitnik illaliothilugit hapkua, ilihakpaikutighanik, havaghanik, tohaghitjutighanik tatvunga Inuit Avatilikinikut Ukkaotjiyiovlotik Katimayigalaatniit (“**IEAC-kut**”), niovgotighanik nunalitni ihuakutighaitnik havagiyaoyot ihomagilogit ikkayotighaitnik hapkua aviktoghimiyomi Kitikmeoni maniliokutighaitnik nunalitni, avaghakatigilugit nanminikutighanik ukkua Sabina-kut, tatvalo imatot 1%-mik maniliokutighanik uyagaghioktiit nalvagiyaaita akkiitnik maniliokutaoyonik tatvunga angiktaohimayomi uyagaghiokvikmi Goose-mi Uyagaghiokvikmi.

## Nunaliitni Hulilokakutait

Sabina-kut tunihimayot havagiyomavlutjuk hamna Hanningayomi Uyagaghiokvighak nakuatot avatilikinikut tatvalo inulikinikut munagitiaklugo tatvalo ihomagitiaklugit hapkua Kitikmeoni Nunaliit ikayohiakuvlugit tatvanga Uyagaghiokvighap aolatjutaitniit. Sabina-kut aghugoktot pitiakatigiyomavlugit hapkua Kitikmeoni Inuinait nunaliitlo hapkua (Ikaluktutiak, Uhuktok, Kugluktuk, Kugaaruk, Taloyoak, Kingaok, Umingmaktoklo), tatvalo hapkua allaat katimayikataoyot. Sabina-kut Nunakakaktonik tatvalo Ukkiuktaktokmiutnik havaktigiyait hivuliktot hapkuninga nunaliitni hulilokakutighanik kivgaktoghugit ukkua nanminikaktot tatvalo havakpiaktot tatvani 2022-mi kaffinik ukkiunik hulingitkaghutik hamna KALLAKJUAJNIK19 hiamaghimatitlugo. 2022-mi hivulikpamik uppautingaghimayot Nunaliitnun Pullagiaktoghutik ukkua Sabina-kut, tatvalo pikahiotivlugit hapkuaa ahiagot nunaliitni huliaghakaghutik. Ukkua havaktigiyait koviahukpiaktot uttighimagamik pullagiaktoghimavlotik nunaliitnun Kitikmeoni tatvalo nigioktot huli pullagiaktoghimaagomavlotik nunaliitnun hivunighami ukkiut kaiyuni.

## Takkuminaktot tatvalo Ayughaotaovaktot

tatvani January 2022-mi, pinnikloktokaghimayot tahamani MLA-mi Hikkumi Apkuhioktitlugit WIR tatvuna una Uyagaghiokvikmi havaktot huikhimayot. Sabina-kut huli annuaghokpaktot huiktokaghimangmat havakatigiyaptingnik.

February-mi ukkua nanminikaktot okaghimayot innighihimaliktot kingolikpamik titigaghugo **onipkalioktamingnik pikatigivlugit ukkua Orion Mine Finance (“Orion-kut”)** tatvalo ukkua **Wheaton Precious Metals Corp. (“Wheaton-kut”)** pitjutigivlugit hapkua iglulioknikut manilikitjutait igluliokutighait tatvalo havaghanot atoktaghat tatvani Goose-mi Uyagaghiokvikmi.

Aoyami hikkukagoiktitlugo, Sabina-kut atkunaghimayot tatvalo kayangnaitomik innighimayot havagiyamingnik hivulikpagivlugo umiakmit uhukjuunik tughuakut immayaghutjuk nunamut, tatvalo havakpiaghotik umiakut uhiyaohimayonik uhiyakpaktot Phase 1-mik haffuma Goose-mi iglukpaghainik (280-nik havaktot hinniktavighaitnik), hapkuningalo tammayaghaitnik hannatjutighaitniklo atoktaoyoghanik tatvani 2023-mi iglukpaliokutighaitnik.

Tatvani Saptaipami Sabina-kut Katimayit igluliokutighanik ihomalioghimayot uvani Goose-mi Uyagaghiokvighami. Hamna ihomaliokutighimayot namaknighaoyok ukkua Sabina-kut uyagaghioktiit tamatiklogit havaghat iglulionginagalakiyot tatvani 2023-mi. Hapkua havagivaliavlogit, ukkua Sabina-kut amigaikpaliahimayait hapkua havaktoghat tatvanga 30-nik havaktikaligaghutik tatvani March-mi tatvunga avatkutugit 170-nik havaktikalighutik tatvani Disaipami. Sabina-kut huli amigaikpaliahimaaktot havaktigiyait Inuinait tatvani Uyagaghiokvighami tatva -80-nik Inuinaknik havaktikalighutik tatvani Uyagaghiokvighap havakviitni tatvani Disaipa 2022-mi.

Tatvani huli tatkihioitimi, Sabina-kut hivulikpamik uppautivlutik kitikmeoni Nunaliitnun Tohaktitaktoghimayot tatvalo Havaktighaghigutik Pullagiaghimayot Sapaipata 26-min 30-mut. Ukkua havaktiit akunaghimayot ukakatikaghimavlotik 248-nik Kitikmeoni Inuinaknik, hitamani nunaliitni. Taloyoak uppaktaongitok hillaughimangmat kihiani, ihuaghaghimayaat tatva uppautiniaghimayot Talukjuanut tatvani Fapyuali 2023-mi. Uppautihimatitlugit nunaliitnun tatva 27-nik havagomayot naonapkutaitnik angiktaohimayot tatvalo kititlogit 53-guyut havagomayot naonaiyaktaohimayot ukakatikaghutik hapkuninga Havaktolikiyiitkunik.

Piiktaovaliatitlogit hapkua KALLAKJUAJNIK-19 Hiamaghimaninga tahamani Nunavumi ahinnilo, ukkua Sabina-kut taitai ikkayokpalialikmiyot nunaliitni hulilokakutaitnik tahamani Kitikmeot nunaliitni. Sabina-kut ikkayoghimaliktot nunaliitni nikkaitkovioyonik, tatvalo nutakikiviit hapkualo ullapkiavaktot

illagighutik tatvalo iliitkuhiktotinih huliokakutinih ikkayokpaghuta tatvalo maniktutighaitnik aittoikataguta.

Tatvani 2022-mi hamna KALLAKJUAKNIK-19 huli ihomalotigihimayaat ukkua Sabina-kut. Ukkua Uyagaghioktiit huli havagiaktogahoat aolakniahaaktitlogit uktakpagait tatvalo tikitagangata havakvikmingnut havaktot uktaktaovaktot. Tatvalo ihoaghitihimayavut hapkua havaktot annialikalaktokaknikat una havaktok anniaktok innuilakmiitagiakaktok namaghitikluni tatvani Uyagaghiokviop havakviatni.

Akkitokpalianingit hapkua hunavaluit , hilaakjuami niovikvioyot ayoghaotait tatvalo uhokjuat akkitokpaliatitlogit ayoghaotaovaliktot Uyagaghioktiitniit, tamaita hapkua ikpigiyakaktot amihuniit kanatami hilaakjuamilu pitjutaoyonik. Tatva uvagut Uyagaghiolihaaktuvluta iglukpaliokpaliatitluta hapkua hunavaluit akkitogaloaktitlogit amigiyagiakaktavut hamna Uyagaghiokvighak natkunakpalianiaknikat. Sabina-kut huli munagitiaktait hapkua kayangnaktot atolikpaliatitlugo ukkiuk 2023-mi.

#### Avatilikinikut Takkuginikmik Havagiyait

Sabina-kut toniyaohimaliktok kaffinik laisighaktakutighanik tatvanga Nunavumi Avatilikiyiitkut Katimayiitniit Uyagaghiokvighaita Naunaipkutaitnik, pihimaliktavutlu ukkua Nunavumi Imalikiyiitkut Katimayiit-kuniit Titigak A Immap Laisighait, tatvalo una Kitikmeot Inuit Katuyikatigit-kuniit Havagiyaiaktot Angikutanih. Hapkua laisighait pitjutikaktot atogaghanik tatvalo malikayaghanik tatvalo hapkuninga ataniktotighaita paknaiyaotaitnik, malikayagiakaktait ukkua Sabina-kut havagiyaitnik tatvalo aolatjutighanik tatvani Hanningayumi Uyagaghiokvighaatni nakuatot munagitiaktlogit avatait tatvalo inulikinikut pitiaktutighait.

tatvani 2022-mi hapkua avatilikinikut takkugitjutait havagiyaoihimaaktot tatvani Hanningayomi Uyagaghiokvighami nalaomatiagahoaghugit ukkua Sabina-kut Iglulioktitluga Havagiyait tatvalo havaghiomaaktitlogit tatvani. Avatilikinikut havagiyaoyot illaliothimayot havagiyaitnik hapkua Innitokliitnik, Hillalikinikut, Immalikinikut, Ikalulikinikut, Nautialikinikut, Nunalikinikut, Nunamiutanik tatvalo Tagiokmiotanih Angutighanik, Tattiniit tatvalo Tagiokmiit Immaknik tatvalo Hallumailgunik Katighoihimayonik naonaiyainik tahamani Hanningayomi Uyagaghiokvighami. Havalihaghuta tatvani 2022-mi iglioghimaaktitluta havagiloaghimayavut hapkua nunamik havakaghuta, ikkutaknik, tatvalo havagihimaghutigo hamna tungavighak. taimaititlugo, hapkua pitjutaoyot hilami puyuktot halumailgonik (GHG) ingnikutikaktonik uhuukjuaktoktonik tatvalo hiokamiit puyuknik. Hiokamik amiginik tatvalo munaginahuaknik havagiyaoaktot tatva hiamakpalangitangani tatvani Hanningayomi, tatvalo kitikataktavut hapkua GHG puuyuit annianigit malikavlugit ukkua Avatilikiyiitkut tatvalo Hilaap Alangukpalianinganik Kanatami (ECCC-kut) GHG-nik Puuyuknik Onipkaliokutaitnik Havagiyaoyonik. Uyagaktaknik tatvalo algaknik nunainakmiit iglulioktitluga takkukataktot tamaat nunaap natkani hallumailgokagiagha ullugianaktonik.

Sabina-kut tunnihimayot munagitiagahuaghugit hapkua omayot angutighatlo kayangitiagahuaghugit, tatvalo atkunagahoaghugit hapkua ihuaghaotighait Uyagaghiokvighami, takkugikataknioklo, tatvalo munagitjutighaitnik havagiyaoiaktonik tuktuut mighagot. tatvani 2022-mi tatvalo atolihaktitluga 2023-mi, Sabina-kut havakatigiyhimayait ukkua Kitikmeot Inuit Katuyikatigit, tatvalo ukkua Nunavut Kavamatkut, aolagotihimavlotik Tuktuut Mighagot Ukaotjiyiovlotik Katimayiitnik takkugitjutaitnik ukkua Uyagaghiokvighami ihivgioghikataktitlogit tatvalo amigikataknioktatvani Uyagaghiokvighami koingikuvalangitangita hapkua tuktuut. Tahamani havakakloakniaktitlogit Sabina-kut Ukkiumi Hikkukut Apkuhiokniaktitlogit tatvuna Q1 2023-mi, ihomagiyaoaktot tatva tuktuutnik takkukikatagomavlogit; Sabina-kut ayungitonik Inuinaknik havaktikakniaktot angutighanik takkugikataktoghanik tahamani ukkiumi hikkumi apkuhioktiitlogit tatvalo ikkayokikakniaktot anguhikiyioyoniit takkugikatakniaktot tuktuut

illiitkuhiitnik kanugitaghaita kaningani tahaffuma Uyagaghiokvighap, illiigainiakmiyot kungialioikutinik tuktuitnik takkugitjutighanik tahamani apkuhioktaoniaktomi, attukataklotiklo hapkuninga mikkiyonik tingmiyunngaktonik inukangitonik kungialioikutinik, tatvalo havagiyakakniakmiyot hapkuninga angutighanik takkugitjutighanik hapkualo apkuhioktaohimayot hannigangit kingikpalangitangita, takkukataklogit hapkua tuktuit kunguhikmiktaohimayot nallaotikaktonik kanniklivaliyaghaita hapkua tuktuit unghiktomiit ingilgatitlogit, tatvalo tamaita hapkua havaktot angiyoni aghalutitoktot kaoyimayagiakakmata tuhaktitaokatagiakaktot tatvani Uyagaghiokvighami angutighat mighagot malikayaghaitnik.

Ukkua Sabina-kut umiakut tammayaghaitnik uhiyaokataktitlogit tatvunga MLA-mi Tullaktakviatnut Kingaokmi, Sabina-kut katighoikatakaptot tagiop imanganik takkuktaoyughanik hallumailgokagiagha. illialiotilugo, tamaita hapkua umiitjat ingilgakataktot tatvunga umiitjat ingilgayangagot Ukkiuktamtumi Umiitjat Ingilgayangagot tatvunaakataktotlo Kingaokut havaktikakaptot takkugiyoyonik tagiokmiotanik angutighanik tatvalo tingianik takkugivaghutik havakakmiyot. Innitoklinnik havagiyavangmiyot nunaoyaliokpaghutik naonaitiaghimayonik nutanik uvalunin nutanguktiktaohimayonik havakvioniaktonik toghiktotikaghutik hilaatani haffuma uyagavioniaktup tatvalo/uvalunin kinguani naonaiyaktahimayot inniktaohimaliktot. Upingaghami tikkitpaliatitlogit takkuktaokatakmiyot inniktaohimayot naonaiyaghugit hapkua upingaghami tingmitjat tikkitagangata tahamunga Uyagaghiokvighamut havakviyounot, tatvalo naotianik naunaiyavaghutik auyami tahamani ukkua Sabina-kut ukkiumi appuhiokvighimayatni.

Illialiotilugit, kaffingoktot ukkiut ukkua Sabina-kut havakaliktot avatilikinikut katighiovaghutik naonaiyaotinik tatvalo kanogiliyokaghimakpat ikpigiyahimayonik naonaiyaghugit tatva kimilgogivaliatitlota tatvani Hanningayomi Uyagaghiokvighami malgotoktonik kullikutinik algoyaktotighanik atogoikpaliyaptingnik uhukjuaktoktonik ingnikutinik atokpaliatitlogit hapkua angugitoktot kulliktotighat. Una Uyagaghiokvighak hadja laisighanik uttakiliktot.

Havagaghioknikut tatvalo Ilihakpalikutighat

Sabina-kut natkunaotikaghimayot havaktiit amigaikpaliahimangmata tatvani 2022-mi havaktikalihaghutik 30-nik hivulikpamik tatvunga 170-nik ukkiuk nunguliktitlugo. Hapkua havaktot amigaikpaliatitlogit tatva nutaat talimat havaktiit Havaktolikiyiitkuni tatvalo ihuaghaivaliatitlogit havaktighaghiokutighanik paknaiyakpaliatitlogit ataniit havaghaitnik tatvani Uyagaghiokvighamik 2023-mi. tatvani ukkiumi 2022-mi, 7213-nik titikanik havagaghioktoniit pihimaliktot tatvalo ihivgioghimalighutik kititogit ima -500-nik havagomayonik appighuivaktot. Sabina-kut huli ihuaghitihimayait hapkua havaktot naitonik himaotigiikataktoghat (Pingahunik pingiaknik) tatvalo havaghimaakutaitnik naonaipkutikaktot 87% aolaganginaktot tatvani ukkiumi.

Inuit havagaghioktot amigaikpaliyot tatvani ukkiumi atoktitlugo hamna KALLAKJUAKNIK 19 himakpalianinga piikpaliatitlugo tatvuna ukkua Sabina-kut havaktinik Nunavumiutait uttikpaliatitlugit tatvunga Uyagaghiokvikmut. Uktutigilugo hamna naovalianinga tatvani ukkiumi tatvananin June 2022-mi, 32-nik Inuinaknik havaktikalihaghimayot tatvani Uyagaghiokvighami tatvalo Desaiipa 2022-mi una nahaotaat angikliyomighimayot ima 80-nik Inuinaknik Uyagaghiokvighami havaktikaliktot. Ima tukikaktot tatvani Hanningayomi Uyagaghiokvighami tautoktugo ima 150 % aglihimayok nahaota Inuinait havaktot tatvani Uyagaghiokvighap havakviitni 7-nik tatkihioitit atoktitlogit akungani June-mit Desaiipamut 2022-mi.

Iliitkohiktotinik Kaoyimavaliotighaitnik Ilihaktitaohimayot havaktot hapkunani Uyagaghiokvighat havakviitni 2022-mi, paknaiपालiangmiyot huli taitait Iliitkuhiktotinik Kaoyimavalioktighaitnik Ilihainik tatvani 2023-mi. Kititlugit hapkua 489-guyut Uyagaghiokvighami havaktot ilihaktitaohimaliktot kagitaoyakut tatvalo havakviitni. 14-nik havakviyoni ilihaimaliktot tatvani Goose-mi MLA-milo havakviitni tatvani ukkiumi atoktitlugo 2022-mi.

## Tatvani Ukkiumi Hivunighani

2023-mi huli ihomagiyat akunakniakmiyoghaoyot ukkua Sabina-kut nanminikaktot havaakaknialiktot iglulioghimaaklotik tatvani Uyagaghiokvighami. Takkugitjutinik havagiyaovaliayot hapkuninga iglulioktot havagiyaitnik malikayaovagiaghaita ukkua Sabina-kut laisighagiyait tatvalo ataniktotaitnik.

Ukkua Nanminikaktot aghokutigiyat Inuinaknik havaktikagomavlotik, havaghimaakovlogit, tatvalo ilihakpalikovlogit taima amigaikpaliagaliniakmiyot tatvani 2023-mi. Ukkua Havaktolikiyiit huli havagihimaakniaktat Inuinaknik havaktikakpaligomavlotik tahamani Uyagaghiokvikmi. Taitai huli nunaliitnun uppaotilotik tohaktiitikatakniaktot havaghaghiogomayonik tatvani Saptaiapa 2023-mi. Naonaitiaghimayonik havakakniakmiyot hapkuninga ihuaghailotik Inuinait ilihaotighaitnik hapkuninga havaghanik tatvani Uyagaghiokvighak. Una nutaak Iliitkuhilikinikut Kaoyivaliotighaitnik Ilihaitjutighak kungialioktaoniaktok ikkayotihaat ukkua Sabina-kut ihuaghaivalianiaktitlogit iliitkuhiktotighanik tatvani uyagaghiokvikmi allatkinik havaktikakpaliatitlogit.

Iglulioknikut havagiyaoyot hivulikpanguniaktot tatvani Goose-mi Uyagaghiokvioniaktomi hinniktakviit inniktaolotik, havagiffakniakmiyaat una tahikmi havagiyaoyok, tatvalo hiitiyonik maaklokaloktunik tatvalo haviknik napaktiginiaktot tungaviolotiklo iglukpakakviatni, uyagaghiokvikmi uyakanik hannavik, tatvalo hapkua hallumaghaiyiit, kukiovikmi havaktot.

Tamaita hapkua havagiyaoyot inniktaoniaktot ukkua Sabina-kut huli havagihimaaklotjuk kayagitiaklogitlo tamaita havakviyot tatvalo aghugotigihimaaklutjuk hamna Uyagaghiokvighak hannayaoluni kayagitiaklugo hamna avatilikinik tatvalo inulikinikut munagitiaklugit havagiyatik nakuatot.

# BACK RIVER PROJECT

## 2022 Annual Report

### Table of Contents

---

Table of Contents .....	xvii
List of Figures .....	xix
List of Tables .....	xix
List of Appendices .....	xix
Acronyms .....	xxi
1. Introduction .....	1-1
1.1 Project Overview .....	1-1
1.2 Regulatory Context .....	1-1
1.3 Report Structure .....	1-3
2. Stakeholder Engagement Activities .....	2-1
2.1 Stakeholder Engagement Overview .....	2-1
2.2 Community Engagement .....	2-1
2.3 Engagement with the KIA .....	2-1
2.4 Engagement with Government and Regulatory Agencies .....	2-1
2.5 Engagement with Working Groups .....	2-1
2.5.1 Kitikmeot Socio-Economic Monitoring Committee & Back River Socio-Economic Monitoring Working Group .....	2-1
2.5.2 Inuit Environmental Advisory Committee .....	2-1
2.5.3 Caribou Technical Advisory Group .....	2-2
2.6 Next Steps .....	2-2
3. Operations Overview .....	3-1
3.1 2022 Highlights and Challenges .....	3-1
3.1.1 Permitting .....	3-1
3.1.2 Engineering .....	3-2
3.1.3 Exploration .....	3-2
3.1.4 Employment .....	3-2
3.1.5 Training .....	3-2
3.1.6 Contracting .....	3-3
3.2 Next Steps .....	3-3
4. Performance on Project Certificate Terms and Conditions .....	4-1
4.1 Approach to Performance Reporting .....	4-1

4.2	Methodology and Criteria .....	4-1
4.3	Summary of 2022 Compliance with Terms and Conditions.....	4-2
4.4	Regulatory Compliance .....	4-3
4.4.1	Agency Inspections and Site Visits .....	4-3
4.4.2	Unauthorized Discharges and Spills.....	4-4
4.4.3	Water Licence Compliance.....	4-5
4.5	Performance on Ecosystemic Terms and Conditions.....	4-6
4.5.1	Air Quality (PC TCs 1 through 5) .....	4-6
4.5.2	Climate and Meteorology (PC TCs 6 through 8).....	4-16
4.5.3	Noise and Vibration (PC TCs 9 through 10) .....	4-27
4.5.4	Terrestrial Environment (PC TCs 11 through 15) .....	4-30
4.5.5	Geological Features, Surficial and Bedrock Geology, and Geochemistry (PC TCs 16 through 18) .....	4-40
4.5.6	Hydrological Features and Hydrogeology (PC TCs 19 through 20) .....	4-46
4.5.7	Groundwater and Surface Water Quality (PC TCs 21 through 22) .....	4-50
4.5.8	Freshwater Aquatic Environment (PC TCs 23 through 31).....	4-54
4.5.9	Vegetation (PC TCs 32 through 36) .....	4-72
4.5.10	Terrestrial Wildlife and Wildlife Habitat (PC TCs 37 through 52).....	4-83
4.5.11	Birds and Bird Habitat (PC TCs 53 through 61).....	4-112
4.5.12	Marine Environment (PC TC 62) .....	4-129
4.5.13	Marine Wildlife (PC TCs 63 through 65).....	4-131
4.6	Performance on Socio-Economic Terms and Conditions.....	4-137
4.6.1	Economic Development and Opportunities (PC TCs 66 through 70) .....	4-137
4.6.2	Employment (PC TCs 71 through 72) .....	4-144
4.6.3	Education and Training (PC TCs 73 through 76) .....	4-147
4.6.4	Population Demographics (PC TC 77).....	4-155
4.6.5	Traditional Activity and Knowledge (PC TCs 78 through 80).....	4-157
4.6.6	Non-Traditional Land Use and Resource Use (PC TC 81) .....	4-161
4.6.7	Heritage Resources (PC TC 82) .....	4-162
4.6.8	Health and Wellbeing (PC TCs 83 through 85) .....	4-164
4.6.9	Human Health and Safety (PC TCs 86 through 88) .....	4-170
4.7	Performance on Other Terms and Conditions.....	4-173
4.7.1	Accidents and Malfunctions (PC TCs 89 through 94) .....	4-173
Appendix A. Figures.....		4-1
Appendix B. 2022 Annual Geotechnical Inspection Report .....		4-1
Appendix C. Aquatic Baseline Report .....		4-2
Appendix D. <b>Sabina’s Back River Blasting Plan for Plant Site and Portal Decline</b> .....		4-3
Appendix E. Vegetation Monitoring Program.....		4-4
Appendix F. Pre-Shipment Equipment Cleaning.....		4-5

Appendix G. 2022 Pre-Construction Wildlife Mitigation and Monitoring Plan ..... 4-6

Appendix H. 2022 Socio-Economic Monitoring Report..... 4-7

Appendix I. Oil Pollution Emergency Plan..... 4-8

Appendix J. Marine Monitoring Report..... 4-9

List of Figures

FIGURE	PAGE
Figure 2-1: Number of Kitikmeot Region Community Meetings Conducted for the Project (as of December 31, 2022) .....	2-2
Figure 4.5.9-1. Back River Project Footprint (2022) .....	4-75

List of Tables

TABLE	PAGE
Table 1.2-1. Permit Registry .....	1-2
Table 2.1. 2022 Community Engagement Log .....	2-2
Table 2.2. 2022 Community Feedback.....	2-1
Table 4.2-1. Layout of PC Condition Summary Sheets .....	4-2
Table 4.3-1. Status of Compliance Terminology and Criteria.....	4-3
Table 4.4-1. Unauthorized Discharges in 2022 .....	4-5

List of Appendices

Appendix A. Figures

Appendix B. 2022 Annual Geotechnical Investigation Report

Appendix C. Aquatic Baseline Summary Report

Appendix D. Blasting Plan

Appendix E. 2022 Vegetation Monitoring Report

Appendix F. Pre-shipment Equipment Cleaning

Appendix G. 2022 Pre-Construction Wildlife Mitigation and Monitoring Program Report

Appendix H. 2022 Socio-Economic Monitoring Report

Appendix I. Oil Pollution Emergency Plan

Appendix J. Marine Monitoring Report

## Acronyms

---

AQMMP	Air Quality Monitoring and Management Plan
CIRNAC	Crown-Indigenous Relations and Northern Affairs Canada
CTAG	Caribou Technical Advisory Group
DFO	Fisheries and Oceans Canada
ECCC	Environment and Climate Change Canada
EMS	Environmental Management System
FEIS	Final Environmental Impact Statement
GNDOE	Government of Nunavut Department of Environment
GNWT	Government of Northwest Territories
IEAC	Inuit Environmental Advisory Committee
IIBA	Inuit Impact Benefit Agreement
INAC	Indigenous and Northern Affairs Canada
IOL	Inuit Owned Land
KIA	Kitikmeot Inuit Association
KSEMC	Kitikmeot Socio-Economic Monitoring Committee
MLA	Marine Laydown Area
NIRB	Nunavut Impact Review Board
NWB	Nunavut Water Board
Project	Back River Project
PC	Project Certificate No. 007
Report	NIRB Annual Report
Sabina	Sabina Gold & Silver Corp.
SEMWG	Socio-Economic Monitoring Working Group
TC	Terms and Conditions
TOR	Terms of Reference
TSF	Tailings Storage Facility
WIR	Winter Ice Road
WMMPP	Wildlife Mitigation and Monitoring Program Plan



# 1. Introduction

---

## 1.1 PROJECT OVERVIEW

The Back River Project (the Project) is a gold project owned by Sabina Gold & Silver Corp. (Sabina) within the West Kitikmeot region of southwestern Nunavut (Figure 1). It is situated approximately 400 kilometres (km) southwest of Cambridge Bay, 95 km southeast of the southern end of Bathurst Inlet (Kingaok), and 520 km northeast of Yellowknife, Northwest Territories. The Project is located predominantly within the Queen Maud Gulf Watershed (Nunavut Water Regulations, Schedule 4).

The Project is comprised of two main areas with interconnecting winter ice roads (WIR): Goose Property and the Marine Laydown Area (MLA) situated along the western shore of southern Bathurst Inlet. The majority of annual resupply will be completed using the MLA, and an approximately 160 km long WIR will interconnect these sites.

## 1.2 REGULATORY CONTEXT

Sabina must obtain and comply with requirements of various authorities including, land use planning, environmental assessment, Inuit water rights, and any other Federal, Territorial act, regulation or guideline applicable to the Project.

The Goose Property, WIR, and MLA are located predominately on Inuit Owned Land (IOL), with some infrastructure on Crown land (i.e., Tailings Storage Facility [TSF]). The lead authorizing agencies for the Project are the Nunavut Impact Review Board (NIRB), Nunavut Water Board (NWB), Kitikmeot Inuit Association (KIA), and Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC). The Project requires the authorization and consent for development, construction, operations, and closure of the Mine and is related facilities. Approvals are in the form of a land use leases, production lease, and Inuit Impact Benefit Agreement (IIBA), water compensation agreements, and other forms or approvals and authorizations. On December 6, 2017, the Minister of Indigenous and Northern Affairs Canada, on behalf of the five responsible federal Ministers, **accepted the NIRB's recommendation for the Project to proceed** to the regulatory and licensing phase. Following the completion of a Project Certificate (PC) workshop held on December 14, 2017 the NIRB issued the final PC pursuant to Section 12.5.12 of Article 12 of the Nunavut Agreement. The Project received its final PC on December 19, 2017.

Sabina subsequently finalized an IIBA with the KIA, with an effective date of June 1, 2018. Furthermore, **Sabina received the Project's Type A Water Licence from the NWB** on November 14, 2018. In June of 2020, Sabina submitted proposed modifications to the Project to the Nunavut Planning Commission, the NIRB and the NWB outlining proposed modifications to the Project<sup>1</sup>. On 9 June 2020<sup>2</sup>, the Nunavut Planning Commission forwarded the 2020 Modification Package to the NIRB for assessment. The NIRB subsequently determined that the Back River Project 2020 Modification Package does not constitute a significant modification that requires further assessment by the NIRB<sup>3</sup> to identify and assess potential environmental and social effects resulting from the Package. In addition, the NIRB concluded that the Package submitted is consistent with the activities identified by Sabina under the NIRB Project Certificate

---

<sup>1</sup> Sabina 2020. Back River Project 2020 Modification Package. June 2020.

<sup>2</sup> NPC's letter, "NPC file # 149378 [Back River 2020 Modification Package]" (P. Scholz to M. Pickard et. al, dated June 9, 2020)

<sup>3</sup> NIRB's letter, "Direction Regarding the "Back River Project 2020 Modification Package" submitted by Sabina Gold & Silver Corp. in relation to the Back River Project (K. Kaluraq to M. Pickard, dated August 11, 2020, NIRB File No. 12MN036)

No. 007. Sabina subsequently provided an application for amendment of **the Project's Type A Water Licence** to the NWB and is currently in the amendment process.

A full list of Project permits and authorizations and their current status are provided in Table 1.2-1.

Table 1.2-1. Permit Registry

Authorization No.	Expiry (yr-mo-day)	Agency	Description
PC No. 007	N/A	NIRB	Back River Project NIRB Project Certificate
2AM-BRP1831	2031-12-31	NWB	Back River Type A Water License
N/A	2038-06-31	KIA	Inuit Impact and Benefit Agreement
KTCL-18D001	2038-04-20	KIA	Commercial Lease - Goose
KTCL-18D002	2038-04-20	KIA	Commercial Lease - MLA
KTCL-18D003	2038-04-20	KIA	Commercial Lease - Winter Road
KTAEL-18C001	2023-04-20	KIA	Advanced Exploration Lease - George
LUL-XX	5 years from Effective Date	KIA	Land Use Licence as per KIA Framework Agreement
KTL312C004	2022-10-16	KIA	Wishbone-Malley Exploration Activities (renewal ongoing)
N2018F0021	2023-10-29	CIRNAC	CAT Train Beechy Lake Area
N2017F0016	2024-07-20	CIRNAC	CAT Train connecting Bathurst Inlet - Back River Project
N2016C0011	2023-10-26	CIRNAC	Back River Exploration Activities
N2018F0017	2023-10-11	CIRNAC	Winter Ice Road Back River Project
Lease No. 76J/12-7-2	2048-08-14	CIRNAC	Marine environment land lease - adjacent to MLA
Lease No. 76J/9-1-2	2048-04-26	CIRNAC	Goose Lake Tailings Storage Facility
2BE-GOO2028	2028-02-18	NWB	Goose Water Licence (Type B)
2BE-GEO2025	2025-05-29	NWB	George Water Licence (Type B)
2BE-MLL1722	2022-06-29	NWB	Wishbone-Malley Water Licence (Type B) (renewal ongoing)
2BC-BRP1819	2019-04-30	NWB	Type B Development Works Water Licence (Replaced by Type A)
12-HCAA-CA7-00007	2031-12-31	DFO	<i>Fisheries Act</i> Authorization - Back River Project
18-HCAA-00185	N/A	DFO	Letter of Authorization - Gander Culvert
18-HCAA-00971	N/A	DFO	Letter of Authorization - MLA
18-HCAA-01626	N/A	DFO	Letter of Authorization - Winter Ice Road
12-HCAA-CA7-00007	N/A	DFO	Letter of Authorization - Rascal Stream Diversion
04 009 19R-M	2022-12-31f	NRI	Back River Project Scientific Research License (renewal ongoing)
2012-600767-002	N/A	TC	<i>Navigation Protection Act</i> - MLA Discharge Pipeline Authorization
2012-600767-003	N/A	TC	<i>Navigation Protection Act</i> - MLA Intake Pipeline Authorization
2012-600767-006	N/A	TC	<i>Navigation Protection Act</i> - MLA Lightering Barge Authorization
12-HCAA-CA7-00007	N/A	ECCC	Amendment to Metal and Diamond Mining Effluent Regulations - Schedule 2

### 1.3 REPORT STRUCTURE

**Sabina's Annual NIRB Report** is composed of the following sections:

- Section 1: provides an overview of the Project and the regulatory context in which this Report is being submitted.
- Section 2: highlights key activities and consultation efforts conducted with stakeholders for the Project, including the Kitikmeot communities the KIA, relevant regulatory agencies and the PC mandated Project working groups (Inuit Environmental Advisory Committee [IEAC] and the Back River Socio-Economic Monitoring Working Group [SEMWG]).
- Section 3: **describes the Project's operational context in 2020**, provides an overview of operational successes, and discusses challenges Sabina faced with respect to meeting PC Terms and Conditions in 2020.
- Section 4: **includes a 'summary sheet' detailing compliance** for each of the 94 PC Conditions. The summary sheets provide an overview of the work completed towards meeting the requirements of all the PC conditions, and a status of compliance is assigned. This section also describes **Sabina's general approach to performance reporting** as well as regulatory compliance.



## 2. Stakeholder Engagement Activities

---

### 2.1 STAKEHOLDER ENGAGEMENT OVERVIEW

Sabina is committed to acting as a steward of the environment and promoting sustainable development in Kitikmeot Region communities. To fulfill this responsibility Sabina has established management plans that commit the Company to open communication with employees, contractors, local stakeholders, governments, and the public on Project activities, environmental and social programs, and performance. Sabina has also established a Community Involvement Plan to outline how the Company conducts its engagement activities. Sabina continues to be a member of and participates in the Kitikmeot Socio-Economic Monitoring Committee (KSEMC) as well as the Back River Socio-Economic Monitoring Working Group (SEMWG). Sabina is additionally a member of the Caribou Technical Advisory Group (CTAG) and will be creating an Inuit Environmental Advisory Committee (IEAC) with KIA in the future.

With the lifting of many COVID-19 related restrictions, the Company has begun to re-engage with Project stakeholders in face-to-face meetings in Nunavut and elsewhere.

### 2.2 COMMUNITY ENGAGEMENT

Sabina continually strives for open and meaningful engagement with Kitikmeot Region residents, communities (Cambridge Bay, Gjoa Haven, Kugluktuk, Kugaaruk, Taloyoak, and Bathurst Inlet/Bay Chimo), and stakeholders to help ensure the Project is built and operated in an environmentally and socially responsible manner. Sabina remains committed to ongoing engagement throughout the life of the Project to ensure support for it continues well into the future.

Community engagement methods employed by Sabina are numerous and have included but are not limited to the following: presenting Project-related information in public and stakeholder meetings; community newsletters; the establishment of community relations offices staffed by Inuit employees in Cambridge Bay and Kugluktuk; and a community Donations Policy focused on supporting initiatives pertaining to **‘education and training’** and **‘community wellness and traditional lifestyles’** in the Kitikmeot Region, with a particular emphasis on women and youth.

Since 2012, Sabina has participated in close to 300 meetings with community members in the north, not including other forms of engagement (e.g. written correspondence, meetings with non-community stakeholders). Of these meetings, nearly 240 have been in the Kitikmeot Region (Figure 2-1).

Figure 2-1: Number of Kitikmeot Region Community Meetings Conducted for the Project (as of December 31, 2022)

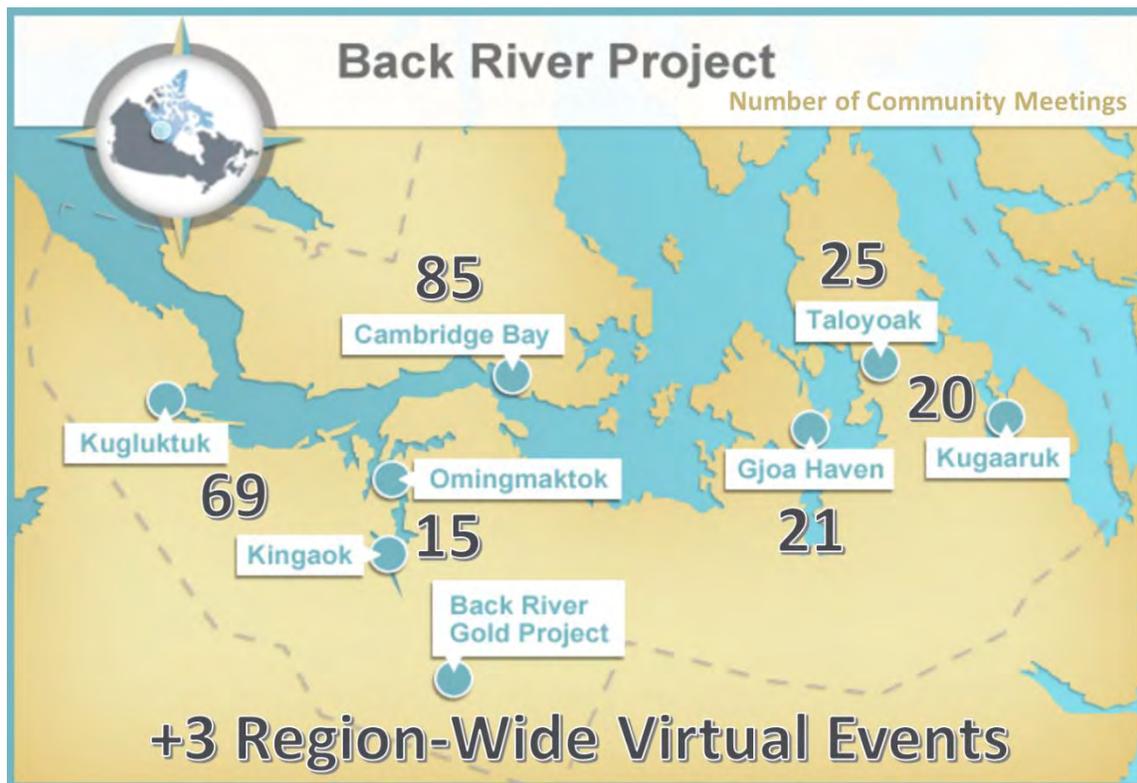


Table 2.1 provides a record of Sabina’s 2022 community engagement activities. With the relaxing of COVID-19 travel restrictions, Sabina’s community engagement program became more active again in 2022. A mix of virtual and in-person engagement activities were held with Project stakeholders across the north. In addition, Sabina’s inaugural Inuit Personnel Survey was completed at the Goose and MLA sites in November and December 2022.

Table 2.1. 2022 Community Engagement Log

2022				
Date	Community	Organization / Individual(s)	Type of Engagement	Description
2022-02-23	Multi-Community (see 'Description')	Various Stakeholders	Correspondence	Invitation to participate in Sabina's March 2022 virtual community tour / overview of the proposed Back River Renewable Energy Centre. Sent to Kitikmeot Region Hamlets and HTOs, in addition to KIA.
2022-02-23	Multi-Community (see 'Description')	Various Stakeholders	Other (see 'Description')	Invitation to participate in Sabina's March 2022 virtual community tour. Issued over social media channels (e.g. Kitikmeot community Facebook pages, Sabina's Facebook page), Kitikmeot community radio stations, and Nunatsiq News print/digital editions.

Table 2.1. 2022 Community Engagement Log

2022				
Date	Community	Organization / Individual(s)	Type of Engagement	Description
2022-03-02	Multi-Community (see 'Description')	Various Stakeholders	Other (see 'Description')	Invitation to participate in Sabina's March 2022 virtual community tour. Issued over social media channels (e.g. Kitikmeot community Facebook pages, Sabina's Facebook page) and Kitikmeot community radio stations.
2022-03-09	Multi-Community (see 'Description')	Various Stakeholders	Public meeting	Virtual event (i.e. Zoom / toll-free number) providing a Project update and discussing <b>Sabina's plans to develop the Back River Renewable Energy Centre</b> . Invitation made available to all Kitikmeot communities.
2022-03-10	Multi-Community (see 'Description')	Various Stakeholders	Public meeting	Virtual event (i.e. Zoom / toll-free number) providing a Project update and discussing <b>Sabina's plans to develop the Back River Renewable Energy Centre</b> . Invitation made available to all Kitikmeot communities.
2022-03-15	Bathurst Inlet and Bay Chimo	Bathurst Inlet & Bay Chimo	Correspondence	Letter notifying residents of Bathurst Inlet and Bay Chimo about 2022 WIR activities
2022-03-30	Bathurst Inlet and Bay Chimo	General Public	Stakeholder meeting	Virtual event (i.e. Zoom / toll-free number) providing a Project update and discussing <b>Sabina's plans to develop the Back River Renewable Energy Centre</b> .
2022-04-12	Other (see 'Description')	Outfitters	Correspondence	Information letter sent to licensed outfitters that operate in the Project area.
2022-05-03	Other (see 'Description')	Bathurst Inlet Lodge	Stakeholder meeting	Provided updates of activities, discussed use of mine infrastructure to support tourism business at Bathurst Inlet Lodge
2022-05-04	Bathurst Inlet and Bay Chimo	Bathurst Inlet HTO	Correspondence	Project update email and touch base with Sam & Susie Kapolak and Connie Kapolak.
2022-05-04	Other (see 'Description')	Kitikmeot Workforce Strategy Working Group	Other (see 'Description')	Sabina participated as a member of the Kitikmeot Workforce Strategy Working Group organized by the Kitikmeot Corporation
2022-05-17	Cambridge Bay	Kitikmeot Friendship Society	Stakeholder meeting	Meeting to discuss potential Inuit employee support program partnerships
2022-05-18	Cambridge Bay	Hamlet of Cambridge Bay	Stakeholder meeting	Meeting with SAO to discuss potential office space, introduce new Director, and provide a Project update
2022-05-19	Other (see 'Description')	Kitikmeot Stakeholders Working Group	Other (see 'Description')	Sabina participated as a member of the Kitikmeot Stakeholders Working Group organized by the KIA
2022-06-01	Other (see 'Description')	Back River Socio-Economic Monitoring Working Group	Stakeholder meeting	Annual meeting of the Back River Socio-Economic Monitoring Working Group held via video conference
2022-06-01	Bathurst Inlet and Bay Chimo	Burnside HTO - Bay Chimo HTO	Correspondence	Requested available dates for site tour.
2022-06-30	Other (see 'Description')	Kitikmeot Members of the Legislative Assembly	Other (see 'Description')	Virtual Project update meeting. Those present included Mr. Anavilok (Kugluktuk), Hon. Tony Akoak (Gjoa Haven), and Mr. Joseph Quqqiaq (Taloyoak/ Kugaaruk).
2022-06-30	Kugluktuk	HTO-Amanda Dumond	Other (see 'Description')	Sourcing wildlife monitor

Table 2.1. 2022 Community Engagement Log

2022				
Date	Community	Organization / Individual(s)	Type of Engagement	Description
2022-07-22	Bathurst Inlet	Bathurst Inlet Community Members	Stakeholder meeting	MLA tour for Bathurst Inlet families led by Colin Fraser, Supervisor, Site Services - MLA
2022-08-07	Multi-Community (see 'Description')	All Kitikmeot Hamlets	Correspondence	Community tour advertisement
2022-08-11	Multi-Community (see 'Description')	All Kitikmeot Members of the Legislative Assembly	Correspondence	Community tour invitations
2022-09-12	Other (see 'Description')	Nunavut Planning Commission	Public meeting	Sabina attended the 2022 Community Engagement Sessions on the DNRLUP hosted by NPC in Cambridge Bay.
2022-09-25 to 2022-09-30	Multi-Community (see 'Description')	Public Open House	Public meeting	Sept 25-30, 2022 Community Information and Human Resources Tour. Communities visited included Kugluktuk, Cambridge Bay, Gjoa Haven, and Kugaaruk (Taloyoak couldn't be visited due to weather)
2022-09-26	Kugluktuk	Kugluktuk HTO Board	Stakeholder meeting	In-person meeting to provide the HTO board with a Project Update
2022-09-26	Kugluktuk	MLA For Kugluktuk	Stakeholder meeting	Update call following summer meeting with all Kitikmeot MLAs
2022-09-27	Cambridge Bay	Municipality of Cambridge Bay	Stakeholder meeting	Meeting with the Hamlet Council to provide a Project update and to discuss the 2022 Kitikmeot Community Tour
2022-09-27	Cambridge Bay	Hunter and Trappers Organization	Stakeholder meeting	Informal meeting with HTO Chairperson to provide a Project update, discuss shipping activities, and potential for collaboration between the HTO and Sabina.
2022-10-18	Other (see 'Description')	Kitikmeot Workforce Strategy Working Group	Other (see 'Description')	Sabina participated as a member of the Kitikmeot Workforce Strategy Working Group organized by the Kitikmeot Corporation
2022-10-25	Bathurst Inlet	Burnside HTO	Correspondence	Email update on arrival of HTO ordered fuel drums at the MLA
2022-11-02	Other (see 'Description')	Kitikmeot Stakeholders Working Group	Other (see 'Description')	Sabina participated as a member of the Kitikmeot Stakeholders Working Group organized by the KIA
2022-11-07	Bathurst Inlet and Bay Chimo	BC and BI HTO	Correspondence	Email update on barges and tug overwintering at the MLA
2022-11-14	Northwest Territories - Other (see 'Description')	Geoscience Forum	Other (see 'Description')	Sabina participated in the Yellowknife Geoscience Forum and provided a Project update presentation to attendees.
2022-11-28	Bay Chimo	Burnside HTO	Correspondence	Email exchange about flights from Yellowknife to MLA over Christmas holidays
2022-11-28	Other (see 'Description')	Kitikmeot Workforce Strategy Working Group	Other (see 'Description')	Sabina participated as a member of the Kitikmeot Workforce Strategy Working Group organized by the Kitikmeot Corporation
2022-12-07	Kugluktuk	Kugluktuk HTO Board	Stakeholder meeting	Discussed plans for 2023 Bernard Harbour Monitoring Program.

Table 2.1. 2022 Community Engagement Log

2022				
Date	Community	Organization / Individual(s)	Type of Engagement	Description
2022-11-17 to 2022-12-14	Other (see 'Description')	Inuit Project Personnel	Other (see 'Description')	2022 Inuit Personnel Survey conducted at Goose Camp and MLA.

A selection of photos from the September 2022 Kitikmeot Community Information and Human Resources Tour are found below.



Kugluktuk, Nunavut - September 2022



Cambridge Bay, Nunavut - September 2022



Gjoa Haven, Nunavut - September 2022



Gjoa Haven, Nunavut - September 2022



Kugaaruk, Nunavut - September 2022

Community perspectives on the Project continue to be tracked by Sabina to inform the content, **results, and management actions associated with Sabina’s monitoring program.** To this end, Sabina has developed the document *Guidance for Incorporating Community Perspectives and Traditional Knowledge in the Back River Project’s Monitoring Programs* (see Appendix C of Sabina’s (2022a) Socio-Economic Monitoring Plan; NIRB PRI No. 338510). **Sabina’s annual Socio-Economic Monitoring Reports and Wildlife Mitigation and Monitoring Program Reports** currently employ this guidance and present relevant information.

Likewise, Table 2.2 includes a summary of community feedback received on the Project in 2022, example comments, and Sabina’s responses to key issues raised.

Table 2.2. 2022 Community Feedback

2022		
Community Feedback Summary	Example Comments	Sabina's Response
Interest in training opportunities at the Project	<ul style="list-style-type: none"> <li>• With the increase in Inuit hires, how many of those Inuit are being trained and in what areas of the mine operations?</li> <li>• Will you have training opportunities available?</li> <li>• Will you be offering apprenticeships during construction?</li> <li>• Is Sabina willing to partner with the Hamlet on training programs?</li> <li>• If I were to apply for a job at the camp, would you provide first aid training? WHMIS or hazardous materials training? Do we need any of these certificates before getting a job at Sabina?</li> </ul>	<p>Training opportunities for Inuit are an important benefit offered by the Project. Various types of training (certificate and non-certificate based) are currently offered by the Project and are reported on through our annual Socio-Economic Monitoring Reports to NIRB. As the Project advances from construction into operations, we anticipate additional training opportunities will become available for Inuit, including apprenticeships. Inuit employees will also have the option to pursue individual career development plans, which will outline additional training opportunities and resources available to them.</p>
Questions about Project operations	<ul style="list-style-type: none"> <li>• What is the timeline for developing the Project?</li> <li>• You mentioned a 15-year mine life, but is there more gold there that could extend the mine life?</li> <li>• What kind of mining will you do? Underground mining?</li> <li>• How many people will be at the camp?</li> <li>• Where is the Winter Ice Road going to be located?</li> </ul>	<p>Sabina always welcomes community questions and comments on the Back River Project. Details on the Project can be found in our NIRB Annual Reports located on the NIRB Public Registry (<a href="https://www.nirb.ca/project/124149">https://www.nirb.ca/project/124149</a>), through our Company website (<a href="https://www.sabinagoldsilver.com/">https://www.sabinagoldsilver.com/</a>), our community staff and offices based in Cambridge Bay and Kugluktuk, and through the community engagement sessions we regularly host in the Kitikmeot Region. Sabina uses these engagement sessions to provide information and address community questions and concerns about the Project.</p>
Interest in employment opportunities at the Project	<ul style="list-style-type: none"> <li>• What is the process for hiring and the steps that I need to follow?</li> <li>• What types of jobs are there at the mine?</li> <li>• How old do you have to be to work at site?</li> <li>• Where do we have to travel to, to go to work?</li> <li>• How do you get a job as a cleaner/janitor?</li> </ul>	<p>Inuit employment opportunities are an important benefit provided by the Project. Sabina is committed to maximizing Inuit employment opportunities during Project operations and has achieved notable progress in this area to-date. The Company has various management plans and policies in place to support these commitments, in addition to an IIBA with KIA that contains additional obligations in this area. Information on current employment opportunities is shared with communities through annual community tours, in-community and online advertising, and through our community staff/offices in Cambridge Bay and Kugluktuk.</p>
Interest in opportunities for youth	<ul style="list-style-type: none"> <li>• Could you come and meet with our high school students to discuss job opportunities? Our youth are very important to us.</li> <li>• Have you had junior high and high school students from each Kitikmeot Region community come to visit your camp?</li> <li>• The youth in town use lots of drugs, alcohol, and propane. Those who use <b>substances don't want to work. The youth also don't listen to the older generation like they used to. We can't go back to the Inuit traditional ways. They are in the past and we can't go back to them. We need jobs today instead.</b></li> </ul>	<p>Youth remain an important focus for Sabina. We continue to engage Inuit youth in the Kitikmeot Region through various means including school visits, participation in career fairs, donations to local youth organizations and initiatives, and through student achievement awards and other programming (e.g. Post-Secondary Application Fee Program to be rolled out in 2023).</p>

Table 2.2. 2022 Community Feedback

2022		
Community Feedback Summary	Example Comments	Sabina's Response
<p>Questions about community benefits from the Project</p>	<ul style="list-style-type: none"> <li>• Could Inuit become investors in the Project? And benefit from business opportunities?</li> <li>• Is there funding available from Sabina for small business development and businesses just starting up?</li> <li>• HTO expressed a desire to speak with Sabina about the potential for further partnerships on fisheries projects similar to that of the Bernard Harbour restoration project. HTO would like to discuss the potential for Sabina to help fund some of these projects at a later date.</li> <li>• Many communities are looking at wind power opportunities, but operations and maintenance is a concern for local technicians. It would be great to have some <b>ability to tap into Sabina's resources for community projects. It's great to see</b> the inclusion of renewables for the Project.</li> <li>• Will Sabina provide information during its community tours on its contracting and business opportunities?</li> </ul>	<p>The Project offers numerous benefits to Kitikmeot communities including employment and training, contract and business development opportunities, donations, taxes paid to government, a regional wealth creation initiative designed to create long-term jobs outside of mining, and other benefits outlined in the IIBA. Additional information on the community benefits and programs offered by Sabina can be obtained by contacting either our Community Liaison Officer in Cambridge Bay, or Senior Indigenous Coordinator in Kugluktuk.</p>
<p>Questions about employment benefits and logistics</p>	<ul style="list-style-type: none"> <li>• Do employees get stock options?</li> <li>• <b>What does Sabina's benefits program consist of?</b></li> <li>• If working at Sabina, do I fly from my home community directly to site or do I have to stop anywhere?</li> <li>• <b>What's the employee rotation schedule at camp?</b></li> <li>• Do you speak Inuktitut on site?</li> </ul>	<p>Employment pay/benefits and requirements will vary by job type and experience, but are addressed in the individual job advertisements and/or contracts for work that are <b>signed between each employee and Sabina. However, Sabina's</b> goal is to provide competitive pay and benefits to our staff that are comparable to other metal mining operations in western and northern Canada. Generally, employment rotations will be 3 weeks-in/3 weeks-out, with Kitikmeot Inuit offered transport to/from the Project and their Kitikmeot Region community of residence. The company attempts to plan direct flights from Kitikmeot communities to Project sites whenever possible.</p>
<p>Questions about health and safety at the Project</p>	<ul style="list-style-type: none"> <li>• Do you hire medics?</li> <li>• Do you offer first aid training?</li> <li>• Does Sabina have any plans to recover the equipment and body that went into Bathurst Inlet during the fatal accident?</li> <li>• Is it safe for your staff who are building the ice road to continue after the accident? Are there emergency responders on standby?</li> </ul>	<p>The health and safety of Project personnel is Sabina's number one priority, at all times. We have numerous policies and procedures in place to ensure a safe working environment for all staff, and a dedicated health and safety team overseeing these matters on-site.</p>
<p>Questions about Sabina's renewable energy project</p>	<ul style="list-style-type: none"> <li>• Are there any opportunities with your renewable energy project to work with communities and businesses to train on installation, or share engineering costs with a local community project not at the mine site?</li> <li>• Can Inuit employees be trained to operate and maintain the wind turbines?</li> <li>• Many communities are looking at wind power opportunities, but operations and maintenance is a concern for local technicians. It would be great to have some ability to tap <b>into Sabina's resources for community projects.</b></li> <li>• Have you done any studies around your proposed wind power area on birds?</li> <li>• How much diesel fuel will you not have to use if you build the wind turbines?</li> </ul>	<p>Sabina continues to welcome community questions and comments on the proposed Back River Energy Center, which is currently under review by NIRB. Details on the proposal can be found on the NIRB Public Registry (<a href="https://www.nirb.ca/project/125740">https://www.nirb.ca/project/125740</a>) and have also been provided to the public through several community engagements sessions to-date. Sabina uses these engagement sessions to provide information and address community questions and concerns about the renewable energy project.</p>

Table 2.2. 2022 Community Feedback

2022		
Community Feedback Summary	Example Comments	Sabina's Response
<p>Questions about Sabina's community engagement process</p>	<ul style="list-style-type: none"> <li>• Will you have an Inuit advisory committee for the Project?</li> <li>• On the last advisory committee we participated in for the Project, we were short on Elders. We need more Elders to participate. When will the next site visit of the MLA and Goose occur for the advisory committee?</li> <li>• Will there be a working group formed to deal with wildlife management issues for the Project? Will it include community representatives like Elders, hunters, etc.?</li> <li>• <b>The youth in town still hunt. That's why there's not a lot of people at your meeting today; they're all out hunting.</b></li> </ul>	<p>Sabina continually strives for open and meaningful engagement with Kitikmeot Region residents, communities, and stakeholders to help ensure the Project is built and operated in an environmentally and socially responsible manner. Sabina remains committed to ongoing engagement throughout the life of the Project to ensure support for it continues well into the future. Community engagement methods employed by Sabina are numerous and have included but are not limited to the following: presenting Project-related information in public and stakeholder meetings; community newsletters; the establishment of community relations offices staffed by Inuit employees in Cambridge Bay and Kugluktuk; and a community Donations Policy. Sabina and KIA are also in the process of creating an Inuit Environmental Advisory Committee, consisting of local community members, that will provide advice on a variety of Project-related matters.</p>



## 2.3 ENGAGEMENT WITH THE KIA

Sabina and the KIA entered into a 20 year benefit and land tenure agreements under a Framework Agreement dated April 2018, setting out rights and obligations with respect to surface land access on IOL on the Back River Project. These agreements provide Kitikmeot Inuit with financial and socio-economic benefits including, training, jobs, formation of an IEAC, investments in community infrastructure projects with the objective of supporting regional wealth creation initiatives within Kitikmeot communities, share ownership in Sabina, and a 1% net smelter royalty on future production from the proposed mine on the Goose Property. In March 2022, Sabina and the KIA met face to face for the annual Presidents Meeting to discuss project updates and IIBA Implementation. Sabina and KIA successfully established the IIBA Implementation Committee with its first meeting being held in December 2022.

## 2.4 ENGAGEMENT WITH GOVERNMENT AND REGULATORY AGENCIES

**Sabina's government engagement program provides government officials with clear** and comprehensive information regarding the Project and the various management and mitigation plans that support its development. Sabina has engaged a number of federal agencies about the Project, including the Canadian Northern Economic Development Agency, Fisheries and Oceans and Canadian Coast Guard Canada, CIRNAC, Environment and Climate Change Canada (ECCC), Natural Resources Canada, and Transport Canada. Sabina also actively engages both territorial governments (Government of Nunavut and the Government of the Northwest Territories), the Nunavut Water Board, the Nunavut Planning Commission, and the GN Chief Medical Health Officer.

## 2.5 ENGAGEMENT WITH WORKING GROUPS

### 2.5.1 Kitikmeot Socio-Economic Monitoring Committee & Back River Socio-Economic Monitoring Working Group

Sabina is actively involved in the Kitikmeot Socio-Economic Monitoring Committee (KSEMC) and regularly participates in its meetings. Unfortunately, the 2022 KSEMC meeting was unable to be organized by the Government of Nunavut but Sabina looks forward to participating in future meetings.

Sabina, in addition to the Government of Nunavut (GN), the Government of Canada, and the Kitikmeot Inuit Association (KIA), is also a member of the Back River Socio-Economic Monitoring Working Group (SEMWG). **The SEMWG Terms of Reference (TOR) provides guidance on Sabina's socio-economic monitoring program.** Sabina is actively involved in the SEMWG and regularly participates in its meetings. Most recently, Sabina hosted a videoconference meeting with the group in June 2022. Ongoing opportunities for **SEMWG members to review and comment on Sabina's socio-economic** submissions are also provided through the NIRB annual reporting process.

Sabina will continue to engage the KSEMC, SEMWG, and community stakeholders on its monitoring program as the Project advances.

### 2.5.2 Inuit Environmental Advisory Committee

Per the IIBA between Sabina and KIA, an Inuit Environmental Advisory Committee (IEAC) will be established for the Project. The IEAC will:

- Receive and consider Project information that relates to the environment and wildlife.
- Provide advice to Sabina and KIA on potential impacts of Project operations on the environment, wildlife, fisheries, TK, traditional land use, and archaeology.

- Provide advice to Sabina and KIA on mitigation of potential impacts of Project operations on the environment, wildlife, fisheries, TK, traditional land use, and archaeology.
- Hear and attempt to resolve concerns from community members related to environmental and wildlife aspects of the Project.

The IIBA Implementation Committee, which met for the first time in December 2022, will appoint seven (7) Kitikmeot Inuit with knowledge of the Project area to be members of the IEAC. IEAC members will have knowledge about wildlife, fisheries, traditional land use, archaeology, or water of the Project area.

Updates pertaining to the IEAC (once it is established) and IEAC meetings may be provided in future NIRB Annual Reports.

### 2.5.3 Caribou Technical Advisory Group

Per Project Certificate Term and Condition No. 51, a Caribou Technical Advisory Group (CTAG) has been established by Sabina in collaboration with KIA and the GN. As part of its function, the group seeks to:

- Provide independent advice on study design(s) and analyses for the testing and evaluation of the **Project's adaptive management** measures for reducing disturbance to caribou.
- Undertake appropriate testing of caribou detection methods, group size thresholds, and distance thresholds employed as recommended by the advisory group.
- On the basis of these tests, and any other available evidence, provide analyses and a written evaluation of the caribou protection measures and where appropriate make necessary adjustments to those measures.
- Submit reports to NIRB, and other relevant parties, for review.

Sabina had its inaugural meeting with the CTAG in December 2019 and a follow up in December 2021. The CTAG meeting was not held in 2020 due to COVID restrictions. Additional details have been provided in relevant sections of the Annual Report.

In 2022 and early 2023, Sabina collaborated with the Kitikmeot Inuit Association, and the Government of **Nunavut, in a Caribou Technical Advisory Group providing technical oversight of the Project's monitoring and seeking to test and evaluate the Project's** measures for reducing disturbance to caribou. With the **key activity of Sabina's Winter Ice Road occurring in Q1 2023, heavy focus is being put on caribou** monitoring; Sabina will have a dedicated Inuit transiting the road monitoring for caribou, whom will be supported by wildlife biologists performing behavior monitoring of caribou in proximity to the Project, establishing remotely activated caribou monitoring cameras along the road route, completing drone monitoring, and ensuring all other wildlife mitigation measures are also in place such as limiting road **bank heights, monitoring caribou collar data for the herd's approach, and ensuring all operators are briefed on the Project's wildlife requirements.**

## 2.6 NEXT STEPS

Sabina is committed to and heavily engaged in assisting Project contractors in an effort to aid their goals of attaining greater Inuit employment. Sabina continues to explore impactful ways in which we can be involved at a community level, as well as continued work with community members, stakeholders, working groups, government and the KIA.

## 3. Operations Overview

---

### 3.1 2022 HIGHLIGHTS AND CHALLENGES

In 2022, Sabina managed to complete several key initial construction activities at the site focused on advancing and de-risking future development:

The following activities were completed in 2022, in support of future Project construction:

- Secured Project funding and made formal Construction decision.
- Successful construction of 10 ML fuel tanks at MLA and Goose, including containment.
- Goose and MLA site road network expansion up to approximately 20 km of all weather roads.
- Pads complete for permanent camp, plant, and fuel storage.
- Approximately 1,500 m of exploration underground ramp completed.
- Pre-stripping commenced at Echo Open Pit.
- All major equipment and materials required for construction have been either procured, marshalled at our east and west transportation hubs, have been delivered or are in transit to the MLA.
- Environmental monitoring and baseline programs including: atmospheric, archaeology, water quality, fisheries, wildlife, geochemical/ geotechnical, and vegetation programs.

#### 3.1.1 Permitting

Sabina and the KIA announced on April 23, 2018 that the parties have entered into 20 year benefit and land tenure agreements under a Framework Agreement setting out rights and obligations with respect to surface land access on IOL on the Back River Project.

On September 21, 2018, the Company received a copy of the NWBs recommendation to the Minister of Intergovernmental Affairs, Northern Affairs and Internal Trade, the responsible Federal Minister (the **Minister**), that the Project's **Type A Water Licence** should be issued with proposed terms and conditions. On November 14, 2018, Sabina received confirmation that the Minister has approved the Type A Water Licence with no changes to the terms and conditions.

Sabina also continued to advance and obtain the necessary Federal permits and authorizations for the Project in 2019. Sabina received the Back River Project *Fisheries Act* Authorization from the Department of Fisheries and Oceans Canada, as well as authorization from Transport Canada that Umwelt Lake and Llama Lake do not require exemption from the *Navigation Protection Act (NPA)*.

Since receipt of the NIRB Project Certificate (PC No. 007) and the NWB Type A Water Licence (2AM-BRP1831), Sabina has continued to advance Detailed Engineering and additional field work related to Construction, Operations, and Closure of the Back River Project (the Project). Through this Detailed Engineering and additional efforts, Sabina identified modifications that would optimize and de-risk the Project. In June of 2020, Sabina submitted proposed modifications to the Project to the Nunavut Planning

Commission, the NIRB and the NWB outlining proposed modifications to the Project<sup>4</sup>. On 9 June 2020<sup>5</sup>, the Nunavut Planning Commission forwarded the 2020 Modification Package to the NIRB for assessment. The NIRB subsequently determined that the modifications were consistent with the activities identified by Sabina under the NIRB Project Certificate No. 007 and did not constitute a significant modification that requires further assessment by the NIRB<sup>6</sup> given that appropriate mitigation and management measures as outlined in the Modification Package and Sabina's **existing plans** were implemented.

**Following the NIRB's direction**, Sabina subsequently provided an application for amendment of the **Project's Type A Water Licence to the NWB**. This application was successfully reviewed and the Type A Water Licence amended in 2021.

### 3.1.2 Engineering

In support of the path to production, Sabina has been focused on completing detailed engineering programs on the Project with the objectives of investigating opportunities, setting key design criteria, improving the accuracy of the engineered and design elements, updating the project execution strategy, improving the accuracy of the capital cost estimate, and improving the overall execution schedule.

### 3.1.3 Exploration

Sabina's **resource** has continued to grow, through extension exploration drilling, the existing high impact targets at the Goose Property that include Llama Extension, Umwelt Vault, and the Goose Main trend. Summer field programs have focused on advancing the Back River deposit level paragenesis in regard to the known gold mineralization and related alteration. Summer field mapping including the Goose and Del Properties. In 2022, Sabina renewed exploration targets and potential at the George Property Area and has plans to continue in 2023.

### 3.1.4 Employment

Increasing the **Project's** Inuit workforce is, and has always been, a key objective for Sabina. In 2022, a total of 713 personnel (i.e. employees and contractors) worked on the Project, 80 of which were Inuit (17.4% by hours worked). 72 Inuit personnel originated from within the Kitikmeot Region, while 8 originated from outside of Nunavut. All non-Inuit personnel originated from outside of Nunavut (633). These employment numbers reflect the limited scope of construction activities that occurred at the Project in 2022. We will continue to work with the KIA and other relevant stakeholders to connect Inuit workers with available jobs at the Project.

### 3.1.5 Training

A total of 8,303 hours of training were provided in 2022, of which 3,259 hours (39.3%) were completed by Inuit. Several types of training were offered on-site in 2022 including certificate-based and job-related programs. Certificate-based programs included HSEQ employee orientation, MineARC, first aid, and emergency response training. Job-related programs included training and competency checks on equipment specific to different Project departments (e.g. heavy equipment, safe operating procedures, etc.). Site orientation, underground orientation, peer-to-peer mentorship, and Inuit cultural awareness programs also occurred. The training programs offered in 2022 reflect the limited scope of construction activities that occurred during the year.

<sup>4</sup> Sabina 2020. Back River Project 2020 Modification Package. June 2020.

<sup>5</sup> NPC's letter, "NPC file # 149378 [Back River 2020 Modification Package]" (P. Scholz to M. Pickard et. al, dated June 9, 2020)

<sup>6</sup> NIRB's letter, "Direction Regarding the "Back River Project 2020 Modification Package" submitted by Sabina Gold & Silver Corp. in relation to the Back River Project (K. Kaluraq to M. Pickard, dated August 11, 2020, NIRB File No. 12MN036)

### 3.1.6 Contracting

In 2022, a total of \$253.9 million in expenditures were made to 512 businesses. Of this, \$70.6 million (27.8%) in expenditures were made to 69 northern businesses (including Kitikmeot Qualified Businesses, NTI Registered Inuit Firms, Nunavut Businesses, and other Northern Businesses). \$60.4 million (23.8%) in expenditures were made to 16 Kitikmeot Qualified Businesses.

### 3.2 NEXT STEPS

Exploration at the Back River Project in 2023 will resemble activities similar to the past several years. Sabina anticipates an approximate 8-week winter exploration drilling program at the George Property starting in late March. Sabina may also complete a summer field based and fall exploration program at Goose and/or George site.

Sabina has successfully completed financing for both continued Exploration and Construction, Sabina will be continuing Construction activities at the Back River Project in 2023.



## 4. Performance on Project Certificate Terms and Conditions

---

### 4.1 APPROACH TO PERFORMANCE REPORTING

**Sabina's** Environmental Management System (EMS) provides a framework for the environmental and socio-economic monitoring activities to be implemented through the life of the Project. The system incorporates the strategies employed for adaptive management using the precautionary principle to pursue the goals of sustainable development. Within this framework, individual management plans have **been drafted to address all aspects of the company's activities** and contain the detailed mitigation measures and monitoring programs that will be implemented throughout the life of the Project to eliminate or minimize adverse effects. Sabina regularly reviews and revises these management plans to reflect site activities and phase, project modifications, stakeholder input, new monitoring results, and improvements in tools and technologies. Any plans which have completed the NWB approval process (if required) or which are otherwise updated are provided to the NIRB as they are generated or in these annual reports.

The EMS also verifies that standard operating procedures reflect legal requirements pertaining to the **Project, and that conditions set at the time of the Project's authorizations**, as well as requirements pertaining to the relevant laws, regulations, and permits are met. All Project employees and contractors are required to comply with these management plans. The reporting and documentation requirements, auditing, and processes for management review and revisions are all specified in the EMS. This system offers enough flexibility to respond to the monitoring results in a timely fashion to reduce or eliminate potential adverse residual effects to the natural and socio-economic environments.

The NIRB and Sabina have various administrative and regulatory obligations that support the efficient and effective implementation of Project Certificate No. 007, including responsibilities to ensure interested members of the public have reasonable access to information about the Project as it progresses.

On January 24, 2022, the NIRB confirmed appointment of the Back River Project Monitoring Officer:

Nunavut Impact Review Board  
 Attn: Kelli Gillard  
 Manager, Project Monitoring  
 PO Box 1360 (29 Mitik St.)  
 Cambridge Bay, NU X0B 0C0  
 Email: kgillard@nirb.ca

### 4.2 METHODOLOGY AND CRITERIA

An individual summary sheet for each of the ecosystemic, socio-economic and other terms and conditions has been provided starting in Section 4.5 of this NIRB Annual Report. The category and content of information provided in these summary sheets is outlined in Table 4.2-1.

Table 4.2-1. Layout of PC Condition Summary Sheets

Item	Summary of Content
Category	<ul style="list-style-type: none"> <li>Category as defined in PC No. 007</li> </ul>
Responsible Parties	<ul style="list-style-type: none"> <li>Responsible party as defined in PC No. 007</li> </ul>
Project Phase(s)	<ul style="list-style-type: none"> <li>Phase(s) of the Project the PC TC is applicable to: <ul style="list-style-type: none"> <li>Pre-construction</li> <li>Construction</li> <li>Operations</li> <li>Temporary Closure/Care and Maintenance</li> <li>Closure</li> <li>Post-Closure</li> </ul> </li> </ul>
Objective	<ul style="list-style-type: none"> <li>Objective as defined in PC No. 007</li> </ul>
Term or Condition (TC)	<ul style="list-style-type: none"> <li>TC as defined in PC No. 007</li> </ul>
Reporting Requirement	<ul style="list-style-type: none"> <li>Reporting Requirement as defined in PC No. 007</li> </ul>
Status of Compliance	<ul style="list-style-type: none"> <li>A self-assessed status of compliance in the PC TC: <ul style="list-style-type: none"> <li>Compliant</li> <li>Partially-compliant</li> <li>Non-compliant</li> </ul> </li> </ul>
Stakeholder Review	<ul style="list-style-type: none"> <li>Stakeholders and other interested parties that participate in discussions and reviews related to aspects and implementation of regulatory submission of actions or documents relevant to the PC TC.</li> </ul>
Reference	<ul style="list-style-type: none"> <li>Description/title of relevant documents where supporting information related to PC TC status of compliance its available for review. □</li> </ul>
Methods	<ul style="list-style-type: none"> <li>The methods employed to complete work required to meet compliance in the PC TC.</li> <li>Summary of any adaptive management measures employed that year in support of achieving compliance to the PC TC.</li> </ul>
Results	<ul style="list-style-type: none"> <li>Summary of efforts or work that were completed in support of achieving PC TC compliance in previous reporting years, where applicable.</li> </ul>
Trends	<ul style="list-style-type: none"> <li>Summary of notable trends from previous years.</li> </ul>
Next Steps	<ul style="list-style-type: none"> <li>Summary of any operational changes undertaken or recommended for the future to achieve compliance or to further enhance environmental performance.</li> <li>Assessment of effectiveness of monitoring program and whether any changes to the scope of monitoring are appropriate.</li> <li>Identification of any challenges related to implementing mitigation measures, undertaking monitoring, or obtaining data from other sources.</li> </ul>

#### 4.3 SUMMARY OF 2022 COMPLIANCE WITH TERMS AND CONDITIONS

Table 4.3-1 outlines the status of compliance levels and describes the criteria related to each of these options. The proposed levels of compliance have been adopted from other Nunavut mining development projects subject to NIRB authority.

Table 4.3-1. Status of Compliance Terminology and Criteria

Status of Compliance	Criteria
Compliant	Term and Condition requirements have been met
Partially-Compliant	Term and Condition requirements have been partially met <i>*Demonstrable efforts towards meeting compliance requirements is evidenced.</i>
Non-Compliant	Term and Condition requirements have not been met <i>*Rationale for being unable to meet compliance requirements is provided.</i>

Sabina was issued Project Certificate No. 007 on December 19, 2017. Following receipt of the Project Certificate Sabina immediately began implementation where applicable. In general, Sabina believes they are in compliance with the Terms and Conditions of the Project Certificate. Refer to the individual summary sheet for each Term and Condition as follows:

- o Section 4.5 Performance on Ecosystemic Terms and Conditions (No.1 to 65)
- o Section 4.6 Performance on Socio-Economic Terms and Conditions (No.66 to 88)
- o Section 4.7 Performance on Other Terms and Conditions (No. 89 to 94)

#### 4.4 REGULATORY COMPLIANCE

##### 4.4.1 Agency Inspections and Site Visits

The following inspections of the Back River Project occurred in 2022:

- o KIA (July): inspection of Goose Lake Camp, Marine Laydown Area, and George Lake Camp was conducted as per the KIA established inspection schedule:
  - Overall, it was noted that the Goose Lake Camp and MLA are being maintained in good condition while furthering development of the mine site.
  - At Goose, the Umwelt access road needs to be raised to 1.5m in height. Past slumping at the generators has been fixed. Culverts at Echo Crossing and Gander need to be installed. Measures should be implemented to mitigate water inflow into the underground portal.
  - The MLA is in good condition, but its pads and roads need to be regraded. New camp accommodations have been constructed.
  - The George Lake Camp is in fair condition and some clean-up and organization has taken place. Further reorganizing and clean up is needed Various materials need to be backhauled, and old pallets should be disposed of or burned.
- o CIRNAC (June): inspection of the Goose Lake Camp, Marine Laydown Area, and George Lake Camp:
  - Goose:
    - Licensee is to implement sediment erosion control measures at the water intake roads; remove all hazardous waste and food waste from the Waste Storage Area; provide a plan to ensure the sump is operating as a sump; inventory historic waste pile and store in a secondary containment.

- George:
  - Licensee is to ensure the pop-up berm is not leaking; repair or replace leaking berm; contain or remediate soli from the garage; remediate spill at Drill 1486; provide inspection log for petroleum storage and containment facilities, fuel tank and connectors.
- MLA:
  - Licensee is to ensure all hazardous material is kept within secondary containment; ensure no waste/water resulting from washing vehicles is entering water and/or causing erosion; install drip trays below the fuel tank noted in the inspection.
- CIRNAC (November): inspection of the Goose Lake Camp:
  - Licensee shall ensure all hazardous waste and hazardous materials are stored in a way to prevent waste from entering water and is consistent with the approved licence/Management Plans. Fix berms noted in the inspection report, place the contaminated material noted in the inspection in the appropriate containment and ensure the hazardous material noted in the inspection are placed in secondary containment.
- NIRB (June): inspection of the Goose Lake Camp, Marine Laydown Area, and George Lake Camp:
  - During the site visit, Monitoring Officers observed that facilities in operation at the Goose Property, MLA, and George Lake Property were very well managed and care and attention has been made to ensure there were adequate environmental protection measures in place and that there was minimal impact to the environment. However, CIRNAC noted issues on their inspection and the NIRB provided a summary of these action items and Sabina's response within their 2022 Site Visit Report.

#### 4.4.2 Unauthorized Discharges and Spills

A summary of unauthorized discharges and spills that occurred in 2022 are provided in the below Table 4.4-1.

Table 4.4-1. Unauthorized Discharges in 2022

Date	Substance	Volume	Cause	Latitude	Longitude	Mitigation
Jan 18/2022	Diesel	150 L	Dozer fell through the ice	66°36'19"	107°36'7"	The incident resulted in a fatality and is under review by the RCMP, WSCC, and the Mines Inspector.
Feb 15/2022	Diesel	120 L	Busted fuel hose causing release to ocean ice	66°32'72"	107°31'47"	All hydrocarbon contamination was successfully removed from the ice and snow for remediation.
March 19/2022	Hydraulic Oil	5 Liters	Wing cylinder broke releasing to ice and snow	66°16'5"	107°10'12"	Spill fully remediated
March 21/2022	Hydraulic Oil	5 Liters	Pick-up truck leaking transmission releasing to ice and snow	66°11'56"	107°10'12"	Spill fully remediated. Leak noticed during pre-trip inspection.
May 4/2022	Hydraulic Oil	4 Liters	Pick-up truck mechanical failure of water pump causing drip trail on the ice.	66°38'11"	107°39'44"	Spill fully remediated. Leak left a drip trail on the ice which was scrapped up.

#### 4.4.3 Water Licence Compliance

Sabina currently has one Type A water licence for the Back River Project:

- Type A - 2AM-BRP1831: for the mining undertaking (Licence)

An amendment to this licence was issued on August 31, 2021. The water licence includes conditions on water use, wastewater management, and water quality monitoring, as well as the management of fuel and waste. Sabina reports on Water Licence compliance in Annual Reports which are provided directly to the NWB by March 31 annually for the previous calendar year, in accordance with the Regulations and as specified in the individual water licenses. For more information, refer to the Annual Reports posted to the NWB Public Registry (2AM-BRP1831 Annual Report).

## 4.5 PERFORMANCE ON ECOSYSTEMIC TERMS AND CONDITIONS

## 4.5.1 Air Quality (PC TCs 1 through 5)

## Project Certificate Condition No. 1

Category	Air Quality Monitoring and Management Plan
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To provide parties with updated information on air quality baseline information and monitoring conducted on-site
Term or Condition (TC)	<p>The Proponent shall have in place an Air Quality Monitoring and Management Plan, which shall include the following:</p> <ol style="list-style-type: none"> <li>Description of air monitoring stations including proposed timing of installation, location, and any factors considered with regards to planning for the installation;</li> <li>Plans for the collection of total suspended dust samples year round, including sampling for metals content relevant to the Project;</li> <li>Description of dustfall collectors;</li> <li>Description of lichen surveys;</li> <li>Identification of near field, far field and reference sites locations with demonstrated consideration for ambient wind conditions;</li> <li>Baseline data collected prior to significant construction activity; and</li> <li>A description of the proposed annual reporting mechanism and response framework.</li> </ol> <p><b>Commentary: The term “year round” is intended to convey that samples are collected during various times of the year, but does not mean continuous monitoring every day of the year.</b></p>
Reporting Requirement	The plan should be submitted to the Nunavut Impact Review Board (NIRB) at least 90 days prior to the start of construction, with results submitted annually thereafter or as may otherwise be required by the NIRB.
Status of Compliance	Compliant
Stakeholder Review	The Air Quality Monitoring and Management Plan (December 2015) was reviewed in conjunction with NIRB Environmental Assessment
Reference	Air Quality Monitoring and Management Plan (July 2019)

## Methods:

Sabina's Air Quality Monitoring and Management Plan (AQMMP) was last updated in July 2019 and was provided to the NIRB on April 3, 2020. Sabina has confirmed that it is available on the NIRB Public Registry but has been filed with the annual reports rather than with the management plans. Sabina has reviewed this plan and confirms that it addresses all relevant PC T&C's, including T&C 1, 2, 3, 6 and 8, and provides suitable guidance for current and near future site activities.

The updated AQMMP (July 2019) specifically includes:

- Descriptions of air monitoring stations including proposed timing of installation, locations and methods;
  - Description of dust monitoring methodology and inclusion of dust metals analysis;
  - Identification of near field, far field and reference sites locations with demonstrated consideration for ambient wind conditions;
  - Discussion of baseline data collected prior to significant construction activity; and
- A description of the proposed annual reporting mechanism and response framework.

The AQMMP includes:

- A Greenhouse Gas Reduction Plan (PC T&C 6)
- A Fugitive Dust Reduction Plan (PC T&C 3) and
- Outlines the meteorological monitoring program (PC T&C 8).
- **Lichen surveys are described in Sabina's Vegetation Monitoring Plan.**

Results:

Not applicable.

Trends:

Not applicable.

Next Steps:

Sabina completed on-site field inspections of existing monitoring equipment to ensure equipment is in proper working order prior to the Construction Phase. Sabina will continue to undertake air quality monitoring in 2023 and provide the results in the 2023 NIRB annual report.

During construction and operation of the Project, the AQMMP will monitor for and quantify Project air quality emissions and compliance with appropriate criteria and guidelines as specified in the AQMMP. Annual reporting will be completed for federal programs such as the NPRI and GHGRP when applicable.

**The AQMMP is a “living document”, and will be updated accordingly if Mine plans, conditions, monitoring results, or other factors necessitate revisions.**

## Project Certificate Condition No. 2

Category	Air Quality Mitigation and Adaptive Management
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure that mitigation and adaptive management measures effectively mitigate impacts on-site.
Term or Condition (TC)	The Proponent shall demonstrate through monitoring of air quality that all emissions remain within predicted levels and, where applicable, within limits established by all applicable guidelines and regulations. In cases where exceedances occur, the Proponent shall provide an explanation for the exceedance, a description of planned mitigation, and shall conduct additional monitoring to evaluate the effectiveness of mitigative measures.
Reporting Requirement	A summary of monitoring results and any exceedances noted shall be provided <b>in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	The AQMMP (December 2015) was reviewed in conjunction with NIRB Environmental Assessment
Reference	Air Quality Monitoring and Management Plan (July 2019)

## Methods:

The Air Quality Monitoring and Management Plan was reviewed by Stakeholders and the NIRB during the Final Environmental Assessment review process. Sabina revised the AQMMP (July 2019) to capture stakeholder comments and Project Certificate requirements.

The revised AQMMP includes air quality monitoring and emissions quantification and sets out standards and guidelines against which air quality parameters will be screened. Monitoring results will also be compared to predicted levels in the annual reports. Section 8 of the AQMMP outlines mitigation and adaptive management approach should exceedances be observed

## Results:

Sabina retained Golder in 2022 to perform scheduled maintenance and calibrations on the Goose property meteorological stations and to initiate air quality monitoring stations for passive NO<sub>2</sub> and dustfall monitoring. The meteorological field work was performed in August 2022. A summary of the meteorological field work is as follows:

- Instrument change-outs were completed on the HMP155A temperature and humidity, and the CS106 barometer.
- Replacement of the model SPLITE2 solar radiometer with a calibrated model SPLITE2 sensor.
- Instrument verifications were completed on the SR50 snow depth sensor and 05103 anemometer (wind sensor).
- Calibration of the model TE525M tipping bucket rain gauge.
- Logger code changes for updated calibration constants, and other code updates.
- Mechanical and other general maintenance items on the tower.

- o A 2-metre meteorological monitoring tripod was installed in the shallow waters of Goose Lake with a model NRLITE2 net radiometer to support the hydrology program.
- o Data from the Goose meteorological stations were downloaded and analyzed.

See Project Certificate Condition No. 8 for details on the site meteorological data analysis.

Air quality monitoring began at Goose in 2022 in early August using the same five baseline, combination passive dustfall and passive nitrogen dioxide (NO<sub>2</sub>) monitoring stations installed near Goose Lake Camp in 2021. A background station is located approximately six kilometres north-northwest of the camp and in the expected upwind direction of the major construction activities that are being undertaken at the property. A series of four more stations are orientated in a transect in the nominal downwind direction of the construction activities occurring at the site. The stations were placed at the edge of the construction road (Dustfall/NO<sub>2</sub> Station 1), 150 metres from the road (Dustfall/NO<sub>2</sub> Station 2), 300 metres from the road (Dustfall/NO<sub>2</sub> Station 3) and 600 metres from the road (Dustfall/NO<sub>2</sub> Station 4). Due to encroaching construction activities at the end of September 2022, the transect air quality monitoring stations were relocated. Table 4.5.2-1 below summarizes the names and the location of each of the air quality stations used for air quality monitoring in 2022.

Table 4.5.2-1. 2022 Air Quality Station Locations

Air Quality Station Name	UTM Zone 13N			
	Original Locations		Updated Locations	
	Easting (m)	Northing (m)	Easting (m)	Northing (m)
Background Dustfall/NO <sub>2</sub> Station	428,746	7,275,188	428,746	7,275,188
Dustfall/NO <sub>2</sub> Station 1	430,564	7,269,967	430,755	7,269,467
Dustfall/NO <sub>2</sub> Station 2	430,667	7,269,560	430,860	7,269,361
Dustfall/NO <sub>2</sub> Station 3	430,766	7,269,454	430,965	7,269,254
Dustfall/NO <sub>2</sub> Station 4	430,977	7,269,223	431,176	7,269,040

No results from the air quality monitoring program in 2022 have been received due to logistical issues with collecting and shipping sample containers. The issues have been noted and Sabina is working on addressing them for the current and future air quality monitoring programs.

Trends:

Not applicable.

Next Steps:

Sabina will undertake inspection of the existing monitoring equipment in 2023 to ensure equipment is in proper working order prior to the Construction Phase. Sabina will undertake air quality monitoring in 2023 and provide the results in the 2023 NIRB annual report.

During construction and operation of the Project, the AQMMP will monitor for and quantify Project air quality emissions and compliance with appropriate criteria and guidelines as specified in the AQMMP. Annual reporting will be completed for federal programs such as the NPRI and GHGRP when applicable.

**The AQMMP is a “living document”, and will be updated accordingly if Mine plans, conditions, monitoring results, or other factors necessitate revisions.**

Reference:

AEP (Alberta Environment and Parks). 2019. Alberta Ambient Air Quality Objectives and Guidelines Summary. Prepared by the Air Policy Branch. Available at <https://open.alberta.ca/publications/9781460134856>

CCME (Canadian Council of Ministers of the Environment). 2020. Guidance Document on Achievement Determination for Canadian Ambient Air Quality Standards for Nitrogen Dioxide. Prepared by the Air Policy Branch. Available at <https://open.alberta.ca/publications/9781460134856>

## Project Certificate Condition No. 3

Category	Air Quality Monitoring and Management Plan
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure that mitigation and adaptive management measures effectively mitigate dust impacts on-site
Term or Condition (TC)	<p>The Proponent shall have in place dust management and monitoring plans which address the following items:</p> <ol style="list-style-type: none"> <li>Reflect commitments made in the Final Environmental Impact Statement, the Final Environmental Impact Statement Addendum, and through the Nunavut Impact <b>Review Board's impact assessment process</b>;</li> <li>Verify commitments to use dust suppressants on-site, including a description of the type of suppressant to be used, as well as the frequency and timing of applications to be made throughout the periods of applicable use;</li> <li>Specify commitments to the use of appropriate dust suppression measures when conducting activities in the landfill such as topping or capping;</li> <li>Outline the specific adaptive management measures to be considered should monitoring indicate that dust deposition is higher than predicted, specifically where project-related traffic is greater than initially expected or where meteorological events have instigated additional deposition; and</li> <li>Demonstrate consideration for the implementation of alternative methods (e.g., windscreens) to limit the deposition of dust generated from the Project.</li> </ol>
Reporting Requirement	The plan should be submitted to the Nunavut Impact Review Board (NIRB) at least 90 days prior to commencement of construction activities. Information regarding updates to the management and monitoring plans and/or mitigation measures implemented by the Proponent in fulfillment of this Term and <b>condition shall be provided in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	The AQMMP (December 2015) was reviewed in conjunction with NIRB Environmental Assessment
Reference	Air Quality Monitoring and Management Plan (July 2019)

Methods:

The Air Quality Monitoring and Management Plan (AQMMP) was reviewed by Stakeholders and the NIRB during the Final Environmental Assessment review process. Sabina revised the AQMMP (July 2019) to capture stakeholder comments and Project Certificate requirements.

The AQMMP aligns with commitments made by Sabina during environmental impact assessment process and includes a Fugitive Dust Reduction Plan which provides information on dust suppressant use and dust suppression measures. Section 8 of the AQMMP also **outlines Sabina's mitigation and adaptive management** approach, including possible responses to increased dust generation. These may include alterations to dust suppressant application rate, frequency, methodology or type, and/or modifications of road maintenance protocols, and/or reductions in road usage through personnel awareness or use of alternate vehicles. Adaptive management response will also be triggered in real-time, based on site observations.

Results:

Not applicable.

Trends:

Not applicable.

Next Steps:

The Fugitive Dust Reduction Plan (FDRP), has been implemented during construction activities and dust monitoring is being conducted.

Proposed updates to the FDRP and AQMMP are planned for May of 2023 to align with advances to monitoring technologies and to reflect the current understanding of the project. Moreover, the updates will address issues that have been noted with current air quality monitoring program.

Information regarding updates to the management and monitoring plans and/or mitigation measures **implemented by the Proponent in fulfillment of this T&C shall be provided in the Proponent's annual report** to the NIRB.

Project Certificate Condition No. 4

Category	Incineration Management Plan
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure that waste management operations are conducted in line with regulatory guidelines.
Term or Condition (TC)	The Proponent shall develop and implement an Incineration Management Plan that demonstrates consideration for the recommendations provided in <b>Environment and Climate Change Canada’s Technical Document for Batch Waste Incineration (2010)</b> .
Reporting Requirement	The initial Incineration Management Plan must be submitted to the Nunavut Impact Review Board at least 60 days prior to the commencement of construction and must be tested within the first year of operations.  Subsequently, unless otherwise directed by Environment and Climate Change Canada, every (3) three years the Proponent shall provide the Nunavut Impact <b>Review Board with confirmation of any changes to the Proponent’s Incineration Management Plan in the Proponent’s annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant.
Stakeholder Review	Type A Water Licence regulatory review process stakeholders/intervenors.
Reference	Incinerator Management Plan (June 2020)

Methods:

Sabina’s Incineration Management Plan (IMP) was last updated in June 2020. Sabina has confirmed that it is available on the NIRB Public Registry. The NWB approved Sabina’s IMP with the issuance of the amended water licence, but Sabina notes that the wrong version (July 2019) of the plan was referenced in the Licence and continues to address this error with the NWB. Sabina has reviewed this plan and confirms that it addresses relevant T&C’s (PC T&C’s 4 and 5) and provides suitable guidance for current and near future site activities.

The IMP (June 2020) includes descriptions of incinerator operation and maintenance protocols, and environmental protection measures to be employed. The IMP as well as the AQMMP note the requirement to test incinerators following installation within their first year of use. Sabina will additionally provide an update to the NIRB on the IMP as revised, and at least every 3 years.

Results:  
Not applicable.

Trends:  
Not applicable.

Next Steps:

**The IMP is a “living document”, and will be updated** as necessary based on changes in Mine plans, conditions, monitoring results, or other factors.

Any revisions to the IMP will be submitted to the NIRB and the NWB, per Part B, Item 17 of the 2AM-BRP1831 Water Licence.

Project Certificate Condition No. 5

Category	Stack Monitoring
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To monitor waste management operations.
Term or Condition (TC)	The Proponent shall provide the results of all stack testing conducted on temporary or permanent incinerators operated for the Project for the year in which testing was conducted.
Reporting Requirement	In years when a stack test occurs, results to be reported to the Nunavut Impact Review Board and to Environment and Climate Change Canada annually, or as may otherwise be required.
Status of Compliance	Compliant
Stakeholder Review	Nunavut Impact Review Board and Environment Climate Change Canada
Reference	Incinerator Management Plan (June 2020)

Methods:

All incinerator stack testing results will be provided to the NIRB within the subsequently filed annual report. The collection and analysis of samples will be conducted in compliance with appropriate stack test methods and undertaken by an accredited laboratory. The stack testing report will include a description of the incinerator and how it was being operated at the time of the stack emissions testing program, the methods used for sampling and analysis and a discussion of the results, including comparison with the Canada Wide Standards for Dioxins and Furans (CCME 2000a) and the Canada Wide Standards for Mercury (CCME 2000b).

Results:  
Not applicable.

Trends:  
Not applicable.

Next Steps:  
Complete stack emissions testing for all incinerators will occur upon commissioning when testing thresholds are met and as required thereafter based on the recommendations provided in Environment and Climate Change Canada’s Technical Document for Batch Waste Incineration (2010) or discussions with the appropriate regulatory authorities. Results and will be compared to the Canada-wide Standards for Dioxins and Furans and the Canada-wide Standards for Mercury (CCME 2000, 2001)

In years when a stack test occurs, results to be reported to the NIRB and to ECCC annually, or as may otherwise be required.

## 4.5.2 Climate and Meteorology (PC TCs 6 through 8)

## Project Certificate Condition No. 6

Category	Greenhouse Gas Reduction Plan
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To monitor and reduce greenhouse gas emissions produced by the Project.
Term or Condition (TC)	<p>The Proponent shall maintain a Greenhouse Gas Emissions (GHG) Reduction Plan which includes:</p> <p><b>a. An estimate of the Project’s GHG baseline emissions;</b></p> <p>b. A description of monitoring measures to be undertaken, including the methods, frequency, parameters, and a description of data analysis; and</p> <p>c. A description of mitigative and adaptive strategies planned, and taken, toward reducing the project-<b>related emission of greenhouse gases over the Project’s</b> life.</p> <p><b>Commentary: The term “baseline emissions” denotes the</b> emissions as predicted by Proponent prior to project development, but reflecting the GHG emissions of existing Project infrastructure (i.e., existing exploration camp and associated infrastructure).</p>
Reporting Requirement	Results to be included in the Proponent’s <b>annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	The current AQMMP (including the GHG Reduction Plan) was reviewed in conjunction with NIRB Environmental Assessment.
Reference	<p>Air Quality Monitoring and Management Plan (July 2019)</p> <p>ECCC(2021). <i>National Inventory Report 1990 - 2019: Greenhouse Gas Sources and Sinks in Canada 2021</i>. Available at <a href="https://unfccc.int/documents/271493">https://unfccc.int/documents/271493</a></p> <p>Environment Canada. <i>Metal Mining: Guidance Manual for Estimating Greenhouse Gas Emissions</i>. Available at <a href="https://publications.gc.ca/collections/Collection/En49-2-9-2E.pdf">https://publications.gc.ca/collections/Collection/En49-2-9-2E.pdf</a></p>

## Methods:

The Air Quality Monitoring and Management Plan (AQMMP) was reviewed by Stakeholders and the NIRB during the Final Environmental Assessment review process. Sabina updated the AQMMP to capture stakeholder comments and Project Certificate requirements in 2019.

The AQMMP includes an Emissions and Greenhouse Gas (GHG) Reduction Plan (Section 6.1.1 of the AQMMP). This GHG Reduction Plan describes mitigative and adaptive strategies employed by Sabina to minimizing Project GHG emissions. GHG generation is estimated based on fuel use by equipment type (including waste oil burner use), usage of explosives, and any other potential GHG sources which are quantified and converted to quantities of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O based on established conversion factors to determine relevant reporting requirements. Relative to T&C 6 commentary, Sabina has noted in the AQMMP that baseline GHG emissions from the existing exploration camp are insignificant in the context of Project **GHG emissions during construction and operations, so are considered to be “nil” for the purposes of** comparison of future results. Section 8 of the AQMMP also outlines Sabina’s mitigation and adaptive management approach. Any measures taken towards reducing Project GHG emissions will be described in the AQMMP annual reports.

Results:

Sabina retained WSP to provide an estimate of greenhouse gas (GHG) emissions for the existing exploration camp based on the diesel fuel and ANFO explosive usage in 2022. Diesel fuel and explosive usage for the Goose, George and MLA sites was provided by Sabina to form the initial GHG emissions estimates (see table below). The ANFO explosive usage was provided over all sites, and it was assumed 97.5% came from Goose and 2.5% came from MLA. Total estimated land clearing area in hectares as well as ecozone type (land cover) was provided by Sabina.

	Goose	George	MLA
Diesel Used (Litres)	3,770,807	0	1,203,684
ANFO Explosives (tonnes)	282.75	0	7.25

The emissions were estimated using methodology consistent with the Environment and Climate Change Canada (ECCC) GHG Emissions Reporting Program (GHGRP), using emission factors as outlined in the *National Inventory Report 1990 - 2020: Greenhouse Gas Sources and Sinks in Canada 2022* for diesel fuel combustion. The emission factor for explosives was taken from the *Metal Mining: Guidance Manual for Estimating Greenhouse Gas Emissions* (Environment Canada, 2004).

During 2022, land change activities occurred. However, based on lack of information of specific vegetation coverage including soil, organic content etc., as well as land alteration techniques (land covered with aggregate), the land clearing activities could not be reasonably estimated. As a result, emissions from carbon sink losses were not included at this time and should be considered once site specific land change activities can be assessed in more detail.

The estimates GHG emissions across all sites for 2022 is shown in the following table.

Site	Emissions (tCO <sub>2</sub> e)
<b>Goose</b>	<b>10,138</b>
<b>George</b>	<b>0</b>
<b>MLA</b>	<b>3,237</b>
<b>Total*</b>	13,429

Note: Total may be more than individual sites due to rounding of decimals.

Trends:

Not applicable.

Next Steps:

Sabina will continue to gather annual fuel usage to update the emission estimates ahead of the Construction Phase of the Project. Once the Construction Phase has commenced, the Greenhouse Gas Reduction Plan mitigative and adaptive strategies will continue to be implemented by Sabina. An evaluation of GHG emissions will be carried out annually to determine whether reporting to the federal Greenhouse Gas Reporting Program (GHGRP) is required. If so, the applicable reporting will be performed and required information submitted to ECCC through the established national reporting systems and will be provided to the NIRB in the annual report. The annual report will also include any information on GHGs will be quantified and summarized on an annual basis using guidance provided by ECCC (ECCC 2021) and other appropriate published emissions factors.



Project Certificate Condition No. 7

Category	Mine Closure and Reclamation Plan
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure mitigation, monitoring, and adaptive management measures are in place for the long-term stability, containment, and integrity of project components and the protection of environmental features.
Term or Condition (TC)	<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 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>
Reporting Requirement	The plan should be submitted to the Nunavut Impact Review Board (NIRB) at least 60 days prior to the start of construction, with results submitted annually thereafter or as may otherwise be required by the NIRB.
Status of Compliance	Compliant
Stakeholder Review	Crown Indigenous Relations and Northern Affairs Canada, Environment Climate Change Canada, Nunavut Water Board, Kitikmeot Inuit Association
Reference	<p>Back River Project Interim and Closure Reclamation Plan (October 2017)                      Back River Project Interim and Closure Reclamation Plan (March 2021)                      Sabina Gold &amp; Silver Corp. Final Submission for Back River Project Type A Water Licence Public Hearing (July 2018)</p>

Methods:

In conjunction with the Type A Water Licence Application, Sabina submitted an updated Interim Closure and Reclamation (ICRP; October 2017). The ICRP was updated to reflect NIRB PC Condition 7 requirements items a to f, to ensure mitigation, monitoring, and adaptive management measures are in place for the long-term stability, containment, and integrity of project components and the protection of environmental features. The NWB, in accordance with Water Licence 2AM-BRP1831, Part B, Item 14 g, approved the ICRP. Sabina subsequently updated the ICRP during the process of amending the Type A Water Licence (2AM-BRP1831). A final ICRP (July 2021) was developed based on consultation and discussion with KIA, and CIRNAC, in conjunction with oversight from NWB, to address any monetary and/or staging changes associated with this application. The ICRP (July 2021) reflects changes associated with the Back River Project 2020 Modification Package, as well as potential advancements in operation and technology.

Results:

The ICRP (July 2021) and included conceptual progressive revegetation program was approved by the NWB and was provided to the NIRB on December 13, 2021<sup>7</sup>. This ICRP was further updated in 2022/23 as part of the amendment application process and is currently under review by the NIRB. The ICRP addresses PC T&C's 7, 15, 35, and 36.

Trends:

Not applicable.

Next Steps:

This plan will be updated as needed to reflect Project phase or applications for Project modification. Should Sabina update this plan, once accepted by the KIA, CIRNAC, and the NWB, it will be provided to the NIRB. Monitoring results associated with this plan will be provided in annual reports to the NIRB.

---

<sup>7</sup> Sabina. 2021. *Re: Sabina Response to NIRB re: The Nunavut Impact Review Board's 2020-2021 Annual Monitoring Report for the Back River Project and Board's Recommendations*. Sabina letter to NIRB, Dated December 13, 2021

Project Certificate Condition No. 8

Category	Weather Monitoring and Adaptive Management
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To monitor local weather and adaptively manage potential impacts from extreme or abnormal weather conditions.
Term or Condition (TC)	The Proponent shall provide a summary report of meteorological conditions experienced within the project area including details related to temperature, wind velocities and patterns, precipitation, as well the onset of seasonal freeze and thaw cycles, and highlight extreme or outlying weather events.
Reporting Requirement	<b>Results to be included in the Proponent’s annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	The AQMMP (December 2015) was reviewed in conjunction with NIRB Environmental Assessment.
Reference	Air Quality Monitoring and Management Plan (July 2019)

Methods:

**Sabina’s** Air Quality Monitoring and Management Plan referred to in Project Certificate T&C No.2, includes a meteorological monitoring program to monitor local weather and adaptively manage potential impacts from extreme and abnormal weather conditions.

Sabina retained Golder (now WSP) to perform maintenance and calibrations on the Goose property meteorological stations in 2022. Data was downloaded from the Goose meteorological station, reviewed, and anomalous data were removed for this summary. Overall data recovery in 2022 from the meteorological station was 99%. Data from the ECCC Bathurst Inlet station and Lupin A station climate normals (1981-2010) were also retrieved and analyzed (ECCC 2023a, 2023b). This summary includes available 2022 site and Bathurst Inlet meteorological data in comparison to long-term (1981-2010) climate normals at the Lupin A station.

Temperature

Figure TC8-1 presents the monthly mean temperatures observed at the Goose station and Bathurst Inlet in 2022 compared to the 1981-2010 Lupin A climate normals. Temperatures recorded at the Goose Lake station in 2022 were similar to the climate normal averages from Lupin A except for October where the average temperature was warmer than the climate normal daily maximum. The 2022 annual mean temperature at Goose Lake was -9.9°C, in comparison, the Lupin A 1981-2010 climate normal average is -10.9°C and the Bathurst Inlet 2022 annual mean temperature was -8.2°C. For all months of 2022 apart from June, average temperatures at the Bathurst Inlet station were warmer than Goose Station but still comparable (i.e., less than a 3.5°C difference).

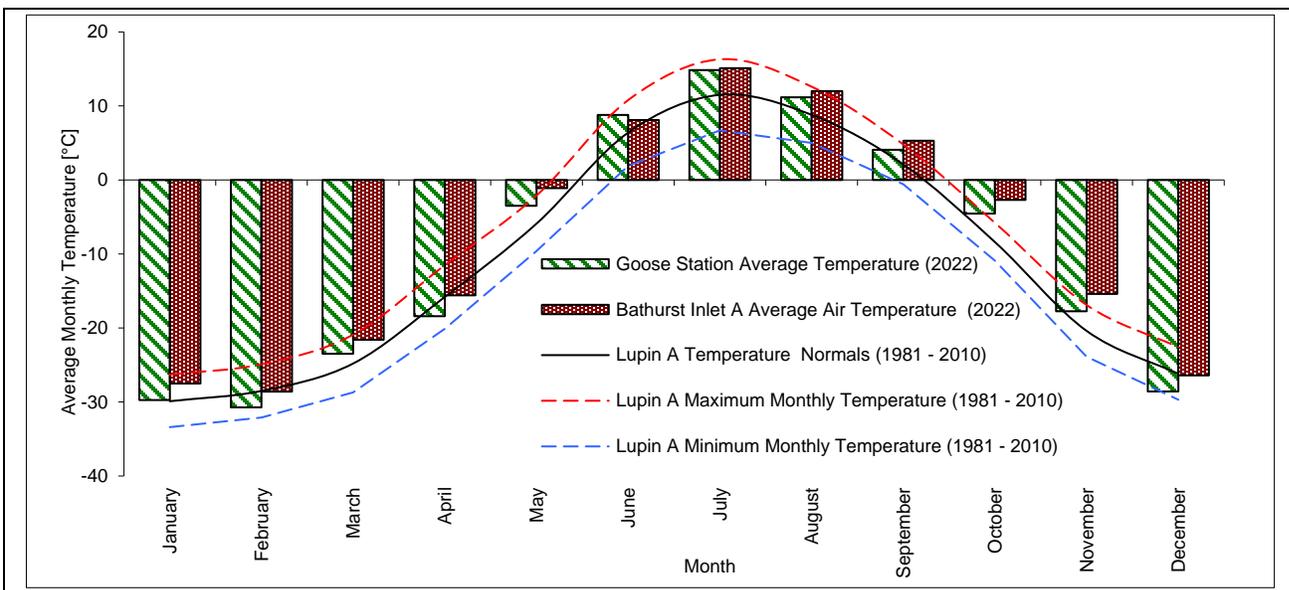


Figure TC8-1: Goose Station and Bathurst Inlet 2022 Monthly Temperature Summary

Solar Radiation

Average monthly total solar radiation at Goose station is presented in Figure TC8-2. Average monthly total solar radiation ranged from 2.2 watts per square metre (W/m<sup>2</sup>) in December to 261 W/m<sup>2</sup> in June at Goose Lake. No solar data were available from the Bathurst Inlet station.

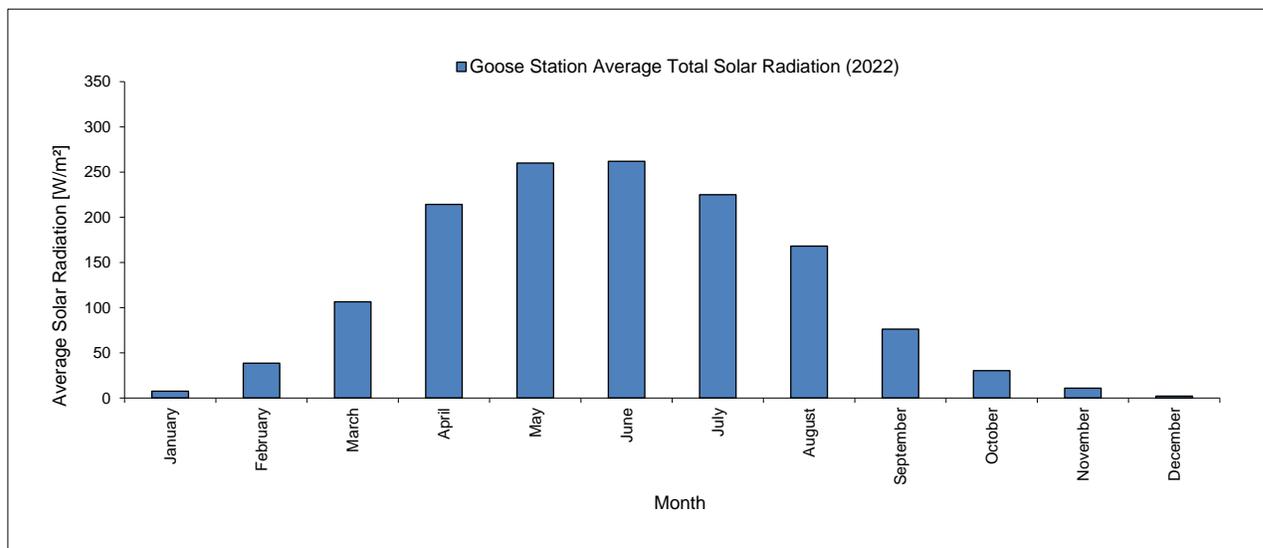


Figure TC8-2: Goose Station 2022 Monthly Average Total Solar Radiation Summary

Relative Humidity

Figure TC8-3 presents the 2022 monthly average relative humidity observed at the Goose station and Bathurst Inlet. The Goose station measured average monthly relative humidity ranging from 67% in July to 87% in October. Monthly average relative humidity at the Goose station was higher than at Bathurst Inlet for all months of 2022 except for June.

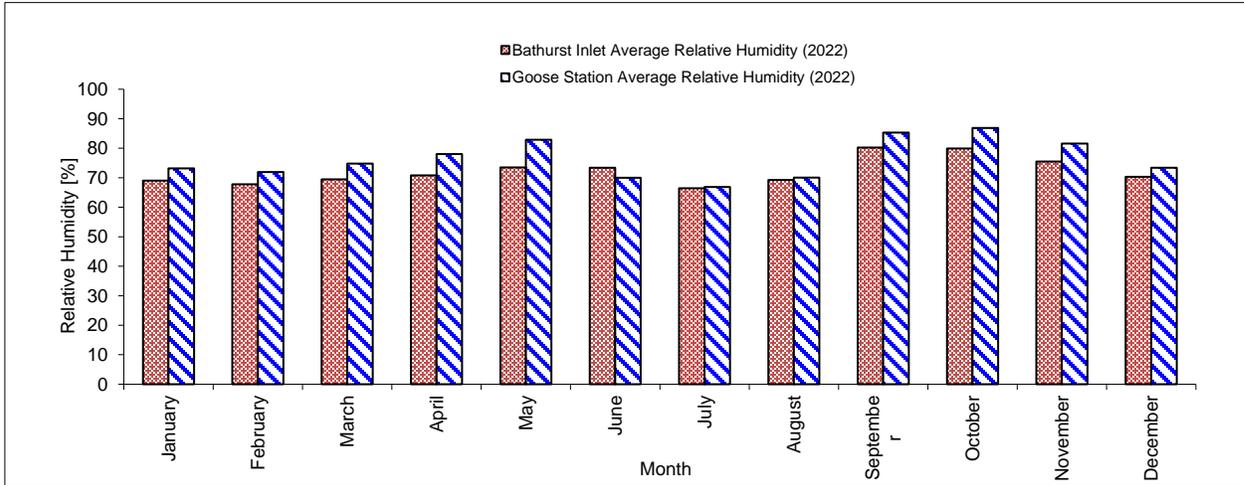


Figure TC8-3: Goose Station and Bathurst Inlet Station 2022 Monthly Average Relative Humidity Summary

Precipitation

Monthly rainfall observed at the Goose station in 2022 is compared to the Lupin A 1981-2010 climate normals in Figure TC8-4 and Figure TC8-5 compares the 2022 monthly total precipitation observed at Bathurst Inlet station to the Lupin A 1981-2010 climate normals. Rainfall measured at the Goose station in 2022 (127.1 mm) is lower than the Lupin A climate normal for annual rainfall (160.5 mm). Similarly, total precipitation recorded at the Bathurst Inlet station in 2022 (178.6 mm) was notably drier than the Lupin A climate normal for annual total precipitation (298.5 mm). Rainfall data from the Bathurst Inlet station is unavailable therefore direct comparisons to Goose station cannot be made, although during months where temperatures were above freezing at both stations in 2022 (i.e., May through October), the Goose station rainfall (127.1 mm) was similar to the Bathurst Inlet station total precipitation (132.9 mm).

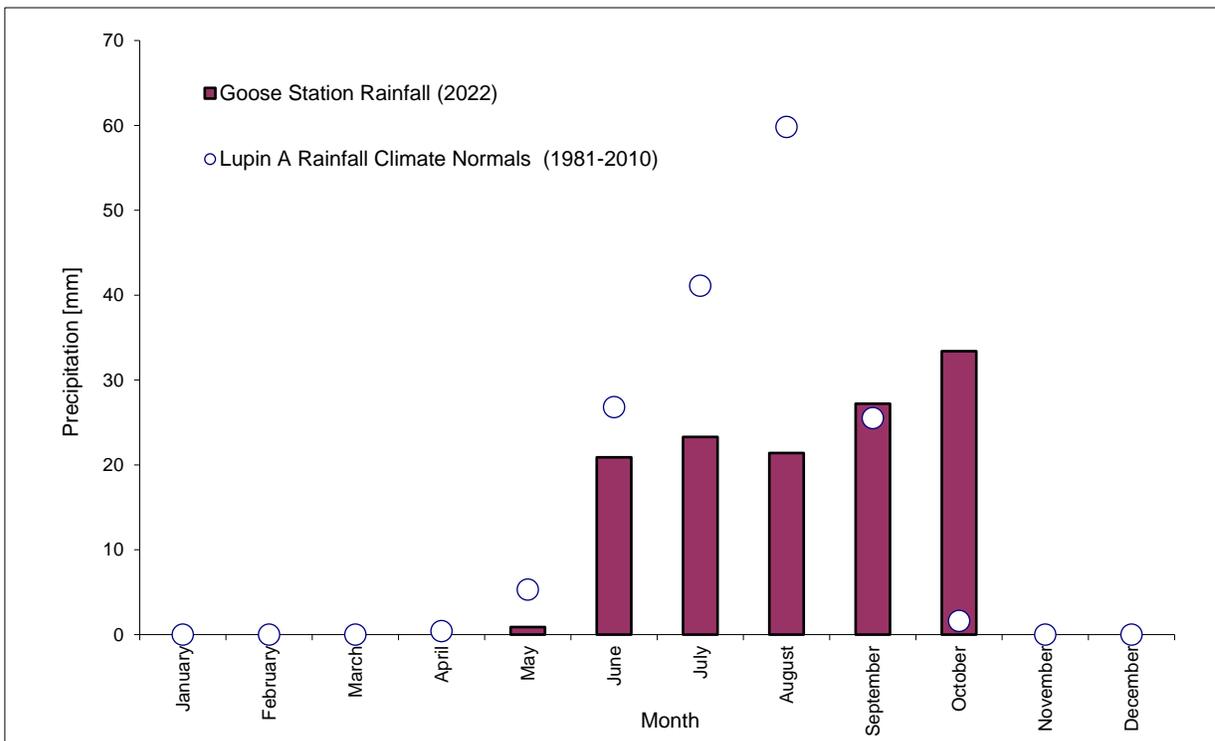


Figure TC8-4: Goose Station 2022 Monthly Rainfall Summary

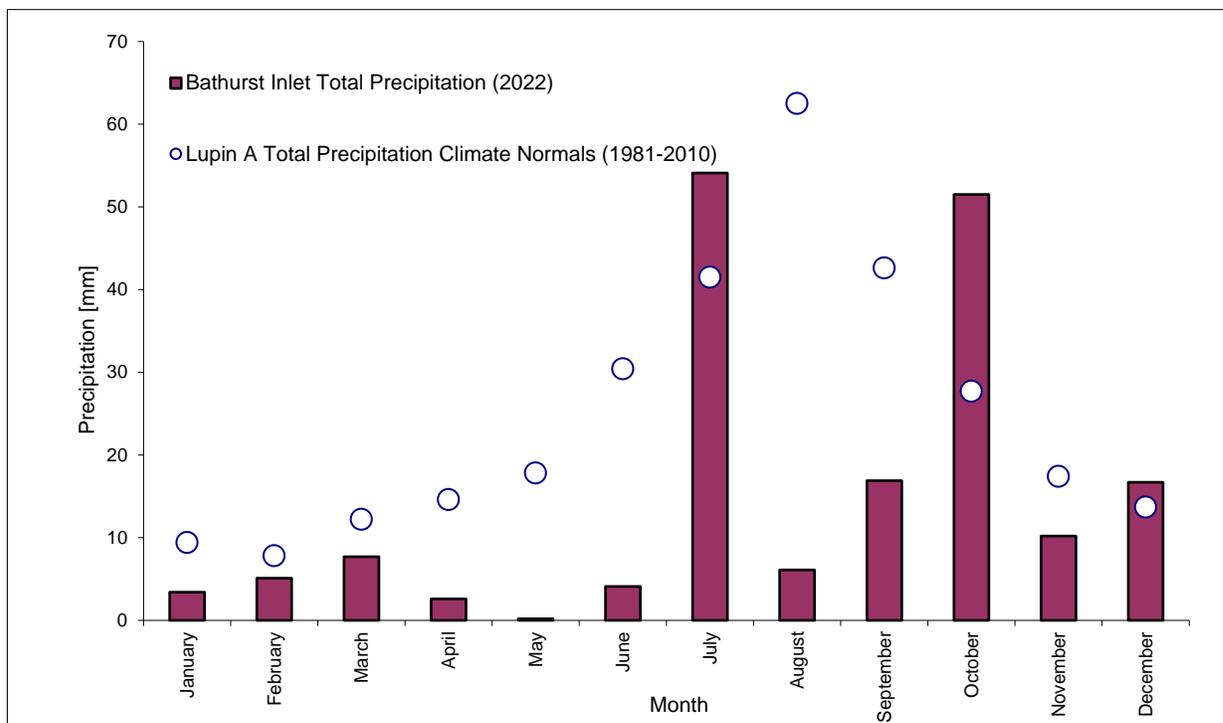


Figure TC8-5: Bathurst Inlet 2022 Monthly Total Precipitation Summary

**Wind**

Windroses that summarize the frequencies of wind directions and speeds observed at Bathurst Inlet and at the Goose station in 2022 are provided in Figures TC8-6 and TC8-7, respectively.

The predominant wind direction measured at the Bathurst Inlet station was from the west to northwest wind sectors. Strong winds (greater than 19.3 km/h) were frequent, at 35% of the 2022 recorded data. In 2022 the common wind directions observed at the Goose station were from the west, north-northwest, north, and south. Infrequently were winds observed from the northeast to east-southeast wind sector in 2022 at the Goose station. Strong winds at the Goose station were more frequent than at the Bathurst Inlet station; 48% of recorded winds in 2022 were strong at the Goose station.

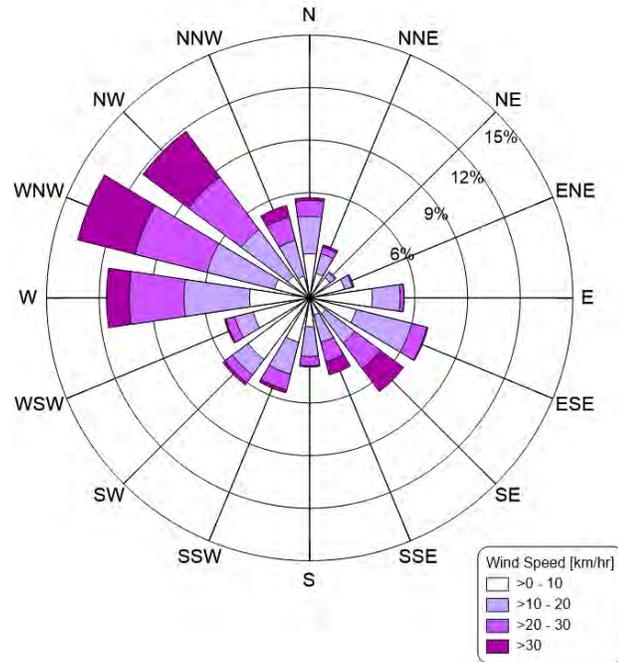


Figure TC8-6: Bathurst Inlet Station 2022 Windrose

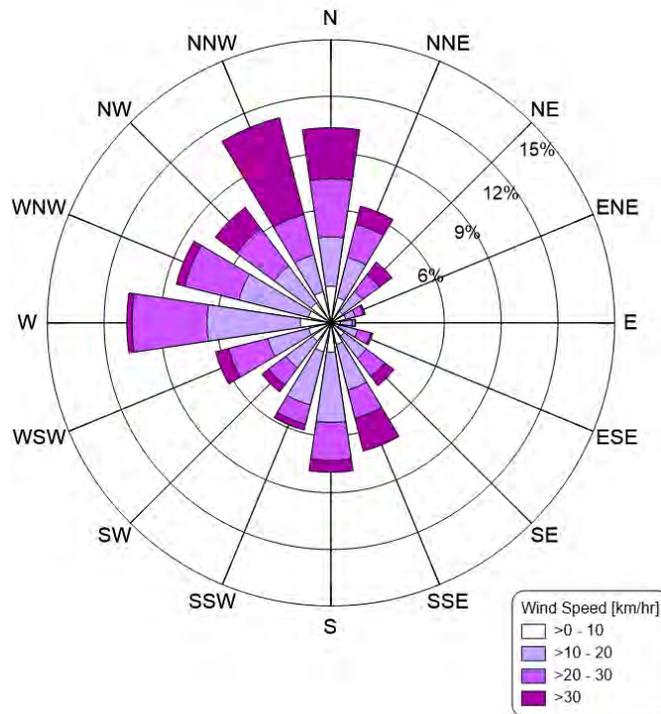


Figure TC8-7: Goose Station 2022 Windrose

Trends:

Not applicable.

Next Steps:

Sabina will continue to perform annual on-site field inspections of existing monitoring equipment to verify equipment is in proper working order during the Construction Phase.

Monitoring will continue-on from the Construction Phase and throughout Operations. Meteorology will be measured at on-site stations in accordance with the Meteorological Service of Canada meteorological station siting recommendations (MSC 2001), as per the AQMMP. Data will be recorded on an hourly basis. Supplemental data will be reviewed and included if relevant from appropriate publicly available stations such as ECCC weather stations.

Results from the monitoring programs will be reviewed annually and a summary report of meteorological conditions experienced within the project area including details related to temperature, wind velocities and patterns, precipitation, as well the onset of seasonal freeze and thaw cycles, and highlight extreme or outlying weather reported to the NIRB in the annual report.

Reference:

ECCC (Environment and Climate Change Canada). 2023a. Bathurst Inlet (Climate ID: 2300551) Historical Data. Available here: [https://climate.weather.gc.ca/historical\\_data/search\\_historic\\_data\\_e.html](https://climate.weather.gc.ca/historical_data/search_historic_data_e.html).

ECCC. 2023b. 1981-2010 Climate Normals & Averages: Lupin A Station. Available here: [https://climate.weather.gc.ca/climate\\_normals/index\\_e.html](https://climate.weather.gc.ca/climate_normals/index_e.html).

MSC (Meteorological Service of Canada). 2001. MSC STDS 2 - 2001. Siting Standards for Meteorological Observing Sites. June 2001.

4.5.3 Noise and Vibration (PC TCs 9 through 10)

Project Certificate Condition No. 9

Category	Noise Reduction
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, and Final Closure
Objective	To ensure worker health and safety.
Term or Condition (TC)	The Proponent shall demonstrate consideration for noise reduction measures when siting and constructing both the Goose Property and Marine Laydown Area camps. Further, the Proponent shall demonstrate that noise levels will remain within reasonable limits and no further mitigation (e.g. additional sound proofing) is required.
Reporting Requirement	During construction, the Proponent shall, on an annual basis, provide information regarding mitigation measures and monitoring undertaken in fulfillment of this <b>Term and Condition in the Proponent’s annual report to the Nunavut Impact Review Board</b> . During operations, once the sound levels associated with operations become stable and predictable, the Proponent shall provide information regarding monitoring results and any updates to mitigation measures <b>every 2 (two) years in the Proponent’s annual report to the Nunavut Impact Review Board</b> .
Status of Compliance	Compliant
Stakeholder Review	Noise Abatement Plan initial stakeholder review undertaken during the NIRB Environmental Assessment.
Reference	Back River Project Noise Abatement Plan, Revision G.1 (November 2015) (NIRB PRI: 301426)  Back River Project FEIS Volume 4 Section 2: Noise and Vibration (November 2015)

Methods:

Noise reduction measures were incorporated into design and layout of the Goose Property and Marine Laydown Area. Additional operations measures implemented to minimize noise effects include purchase and use of equipment fitted with appropriate mufflers and silencers, identifying enclosures, berms, acoustic screening and shrouding where stationary sources of noise require control and ensuring equipment is well maintained.

Throughout the Project Construction and Operations phases, noise levels will be monitored in accordance with applicable legislation and guidelines. Additional details on noise monitoring methods are provided in the Noise Abatement Plan (November 2015) which Sabina is currently reviewing and updating. If monitoring data indicates noise levels in excess of reasonable limits and/or predictions from the FEIS, additional noise mitigation options will be considered.

Results:  
Not Applicable.

Trends:

Not Applicable.

Next Steps:

Sabina has obtained and operates decibel readers at the Back River Project site in which noise mapping of general areas can be completed and areas where noise protection is required are identified. To date, no areas have been recorded where additional noise protection is required.

In addition, Sabina plans to bring a third-party Occupation Hygienist to conduct OHS atmospheric sampling, vibration monitoring, and noise monitoring annually, and this information will be provided in annual reports. This is tentatively scheduled for July 2023.

## Project Certificate Condition No. 10

Category	Noise Reduction
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Construction, Operations
Objective	To ensure worker health and safety.
Term or Condition (TC)	The Proponent shall demonstrate its consideration of options to further mitigate noise generated from project activities, equipment, and components during normal operations as well as from project activities, equipment, and components that would remain operational during staged reduction events (e.g., noise barriers, acoustic insulation, exhaust silencers).
Reporting Requirement	During construction, the Proponent shall, on an annual basis, provide information regarding mitigation measures and monitoring undertaken in fulfillment of this <b>Term and Condition in the Proponent's annual report to the Nunavut Impact Review Board</b> . During operations, once the sound levels associated with operations become stable and predictable, the Proponent shall provide information regarding monitoring results and any updates to mitigation measures <b>every 2 (two) years in the Proponent's annual report to the Nunavut Impact Review Board</b> .
Status of Compliance	Compliant
Stakeholder Review	Noise Abatement Plan initial stakeholder review undertaken during the NIRB Environmental Assessment.
Reference	Back River Project Noise Abatement Plan, Revision G.1 (November 2015) (NIRB PRI: 301426)

## Methods:

Throughout the Project Construction and Operations phases, noise levels will be monitored in accordance with applicable legislation and guidelines. Additional details on noise abatement measures are provided in the Noise Abatement Plan (November 2015) along with a monitoring overview. If monitoring data indicates noise levels in excess of reasonable limits and/or predictions from the FEIS, additional noise mitigation options will be considered.

## Results:

Not Applicable.

## Trends:

Not Applicable.

## Next Steps:

Sabina has obtained and operates decibel readers at the Back River Project site in which noise mapping of general areas can be completed and areas where noise protection is required are identified. To date, no areas have been recorded where additional noise protection is required.

In addition, Sabina plans to bring a third-party Occupation Hygienist to conduct OHS atmospheric sampling, vibration monitoring, and noise monitoring annually, and this information will be provided in annual reports. This is tentatively scheduled for July 2023.

## 4.5.4 Terrestrial Environment (PC TCs 11 through 15)

## Project Certificate Condition No. 11

Category	Permafrost Mapping and Monitoring
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To monitor and plan for changing permafrost conditions.
Term or Condition (TC)	The Proponent shall conduct further permafrost mapping to document permafrost temperature, thickness of seasonal thaw and amount of ground ice in the project development area. This information will be made available to inform the detailed design of project infrastructure.
Reporting Requirement	During construction, the Proponent shall, on an annual basis, provide additional permafrost mapping information documented in fulfillment of this Term and <b>Condition in the Proponent's annual report to the Nunavut Impact Review Board.</b> Subsequently, once monitoring has demonstrated that the area(s) assessed are <b>stable, every two years the Proponent shall identify, in the Proponent's annual report to the Nunavut Impact Review Board, any updates to the Proponent's previous permafrost mapping results.</b>
Status of Compliance	Compliant
Stakeholder Review	Nunavut Impact Review Board
Reference	Not applicable

## Methods:

Sabina shall conduct further permafrost mapping to document permafrost temperature, thickness of seasonal thaw, and amount of ground ice in the Project Development Area. This information will be made available to inform the detailed design of project infrastructure.

## Results:

Not applicable.

## Trends:

Not applicable.

## Next Steps:

Sabina places high importance on ensuring that permafrost integrity is maintained. This is not only for environmental and flow path reasons, for monitoring and looking for potential changes in permafrost distribution, but also due to the fact that many of the infrastructure designs tie directly into the permafrost. For example, the Primary Pond, the first large water management structure being constructed, has a frozen foundation. The frozen foundation designs rely on a liner being keyed into the frozen permafrost foundation to achieve containment. The thermal design for these structures is based on passive heat transfer with the atmosphere and includes sufficient thermal cover, or dam fill, to limit warming and thaw of the foundation. Detailed thermal analysis was required for these critical infrastructure components and cross-sections to ensure that the design intent could be upheld during operation.

As part of the 2023 scope of works, Sabina has committed to revisiting the locations where past thermistors or Ground Temperature Cables (GTCs) have been installed, taking readings were possible, and generating

an initial draft of Goose site Thermal Monitoring Plan. Once a draft of the Thermal Monitoring Plan is complete Sabina will submit this to NIRB (likely as part of the 2023 NIRB annual reporting package, if not earlier).

To date, Sabina has not constructed the larger and primary water management infrastructure. The construction of the first of the larger water management infrastructure, the Primary Pond, is being started now. As part of this construction a detailed thermal monitoring system is being installed. Additional details on the Primary Pond **thermal monitoring are detailed in Sabina's December 5th, 2022 "Responses to Primary Pond report Comments" package; this package responded to comments raised by KIA, CIRNAC and ECCC on our Nunavut Water Board (NWB) Primary Pond Engineering Design Report.** The instrumentation for the Primary Pond system (which includes a series of more than a dozen ground temperature cables within, upstream and downstream of this structure) is in the process of being procured now. Ground temperatures will be installed in 2023 and measurements will be collected around the Primary Pond location. During construction best efforts will also be made to capture periodic spot readings of the permafrost in the Primary Pond construction locations where possible.

Some additional details and figures are presented at the end of this response package to overview some of the past ground temperature cable installations and provide some examples of the construction and long-term thermal monitoring planned for the Primary Pond.

## Project Certificate Condition No. 12

Category	Permafrost Monitoring
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To monitor and mitigate impacts from the Project on permafrost.
Term or Condition (TC)	The Proponent shall monitor the effects of the Project on permafrost conditions relative to project infrastructure, including associated roads, waste rock stockpiles, trails, and quarries. Should permafrost degradation be observed, the Proponent shall report on measures implemented to restore and promote permafrost integrity.
Reporting Requirement	During construction, the Proponent shall, on an annual basis, provide information regarding the results of monitoring and identifying any mitigation measures <b>undertaken in fulfillment of this Term and Condition in the Proponent's annual report</b> to the Nunavut Impact Review Board. Subsequently, once monitoring has demonstrated that the area(s) assessed are stable, the Proponent shall provide information regarding monitoring results and any updates to mitigation measures <b>every 2 (two) years in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Nunavut Impact Review Board, Nunavut Water Board
Reference	Not applicable

## Methods:

Sabina shall monitor the effects of the Project on permafrost conditions relative to project infrastructure, including associated roads, waste rock stockpiles, trails, and quarries. Should permafrost degradation be observed, the Proponent shall report on measures implemented to restore and promote permafrost integrity.

## Results:

Not applicable.

## Trends:

Not applicable.

## Next Steps:

Sabina places high importance on ensuring that permafrost integrity is maintained. This is not only for environmental and flow path reasons, for monitoring and looking for potential changes in permafrost distribution, but also due to the fact that many of the infrastructure designs tie directly into the permafrost. For example, the Primary Pond, the first large water management structure being constructed, has a frozen foundation. The frozen foundation designs rely on a liner being keyed into the frozen permafrost foundation to achieve containment. The thermal design for these structures is based on passive heat transfer with the atmosphere and includes sufficient thermal cover, or dam fill, to limit warming and thaw of the foundation. Detailed thermal analysis was required for these critical infrastructure components and cross-sections to ensure that the design intent could be upheld during operation.

As part of the 2023 scope of works, Sabina has committed to revisiting the locations where past thermistors or Ground Temperature Cables (GTCs) have been installed, taking readings where possible, and generating an initial draft of Goose site Thermal Monitoring Plan. Once a draft of the Thermal Monitoring Plan is complete Sabina will submit this to NIRB (likely as part of the 2023 NIRB annual reporting package, if not earlier).

To date, Sabina has not constructed the larger and primary water management infrastructure. The construction of the first of the larger water management infrastructure, the Primary Pond, is being started now. As part of this construction a detailed thermal monitoring system is being installed. Additional details **on the Primary Pond thermal monitoring are detailed in Sabina’s December 5th, 2022 “Responses to Primary Pond report Comments” package; this package responded to comments raised by KIA, CIRNAC and ECCC on our Nunavut Water Board (NWB) Primary Pond Engineering Design Report.** The instrumentation for the Primary Pond system (which includes a series of more than a dozen ground temperature cables within, upstream and downstream of this structure) is in the process of being procured now. Ground temperatures will be installed in 2023 and measurements will be collected around the Primary Pond location. During construction best efforts will also be made to capture periodic spot readings of the permafrost in the Primary Pond construction locations where possible.

As part of, and as reported in the Goose Annual Geotechnical Inspections (AGI) which is a term and condition of Sabina’s Type A Water Licence (2AM-BRP1831), all the available ground temperature data was reviewed. A summary of that data is presented in the 2022 AGI report (Appendix B). Generally, the **permafrost on site is seen to be ‘cold’ (generally below -20C at depth)** and supports the approach that permafrost should be focused on being maintained below any section of infrastructure constructed over overburden (less critical for elements built over bedrock).

The last reading for most of the ground temperature cables was from 2015 or earlier. This noted, Sabina has put a plan together for 2023 to go and revisit ground temperature cable locations, that still exist on site and are accessible, to see if any additional readings can be opportunistically collected. Data collection will be attempted from the areas where historic instrumentation appears to still be active.

Figure 1 below shows an overview of the historic ground temperature cable locations.

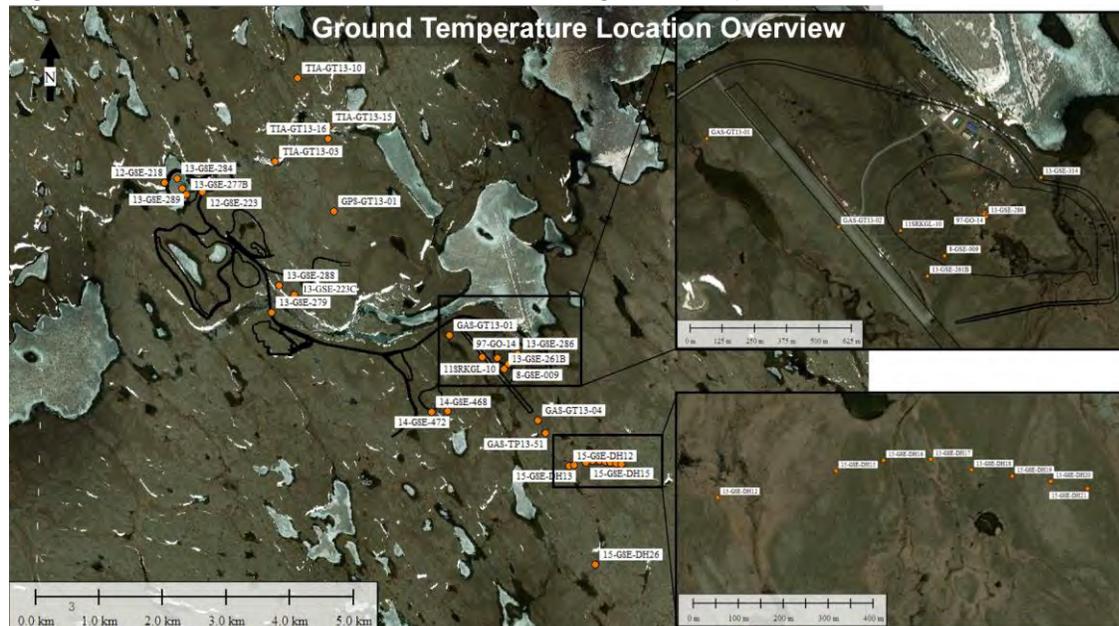


Figure 1 - Overview of the Historic GTCs at the Goose Site (function / activity unknown)

Locations around the airstrip, Echo Pit location and the future camp site have been removed or not active. The other areas (many further from the ongoing infrastructure development, or located in previously planned infrastructure) will be further investigated in 2023.

Primary Pond Instrumentation

As part of the Primary Pond design a detailed monitoring system has been included. For the Ground Temperature Cables (GTCs) monitoring is planned within embankment sections and at the upstream and downstream toes.

See Figure 2 for a plan view overview of the GTCs and Figure 3 for an example cross-sections of the GTC installations.

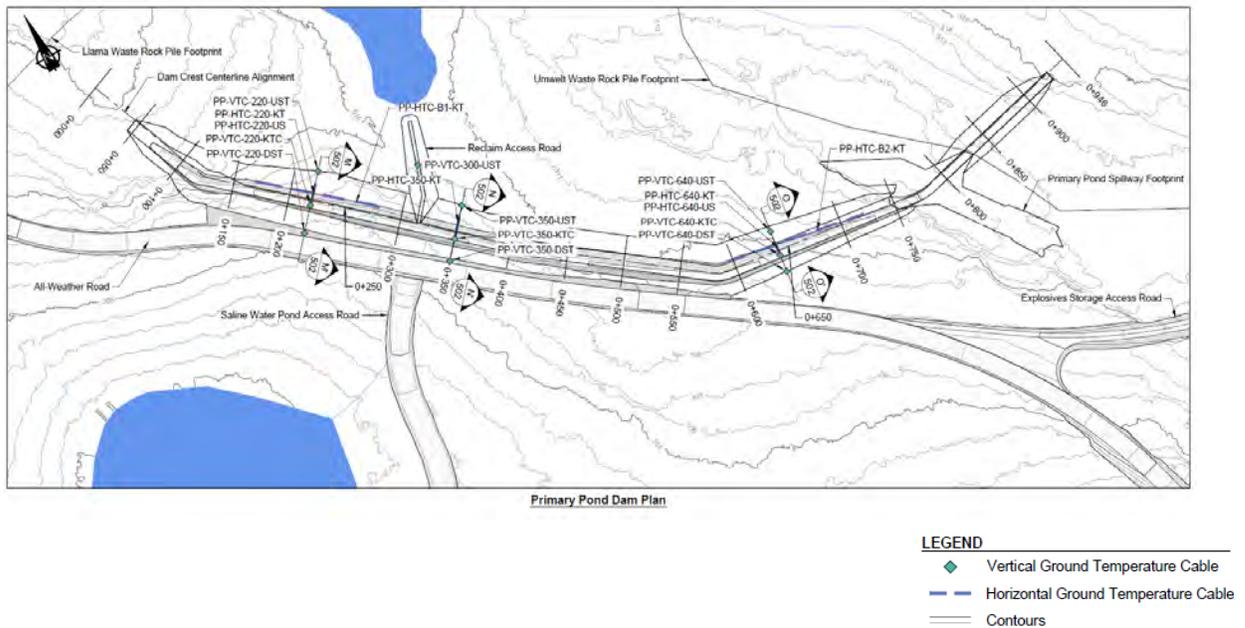


Figure 2 - GTC Monitoring at the Primary Pond - Plan View

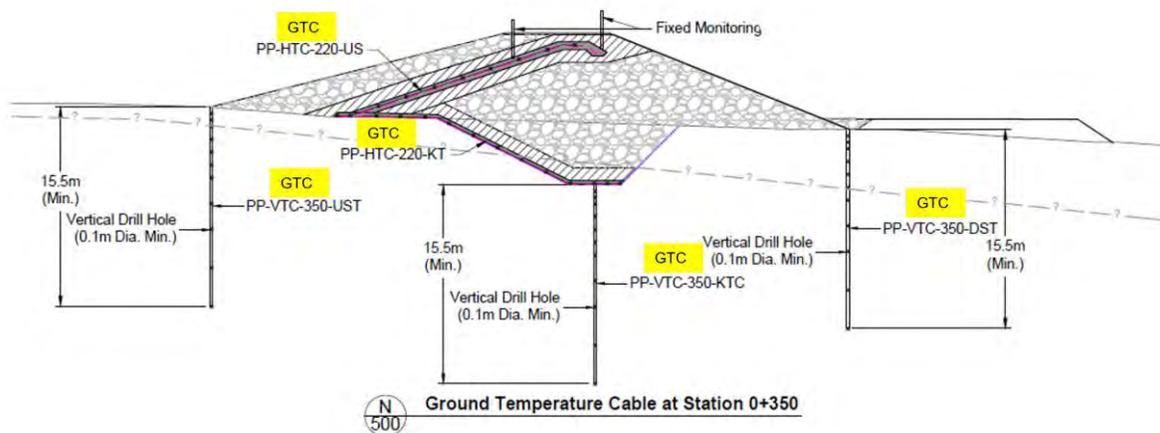


Figure 3 - Example Primary Pond Monitoring Cross-Sections

During construction of critical infrastructure, best efforts will be carried out on site to collect additional 'spot' thermal data. An example of this is shown in Figure 4 below where some of the instrumentation on site (for the Primary Pond) was temporarily placed down a drilling blast hole to collect some additional thermal monitoring 'spot' data. This type of monitoring will be done more opportunistically when opportunities present themselves (typically done by the site field engineering or quality control or monitoring staff).

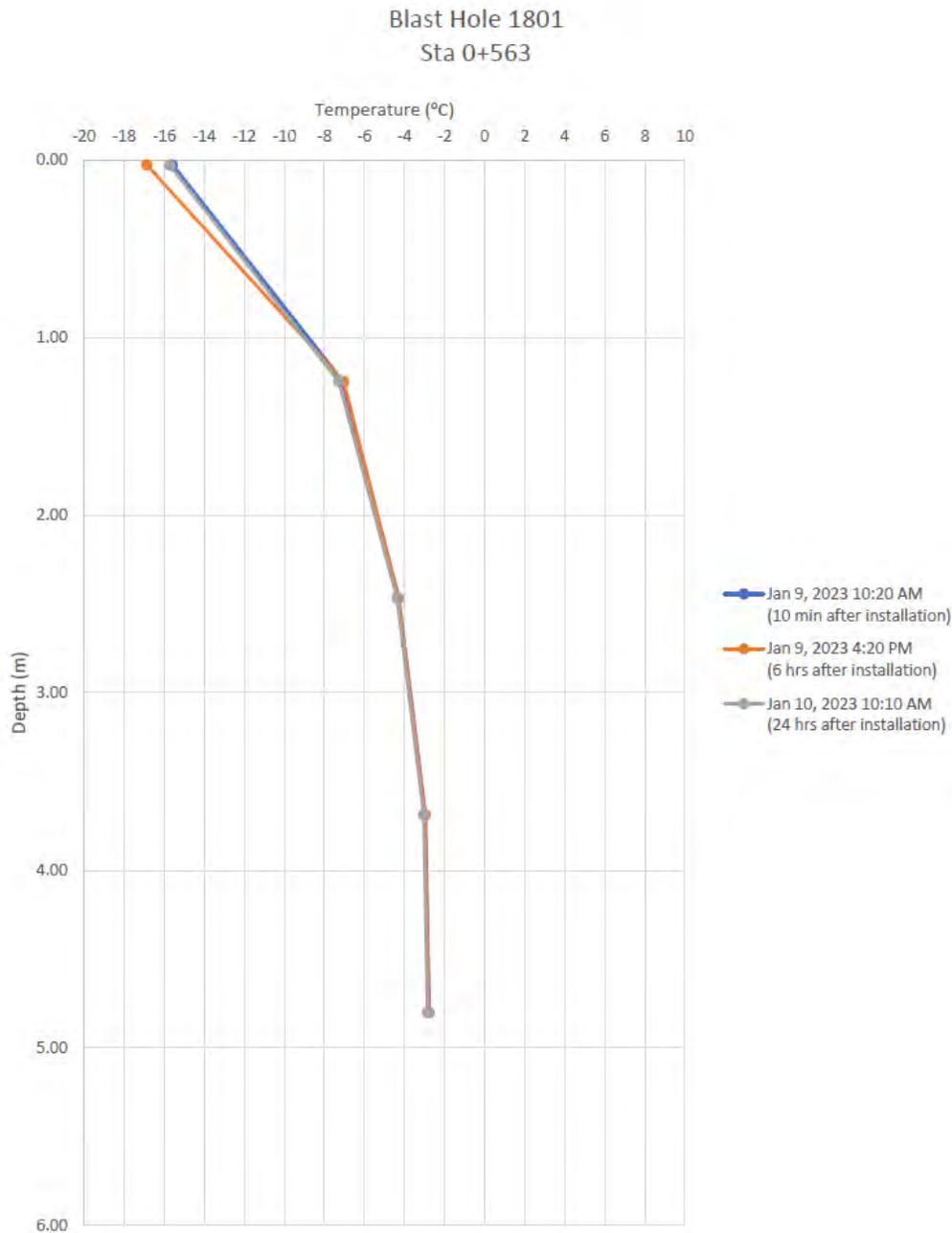


Figure 4 - Example 'Spot' Field Ground Temperature Measurements Collected During Construction

## Project Certificate Condition No. 13

Category	Sensitive Landform Mitigation and Monitoring
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate project impacts on sensitive landforms.
Term or Condition (TC)	The Proponent shall undertake additional geotechnical investigations as required to identify sensitive landforms, modify engineering design for project infrastructure (e.g., tailings storage facilities, waste rock piles, and landfill), and develop and implement mitigation and monitoring measures to prevent or <b>minimize the impacts of the Project's activities and infrastructure on sensitive landforms</b> . Plans for the investigations, mitigation, and monitoring measures are to be included within appropriate management plans.
Reporting Requirement	During construction, the Proponent shall, on an annual basis, provide information regarding the results of additional geotechnical investigations undertaken and any associated mitigation and monitoring measures implemented by the <b>Proponent in the Proponent's annual report to the Nunavut Impact Review Board</b> . Subsequently, once monitoring has demonstrated that the area(s) assessed are stable, the Proponent shall provide information regarding any updates to <b>mitigation measures and monitoring every 2 (two) years in the Proponent's annual report to the Nunavut Impact Review Board</b> .
Status of Compliance	Compliant
Stakeholder Review	Nunavut Impact Review Board, Nunavut Water Board
Reference	Not applicable

## Methods:

Sabina shall undertake additional geotechnical investigations as required to identify sensitive landforms, modify engineering design for project infrastructure (e.g., tailings storage facilities, waste rock piles, and landfill), and develop and implement mitigation and monitoring measures to prevent or 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.

## Results:

Not applicable.

## Trends

Not applicable.

## Next Steps

Sabina is required to have an annual geotechnical inspection completed by a Geotechnical Engineer of all major earthworks. The inspection must be conducted in accordance with the *Canadian Dam Safety Guidelines* where applicable. This is a requirement of the Back River Project Type A Water Licence 2AM-BRP1831 (Part I, Item 10). Sabina completed this annual geotechnical inspection in 2022 and it is included in this NIRB Annual Report (Appendix A).

Project Certificate Condition No. 14

Category	Waste Management Plan
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure waste management is protective of the surrounding environment.
Term or Condition (TC)	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. The Proponent shall demonstrate that the use of liners at waste management facilities has been considered and adopted, wherever feasible.
Reporting Requirement	The plan should be submitted to the Nunavut Impact Review Board at least 60 days prior to the start of construction, with updates provided as necessary.
Status of Compliance	Compliant
Stakeholder Review	Nunavut Impact Review Board, Nunavut Water Board, CIRNAC, ECCC
Reference	Landfill and Waste Management Plan (2017). Landfill and Waste Management Plan (2022; Pending approval from the NWB).

Methods:

In conjunction with the Type A Water Licence Application, Sabina submitted a Landfill and Waste Management Plan (LWMP; October 2017). The LWMP was updated to reflect NIRB PC T&C's 7, 15, 35, and 36 and was approved by the NWB. Sabina recently reviewed and updated this plan to reflect site activities during the construction phase and to clarify waste segregation and wildlife attractant management practices.

Results:

Sabina provided the updated Landfill and Waste Management Plan (August 2022) to the NWB on September 1, 2022 for review and approval.

Trends:

Not applicable.

Next Steps:

Once approved by the NWB, the updated LWMP will be submitted to the NIRB **in the following year's annual report**.

## Project Certificate Condition No. 15

Category	Progressive Reclamation Plan
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure that project components, areas, and infrastructure are progressively reclaimed throughout the life of the Project.
Term or Condition (TC)	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: <ul style="list-style-type: none"> <li>a. 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>b. 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>c. how Inuit Qaujimagatuqangit and Traditional Knowledge was collected, and used to inform closure plans and the design of project components.</li> </ul>
Reporting Requirement	The plan should be submitted to the Nunavut Impact Review Board (NIRB) at least 90 days prior to the start of construction, with results and details submitted annually thereafter or as may otherwise be required by the NIRB.
Status of Compliance	Compliant
Stakeholder Review	Crown Indigenous Relations and Northern Affairs Canada, Environment Climate Change Canada, Nunavut Water Board, Kitikmeot Inuit Association
Reference	Back River Project Interim and Closure Reclamation Plan (July 2021)

## Methods:

Sabina has developed a Progressive Reclamation Plan for project components, areas, and infrastructure throughout the life of the Project. **Sabina's Progressive Reclamation Plan is included in Sabina's Interim Closure and Reclamation Plan (July 2021)**, which has been approved by the NWB following consultation and discussion with the KIA and CIRNAC. The Progressive Reclamation Plan details:

- a. projected timelines for the reclamation of project features, methodologies for undertaking such activities, and monitoring measures to ensure the effectiveness of reclamation methods employed;
- b. specific measures for adaptive management and triggers for their application, should monitoring results reveal trends that could affect the reclamation and closure objectives; and
- c. how Inuit Qaujimagatuqangit and Traditional Knowledge was collected and used to inform closure plans and the design of project components.

Results:

**Sabina's** Progressive Reclamation Plan was approved by the NWB with the issuance of the amended Licence, and was provided to the NIRB on Dec 13, 2021<sup>8</sup>.

No progressive reclamation activities have been undertaken to date, as no mining areas constructed are no longer in operation.

Trends:

Not applicable.

Next Steps:

Progressive reclamation results will be submitted annually, or as may otherwise be required by the NIRB.

---

<sup>8</sup> Sabina. 2021. *Re: Sabina Response to NIRB re: The Nunavut Impact Review Board's 2020-2021 Annual Monitoring Report for the Back River Project and Board's Recommendations*. Sabina letter to NIRB, Dated December 13, 2021.

## 4.5.5 Geological Features, Surficial and Bedrock Geology, and Geochemistry (PC TCs 16 through 18)

## Project Certificate Condition No. 16

Category	Aggregate Sources
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure
Objective	To inform parties on the quarry or borrow materials required for the development of project infrastructure.
Term or Condition (TC)	The Proponent shall develop site-specific quarry operation and management plans in advance of the development of any potential quarry site or borrow pit.
Reporting Requirement	The plan should be submitted to the Nunavut Impact Review Board and the Kitikmeot Inuit Association at least 30 days prior to the use of borrow or quarry sites for <b>review. Information regarding the Proponent's fulfillment of this Term and Condition and identifying any amendments to existing site-specific quarry operation and management plans shall be provided annually in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Nunavut Impact Review Board, CIRNAC
Reference	Back River Project Quarry Management Plan (November 2020)

## Methods:

Sabina develops site-specific quarry operation and management plans in advance of the development of any potential quarry site or borrow pit.

Sabina updated the Borrow Pits and Quarry Management Plan (QMP) **in 2020 for inclusion in Sabina's** application for amendment of Water Licence 2AM-BRP1831. Sabina has confirmed that the 2020 QMP continues to appropriately addresses PC T&C's 16 and 23 and provides suitable guidance for current and near future site activities.

## Results:

The QMP (November 2020) was approved by the NRB with the issuance of the amended Licence 2AM-BRP1831 and was provided to the NIRB on Dec 13, 2021<sup>9</sup>.

## Trends:

Not applicable.

<sup>9</sup> Sabina. 2021. *Re: Sabina Response to NIRB re: The Nunavut Impact Review Board's 2020-2021 Annual Monitoring Report for the Back River Project and Board's Recommendations*. Sabina letter to NIRB, Dated December 13, 2021.

Next Steps:

Sabina will provide any further updates to the Borrow Pits and Quarry Management Plan to the NIRB once approved by the NWB. Sabina will continue to provide site-specific quarry operation and management plans to the NIRB and the KIA at least 30 days prior to the use of borrow or quarry sites for review. Any amendments to existing site-specific quarry operation and management plans shall be provided in **Sabina's** annual report to the NIRB.

## Project Certificate Condition No. 17

Category	Monitoring of Tailings and Treatment Sludges
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Operations, Temporary Closure/Care and Maintenance
Objective	To mitigate potential impacts to the receiving environment caused by remobilization of arsenic.
Term or Condition (TC)	The Proponent shall conduct tests of the tailings and treatment sludges as they are produced to evaluate the potential for remobilization of arsenic from these materials.  <b>Commentary: For clarity, the Proponent's testing is limited to grab sampling only</b> 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.
Reporting Requirement	The results of the tests should be submitted the Nunavut Impact Review Board (NIRB), the Kitikmeot Inuit Association and other interested parties annually or as may otherwise rascal stream be required by the NIRB.
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Nunavut Impact Review Board, Nunavut Water Board, Crown Indigenous and Northern Affairs Canada
Reference	Tailings Management Plan (November 2020) Tailings Management Plan (April 2022; Pending approval from the NWB).

## Methods:

Sabina will shall conduct tests of the tailings and treatment sludges as they are produced to evaluate the potential for remobilization of arsenic from these materials. Sabina updated the Back River Project Tailings **Management Plan (TMP) in 2020 for inclusion in Sabina's application** for amendment of Water Licence 2AM-BRP1831. This TMP addressed the commitment to evaluate the potential for remobilization of arsenic in tailings and treatment sludges, and was approved by the NWB with the issuance of the amended Licence 2AM-BRP1831 and a copy was provided to the NIRB. Sabina has subsequently reviewed and updated the TMP and provided an April 2022 TMP to the NWB for review and approval.

## Results:

The TMP (April 2022) is pending NWB approval.

## Trends:

Not applicable.

Next Steps:

Once approved by the NWB, the TMP (April 2022) will be provided to the NIRB in the annual report.

When tailings and treatment sludges are produced and available for testing, Sabina will conduct analysis, and provide analytical results, in accordance with the Annual reporting requirements of the Project Certificate and/or Type A Water Licence requirements, which includes submission of results to the NIRB and KIA.

## Project Certificate Condition No. 18

Category	Geotechnical Characterization Program
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations
Objective	To minimize the impacts of contaminated water to the groundwater and receiving environment.
Term or Condition (TC)	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.
Reporting Requirement	During construction, the Proponent shall, on an annual basis, provide information regarding the results of the infill geotechnical characterization program and any <b>required mitigation measures in the Proponent's annual report to the Nunavut Impact Review Board</b> . Subsequently, once monitoring has demonstrated that the area(s) assessed are stable, the Proponent shall provide information regarding any updates to the infill geotechnical characterization program and any required mitigation measures every 2 (two) <b>years in the Proponent's annual report to the Nunavut Impact Review Board</b> .
Status of Compliance	Compliant
Stakeholder Review	Nunavut Impact Review Board, Nunavut Water Board
Reference	Not applicable

Methods:
----------

Sabina 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 will include permeability testing, seepage analysis and planning for thermal monitoring of the western ridge, where appropriate.

## Results:

Sabina completed an initial infill geotechnical drill program at the Goose Property in March and April of 2018. Drilling was focused on understanding proposed water management infrastructure foundations and included drill holes targeting the western ridge and the TSF Containment Dam. Field permeability (packer testing) was also completed on a subset of the drill holes. Initial results of drilling at the western ridge suggest the area does not have high permeability, with few joints and fractures present, as well as clay infilling and no visible ice within the drill hole.

Further geotechnical drilling was undertaken in 2021 however the program did not focus on the TSF Containment Dam but other key infrastructure locations. Going forward, Sabina will complete the remaining infill geotechnical drill program as part of further characterization carried out immediately prior to TSF Dam construction if constructed. **It's noted that Sabina's currently approved mine plan no longer contains a TSF structure and its associated dam.**

Trends:

Not applicable.

Next Steps:

During Construction, Sabina, on an annual basis, will provide information regarding the results of the infill geotechnical characterization program and any required mitigation measures in **Sabina's** annual report to the NIRB. Subsequently, once monitoring has demonstrated that the area(s) assessed are stable, Sabina will provide information regarding any updates to the infill geotechnical characterization program and any required mitigation measures every two years in **Sabina's** annual report to the NIRB.

Note, for waste disposal/management facilities defined in the Type A Water Licence 2AM-BRP1831, Sabina will include final design and construction drawing accompanied by a detailed report that will include results of the infill geotechnical characterization program and a description of necessary monitoring instrumentation to confirm performance of the TSF Dam (refer to Part D, Item 4 of the Water Licence) 60 days prior to construction. In addition, earthworks will be inspected for stability in accordance with Geotechnical Inspection referred to in Project Certificate T&C No.12.

## 4.5.6 Hydrological Features and Hydrogeology (PC TCs 19 through 20)

## Project Certificate Condition No. 19

Category	Saline Water
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To manage saline groundwater and minimize the impacts to permafrost, soil, surface water, vegetation and wildlife.
Term or Condition (TC)	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.
Reporting Requirement	The plan should be submitted to the Nunavut Impact Review Board (NIRB) at least 60 days prior to the commencement of operations, with results submitted annually thereafter or as may otherwise be required by the NIRB.
Status of Compliance	Compliant
Stakeholder Review	Nunavut Water Board, Nunavut Impact Review Board, Kitikmeot Inuit Association
Reference	Water Management Plan (October 2020) Water Management Plan (April 2022; Pending approval from the NWB) Type A Water Licence 2AM-BRP1831 Technical Meeting Commitment Responses (June 2018)

## Methods:

Sabina maintains a saline water management plan which includes 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 and treatment and disposal methods. The plan includes the accurate characterization of saline water inflows into the underground mine workings.

Sabina's Water Management Plan (WMP) addresses PC T&C's 22, 28, and 19 and includes a Saline Water Management Plan as Appendix C of the WMP. The WMP was updated in October 2020 for the purposes of Water Licence amendment and to address Part E, Item 2 of the Back River Project 2AM-BRP1831 Water Licence. This WMP (October 2020) and associated Saline Water Management Plan were approved by the NWB with the issuance of the amended Licence and a copy of this plan was provided to the NIRB on December 13, 2021<sup>10</sup>.

<sup>10</sup> Sabina. 2021. *Re: Sabina Response to NIRB re: The Nunavut Impact Review Board's 2020-2021 Annual Monitoring Report for the Back River Project and Board's Recommendations*. Sabina letter to NIRB, Dated December 13, 2021.

Results:

As a requirement of the amended water licence, the WMP (and associated Saline Water Management Plan) was further revised and an updated. An April 2022 WMP was provided to the NWB in April of 2022 for review and approval.

At this time there are no saline water inflows requiring monitoring at the Back River Project.

Trends:

Not applicable.

Next Steps:

Sabina will provide the updated version of the WMP, which contains a Saline Water Management Plan, to the NIRB once NWB review has been completed and the WMP approved.

## Project Certificate Condition No. 20

Category	Thermal Monitoring
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To minimize the impacts of contaminated water to the groundwater and receiving environment.
Term or Condition (TC)	The Proponent shall develop a thermal monitoring plan to address the potential changes in permafrost/talik distribution, flow distribution and flow paths that may be directly or indirectly affected by the Project facilities and activities. Thermal monitoring should be considered at a minimum for the critical cross sections of the Main Dam, Llama Pit, and Umwelt Pit.
Reporting Requirement	The plan should be submitted to the Nunavut Impact Review Board (NIRB) at least 60 days prior to the start of construction, with results submitted annually thereafter or as may otherwise be required by the NIRB.
Status of Compliance	Compliant
Stakeholder Review	Nunavut Impact Review Board, Nunavut Water Board
Reference	Not applicable

## Methods:

Sabina will develop a thermal monitoring plan to address the potential changes in permafrost/talik distribution, flow distribution, and flow paths that may be directly or indirectly affected by the Project facilities and activities. Thermal monitoring shall be considered at a minimum for the critical cross sections of the Main Dam, Llama Pit, and Umwelt Pit.

## Results:

Not applicable.

## Trends:

Not applicable.

## Next Steps:

Sabina places high importance on ensuring that permafrost integrity is maintained. This is not only for environmental and flow path reasons, for monitoring and looking for potential changes in permafrost distribution, but also due to the fact that many of the infrastructure designs tie directly into the permafrost. For example, the Primary Pond, the first large water management structure being constructed, has a frozen foundation. The frozen foundation designs rely on a liner being keyed into the frozen permafrost foundation to achieve containment. The thermal design for these structures is based on passive heat transfer with the atmosphere and includes sufficient thermal cover, or dam fill, to limit warming and thaw of the foundation. Detailed thermal analysis was required for these critical infrastructure components and cross-sections to ensure that the design intent could be upheld during operation.

As part of the 2023 scope of works, Sabina has committed to revisiting the locations where past thermistors or Ground Temperature Cables (GTCs) have been installed, taking readings where possible, and generating an initial draft of Goose site Thermal Monitoring Plan. Once a draft of the Thermal Monitoring Plan is

complete Sabina will submit this to NIRB (likely as part of the 2023 NIRB annual reporting package, if not earlier).

To date, Sabina has not constructed the larger and primary water management infrastructure. The construction of the first of the larger water management infrastructure, the Primary Pond, is being started now. As part of this construction a detailed thermal monitoring system is being installed. Additional details **on the Primary Pond thermal monitoring are detailed in Sabina's December 5th, 2022 "Responses to Primary Pond report Comments" package; this package responded to comments raised by KIA, CIRNAC and ECCC on our Nunavut Water Board (NWB) Primary Pond Engineering Design Report.** The instrumentation for the Primary Pond system (which includes a series of more than a dozen ground temperature cables within, upstream and downstream of this structure) is in the process of being procured now. Ground temperatures will be installed in 2023 and measurements will be collected around the Primary Pond location. During construction best efforts will also be made to capture periodic spot readings of the permafrost in the Primary Pond construction locations where possible.

## 4.5.7 Groundwater and Surface Water Quality (PC TCs 21 through 22)

## Project Certificate Condition No. 21

Category	Aquatic Effects Monitoring Plan
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate potential impacts to groundwater and surface waters.
Term or Condition (TC)	<p>The Proponent shall, reflecting any direction from the Nunavut Water Board, maintain an Aquatic Effects Monitoring Plan (AEMP) designed to:</p> <ul style="list-style-type: none"> <li>o determine the short and long-term effects in the aquatic environment resulting from the Project;</li> <li>o evaluate the accuracy of Project effect predictions;</li> <li>o assess the effectiveness of mitigation and management measures on Project effects;</li> <li>o identify additional mitigation measures to avert or reduce environmental effects due to Project activities; and</li> <li>o comply with Metal Mining Effluent Regulations requirements, should an Environmental Effects Monitoring program be triggered.</li> </ul> <p>The AEMP should include 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.</p>
Reporting Requirement	The plan should be submitted to the Nunavut Impact Review Board (NIRB) at least 90 days prior to the start of construction, with results submitted annually thereafter or as may otherwise be required by the NIRB.
Status of Compliance	Compliant
Stakeholder Review	Nunavut Water Board, Environment Climate Change Canada, Nunavut Impact Review Board
Reference	Aquatic Effects Monitoring Plan (October 2017)

## Methods:

Additional baseline data collection was conducted in 2022 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 (ECCC), and to support the next update to the Aquatic Effects Management Plan. The following field programs occurred:

- o Ice-cover and open-water water quality sampling in Goose Lake, Propeller Lake, and Reference B Lake;
- o Open-water water quality sampling in outflow streams from Goose Lake, Propeller Lake, and Reference B Lake;

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
- the terms and conditions of the Type A Water Licence
- re-align the AEMP with recent changes to the Metal and Diamond Mining Effluent Regulations (MDMER),
- update to the Project description according to the 2019 Modification Package,
- recommendations from the aquatic baseline synthesis report, and to refine details of the sampling design and response framework and
- updates to reflect updated mine plan alignment with additional modelling (water quality, groundwater and hydrodynamic) completed in 2022.

Results:

- The 2022 data will be added to the baseline dataset and used in the first AEMP report to support the data analysis and calculation of normal ranges.
- A summary of the 2022 baseline data is provided in Appendix C.

Trends:

Not applicable.

Next Steps:

The full AEMP will be implemented when discharge activities start, with results submitted annually thereafter or as may otherwise be required by the NIRB.

## Project Certificate Condition No. 22

Category	Site Water Monitoring and Management Plan
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To minimize the use of natural waters as practicable and limit potential impacts to the receiving environment from contact (site) water.
Term or Condition (TC)	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.
Reporting Requirement	The plan should be submitted to the Nunavut Impact Review Board (NIRB) at least 90 days prior to the start of construction, with results submitted annually thereafter or as may otherwise be required by the NIRB.
Status of Compliance	Compliant
Stakeholder Review	Nunavut Water Board, Nunavut Impact Review Board, Kitikmeot Inuit Association, Environment and Climate Change Canada, Crown- Indigenous Relations and Northern Affairs Canada
Reference	Water Management Plan (October 2020; Revision submitted to NWB for review) Water Management Plan (April 2022; pending NWB approval) Type A Water Licence 2AM-BRP1831

## Methods:

Sabina's Water Management Plan (WMP) addresses PC T&C's 22, 28, and 19 and includes a Saline Water Management Plan as Appendix C of the WMP. The WMP was updated in October 2020 for the purposes of Water Licence amendment and to address Part E, Item 2 of the Back River Project 2AM-BRP1831 Water Licence.

As part of the amendment application process to the Type A Water Licence (2AM-BRP1831) associated with the Back River Project 2020 Modification Package, Sabina updated the Water Management Plan to include:

- Saline Water Management Plan (Project Certificate T&C No. 19);
- Further detail respecting potential management and treatment options related to water quality in the effluent discharged from flooded pits and the downstream receiving environment.
- Commitments made with respect to submissions received during the technical review of the Water Licence Application, as well as final submission and issues raised during the NWB Public Hearing process;
- 2017-2018 baseline data collections that take into account season variation; and
- An updated water and load balance model as well as a hydrodynamic model.
- This WMP (October 2020) also specifically addressed PC T&C's 22, 28, and 19.

The WMP (October 2020) and associated Saline Water Management Plan were approved by the NWB with the issuance of the amended Licence. A copy of the WMP (October 2020) was provided to the NIRB on December 13, 2021<sup>11</sup>.

Results:

As a requirement of the amended water licence, the WMP was further revised, and an updated version (April 2022) was provided to the NWB for review and approval. There were no waste rock or ore storage areas in use during 2022, so no monitoring has yet been initiated.

Trends:

Not applicable.

Next Steps:

Sabina will provide the updated version of the WMP to the NIRB once the NWB review has been completed and the WMP approved. All site water quality monitoring results are reported in the annual report to the NWB.

---

<sup>11</sup> Sabina. 2021. *Re: Sabina Response to NIRB re: The Nunavut Impact Review Board's 2020-2021 Annual Monitoring Report for the Back River Project and Board's Recommendations*. Sabina letter to NIRB, Dated December 13, 2021.

## 4.5.8 Freshwater Aquatic Environment (PC TCs 23 through 31)

## Project Certificate Condition No. 23

Category	Setbacks
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Construction, Operations, Temporary Closure/Care and Maintenance, Closure
Objective	To mitigate impacts of runoff/sedimentation into freshwater aquatic habitat.
Term or Condition (TC)	The Proponent shall maintain an appropriate setback distance between project quarries and fish-bearing or permanent waterbodies, or implement appropriate mitigation measures, as required to prevent acid rock drainage or metal leaching into such waterbodies.
Reporting Requirement	Throughout quarry development and operation, the Proponent shall, on an annual basis, provide information regarding quarry setback distances maintained and/or mitigation measures implemented by the Proponent in fulfillment of this <b>Term and Condition in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Nunavut Impact Review Board, Fisheries and Oceans Canada, Nunavut Water Board
Reference	Borrow Pits and Quarry Management Plan (November 2020)

## Methods:

Sabina updated the Borrow Pits and Quarry Management Plan (**QMP**) in 2020 for inclusion in Sabina's application for amendment of Water Licence 2AM-BRP1831. Sabina has confirmed that the 2020 QMP appropriately addresses PC T&C's 16 and 23 and provides suitable guidance for current and near future site activities. Specifically, Sabina's QMP stipulates a minimum setback for quarries of 31 m from the ordinary high water mark of any waterbody and outlined monitoring and mitigation to ensure effects on fish and waterbodies are minimized.

## Results:

The QMP (November 2020) was approved by the NWB with the issuance of the amended Licence 2AM-BRP1831 and was provided to the NIRB on December 13, 2021<sup>12</sup>.

All quarries in use have been designed with appropriate setbacks for water and fish. All setbacks are described in the QMP and were adhered to in 2022 and no additional mitigations were required.

## Trends:

Not applicable.

<sup>12</sup> Sabina. 2021. *Re: Sabina Response to NIRB re: The Nunavut Impact Review Board's 2020-2021 Annual Monitoring Report for the Back River Project and Board's Recommendations*. Sabina letter to NIRB, Dated December 13, 2021.

Next Steps:

Throughout quarry development and operation, Sabina will, on an annual basis, provide information regarding quarry setback distances maintained and/or mitigation measures implemented by Sabina in fulfillment of this T&C in **Sabina's** annual report to the NIRB.

Sabina is additionally required, in accordance with the Back River Project Type A Water Licence 2AM-BRP1831 (Part D, Item 9), to conduct visual inspection for runoff/seepage, and conduct sampling where turbidity is observed, for all construction activities during spring freshet and during and after remarkable rainfall events. **This information is provided in Sabina's annual reports to the NWB.**

## Project Certificate Condition No. 24

Category	Watercourses
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To prevent blockages or restrictions to fish passages.
Term or Condition (TC)	The Proponent shall ensure that all project infrastructure in watercourses are designed and constructed in such a manner that they do not unduly prevent and limit the movement of water in fish bearing streams and rivers, unless otherwise authorized by Fisheries and Oceans Canada.
Reporting Requirement	Information regarding design, construction and inspection measures implemented by the Proponent in fulfillment of this Term and Condition shall be <b>provided in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Not Applicable
Reference	DFO. 2018. Fisheries and Oceans Canada - Letter of Advice: Implementation of mitigation measures to avoid and mitigate serious harm to fish and fish habitat for the early development work activities at the Goose property for the Back River Project 18-HCAA-00185 (letter dated May 2, 2018) Golder 2018. Back River Project Early Works - Request for Review Application (submitted February 27, 2018) Golder. 2021. Sabina Back River Project - Goose Property Area: Supplemental Hydrology and Fish Habitat Data Report. 2021 Open-Water Period Sabina. 2017. Back River Project: Road Management Plan (October 2017).

RASCAL STREAM WEST Methods:
--------------------------------

In 2019, a clear-span bridge was installed above the high-water mark in the lower reach of Rascal Stream West, also referred to as Gander Pond Outflow. The bridge was constructed without any instream structures and without fording the stream. Since the installation of the single-span bridge did not involve any instream works or removal of materials from below the high-water mark, fish passage monitoring during construction activities was not required. However, sediment and erosion control measures were implemented as per condition 18 in Part E of the Type B Water Licence (No. 2BC-BRP1819). The use of a single-span bridge provides unrestricted flows for passage of fish and negates any potential of causing Serious Harm to fish and meeting the conditions of the Letter of Authorization from DFO (DFO File No. 18-HCAA-00185).

## Results:

- As previously reported, a 2019 fish habitat study was completed at the lower reach of Rascal Stream West, where the bridge crossing was located, during spring flow conditions. Results of the field study illustrated the clear span was designed and constructed in such a manner to not unduly prevent or limit the movement of water in Rascal Stream West.

Annual visual inspections (2019, 2020) of the crossing during spring freshet conditions by Sabina have confirmed minimal buildup of ice and that the structure is not preventing or limiting the movement of water.

Follow-up surveys of Rascal Stream West were conducted during spring flow conditions in 2021 and 2022 (Golder 2021; WSP 2023). Both surveys evaluated fish movement potential in the lower reach of Rascal Stream West and documented current habitat and substrate conditions. Photos of substrate and hydraulic habitat were taken as well as a measurement of discharge and flow velocities at the bridge crossing. The following findings were noted:

- Geomorphic habitat at and upstream from the bridge crossing consisted of shallow riffles, cascades, runs, and a small section of chute habitat
- Stream discharge recorded on 5 July 2021 was 0.12 m<sup>3</sup>/s; stream discharge recorded daily from 8 to 12 June 2022 ranged from 0.38 to 0.57 m<sup>3</sup>/s
- Maximum flow velocity at the watercourse crossing was 0.94 m/s in 2021; and 0.69 m/s in 2022

Trends:

Not applicable.

Next Steps:

The single span bridge watercourse crossing is planned to be replaced by a twinned steel oblong culvert crossing (primary channel, fish-bearing) and a single steel circular culvert crossing (secondary channel), as per Phase 1 of construction in the Water Management Plan, during frozen watercourse conditions in 2023 (prior to the spring freshet). Since construction is scheduled to occur during frozen watercourse conditions, it is not anticipated that the construction will block or reduce fish movement. Sabina submitted engineering drawing for the new culvert crossing to NWB and DFO in advance of the construction. A request for review application for the current design was submitted to DFO on 20 June 2022 which included the Issued for Construction (IFC) Engineer Drawings, Arctic Grayling Fish Passage Criteria, and the controls and mitigations that will be applied during construction to prevent harm to fish and fish habitat. The request for review application provided controls and mitigations that Sabina is committed to prevent harm or death to fish and harmful alteration, disruption or destruction (HADD) to fish habitat during instream works. In response, DFO issued an approval for the culvert construction under a Letter of Advice (file #22-HCAA-00586) on 15 July 2022 (DFO 2022) and provided the following conditions, that in combination with request for review controls and mitigations, the works is not likely to result in a noncompliance with the *Fisheries Act*:

- Plan in-water works, undertakings and activities to respect timing windows to protect fish, including their eggs, juveniles, spawning adults and/or the organisms upon which they feed and migrate.
- Limit impacts on riparian vegetation to those approved for the work, undertaking
- or activity.
- Follow the measures described in the Interim code of practice: Temporary cofferdams and diversion channels.
- Follow the measures described the Interim code of practice: End of pipe fish protection screens for small water intakes in freshwater, when using pumps.

Monitoring of environmental conditions (e.g., flows, turbidity) at the crossing will be continued in 2023 if a single span bridge crossing is replaced with a culvert crossing, as per Phase 1 of construction in the Water Management Plan. Fish monitoring is also planned for 2023 to confirm that fish passage will be maintained in Rascal Stream West as part of the commitment to monitor fish following the construction of the airstrip extension and related diversion of flows from Rascal Stream East to Rascal Stream West.

## Project Certificate Condition No. 25

Category	Blasting
Responsible Parties	Sabina Gold & Silver Corp., Fisheries and Oceans Canada
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure
Objective	To mitigate impacts of explosives use on fish and fish habitat.
Term or Condition (TC)	The Proponent shall engage with Fisheries and Oceans Canada in exploring possible project specific thresholds, mitigation and monitoring for blasting that <b>would exceed the requirements of Fisheries and Oceans Canada's Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters (D.G. Wright and G.E. 6", 1998).</b>
Reporting Requirement	Information regarding the thresholds adopted, mitigation and/or monitoring measures associated with blasting developed and implemented by the Proponent in fulfillment <b>of this Term and Condition shall be provided in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Not Applicable
Reference	Environmental Impact Assessment Statement Supporting Volume 10: Management Plans; 13. Explosives Management Plan (2013). Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters (1998) Golder. 2021. Sabina Back River Blasting Plan for Plant Site and Portal Decline. Dated April 23, 2021. 10 pages. (Appendix D)

## Methods:

Any blasting or use of explosives that occurs within the blasting setbacks, as outlined in the Guideline of the Use of Explosives In or Near Canadian Fisheries Waters (DFO 1998), will require consultation with DFO. Consultation with DFO will work to possibly identify project specific thresholds, mitigation and monitoring that would exceed the DFO guidelines. Current blasting activities have all taken place outside the DFO setbacks. Additional guidance for blasting at the Plant Site and Port Decline was provided by Golder (2021) to refine setback distances and identify mitigation, if required, to protect fish and fish habitat.

## Results:

Not Applicable. No blasting occurred within the setbacks from fish bearing waters, as defined using DFO criteria. Commitments in the Explosives Management Plan indicate that consultation with DFO will commence any blasting activities are planned near fish bearing waters.

## Trends:

No blasting occurred within or near required setbacks from fish bearing waters, as defined using DFO criteria. Consultation with DFO will commence specific to any blasting near fish bearing waters in 2023.

## Next Steps:

Consultation with DFO will commence specific to any blasting activities near fish bearing waters in 2023. Planned blasting activities will follow recommended blasting setbacks consistent with mitigation commitments made during the environmental assessment review of the Project (also see Golder 2021).

Project Certificate Condition No. 26

Category	Fish Passage
Responsible Parties	Sabina Gold & Silver Corp. (Sabina), Kitikmeot Inuit Association (KIA), Fisheries and Oceans Canada (DFO)
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To minimize potential impacts to the migration of Arctic Grayling.
Term or Condition (TC)	The Proponent shall engage Fisheries and Oceans Canada, the Kitikmeot Inuit Association, and other interested parties during the regulatory phase on the design, construction, and operation of adequate fish passage to permit migration of Arctic Grayling from Goose Lake to natural spawning and rearing habitat located in upper Rascal Stream East, south of the planned airstrip. Any additional information required to ensure the design of the fish passage will be completed prior to significant construction activities at the Goose Property.
Reporting Requirement	The updated information should be submitted to the Nunavut Impact Review Board (NIRB) at least 30 days prior to construction of the fish passage, with results submitted annually thereafter or as may otherwise be required by the NIRB.
Status of Compliance	Compliant
Stakeholder Review	<p>Draft Final Offsetting Plan was submitted to DFO for review on September 12, 2018</p> <p>A meeting with Tania Gordanier (DFO manager of major projects) was held in Ottawa to discuss the Draft Final Offsetting Plan on September 26, 20-18</p> <p>Reply to DFO Questions on the Draft Final Offsetting Plan was submitted to DFO on October 23, 2018</p> <p><b>A meeting in DFO's Yellowknife office was held to discuss the offsetting plan on November 21, 2018</b></p> <p>DFO. 2019. Fisheries and Oceans Canada - <i>Fisheries Act Authorization</i> for the Sabina Back River Project. File #12-HCAA-CA7-00007 (letter dated November 22, 2019).</p> <p>DFO. 2022. Fisheries and Oceans Canada - Letter of Advice (DFO file #22-HCAA-00586): All-Weather Road Watercourse Crossing Upgrades within the Goose Property for the Back River Project - Implementation of Measures to Avoid and Mitigate the Potential Effects to Fish and Fish Habitat (letter dated July 15, 2022).</p>

## Reference

- Sabina. 2018. Rascal Stream Fishway Hydrotechnical Assessment (January 2018)
- Sabina. 2019. Back River Project: Fish Offsetting Plan (June 2019)
- Golder. 2021a. Rascal Stream West velocity mitigation - 2020 construction report. Dated 29 March 2021. 60 pages
- Golder. 2021b. Sabina Back River Project - Goose Property Area: Supplemental Hydrology and Fish Habitat Data Report. 2021 Open-Water Period
- Golder. 2020a. Rascal Stream Fishway Hydrotechnical Assessment. Submitted to Sabina Gold & Silver Corp., 30 June 2020. Reference No. 18114181-R-Rev0. 133 pages.*
- Golder. 2020b. Fish Passage Evaluation, Mitigation, and Monitoring for the Rascal Stream Diversion. Submitted to Sabina Gold & Silver Corp., 29 June 2020. Reference No. 18114181-062-TM-Rev0. 22 pages*
- Golder. 2020c. Rascal Stream Fish Passage Evaluation - Addendum. Submitted to Sabina Gold & Silver Corp. 11 August 2020. 2 pages.*

The condition related to the Arctic Grayling migration applies to both the Rascal Stream West Crossing and **proposed 'fishway' (or diversion) to be constructed while the airstrip is** extended to divert flows from Rascal Stream East to Rascal Stream West. For the report on the Rascal Stream West Crossing, please see the response provided under Condition No. 24.

## RASCAL STREAM FISHWAY

## Methods:

In 2018, continued collaboration with DFO and stakeholders on ideal design for the Rascal Stream Fishway (i.e., diversion) was undertaken concurrent with regulatory review of the Project and the Offsetting Plan was updated to reflect feedback received. The final version of the Offsetting Plan was submitted in 2019, however, it did not include the final design of the Rascal Stream diversion under the proposed airstrip extension. Sabina chose to defer the final design in the Offsetting Plan due to ongoing additional design, baseline data collection, and hydrological modelling underway.

In 2020, design, evaluation, and monitoring reports were provided to DFO for their review (e.g., Golder 2020abc). Based on the guidance and conclusions provided in the above reports and feedback provided by DFO (August 5, 2020), the main concern related to the diversion of flows from Rascal Stream East to Rascal Stream West would be downstream effects on velocities, particularly during spring conditions when adult Arctic Grayling migrate to upstream spawning habitats in Rascal Stream. Within the hydrotechnical assessment, specific locations immediately upstream of the crossing (Rascal Stream West Reach 1) were flagged as having high velocities under a baseline case that may exceed fish passage criteria under a diverted flow scenario.

In fall 2020, a field program was conducted to construct instream structures to mitigate the potential effects of high velocities on upstream passage of Arctic Grayling upon construction of the diversion channel. Velocity mitigation included the addition of boulders to the stream, positioned to create small rock weirs **as per the recommendations in Golder's technical memorandum. Flow and habitat measurements were** collected before and after construction (Golder 2021a).

In 2021, a follow-up survey was conducted during spring flows to evaluate the effectiveness of the rock weir structures to slow water velocities during the annual high-flow period (Golder 2021b).

**Results:**

Although the construction of airstrip has not commenced, design and mitigation solutions have been proposed and the velocity mitigations in lower Rascal Stream West were installed September 2-5, 2020, prior to the diversion of flows. At selected locations, rock weir designs were field-fit to best address **'pinch points' and sections with high velocities, while considering stream morphology. Based on the field surveys, 14 in-stream rock weir structures were constructed. The rock weir structures reduced velocities, on average, by 34%, and increased depths by 19%. Additional details are provided in the report titled 'Rascal Stream West Velocity Mitigation - 2020 Construction Report' (Golder 2021a).**

The spring 2021 and 2022 follow-up surveys confirmed that the maximum flow velocity recorded from the stream crossing was below the maximum allowable thresholds (1.5 m/s) described in the approved Road Management Plan for watercourse crossings. This result suggests that spring conditions in 2021 and 2022 did not provide a velocity barrier to Arctic Grayling movement to upstream habitat.

Summer 2023 represents an opportunity to improve the mitigation structures as required. Sabina welcomes additional feedback received through the Water Licence process.

**Trends:**

Not applicable as the construction of airstrip and diversion of flows have not commenced.

**Next Steps:**

The installation of the Rascal Stream diversion channel would be the next step, followed by monitoring of flows and fish movements under spring flow conditions to evaluate the effectiveness of mitigations and determine whether additional velocity mitigation is required in Rascal Stream West. Collaboration with DFO, KIA, and other interested parties will continue into 2023. Detailed plans for construction and ongoing monitoring will be implemented in compliance with DFO/KIA requirements and any further commitments made by Sabina (if applicable). The final design and monitoring plans will be submitted to the NIRB at least 30 days prior to construction of the fish passage. If the diversion is constructed during summer 2023, environmental monitoring activities, such as a fish salvage and turbidity monitoring, will be conducted before and during in-water construction activities. Results from the monitoring activities will be presented as part of the NIRB annual Report in 2024. A comprehensive fish passage monitoring study will be conducted in June 2024.

## Project Certificate Condition No. 27

Category	Water Withdrawal Sites
Responsible Parties	Sabina Gold & Silver Corp., Nunavut Water Board, Fisheries and Oceans Canada
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To minimize impacts to freshwater fish habitat that may be used for water withdrawal.
Term or Condition (TC)	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.
Reporting Requirement	The information for each waterbody should be provided to the Nunavut Impact Review Board (NIRB), Fisheries and Oceans Canada (DFO), and the Nunavut Water Board (NWB) during the regulatory phase. Information on additional waterbodies should be provided to the NIRB, the DFO, the NWB, and other interested parties at least 90 days prior to the start of water withdrawal or as otherwise directed by DFO or the NWB.
Status of Compliance	Compliant
Stakeholder Review	Nunavut Water Board, Fisheries and Oceans Canada
Reference	DFO (Fisheries and Oceans Canada). 2018. Letter of Advice: Implementation of mitigation measures to avoid and mitigate serious harm to fish and fish habitat during the construction of the Winter Ice Road for the Back River Project 18-HCAA-01626 (letter dated December 20, 2018) Golder. 2018a. Technical Memorandum, Winter Ice Road Water Withdrawal Evaluation (November 2018) Golder 2018b. Winter Ice Road Request for Review Application (submitted November 2018). Golder. 2022a. Technical Memorandum, Supplementary Winter Ice Road Water Withdrawal Recommendations and Field Verification Methods (submitted November 2022)

## Methods:

Subsequent to the Environmental Assessment review process and receipt of Project Certificate, Sabina submitted a Request for Review for Winter Ice Road to DFO in February 2018. In November 2018 Sabina provided the NIRB, DFO, and NWB with a detailed Technical Memorandum for Water Withdrawal Evaluation for proposed water withdrawal planned for 2019. On December 20, 2018 DFO confirmed no serious harm to fish would occur and similarly on December 18, 2018, the NWB confirmed WIR tech memo met requirements of the Type A. Construction of the ice road took place in 2019.

In 2017, Sabina completed an evaluation of potential water sources for winter ice road construction along the proposed 160-km long winter road corridor from the Goose Property at Goose Lake to the Marine Laydown Area at Bathurst Inlet. Bathymetric digital elevation models were generated for 118 waterbodies within the winter road corridor using imagery collected in August 2017. Detailed lakebed topography was identified to a depth of 30 m. Based on these bathymetric models, analysis of volume and area per depth could be completed to estimate available under-ice water volumes for ice road construction from each source lake (i.e., 10% of under ice volume).

**Results:**

Of the 118 waterbodies examined, 55 lakes were identified as being sufficient for under-ice withdrawal. No measurable effects are predicted for fish and fish habitat for the identified source lakes as the recommended under-ice volumes will be adhered to and have been acknowledged to be protective by DFO.

In 2019, Sabina's **water usage for construction and operation of the winter ice road remained with the recommended under-ice volumes from the identified 55 lakes**. Additional details on water source locations **and volumes can be found in Sabina's Type A Water Licence (2AM-BRP1831) annual report**.

No winter ice road was constructed in 2020. No water was consumed over the 2020/2021 WIR season as no WIR was constructed.

Sabina filed a technical memorandum with the NWB at least sixty (60) days prior to annual 2021 Winter Ice Road construction outlining the planned WIR route and water withdrawal sites. Sabina also followed guidance provided by DFO in their Letter of Advice in the withdrawal of water from these sites and adhered to the volumes assessed and agreed to by DFO and the NWB.

**Trends:**

Not applicable.

**Next Steps:**

Sabina is required to comply with Type A Water Licence 2AM-BRP1831, Part E, Item 5 for the use of freshwater from sources proximal to the WIR for the purpose of construction, maintenance and operation of the WIR. The current NWB Water Licence No. 2AM-BRP1831 - Amendment No. 1 that stipulates an annual under ice water withdrawal of 2,025 m<sup>3</sup> per km for the construction and maintenance of the WIR each year. In addition, at least 60 days prior to annual construction, Sabina is required to submit a technical memorandum under Part E, Item 13 including projected routing, bathymetry, depth, potential location of water withdrawal, proposed volumes and anticipated water level decreases. This information is required for a scenario where the WIR alignment has shifted. New alignments will consider direction provided by Golder (2022) and through discussions with DFO.

## Project Certificate Condition No. 28

Category	Winter Ice Road
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate impacts to fish and fish habitat.
Term or Condition (TC)	The Proponent shall implement all applicable Fisheries and Oceans Canada best management practices to avoid and mitigate serious harm to fish as a result of the construction, operation, and decommissioning of winter ice roads, and from under ice water withdrawals. This includes adequately screening the water intakes pipes to prevent impingement and entrainment of fish.
Reporting Requirement	Information regarding best management practices and/or mitigation measures implemented by the Proponent in fulfillment of this Term and Condition shall be <b>provided in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Not Applicable
Reference	DFO. 2020. Interim code practice: end of pipe fish protection screens for small water intakes in freshwater. Modified 2020-02-06. Accessed March 3, 2022 at <a href="https://www.dfo-mpo.gc.ca/interim-code-of-practice-end-of-pipe-fish-protection-screens-for-small-water-intakes-in-freshwater">Interim code of practice: End-of-pipe fish protection screens for small water intakes in freshwater (dfo-mpo.gc.ca)</a> Road Management Plan (October 2017).

## Methods:

Sabina implements all applicable Fisheries and Oceans Canada best management practices to avoid and mitigate serious harm to fish as a result of the construction, operation, and decommissioning of winter ice roads, and from under ice water withdrawals. This includes adequately screening the water intakes pipes to prevent impingement and entrainment of fish.

Sabina has assessed all potential water withdrawal sites and established water withdrawal volumes for each that remain protective of fish. This information has been provided to DFO, the NIRB, KIA and NWB as **part of the Project modification and amendment application. Sabina's Back River Project Road Management Plan** also includes mitigation measures related to the WIR.

## Results:

Sabina files a technical memorandum with the NWB at least sixty (60) days prior to the initiation of annual Winter Ice Road (WIR) construction which outlines the planned WIR route and water withdrawal sites. Post WIR use, additional information is provided to the NWB on any deviations in WIR construction or routing. This information is available on the NWB public registry. Sabina also follows guidance provided by DFO in their Letter of Advice in the withdrawal of water from these sites and adhered to the volumes assessed and agreed to by DFO and the NWB. Due to an accident resulting in a fatality, 2021/2022 WIR construction was abandoned prior to any use of water. 2022/2023 WIR season is still to be determined as the WIR is still in operation at the time of writing of this report.

Sabina also remained in compliance with Type A Water Licence 2AM-BRP1831, Part E, Item 7, wherein, Sabina 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.

Trends:

Not Applicable.

Next Steps:

As required by Part E, Item 13, of Type A Water Licence 2AM-BRP1831 Sabina will file a technical memorandum to the NWB at least sixty (60) days prior to annual Interconnection Winter Ice Road construction outlining the planned WIR route and water withdrawal. Sabina will follow any guidance provided by DFO in their Letter of Advice in the withdrawal of water from these sites and will adhere to the volumes assessed and agreed to by DFO and the NWB. Sabina will also comply with Type A Water Licence 2AM-BRP1831, Part E, Item 7, wherein, Sabina 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. The 2022/2023 WIR water use (in volumes per kilometre of WIR) will be provided in the 2023 Annual Reports to the NWB and NIRB.

## Project Certificate Condition No. 29

Category	Water Crossings
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate impacts to fish and fish habitat.
Term or Condition (TC)	The Proponent shall implement all applicable Fisheries and Oceans Canada best management practices to avoid and mitigate serious harm to fish as a result of water crossing construction, operation, and decommissioning for all fish-bearing water crossings. These measures should include, but are not limited to, appropriate design of water crossings to facilitate fish passage at both high and low flows, timing windows that incorporate spawning, incubation and hatch times for all species using watercourses, sediment and erosion control, protection of riparian vegetation, and other forms of bank stabilization
Reporting Requirement	Information regarding best management practices and/or mitigation measures implemented by the Proponent in fulfillment of this Term and Condition shall be <b>provided in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Not Applicable
Reference	Back River Project Rascal Stream West Culvert Installation - Request for Review Application (submitted June 20, 2022) Sabina. 2017. Back River Project - Road Management Plan (October 2017) Golder. 2018. Back River Project Early Works - Request for Review Application (submitted February 27, 2018). Golder. 2021. Sabina Back River Project - Goose Property Area: Supplemental Hydrology and Fish Habitat Data Report. 2021 Open-Water Period. DFO (Fisheries and Oceans Canada). 2018. Letter of Advice: Implementation of mitigation measures to avoid and mitigate serious harm to fish and fish habitat for the early development work activities at the Goose property for the Back River Project 18-HCAA-00185 (letter dated May 2, 2018) WSP. 2023. Sabina Back River Project - 2022 Rascal Stream West Field Summary and Fish Passage Characterization.

Note that this condition and report is related to Condition No. 24.

Methods:
----------

In fall 2018, a clear-span bridge was installed above the high-water mark at the Gander Pond outflow (i.e., Rascal Stream West Reach 1) crossing. As the installation of the single-span bridge did not involve any instream works or removal of materials from below the high-water mark, fish passage monitoring during construction activities was not required. However, sediment and erosion control measures were implemented as per condition 18 in Part E of the Type B Water Licence (No. 2BC-BRP1819). The use of a single-span bridge provides unrestricted flows for passage of fish and negates any potential of causing Serious Harm to fish and meeting the conditions of the Letter of Authorization from DFO (DFO File No. 18-HCAA-00185).

## Results:

As instream work was not required for the installation of the clear-span bridge, turbidity monitoring was not required during construction in fall 2018. Erosion and sediment control structures were installed as per the commitments made in the Road Management Plan.

A follow-up study of fish habitat conditions at the watercourse in spring 2019 confirmed that the crossing structure did not, and will not impede natural flows and movements of fish in Rascal Stream West. Annual inspections (2019, 2020) of the crossing during spring freshet conditions by Sabina have confirmed minimal buildup of ice and that the structure is not preventing or limiting the movement of water.

Follow-up surveys of Rascal Stream West were conducted during spring flow conditions in 2021 and 2022 (Golder 2021; WSP 2023). Both surveys evaluated fish movement potential in the lower reach of Rascal Stream West and documented current habitat and substrate conditions. Photos of substrate and hydraulic habitat were taken as well as a measurement of discharge and flow velocities at the bridge crossing. The following findings were noted:

- Geomorphic habitat at and upstream from the bridge crossing consisted of shallow riffles, cascades, runs, and a small section of chute habitat
- Stream discharge recorded on 5 July 2021 was 0.12 m<sup>3</sup>/s; stream discharge recorded daily from 8 to 12 June 2022 ranged from 0.38 to 0.57 m<sup>3</sup>/s
- Maximum flow velocity at the watercourse crossing was 0.94 m/s in 2021; and 0.69 m/s in 2022

During the spring of 2023, adult Arctic Grayling were observed within both the upstream and downstream sections of Rascal Stream Reach 1, suggesting that under current conditions, adult Arctic Grayling can still migrate from Goose Lake to Gander Pond (WSP 2023).

## Trends:

Not applicable.

## Next Steps:

The existing crossing structures were approved under DFO file no. 18-HCAA-00185. These crossing structures were installed as part of the all-weather road used for early development works and proposed upgrades are now necessary to accommodate the safe travel of increasing haul truck traffic along the service road once the mine is in operation. Therefore, the new culvert design has since changed from the current design to a twinned steel oblong culvert (Primary Channel, fish-bearing) and a single steel circular culvert (Secondary Channel). Construction will be completed under frozen conditions prior to the spring freshet in 2023. Due to the required crossing upgrade, Sabina has applied (on June 20, 2022) to DFO for an amendment to the current approval such that in-stream construction work can proceed (DFO 2022). The application includes a completed Requested for Review application, the Issued for Construction (IFC) Engineer Drawings, and Arctic Grayling Fish Passage Criteria. Monitoring of flows and fish passage in the Gander Pond Outflow will continue in summer 2022. The request for review application provided controls and mitigations that Sabina is committed to prevent harm or death to fish and harmful alteration, disruption, or destruction (HADD) to fish habitat during instream works. In response, DFO issued an approval for the culvert construction under a Letter of Advice (file #22-HCAA-00586) on 15 July 2022 (DFO 2022) and provided the following conditions, that in combination with request for review controls and mitigations, the works is not likely to result in a noncompliance with the *Fisheries Act*:

- Plan in-water works, undertakings and activities to respect timing windows to protect fish, including their eggs, juveniles, spawning adults and/or the organisms upon which they feed and migrate.
- Limit impacts on riparian vegetation to those approved for the work, undertaking

- or activity.
- Follow the measures described in the Interim code of practice: Temporary cofferdams and diversion channels.
- Follow the measures described the Interim code of practice: End of pipe fish protection screens for small water intakes in freshwater, when using pumps.

Project Certificate Condition No. 30

Category	Monitoring Program for Culverts
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To minimize the impacts to fish bearing watercourses.
Term or Condition (TC)	<b>Unless otherwise directed by Fisheries and Oceans Canada, the Proponent's</b> monitoring program for culverts on fish bearing watercourses during the operations and closure phases shall include measures to ensure that barriers to fish passage do not form over time as a result of crossing damage due to ice blockage, flooding, or movement of debris; all of which may occur at freshet. Detailed design drawings and an updated monitoring program shall be produced prior to construction.
Reporting Requirement	The updated drawings and monitoring program should be submitted to the Nunavut Impact Review Board (NIRB) and Fisheries and Oceans Canada (DFO) at least 30 days prior to the construction of the culverts, with results submitted annually thereafter or as may otherwise be required by the NIRB and DFO.
Status of Compliance	Compliant
Stakeholder Review	Fisheries and Oceans Canada
Reference	Back River Project Rascal Stream West Culvert Installation - Request for Review Application (submitted June 20, 2022) Back River Project Early Works - Request for Review Application (submitted February 27, 2018) DFO. 2022. Fisheries and Oceans Canada - Letter of Advice (DFO file #22-HCAA-00586): All-Weather Road Watercourse Crossing Upgrades within the Goose Property for the Back River Project - Implementation of Measures to Avoid and Mitigate the Potential Effects to Fish and Fish Habitat (letter dated July 15, 2022). Fisheries and Oceans Canada - Letter of Advice: Implementation of mitigation measures to avoid and mitigate serious harm to fish and fish habitat for the early development work activities at the Goose property for the Back River Project 18-HCAA-00185 (letter dated May 2, 2018)

Methods:

Note that this condition and report is related to Condition No. 24 and 29. In 2018, a clear-span bridge was installed for the crossing at lower Rascal Stream West (Gander Pond outflow).

Results:

See Results summarized for Condition No. 29.

Trends:

Not applicable.

Next Steps:

An upgrade to the existing crossing structures on Rascal Stream West is necessary to accommodate the safe travel of haul truck traffic along the service road once the mine is in operation. The new culvert design are twinned steel oblong culverts (Primary Channel, fish-bearing) and a single steel circular culvert (Secondary Channel). Sabina submitted engineering drawing for the new culvert crossing to NWB and DFO in advance of the construction. Construction will proceed under frozen conditions prior to spring freshet in 2023. Due to the required upgrade, Sabina applied (on June 20, 2022) to DFO for an amendment to the current approval such that in-stream construction can proceed. The application includes a completed Requested for Review application, the Issued for Construction (IFC) Engineer Drawings, and Arctic Grayling Fish Passage Criteria. Monitoring of flows and fish passage at the crossing will continue in summer 2023. Visual inspections of the crossing structures will be conducted during freshet to ensure that the crossings are functioning as planned (e.g., to confirm no impact to fish movements). Monitoring of environmental conditions (e.g., flows, turbidity) will also be conducted, as per Phase 1 of construction in the Water Management Plan.

Project Certificate Condition No. 31

Category	Monitoring Program for Culverts
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To minimize the impacts to fish and fish habitat.
Term or Condition (TC)	The Proponent should provide annual monitoring updates regarding the Rascal Stream Fish Passage that enables parties to determine its effectiveness.
Reporting Requirement	Monitoring updates regarding the Rascal Stream Fish Passage shall be included in the annual report to the NIRB. In years when monitoring is not required by Fisheries and Oceans Canada, the Proponent will include a statement in the annual report confirming no active monitoring has occurred.
Status of Compliance	Compliant
Stakeholder Review	Fisheries and Oceans Canada
Reference	Not Applicable

Methods:

Not applicable. Construction on the Rascal Stream **'Fishway'** (diversion channel) has not occurred to date. See the reply to Project Certificate Condition No. 26 for more information.

Results:

Not applicable.

Trends:

Not applicable.

Next Steps:

Sabina will conduct monitoring of any construction in fish-bearing waters in 2023 and present the results as part of the NIRB annual Report in 2024. The proposed crossing upgrade on Rascal Stream West (i.e., Gander Pond outflows) is schedule for late spring prior freshet and will be installed during frozen conditions. Monitoring of flows and fish passage at the crossing will continue in spring and summer 2023. Visual inspections of the crossing structures on Rascal Stream West will be conducted during freshet to ensure that the crossings are functioning as planned (e.g., to confirm no impact to Arctic Grayling movements). Monitoring of environmental conditions (e.g., flows, turbidity) at the crossings will also be conducted in 2023, as per Phase 1 of construction in the Water Management Plan.

The proposed airstrip extension is scheduled to occur during 2023. The extension footprint off the south end of the airstrip will overlap with two small watercourses, Rascal Stream East Reach 4 and Main Goose Pit Reach 3. As such, Sabina proposes diverting flow from these two watercourses into Rascal Stream West (Gander Pond outlet channel) with the construction of the diversion berm and channel located just east Gosling Pond 1. The works associated with berm construction and the subsequent watercourse diversion is permitted under a Fisheries Act Authorization (No. 12-HCAA-CA7-00007). In partial fulfillment of the Authorization, environmental monitoring activities, such as a fish salvage and turbidity monitoring, will be completed if construction occurs during the open-water. Results from the monitoring activities will be presented as part of the NIRB annual Report in 2024. A comprehensive fish passage monitoring study will be conducted in the open water season that follows the installation of the diversion berm and channel.

## 4.5.9 Vegetation (PC TCs 32 through 36)

## Project Certificate Condition No. 32

Category	Site Footprint
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To minimize the impacts of the Project on vegetation.
Term or Condition (TC)	The Proponent shall ensure that Project activities are planned and conducted in such a way as to minimize the Project footprint.
Reporting Requirement	<b>In the Proponent's annual report to the Nunavut Impact Review Board, the Proponent shall provide information regarding the current Project footprint, taking into account construction and progressive reclamation activities, and including information regarding the loss or alteration of vegetation associated with Project activities (including identifying the type of any habitat losses resulting from these effects).</b>
Status of Compliance	Compliant
Stakeholder Review	None
Reference	Vegetation Monitoring Plan (January 2020) Vegetation Monitoring Program (Golder 2019).

## Methods:

The 2022 Project footprint was overlain with the LSA ecological mapping in a GIS environment to quantify the amount of loss or alteration of vegetation associated with Project activities.

## Results:

Disturbance associated with current footprint for the Goose Property and the MLA totals 125.7 ha and is presented by ecosystem type in Table 4.5.9-1. To date, 88.3 ha (0.1% of the LSA) has been affected due to Goose Property development, of which 79.5 ha (0.1% of the LSA) are vegetated ecosystems and 3.0 ha (<0.1% of the LSA) are sparsely vegetated ecosystems and 5.7 ha (<0.1% of the LSA) are in non-vegetated ecosystems, associated with the Mine Camp area. Of the ecosystem types that are considered special landscape features, 7.21 ha (<0.1% of the LSA) have been affected in the Goose Property.

Development activities associated with the MLA property has affected 37.4 ha (<0.1% of the LSA), of which 26.4 ha (<0.1% of the LSA) are vegetated ecosystems while 5.2 ha (<0.1% of the LSA) are sparsely vegetated ecosystems and 5.8 ha (<0.1% of the LSA) are in non-vegetated ecosystems. Of the ecosystem types which are considered special landscape features, 12.6 ha (<0.1% of the LSA) have been affected in the MLA property.

Table 4.5.9-1 Ecosystem/Vegetation Losses Associated with Current (2022) Footprint for the Goose Property and the Marine Laydown Area

ECOSYSTEM TYPE	TEM CODE	LSA		Predicted Losses FEIS (2015) Area (ha)	Goose Property			MLA Property		
		Area (ha)	% of Total LSA		2022 Area (ha)	% of Total LSA	Change from 2021 (ha)	2022 Area (ha)	% of Total LSA	Change from 2021 (ha)
Non-vegetated Ecosystems										
Lake	LA	18,140.90	12.5	461.90	<0.1	<0.1	<0.1	-	-	-
Mine Camp	DR	10	<0.1	6.80	5.6	<0.1	0.1	-	-	-
Pond	PD	6,436.10	4.5	273.70	0.1	<0.1	0.1	-	-	-
River	RI	329	0.2	3.70	-	-	-	-	-	-
Road surface	DZ	3.2	<0.1	0.00	-	-	-	-	-	-
Saltwater	MW	6,170.10	4.3	0.00	-	-	-	5.8	0.0	0.0
<i>Subtotal</i>		<i>31,089.30</i>	<i>21.5</i>	<i>746.10</i>	<i>5.7</i>	<i>0.0</i>	<i>0.2</i>	<i>5.8</i>	<i>0.0</i>	<i>0.0</i>
Sparsely Vegetated Ecosystems										
Bedrock outcrop <sup>(a)</sup>	BR	3,428.80	2.4	155.10	1.8	<0.1	0.4	-	-	-
Bedrock-lichen veneer <sup>(a)</sup>	BL	6,882.80	4.8	52.00	1.2	<0.1	0.8	-	-	-
Blockfield	TB	195.5	0.1	0.00	-	-	-	-	-	-
Cliff <sup>(a)</sup>	BC	10.9	<0.1	0.00	-	-	-	-	-	-
Exposed soil	ES	176.7	0.1	0.30	-	-	-	-	-	-
Marine beach <sup>(a)</sup>	MB	59.5	<0.1	14.30	-	-	-	0.4	<0.1	0.1
Old beach heads <sup>(a)</sup>	MH	476.1	0.3	53.50	-	-	-	4.8	<0.1	1.7
Saline shallow open water <sup>(a)</sup>	MO	55.8	<0.1	0.00	-	-	-	-	-	-
Shallow open water (a)	WO	81.1	0.1	4.50	<0.1	<0.1	<0.1	-	-	-
Sparsely vegetated esker (a)	EC	659.5	0.5	2.20	-	-	-	-	-	-
Talus	BT	4.5	<0.1	0.00	-	-	-	-	-	-
<i>Subtotal</i>		<i>12,031.20</i>	<i>8.3</i>	<i>281.90</i>	<i>3.0</i>	<i>0.0</i>	<i>1.2</i>	<i>5.2</i>	<i>0.0</i>	<i>1.8</i>
Vegetated Ecosystems										
Cottongrass-sedge fen (a)	WC	3,467.70	2.4	132.60	0.4	<0.1	0.1	-	-	-
Disturbed Vegetation	DV	0.7	<0.1	0.00	-	-	-	-	-	-
Dry-sparse tundra	TH	23,458.20	16.2	574.30	9.4	<0.1	2.5	-	-	-
Dwarf shrub esker (a)	EH	629.7	0.4	8.60	-	-	-	-	-	-
Estuary marsh (a)	ME	4.22	0.7	0.00	-	-	-	-	-	-
Low bench floodplain (a)	RL	36.5	<0.1	0.00	-	-	-	-	-	-
Marine dwarf shrub tundra	MT	5,444.70	3.8	275.50	-	-	-	18.2	<0.1	3.4
Marine riparian shrub (a)	MR	439.4	0.3	89.80	-	-	-	4.8	<0.1	0.9
Marine shrubby tundra	MS	1,830.20	1.3	10.10	-	-	-	0.8	<0.1	0.3
Mesic dwarf-shrub tundra	TL	41,722.40	28.9	2338.80	55.3	<0.1	20.9	-	-	-
Mid bench floodplain (a)	RM	3.8	<0.1	0.00	-	-	-	-	-	-
Raised bog complex (a)	WB	4,224.60	2.9	236.90	2.1	<0.1	1.1	0.2	<0.1	<0.1
Saline fen (a)	MF	993.08	0.1	73.30	-	-	-	2.1	<0.1	0.3
Saline marsh (a)	MM	252	0.2	13.70	-	-	-	<0.1	<0.1	<0.1
Shrubby esker (a)	EW	220.8	0.2	0.00	-	-	-	-	-	-
Shrubby tundra	TS	11,853.90	8.2	910.60	10.5	<0.1	6.9	-	-	-
Tussock meadow (a)	WT	64.4	<0.1	3.60	<0.1	<0.1	<0.1	-	-	-
Undifferentiated fen (a)	WF	2,582.00	1.8	78.00	1.2	<0.1	0.3	-	-	-
Water sedge marsh (a)	WA	2,396.00	1.7	112.00	0.4	<0.1	0.3	0.3	<0.1	<0.1
Willow riparian (a)	RW	1,441.90	1	64.20	0.1	<0.1	0.1	-	-	-
Willow-sedge fen (a)	WS	418.3	0.3	23.20	<0.1	<0.1	<0.1	-	-	-
<i>Subtotal</i>		<i>101,484.60</i>	<i>70.2</i>	<i>4945.20</i>	<i>79.5</i>	<i>0.1</i>	<i>32.2</i>	<i>26.4</i>	<i>&lt;0.1</i>	<i>5.0</i>
<i>Total Special Landscape Features</i>		<i>28,828.90</i>	<i>20.10</i>	<i>1,117.50</i>	<i>7.21</i>	<i>&lt;0.1</i>	<i>3.12</i>	<i>12.55</i>	<i>0.01</i>	<i>3.03</i>
<b>Grand Total</b>		<b>144,605.10</b>	<b>100</b>	<b>5973.20</b>	<b>88.3</b>	<b>0.1</b>	<b>33.6</b>	<b>37.4</b>	<b>0.0</b>	<b>6.8</b>

Figure 4.5.9-1 is a graphic representation of the 2022 footprint for the Goose Property and MLA

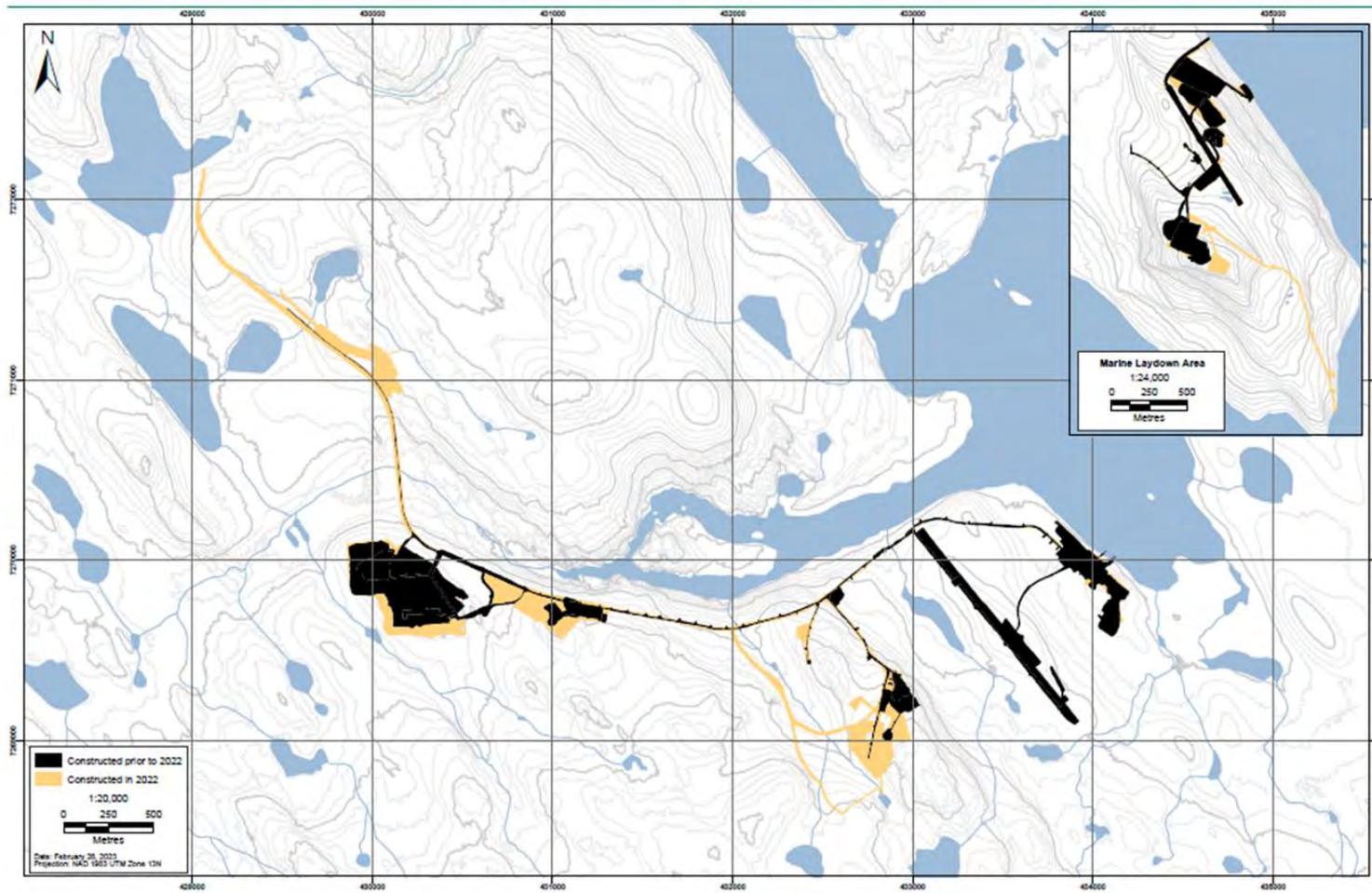
Trends:

Not applicable. On-going annual vegetation monitoring will continue.

Next Steps:

Annual vegetation monitoring will continue to identify any loss or alteration of vegetation associated with increases to the Back River Project footprint.

Figure 4.5.9-1. Back River Project Footprint (2022)



Project Certificate Condition No. 33

Category	Invasive Species
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To prevent the introduction of invasive species.
Term or Condition (TC)	The Proponent shall ensure that equipment and supplies brought to the project sites are clean and free of soils that could contain plant seeds not naturally occurring in the area. Vehicle tires and treads in particular must be inspected prior to initial use in project areas. The Proponent shall also incorporate protocols for monitoring for the potential introduction of invasive vegetation species (e.g. surveys of plant populations in previously disturbed areas) into relevant monitoring and management plans for the terrestrial environment. Any introductions of non-indigenous plant species must be promptly reported to the Government of Nunavut Department of Environment.
Reporting Requirement	At least 30 days prior to first shipment of equipment and supplies to the site, the <b>Proponent's mitigation</b> plans, protocols, monitoring and inspection program required in fulfillment of this Term and Condition shall be provided to the Nunavut Impact Review Board for review. Subsequently, information regarding inspections, monitoring results and any reports to the Government of Nunavut Department of Environment as referenced above shall be included in the <b>Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	None
Reference	Vegetation Monitoring Program (Golder 2022) (Appendix E)

Methods:

On February 16, 2018 Sabina provided to the NIRB a Standard Operating Procedure (SOP) which ensures all equipment and bulk supplies arriving at the Back River Project site are in a condition free of any soil or plant debris to minimize the risk of invasive plant introduction.

Sabina updated the Back River Project Vegetation Monitoring Plan in 2020 and provided it to the NIRB. This plan includes invasive plant species monitoring within the Goose Property, MLA, and WIR footprint and adjacent habitats.

Sabina conducted invasive plant monitoring as part of the Vegetation Monitoring Program on July 2 to 11, 2022 (Appendix E).

Results:

Expediter verification forms confirm. equipment and bulk supplies destined for the Back River Project are free of soil and plant debris. No invasive weeds were identified in the 2022 field program.

Trends:

Not applicable.

Next Steps:

Sabina will continue to provide completed expediter verification forms confirming equipment and bulk supplies destined for the Back River Project are free of soil and plant debris upon shipment in the NIRB annual report (Appendix F).

## Project Certificate Condition No. 34

Category	Vegetation Monitoring Plan
Responsible Parties	Sabina Gold & Silver Corp., Kitikmeot Inuit Association, the Government of Nunavut
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To minimize potential impacts to vegetation along the winter road/trail routings and around project sites.
Term or Condition (TC)	<p>The Proponent shall have in place a Vegetation Monitoring Plan that is designed to quantify the potential impacts on vegetation from the Project, including the annual construction/operation of the winter ice roads and trails. The plan should include all commitments discussed throughout the Review of the Project, including commitments to consult with the Kitikmeot Inuit Association, the Government of Nunavut, and other relevant parties, as well as:</p> <ol style="list-style-type: none"> <li>Establishment of pre-construction and post-operation vegetation conditions annually with supporting photographs to allow for long-term comparisons of vegetation conditions along winter ice road/trail routings and around project sites;</li> <li>Incorporation of measures to prevent or minimize potential destabilization and erosion along winter ice road/trail routings and around project sites;</li> <li>Details on the triggers for implementing adaptive management options if effects to vegetation are observed, including potential impacts from dust deposition; and,</li> <li>Discussion of how the findings from monitoring efforts would be used to inform reclamation planning.</li> </ol>
Reporting Requirement	The plan should be submitted to the Nunavut Impact Review Board (NIRB) at least 90 days prior to the start of construction, with results submitted annually thereafter or as may otherwise be required by the NIRB.
Status of Compliance	Compliant
Stakeholder Review	None
Reference	Vegetation Monitoring Plan (January 2020) Vegetation Monitoring Program (WSP Golder 2022) (Appendix E).

## Methods:

Sabina provided a Vegetation Monitoring Plan to the NIRB on January 23, 2020, that is designed to quantify the potential impacts on vegetation from the Project, including the annual construction/operation of the winter ice roads and trails. The plan includes all commitments discussed throughout the Review of the Project, including commitments to consult with the Kitikmeot Inuit Association, as well as the Project Certificate (No. 007) Term and Condition No. 34 requirements.

In addition, a Vegetation Monitoring Program (Golder 2019) was implemented in 2019 for the Winter Ice Road connecting the MLA and the Goose Property **and results of this program were provided in Sabina's 2019 Annual report to the NIRB.**

Results:

In 2022, ten new vegetation monitoring plots were established due to proposed re-alignment of the Winter Ice Road. The results of the monitoring are attached in Appendix E.

Following Closure and post-closure phases of the vegetation monitoring schedule for the project footprint will be as follows:

- Vegetation Monitoring (Potential Development Area, including non-native plant monitoring) - every three years during closure, once every five years post closure for a total of 15 years.
- WIR - every three years during closure, once every five years post closure for a total of 15 years.

Trends:

Not applicable.

Next Steps:

Annual vegetation monitoring will continue to inform adaptive management strategies and provide early warning of undesirable change to the environment. If data indicates increasing disturbance to vegetation, additional mitigation options will be considered.

## Project Certificate Condition No. 35

Category	Revegetation and Reclamation
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To maximize revegetation in reclaimed areas.
Term or Condition (TC)	The Proponent shall develop a progressive revegetation program for disturbed areas that are no longer required for operations, such as a program to incorporate measures for the use of test plots, reseeding, and replanting of native plants as necessary. It is further recommended that this program be directly associated with the management plans for erosion control established for the Project.
Reporting Requirement	The program and associated revegetation results should be provided within the <b>Proponent's annual report submitted to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	None.
Reference	Incorporated within the Interim Closure and Reclamation Plan (July 2021).

## Methods:

Sabina has developed a progressive revegetation program for disturbed areas that are no longer required for operations. It is noted that this progressive revegetation program, which is included in **Sabina's Interim Closure and Reclamation Plan (ICRP)** is not fully developed at this early phase of project construction. Further information regarding revegetation studies developed would be submitted within 3 years of the commencement of construction as required by T&C 36.

## Results:

The ICRP (July 2021) and included conceptual progressive revegetation program was approved by the NWB and was provided to the NIRB on December 13, 2021<sup>13</sup>. This ICRP was further updated in 2022/23 as part of the amendment application process and is currently under review by the NIRB. The ICRP addresses PC T&C's 7, 15, 35, and 36.

## Trends:

Not applicable.

## Next Steps:

In-line with Project Certificate T&C No.36, within three years from the commencement of Construction, information regarding the revegetation strategies developed and implemented by Sabina in fulfillment of this T&C will be included in **Sabina's** annual report to the NIRB. Subsequently, information regarding the **Proponent's progress in fulfillment of this T&C will be provided annually in the Proponent's annual report** to the NIRB.

<sup>13</sup> Sabina. 2021. *Re: Sabina Response to NIRB re: The Nunavut Impact Review Board's 2020-2021 Annual Monitoring Report for the Back River Project and Board's Recommendations*. Sabina letter to NIRB, Dated December 13, 2021

## Project Certificate Condition No. 36

Category	Mine Closure and Reclamation Plan
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To maintain an up to date revegetation plan for the Project.
Term or Condition (TC)	The Proponent shall include revegetation strategies within its Mine Closure and Reclamation Plan that support progressive reclamation, and promote natural revegetation and recovery of disturbed areas compatible with the surrounding natural environment. These strategies should include exploration of the feasibility and practicality of topsoil/organic matter salvage through Project development. The Closure and Reclamation Plan should be updated on an on-going basis as more information becomes available from similar reclamation efforts at other northern projects, as applicable.
Reporting Requirement	Within 3 (three) years from the commencement of construction, information regarding the revegetation strategies developed and implemented by the Proponent in fulfillment of this Term and Condition shall be included in the <b>Proponent's annual report to the Nunavut Impact Review Board. Subsequently, information regarding the Proponent's progress in fulfillment of this Term and Condition shall be provided annually in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	None
Reference	Interim Closure and Reclamation Plan (July 2021). Interim Closure and Reclamation Plan ( <b>July 2022; In Review with the NWB</b> ).

## Methods:

Sabina has developed a conceptual progressive revegetation program within the Back River Project Interim Closure and Reclamation Plan (ICRP; July 2021) which was finalized based on a review and input from the KIA and CIRNAC, with oversight by the NWB. This conceptual progressive revegetation program is not fully developed at this early phase of project construction. Further information regarding revegetation studies developed would be submitted within 3 years of the commencement of construction as required by this T&C.

## Results:

The ICRP (July 2021) and included progressive revegetation program was approved by the NWB and was provided to the NIRB on December 13, 2021<sup>14</sup>. **This ICRP was further updated in 2022 as part of the amendment application process and is currently under review by the NWB (ICRP 2022).** The ICRP addresses PC T&C's 7, 15, 35, and 36.

<sup>14</sup> Sabina. 2021. *Re: Sabina Response to NIRB re: The Nunavut Impact Review Board's 2020-2021 Annual Monitoring Report for the Back River Project and Board's Recommendations*. Sabina letter to NIRB, Dated December 13, 2021

Trends:

Not applicable

Next Steps:

Within three years from the commencement of Construction, information regarding the revegetation strategies developed and implemented by Sabina in fulfillment of this T&C will be included in **Sabina's** annual report to the NIRB. Subsequently, information regarding **the Proponent's progress in fulfillment of this T&C will be provided annually in the Proponent's annual report to the NIRB.**

Once the NWB has approved the ICRP (July 2022) it will be submitted to the NIRB.

## 4.5.10 Terrestrial Wildlife and Wildlife Habitat (PC TCs 37 through 52)

## Project Certificate Condition No. 37

Category	Wildlife Mitigation and Monitoring Plan
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate, monitor, and adaptively manage potential impacts to wildlife.
Term or Condition (TC)	<p>The Proponent shall have in place a Wildlife Mitigation and Monitoring Program Plan (WMMPP) throughout all phases of the Project. The plan shall include detailed monitoring, mitigation, and adaptive management measures for wildlife, and shall detail considerations for: species-specific sensitive wildlife periods and areas; activities known to affect wildlife; specific triggers for mitigation and adaptive management intervention; and implementation <b>of all commitments made throughout the Nunavut Impact Review Board's (NIRB) assessment of the Project.</b> The Proponent shall demonstrate appropriate <b>refinements to the WMMPP's design throughout the life of the Project</b>, as necessary to allow for the identification of long- term trends and cumulative effects where project interactions with wildlife are identified. Updates to the WMMPP may be triggered by significant changes in project development plans, monitoring results indicating biologically-meaningful changes, significant updates to the scientific understanding of management methods relevant to wildlife at the project site, Inuit Qaujimagatuqangit, Traditional Knowledge, changes in climatic conditions that might subject wildlife to unexpected impacts, or as otherwise necessary.</p> <p>Commentary: Measures included in the WMMPP shall be inclusive of all commitments made by the Proponent throughout the Review of the Project. Further, the Proponent shall, throughout the duration of the Project, collaborate with the Kitikmeot Inuit Association, the Government of Nunavut, and other relevant parties to develop updated mitigation, monitoring, and adaptive management measures within the Wildlife Mitigation and Monitoring Program Plan.</p>
Reporting Requirement	The plan should be submitted to the Nunavut Impact Review Board (NIRB) at least 90 days prior to the start of construction, with revised versions submitted annually thereafter or as may otherwise be required by the NIRB.
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.

Methods:

Sabina updated the WMMPP in 2018 to include the commitments made at the 2017 Final Hearing. The updated WMMPP (Version 9, September 2018) was circulated for review by the KIA and Government of Nunavut Department of Environment (GN DOE) in August, 2018. Sabina then met with the KIA and GN DOE in September 2018 to discuss the updates.

The WMMPP was again updated in October 2019 to Version 10. Updates were made to address a commitment to the KIA to include information on spill response equipment contact information for community organizations. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE during November 2019 and discussed at the December 2019 CTAG meeting.

The WMMPP was again updated in December 2022 to Version 11. Updates included additions to refer to the proposed addition of the Wind Energy Centre, including mitigations and monitoring related to wind turbines, as well as to incorporate commitments in response to comments and suggestions from the KIA. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE, and was discussed at the December 2022 meeting.

Results:

Sabina was using the WMMPP (Version 9, 2018) during 2020 and the WMMPP (Version 10, October 2019) in 2021 and 2022. The updated WMMPP (Version 11, 2022) will be used for 2023. Mitigation and monitoring were effective.

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction and Construction Phases. The WMMPP Plan will continue to be updated annually as needed.

## Project Certificate Condition No. 38

Category	Wildlife Monitoring
Responsible Parties	Sabina Gold & Silver Corp., Kitikmeot Inuit Association, the Government of Nunavut
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To monitor wildlife in collaboration with other monitoring bodies.
Term or Condition (TC)	In consultation with the Government of Nunavut, the Kitikmeot Inuit Association, and other relevant parties, the Proponent shall make efforts to contribute to existing and planned cumulative effects and regional monitoring programs for caribou, grizzly bear, wolverine and muskox, as appropriate. Relevant details of coordination through data sharing arrangements or agreements should be highlighted.
Reporting Requirement	<b>Information regarding the Proponent's consultation, coordination and other contribution efforts undertaken in fulfillment of this Term and Condition shall be provided in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	WMMPP Section 7.2.2.7 Collaborative Herd-scale Monitoring Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.

Methods:
----------

Sabina included collaborative herd-scale monitoring for caribou in the WMMPP in Section 7.2.2.7, which includes 1) participation in meetings for the Draft Bathurst Caribou Range Plan, and 2) collaborative monitoring for caribou with the GNDOE and Government of Northwest Territories Department of Environment and Natural Resources (NWT ENR).

## Results:

In 2018, a representative from Sabina attended meetings for the Draft Bathurst Caribou Range Plan held in Yellowknife and via teleconference on 17 March 2017, 28 June 2017 and 21 January 2018.

In 2019, Sabina met with representatives of the KIA and GNDOE to review the WMMPP and discuss plans for monitoring in 2019.

In 2020, a representative from Sabina attended and presented at meetings organized by the Government of Northwest Territories, Department of Environment and Natural Resources (GNWT ENR), to collaborate on methods for calculating and assessing Zone of Influence (ZOI) and road crossing by caribou at mining projects in NWT and NU. Attendees included representatives from GNWT ENR, diamond mining companies, independent monitoring agencies and consultants to these groups.

In December 2021 and 2022, Sabina met with representatives of the KIA and GN DOE as part of the Caribou Technical Advisory Group (CTAG) to discuss Project monitoring results for 2020 2021 and 2022, and plans for 2023.

Trends:

Not applicable.

Next Steps:

Sabina is meeting with representatives of the KIA and GNDOE during 2023 as part of the Caribou Technical Advisory Group (CTAG). Sabina will discuss opportunities to collaborate and regional monitoring at that time.

Project Certificate Condition No. 39

Category	Caribou Mitigation and Adaptive Management Measures
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate potential impacts to caribou throughout the life of the Project.
Term or Condition (TC)	<p>The Proponent shall provide, within its Wildlife Mitigation and Monitoring Program Plan (WMMPP), measures for the staged reduction of project activities should caribou occur in proximity to the project site. The WMMPP will include a detailed description of all project activities, equipment, and components that would be managed during different phases of staged reduction mitigation events, including rapid and planned operational shutdowns should caribou calving or post-calving ranges overlap with the Project. Any planned activity restrictions/cessations should be of sufficient duration to take into account annual variation in the timing and distribution of calving and post-calving caribou interactions with the Project.</p> <p>Commentary: Additional details to be contained within the WMMPP shall include a quantitative description of the noise produced by all activities, equipment, and components that would be managed during the staged reduction events, in addition to an analysis of the zones over which continuous and instantaneous noise thresholds for caribou would be exceeded within the project area. The Proponent shall provide updated details throughout the life of the Project should activities, equipment, or components alter the zones of influence as originally assessed.</p>
Reporting Requirement	The finalized Wildlife Mitigation and Monitoring Program Plan (WMMPP) shall be submitted to the Nunavut Impact Review Board at least 90 days prior to construction. Subsequently, the Proponent shall provide include an annual summary of the measures taken and monitoring results under the WMMPP in <b>the Proponent’s annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	<p>WMMPP 7.1.5.2 Levels of Management for Caribou during Normal Operations                      WMMPP Section 7.1.5.3 Management for Shifts in Calving Ranges                      Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.                      The 2022 Pre-Construction Wildlife Effects Monitoring Report is appended as Appendix G.</p>

Methods:

Section 7.1.5.2 of the WMMP (Levels of Management for Caribou during Normal Operations) describes the triggers and activities for staged reductions in Project activities should caribou be observed near the Project site. Section 7.1.5.3 of the WMMPP (Management for Shifts in Calving Ranges) describes the triggers and activities to be undertaken in response to a shift in calving grounds - leading to a rapid or a planned operational shutdown.

Sabina updated the WMMPP in 2018 with the commitments made at the 2017 Final Hearing, including additional details about reductions in project activities and project shutdowns. The updated WMMPP (Version 9, September 2018) was circulated for review by the KIA and GN DOE in August, 2018. Sabina then met with the KIA and GNDOE in September 2018 to discuss the updates.

The WMMPP was again updated in October 2019 to Version 10. Updates were made to address a commitment to the KIA to include information on spill response equipment contact information for community organizations. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN during November 2019 and discussed at the December 2019 CTAG meeting.

The WMMPP was again updated in December 2022 to Version 11. Updates included additions to refer to the proposed addition of the Wind Energy Centre, including mitigations and monitoring related to wind turbines, as well as to incorporate commitments in response to comments and suggestions from the KIA. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE, and was discussed at the December 2022 CTAG meeting.

#### Results:

During 2020, Sabina followed the mitigation measures listed in the WMMPP (Version 9, September 2018) and during 2021, Sabina followed the updated WMMPP (Version 9, October 2019).

In 2021, Sabina implemented the caribou management system (Section 7.1.5.2 of the WMMP Plan; ERM 2019), by responding to caribou presence with a Level 2, Level 3, and Level 4 response.

In 2022, there were no situations requiring implementation of the caribou management system above a Level 2 response (Section 7.1.5.2 of the WMMP Plan; ERM 2022).

To mitigate for effects on caribou, the Environment Department monitored GNWT collar data daily during the calving, post-calving, and into summer seasons (July - August).

Records of incidental observations, monitoring, and mitigation measures are reported in the 2022 Pre-Construction Wildlife Effects Monitoring Report.

#### Trends:

Not applicable.

#### Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction Phase. The WMMP Plan will continue to be updated annually as needed.

Project Certificate Condition No. 40

Category	Caribou Monitoring
Responsible Parties	Sabina Gold & Silver Corp., Kitikmeot Inuit Association, the Government of Nunavut
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure that implementation of adaptive management is not unduly delayed by potential lag times associated with delayed access to collar data.
Term or Condition (TC)	<p>In consultation with the Kitikmeot Inuit Association, the Government of Nunavut, and relevant parties, the Proponent shall ensure that the utilization of satellite collar data as an early detection method for caribou takes into consideration an agreed-upon biological buffer, as well as potential lag times associated with delayed access to collar data, for the development of thresholds for monitoring and adaptive management triggers.</p> <p><b>Commentary: The term “agreed-upon biological buffer” references the biological buffer agreed to by the relevant parties at the Supplemental Final Hearing, but this buffer may be updated during the life of the Project to reflect any subsequent agreements by the Proponent, the Kitikmeot Inuit Association, the Government of Nunavut, and other relevant parties.</b></p>
Reporting Requirement	<b>Within 1 (one) year of construction, information regarding the Proponent’s fulfillment of this Term and Condition shall be included in the Proponent’s annual report to the Nunavut Impact Review Board. Subsequently, information regarding the Proponent’s in fulfillment of this Term and Condition shall be included every 2 (two) years in the Proponent’s annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	<p>WMMPP 7.2.1.2 Near Real-time Collar Monitoring  Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.  Document title: Back River Project Caribou Movement Rates, September 2018.  Document title: The 2022 Pre-Construction Wildlife Effects Monitoring Report is appended as Appendix G</p>

Methods:

Sabina updated the WMMPP in 2018 to include the commitments made at the 2017 Final Hearing, including the biological buffer surrounding collar data. The updated WMMPP (Version 9, September 2018) was circulated for review by the KIA and GN DOE in August, 2018. The most up to date WMMPP (Version 11, December 2022) retains this buffer.

Sabina also prepared a memo *Back River Project Caribou Movement Rates, September 2018*, to address Condition 40 which was circulated for review by the KIA and GNDOE.

Sabina then met with the KIA and GNDOE in September 2018 to discuss the updates and movement rate memo.

Results:

Sabina, the KIA and the GND OE met in September 2018 to discuss caribou movement rates and the updates to the WMMPP (Version 9, September 2018). The parties discussed data availability and calculation of movement rates from collared caribou.

During 2020, 2021 and 2022, Sabina used the collar data plus the biological buffer listed in the WMMPP (Version 11, December 2019) to monitor the need for caribou mitigation. Reduction of project activities did not occur for caribou in 2022, though Level 2 and Level 3 Alerts were issued (Appendix G).

Trends:

Not applicable.

Next Steps:

Sabina will continue to use the WMMPP (Version 11, December 2022 that includes a biological buffer on collar data, as agreed to by the CTAG, on collar data for managing site mitigation. Sabina is meeting with representatives of the KIA and GND OE during 2023 as part of the CTAG.

Project Certificate Condition No. 41

Category	Caribou Mitigation Measures
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate potential impacts to caribou during periods of heightened sensitivity.
Term or Condition (TC)	The Proponent shall demonstrate consideration for the increased potential of caribou presence in the area when planning outdoor construction activities (including site clearing, blasting, and operation of heavy equipment) during the July 26 to August 31 period.
Reporting Requirement	<b>Information regarding the Proponent’s fulfillment of this Term and Condition shall be included in the Proponent’s annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	WMMPP 7.1.5.1 Management System to Reduce Disturbance to Caribou WMMPP 7.1.5.2 Levels of Management for Caribou during Normal Operations  Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.

Methods:

Section 7.1.5.1 of the WMMPP (Management System to Reduce Disturbance to Caribou) describes the monitoring and management of the Project site, including advising personnel of the heightened chance of encountering caribou during the summer months. Section 7.1.5.2 (Levels of Management for Caribou during Normal Operations) includes activities to be conducted during the summer months when there is a higher chance of observing caribou.

Sabina updated the WMMPP in 2018 to include the commitments made at the 2017 Final Hearing, including consideration for caribou presence in summer. The updated WMMPP (Version 9, September 2018) was circulated for review by the KIA and GN DOE in August, 2018.

The WMMPP was again updated in October 2019 to Version 10. Updates were made to address a commitment to the KIA to include information on spill response equipment contact information for community organizations. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN during November 2019 and discussed at the December 2019 CTAG meeting.

The WMMPP was again updated in December 2022 to Version 11. Updates included additions to refer to the proposed addition of the Wind Energy Centre, including mitigations and monitoring related to wind turbines, as well as to incorporate commitments in response to comments and suggestions from the KIA. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE, and was discussed at the December 2022 CTAG meeting.

---

Additional information relating to the location and timing of blasts was included in the 2022 WMMPP Report, as requested by the GN DOE (Appendix G).

Results:

In 2022, Sabina followed the mitigation measures listed in the WMMPP (Version 11, December 2022).

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction Phase. This WMMPP includes planning and mitigation account for the higher likelihood of observing caribou during summer (July to August). The WMMPP Plan will continue to be updated annually as needed.

## Project Certificate Condition No. 42

Category	Caribou Mitigation Measures
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure that mitigation measures apply for all caribou.
Term or Condition (TC)	The Proponent shall ensure that all caribou mitigation and monitoring measures (including mitigation for shifts in calving and post-calving ranges) included within the Wildlife Mitigation Monitoring Program Plan apply to all caribou, regardless of the herd.
Reporting Requirement	<b>Information regarding the Proponent's fulfillment of this Term and Condition shall be included in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	WMMPP 7.1.5.1 Management System to Reduce Disturbance to Caribou WMMPP 7.1.5.2 Levels of Management for Caribou during Normal Operations WMMPP Section 7.1.5.3 Management for Shifts in Calving Ranges Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.

## Methods:

Sabina updated the WMMPP in 2018 to include the commitments made at the 2017 Final Hearing including mitigation for all caribou, regardless of herd. Sections of the WMMPP that deal with mitigation and monitoring of caribou includes all caribou, not only the Bathurst herd, principally Sections 7.1.5.1, 7.1.5.2, and 7.1.5.3. The updated WMMPP (Version 9, September 2018) was circulated for review by the KIA and GN DOE in August, 2018.

The WMMPP was again updated in October 2019 to Version 10. Updates were made to address a commitment to the KIA to include information on spill response equipment contact information for community organizations. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN during November 2019 and discussed at the December 2019 CTAG meeting.

The WMMPP was again updated in December 2022 to Version 11. Updates included additions to refer to the proposed addition of the Wind Energy Centre, including mitigations and monitoring related to wind turbines, as well as to incorporate commitments in response to comments and suggestions from the KIA. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE, and was discussed at the December 2022 CTAG meeting.

## Results:

During 2022, Sabina followed the mitigation measures listed in the WMMPP (Version 11, December 2022).

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction Phase. No changes to the WMMPP are anticipated during 2023.

## Project Certificate Condition No. 43

Category	Wildlife Mitigation Measures
Responsible Parties	Sabina Gold & Silver Corp., Government of Nunavut
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure that specific criteria and procedures are developed should wildlife be deemed project-tolerant.
Term or Condition (TC)	In consultation with the Government of Nunavut (GN) and other relevant authorities, the Proponent shall include criteria and procedures within its Wildlife Mitigation and Monitoring Program Plan governing the deterring of wildlife from blast zones and the relaxation of mitigation measures for animals deemed project-tolerant. Caribou shall be deterred using only agreed-upon deterrence measures established in consultation with the GN and only if their safety is deemed at risk.
Reporting Requirement	The information should be submitted to the Nunavut Impact Review Board (NIRB) at least 90 days prior to the start of construction, further reporting to be determined following approval of the Project by the Minister.
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	WMMPP Section 7.1.7 Mitigation and Management for Direct Mortality and Injury of Caribou Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022. Document title: Back River Project Wildlife Deterrence, September 2018. Document title: The 2022 Pre-Construction Wildlife Effects Monitoring Report is appended as Appendix G.

## Methods:

Sabina updated the WMMPP in 2018 to include the commitments made at the 2017 Final Hearing including deterrence of wildlife. The updated WMMPP (Version 9, September 2018) was circulated for review by the KIA and GN DOE in August, 2018. Sabina also prepared a memo *Back River Project Wildlife Deterrence, September 2018*, to address Condition 43 which was circulated for review by the KIA and GNDOE. Sabina then met with the KIA and GNDOE in September 2018 to discuss the updates and movement rate memo.

The WMMPP was again updated in October 2019 to Version 10. Updates were made to address a commitment to the KIA to include information on spill response equipment contact information for community organizations. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN during November 2019 and discussed at the December 2019 CTAG meeting.

The WMMPP was again updated in December 2022 to Version 11. Updates included additions to refer to the proposed addition of the Wind Energy Centre, including mitigations and monitoring related to

---

wind turbines, as well as to incorporate commitments in response to comments and suggestions from the KIA. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE, and was discussed at the December 2022 CTAG meeting.

Results:

Sabina, the KIA and the GNDOE met in September 2018 to discuss caribou deterrence and the updates to the WMMPP (Version 9, September 2018). The parties discussed conditions for deterring caribou. Sabina met with the KIA and GNDOE in December 2019, and there were no further comments on the conditions for deterring caribou.

During 2019, a lone male caribou became acclimated to the Marine Laydown Area (MLA) camp. After approximately a month of continuous sightings of this caribou within the camp, and after consultation with the KIA, this caribou was gently deterred from the site. Camp personnel deterred the caribou by clapping their hands in a group and slowly moving closer to the caribou until it departed.

During 2020, a lone male caribou continued to be observed at the MLA; no caribou were deterred from Project sites.

During 2021, a lone male caribou continued to be observed at the MLA. During December 2021, Sabina met with the CTAG (which includes the KIA and GN DOE) and discussed deterring this caribou away from the MLA and what methods to use.

No project tolerant caribou were observed around the MLA or Goose camp in 2022.

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, October 2022) to conduct mitigation and monitoring relevant for the Pre-construction Phase. The WMMP Plan will continue to be updated annually as needed.

## Project Certificate Condition No. 44

Category	Muskox Mitigation Measures
Responsible Parties	Sabina Gold & Silver Corp., Government of Nunavut
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate potential impacts to muskox from project activities.
Term or Condition (TC)	In collaboration with the Government of Nunavut, the Proponent shall specify within its Wildlife Mitigation and Monitoring Plan specific mitigation measures, trigger distances, and group size thresholds for the protection of muskox in proximity to project activities (e.g., blasting, heavy truck traffic, and aircraft).
Reporting Requirement	<b>Information regarding the Proponent's fulfillment of this Term and Condition shall be included in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	WMMPP Section 8.1.3 Mitigation and Management for Disturbance of Muskox Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022. Document title: The 2022 Pre-Construction Wildlife Effects Monitoring Report is appended as Appendix G.

## Methods:

Sabina updated the WMMPP in 2018 to include the commitments about muskox made at the 2017 Final Hearing. The updated WMMPP (Version 9, September 2018) was circulated for review by the KIA and GNDOE in August, 2018. Sabina then met with the KIA and GNDOE in September 2018 to discuss the updates.

The WMMPP was again updated in October 2019 to Version 10. Updates were made to address a commitment to the KIA to include information on spill response equipment contact information for community organizations. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN during November 2019 and discussed at the December 2019 CTAG meeting.

Sabina, the KIA and the GNDOE met in September 2018 and December 2019 to discuss the updates to the WMMPP.

The WMMPP was again updated in December 2022 to Version 11. Updates included additions to refer to the proposed addition of the Wind Energy Centre, including mitigations and monitoring related to wind turbines, as well as to incorporate commitments in response to comments and suggestions from the KIA. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE, and was discussed at the December 2022 CTAG meeting.

Results:

Sabina utilized the WMMPP (Version 11, December 2022) to conduct mitigation and monitoring between 2020 and 2022. Muskox were reported relatively frequently in 2020 by Project personnel (289 animals over 12 separate sightings) and were not reported incidentally in 2021. Muskox were observed moderately frequently in 2022 (111 animals over five sightings) (Appendix G). Muskox were not observed during Project activities (e.g., blasting) that required mitigation.

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction and construction Phase. The WMMP Plan will continue to be updated annually as needed.

Project Certificate Condition No. 45

Category	Wildlife Mitigation Measures
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate potential disturbances to wildlife migration and movement from project infrastructure.
Term or Condition (TC)	The Proponent shall ensure that safety barriers, berms, and designed crossings associated with project infrastructure, including site roads and the winter ice road, are constructed as necessary to allow for the safe passage of caribou and other terrestrial wildlife and do not interfere with wildlife denning sites.
Reporting Requirement	<b>Information regarding the Proponent’s fulfillment of this Term and Condition shall be included in the Proponent’s annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	Movement across the winter ice road is described in WMMPP Section 7.1.6 Mitigation and Management for Disruption of Movement of Caribou Management for dens in the ice road route is described in WMMPP Section 9.1.3.7 Winter Ice Road Management Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.

Methods:

Sabina updated the WMMPP in 2018 to include the commitments about road crossings and denning grizzly bears made at the 2017 Final Hearing. The updated WMMPP (Version 9, September 2018) was circulated for review by the KIA and GNDOE in August, 2018. Sabina then met with the KIA and GNDOE in September 2018 to discuss the updates.

The WMMPP was again updated in October 2019 to Version 10. Updates were made to address a commitment to the KIA to include information on spill response equipment contact information for community organizations. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN during November 2019 and discussed at the December 2019 CTAG meeting.

The WMMPP was again updated in December 2022 to Version 11. Updates included additions to refer to the proposed addition of the Wind Energy Centre, including mitigations and monitoring related to wind turbines, as well as to incorporate commitments in response to comments and suggestions from the KIA. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE, and was discussed at the December 2022 CTAG meeting.

Results:

Sabina, the KIA and the GNDOE met in September 2018 to discuss the updates to the WMMPP (Version 9, September 2018).

Sabina followed the mitigation hierarchy (avoid, mitigate, manage) to avoid potential den sites. During the fall of 2018, Sabina made adjustments to the route of the winter ice road (WIR) to avoid potential grizzly bear denning habitat identified from Terrestrial Ecosystem Mapping.

During 2019, when the WIR was constructed, not all potential denning sites could be avoided and the WIR crossed the toe of a small number of esker systems. Prior to construction, during February, 2019, Sabina surveyed these sites to determine their suitability as denning habitat, using a thermal camera for potential dens. The sites were not determined to be good quality denning habitat and no dens were discovered.

During 2019, the WIR was constructed in such a way as to allow caribou and other animals to cross the road. An analysis was conducted comparing collar data from caribou in 2019 (WIR active) to 2017 and 2018 (no WIR), which reported no change or delay in caribou movement during 2019 when the WIR was active. This analysis was appended to the 2019 WMMP Report.

During summer 2020, Sabina conducted a study of all potential borrow sites along the WIR route to evaluate each site for existing dens and their potential support winter dens by grizzly bear. These data can be used in future when determining which borrow sites to use for construction of the WIR.

During 2021 and 2022, the WIR was not constructed.

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction Phase. The WMMP Plan will continue to be updated annually as needed.

## Project Certificate Condition No. 46

Category	Wildlife Monitoring and Adaptive Management Measures
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure that all direct mortalities are reported and considered in the development of adaptive management protocols.
Term or Condition (TC)	The Proponent shall file an incident report to the local wildlife conservation office for any and all direct wildlife mortalities that occur in association with the Project. All incident reports should include sufficient detail to demonstrate how monitoring and mitigation measures failed to prevent the mortality, as well as information pertaining to what measures would be put in place to prevent the incident from reoccurring. The Proponent shall reach an agreement with the appropriate Designated Inuit Organization regarding compensation for any direct mortality of wildlife resulting from the Project.
Reporting Requirement	A summary regarding incidents reported and if compensation was or will be provided by the Proponent for direct mortalities, as well as a description of steps taken in fulfillment of this Term and Condition shall be included in the Proponent's <b>annual report to the Nunavut Impact Review Board</b> .
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.  Document title: The 2022 Pre-Construction Wildlife Effects Monitoring Report is appended as Appendix G.

## Methods:

Sabina updated the WMMPP in 2018 to include the commitments made at the 2017 Final Hearing including information about responding to wildlife mortalities. The updated WMMPP (Version 9, September 2018) was circulated for review by the KIA and GNDOE in August, 2018. Sabina then met with the KIA and GNDOE in September 2018 to discuss the updates.

The WMMPP was again updated in October 2019 to Version 10. Updates were made to address a commitment to the KIA to include information on spill response equipment contact information for community organizations. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN during November 2019 and discussed at the December 2019 CTAG meeting.

The WMMPP was again updated in December 2022 to Version 11. Updates included additions to refer to the proposed addition of the Wind Energy Centre, including mitigations and monitoring related to wind turbines, as well as to incorporate commitments in response to comments and suggestions from

---

the KIA. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE, and was discussed at the December 2022 CTAG meeting.

Results:

In 2018, one wildlife mortality was reported, a long-tailed duck that was found at the MLA. No cause of mortality could be found so it could not be concluded that the mortality was due to the Project.

In 2019, one wildlife mortality was reported due to Project activities - a grizzly bear. All communication with the KIA and GN authorities followed the guidance in the WMMPP (Version 9). Results of wildlife monitoring are reported in the 2019 Pre-Construction Wildlife Effects Monitoring Report.

In 2020, 2021, and 2022 no wildlife mortalities were reported due to Project activities (Appendix G).

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction Phase. The WMMP Plan will continue to be updated annually as needed.

Project Certificate Condition No. 47

Category	Wildlife Monitoring and Adaptive Management Measures
Responsible Parties	Sabina Gold & Silver Corp., Kitikmeot Inuit Association
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate potential impacts to wildlife through interaction with water attenuation ponds and/or tailings storage areas.
Term or Condition (TC)	The Proponent shall, in consultation with the Kitikmeot Inuit Association, develop and implement measures to prevent the use of water attenuation ponds and tailings storage areas by wildlife, including waterfowl, other migratory birds, and caribou, with sufficient monitoring to assess whether these measures are effective or whether further deterrents may be required.
Reporting Requirement	Information regarding development, implementation and monitoring of the measures developed by the Proponent in fulfillment of this Term and <b>Condition shall be included in the Proponent’s annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	WMMPP Section 9.1.7 Mitigation and Management for Attraction of Grizzly Bear and Wolverine Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.

Methods:

Not Applicable. No water attenuation ponds or tailing storage areas occur at the project site at this time.

Sections 7.1.10 and 11.1.8 of the WMMPP describe the monitor water quality in project ponds and the Tailings Storage Facilities and mitigation to exclude caribou, other large mammals, and waterbirds if required.

Results:

Not Applicable. No water attenuation ponds or tailing storage facilities occur at the project site at this time.

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction Phase. The WMMP Plan will continue to be updated as needed.

## Project Certificate Condition No. 48

Category	Wildlife Mitigation Measures
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate potential impacts to wildlife from attraction to project infrastructure.
Term or Condition (TC)	The Proponent shall develop and implement mitigation measures and monitoring programs to limit the attraction of predators and scavengers to Project facilities, and to limit impacts from specific project activities.
Reporting Requirement	Information regarding mitigation measures implemented and/or updated by the Proponent in fulfillment of this Term and Condition shall be included in Wildlife Mitigation and Monitoring Program Plan (WMMPP) and in the <b>Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	WMMPP Section 9.1.7 Mitigation and Management for Attraction of Grizzly Bear and Wolverine Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022. Document title: The 2022 Pre-Construction Wildlife Effects Monitoring Report is appended as Appendix G.

Methods:
----------

Sabina updated the WMMPP in 2018 to include the commitments made at the 2017 Final Hearing including limiting the attraction of predators and scavengers. The updated WMMPP (Version 9, September 2018) was circulated for review by the KIA and GNDOE in August, 2018. Sabina then met with the KIA and GNDOE in September 2018 to discuss the updates.

The WMMPP was again updated in October 2019 to Version 10. Updates were made to address a commitment to the KIA to include information on spill response equipment contact information for community organizations. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN during November 2019 and discussed at the December 2019 CTAG meeting.

The WMMPP was again updated in December 2022 to Version 11. Updates included additions to refer to the proposed addition of the Wind Energy Centre, including mitigations and monitoring related to wind turbines, as well as to incorporate commitments in response to comments and suggestions from the KIA. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE, and was discussed at the December 2022 CTAG meeting.

## Results:

The WMMPP, Section 9.1.7 (Mitigation and Management for Attraction of Grizzly Bear and Wolverine), includes sections describing design of buildings to exclude wildlife (Section 9.1.7.1), management of wildlife attractants (Section 9.1.7.2), general mitigation to prevent human-wildlife interactions (Section 9.1.7.3), a protocol for responding to observations of predators and scavengers (Section 9.1.7.4) and a protocol for management of problem wildlife specific to predators (Section 9.1.7.5).

During 2022, there were 13 observations of grizzly bear and 21 observations of wolverine. Where they occurred within the camp perimeter, wolverines were deterred by human presence, bear bangers, and rubber bullets. One individual wolverine was observed repeatedly within the Goose Camp perimeter, though it was not observed directly accessing attractants. On November 21 a wolverine was found within the incinerator building, and deterred using bear bangers and rubber bullets. Following this incident an audit of waste management at site was conducted (Appendix G).

On November 8 a staff member entered the GS-02 generator shack at Goose, and was bit on the leg by a small carnivore identified as either a fox or wolverine. The animal tore through the coveralls and pants of the worker, piercing the skin above the boot. The worker struck the animal with his other foot and an oil jug until it released and ran from the area. The worker was assessed by site medics and flown to Yellowknife for further medical treatment. Staff searched the site for the animal but were unable to locate it. An incident report was completed (Appendix G), and corrective actions implemented to mitigate access for wildlife to the generator shack. Mitigation actions taken include installation of wire mesh over vent louvres on the building intake duct, and a safety presentation to all staff regarding wildlife interactions, precautions, and waste management.

## Trends:

Not applicable.

## Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction Phase. The WMMP Plan will continue to be updated annually as needed.

## Project Certificate Condition No. 49

Category	Annual Reporting to the Nunavut Impact Review Board
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To provide annual updates to the Nunavut Impact Review Board and relevant parties for ongoing monitoring and collaboration purposes
Term or Condition (TC)	The Proponent shall report to the Nunavut Impact Review Board (NIRB) regarding its terrestrial wildlife monitoring efforts, with inclusion of the following information: a. Description of all updates to terrestrial wildlife baseline data; b. A description of the involvement of local communities in its monitoring programs; c. A detailed presentation and analysis of the distribution relative to Project infrastructure and activities for caribou and other terrestrial mammals observed during surveys and incidental sightings; and d. Results of the annual monitoring programs, including methodologies and statistical approaches used to support conclusions drawn.
Reporting Requirement	<b>Information regarding the Proponent's efforts in</b> fulfillment of this Term and Condition shall be included <b>in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	Document title: The 2022 Pre-Construction Wildlife Effects Monitoring Report is appended as Appendix G.

## Methods:

The majority of formal wildlife monitoring will be beginning in the Construction Phase of the Project. Sabina is developing an initial Pre-Construction Wildlife Effects Monitoring Report to report on the pre-construction activities conducted in 2022.

## Results:

The 2022 Pre-Construction Wildlife Effects Monitoring Report is provided in Appendix G.

## Trends:

Not applicable. Wildlife monitoring will begin during the Construction Phase of the Project.

## Next Steps:

The 2022 Pre-Construction Wildlife Effects Monitoring Report is provided in Appendix G.

## Project Certificate Condition No. 50

Category	Annual Reporting to the Nunavut Impact Review Board
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To provide annual updates to the Nunavut Impact Review Board and relevant parties to verify the effectiveness of ongoing monitoring and mitigation efforts.
Term or Condition (TC)	<p>Within its annual report to the NIRB, the Proponent shall incorporate a review section which includes:</p> <ol style="list-style-type: none"> <li>a. An examination for trends in the measured natural variability of Valued Ecosystem Components in the region relative to the baseline reporting;</li> <li>b. A detailed analysis of wildlife responses to operations with emphasis on wildlife behaviour, mortalities, and displacements (if any), and responses to project operations;</li> <li>c. A detailed description of staged reduction mitigation events, including operational shutdowns, undertaken throughout the year in response to wildlife in proximity to the Project. Details shall include, but are not limited to: <ol style="list-style-type: none"> <li>i. A description of the aggregation and species of wildlife encountered;</li> <li>ii. Environmental conditions;</li> <li>iii. A description of the sequence of activities ceased as well as the duration of cessation; and</li> <li>iv. The effectiveness of the applied mitigation measures and potential amendments that may be required.</li> </ol> </li> <li>d. A demonstration and description of how the monitoring results contribute to cumulative effects monitoring associated with the Project; and</li> <li>e. Any proposed changes to the monitoring survey methodologies, statistical approaches, or proposed adaptive management stemming from the results of the monitoring program.</li> </ol>
Reporting Requirement	<b>Information regarding the Proponent's efforts in fulfillment of this Term and Condition shall be included in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	The 2022 Pre-Construction Wildlife Effects Monitoring Report is appended as Appendix G.

## Methods:

The majority of formal wildlife monitoring will be beginning in the Construction Phase of the Project. Sabina is developing an initial Pre-Construction Wildlife Effects Monitoring Report to report on the pre-construction activities conducted in 2022.

## Results:

In 2018 and 2019, monitoring did not identify any triggers for staged reduction or shutdown of project activities.

In 2020, 2021, and 2022, the Environment Department monitored GNWT collar data daily during the calving, post-calving, and into summer seasons (July - August).

During 2020, one Level 2 response (Site Notification) occurred on July 18 in response to collared caribou within 100 km of the site. Two Level 3 responses (Site Alert) occurred when collars showed caribou moving towards the Project on July 1, and when ~1,000 caribou were observed within ~2 km on August 1. Two Level 4 responses (staged reduction in Project activities) occurred when 50-100 caribou were observed near the Goose site on July 30 and August 2).

During 2021 collared caribou data were used to trigger a Level 2 (Site Notification) when collared caribou approached to within 100 km of the Goose Site on July 28,

During 2022 collared caribou data were used to trigger a Level 2 (Site Notification) when collared caribou approached to within 100 km of the Goose Site (Appendix G).

The 2022 Pre-Construction Wildlife Effects Monitoring Report is provided in Appendix G.

Trends:

Not Applicable. Formal wildlife monitoring will begin during the Construction Phase of the Project.

Next Steps:

The 2022 Pre-Construction Wildlife Effects Monitoring Report is provided in Appendix G.

Project Certificate Condition No. 51

Category	Caribou Technical Advisory Group
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	<b>To establish an advisory group to provide technical oversight on the Project's</b> mitigation, monitoring, and adaptive management measures related to caribou.
Term or Condition (TC)	<p>In collaboration with the Kitikmeot Inuit Association, the Government of Nunavut, and other relevant parties, the Proponent shall develop and participate in a Caribou Technical Advisory Group. As part of its function, the group shall seek to:</p> <ul style="list-style-type: none"> <li>o Provide independent advice on study design(s) and analyses for the <b>testing and evaluation of the Project's adaptive management</b> measures for reducing disturbance to caribou;</li> <li>o Undertake appropriate testing of the caribou detection methods, group size thresholds, and distance thresholds employed as recommended by the advisory group;</li> <li>o On the basis of these tests, and any other available evidence, provide analyses and a written evaluation of the caribou protection measures and where appropriate make necessary adjustments to those measures; and</li> <li>o Submit reports to the Nunavut Impact Review Board (NIRB), and other relevant parties, for review.</li> </ul> <p>Commentary: Where possible the Proponent shall include relevant hunters and trappers associations and/or knowledgeable land users in the membership of the group and shall demonstrate its consideration for community input and <b>Inuit Qaujimagatuqangit as part of the group's function. The Proponent</b> acknowledges that it is the responsibility of the Proponent to carry out the studies, analyses, evaluation and reports that may be required. The Proponent also commits to taking advice from the Caribou Technical Advisory Group into consideration when carrying out these tasks.</p>
Reporting Requirement	<b>Information regarding the Proponent's fulfillment of this Term and Condition shall be included in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	WMMP Section 3.2 Caribou Technical Advisory Group Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December, 2022.

Methods:
----------

Sabina updated the WMMPP in 2018 to include the commitments made at the 2017 Final Hearing, including the Caribou Technical Advisory Group (CTAG). The function and responsibilities of the CTAG is described in Section 3.2 of the WMMPP. The updated WMMPP (Version 9, September 2018) was circulated for review by the KIA and GN DOE in August, 2018.

The WMMPP was again updated in October 2019 to Version 10. Updates were made to address a commitment to the KIA to include information on spill response equipment contact information for community organizations. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN during November 2019 and discussed at the December 2019 CTAG meeting.

The WMMPP was again updated in December 2022 to Version 11. Updates included additions to refer to the proposed addition of the Wind Energy Centre, including mitigations and monitoring related to wind turbines, as well as to incorporate commitments in response to comments and suggestions from the KIA. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE, and was discussed at the December 2022 CTAG meeting.

Sabina also produced a draft Terms of Reference (TOR) for the CTAG and circulated this to KIA and GNDOE in September, 2018 and discussed in September 2018 and December 2019.

#### Results:

Sabina then met with the KIA and GNDOE in September 2018 and December 2019 to discuss the draft TOR for the CTAG, Project updates, as well as a number of technical subjects, including buffers surrounding collar data, management of the Winter Ice Road, caribou survey methods, and mitigation measures.

In 2020, the CTAG did not meet due to COVID-19 restrictions.

In 2021, the CTAG met virtually in December to discuss updates to the Project plans, a planned windfarm, and an update on the habituated caribou at the MLA.

In 2022, the CTAG met virtually in December to discuss updates to the Project plans, developments relating to the planned windfarm, results from the 2021 WMMPP Report, and plans for monitoring in 2023.

#### Trends:

Not Applicable.

#### Next Steps:

Sabina is in the process of finalizing the CTAG TOR with the KIA and GNDOE and will provide the TOR to the NIRB when finalized.

Project Certificate Condition No. 52

Category	Caribou Mitigation
Responsible Parties	Sabina Gold & Silver Corp., Kitikmeot Inuit Association, the Government of Nunavut, the Government of the Northwest Territories
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure caribou protection in the context of additional exploration
Term or Condition (TC)	<p>The Proponent shall, in collaboration with the Government of Nunavut, the Government of the Northwest Territories, the Kitikmeot Inuit Association and other relevant parties, thoroughly evaluate the potential impacts to caribou from planned mineral exploration within its mineral tenures and outside the approved project development area. The Proponent must demonstrate that the potential for adverse effects to caribou populations can be prevented prior to exploration occurring.</p> <p>Commentary: The application of this term and condition is limited to planned mineral exploration which is based out of, or substantially supported by, infrastructure or operations at the Back River Project sites.</p>
Reporting Requirement	<b>Within 1 (one) year of construction, information regarding the Proponent’s fulfillment of this Term and Condition shall be included in the Proponent’s annual report to the Nunavut Impact Review Board. Subsequently, information regarding the Proponent’s in fulfillment of this Term and Condition shall be included every 2 (two) years in the Proponent’s annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Not Applicable.
Reference	Not Applicable.

Methods:

Not Applicable.

Results:

Not Applicable.

Trends:

Not Applicable.

Next Steps:

*Sabina confirms that there is currently no planned or occurring mineral exploration within its mineral tenures and outside the approved project development area which is based out of, or substantially supported by, infrastructure or operations at the Back River Project.*

## 4.5.11 Birds and Bird Habitat (PC TCs 53 through 61)

## Project Certificate Condition No. 53

Category	Mitigation, Monitoring, and Adaptive Management for Birds and Bird Habitat
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To develop and implement appropriate mitigation and monitoring measures for birds and bird habitat.
Term or Condition (TC)	<p>The Proponent shall have in place specific measures for the protection and monitoring of birds and bird habitat within its Wildlife Mitigation and Monitoring Program Plan (WMMPP). Protection measures shall include, but are not limited to:</p> <ul style="list-style-type: none"> <li>○ Mitigation and monitoring measures applied at all times throughout project operations to limit impacts to birds and bird habitat from specific project activities and infrastructure;</li> <li>○ Mitigation and monitoring measures applied during periods of heightened sensitivity or alternative circumstances;</li> <li>○ Adaptive management measures with specific triggers for intervention; and</li> <li>○ <b>Protocols for collaboration with relevant parties, and the Project's advisory groups, throughout the Project, including on-going consideration and incorporation of Inuit Qaujimaningit, to ensure the effective delivery of the WMMPP as related to bird and bird habitat protection.</b></li> </ul>
Reporting Requirement	Information regarding mitigation, adaptive management and monitoring strategies and protocols implemented and/or updated by the Proponent in <b>fulfillment of this Term and Condition shall be included in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	<p>Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.</p> <p>The 2022 Pre-Construction Wildlife Effects Monitoring Report is appended as Appendix G.</p>

## Methods:

Specific measures for the protection and monitoring of birds and bird habitat are described within the Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022, in Sections 10, 11, 12, and 13. During Pre-construction in 2022, incidental observations of birds and nests were recorded.

Results:

Sabina was using the WMMPP (Version 9, September 2018) during winter, spring and summer of 2020, the updated WMMPP (Version 10, October 2019) in 2021, and the further updated WMMPP (Version 11, December 2022) in 2021 and 2022.

Mitigation and monitoring were effective. No bird incidents were reported due to Project activities in 2020, 2021, or 2023. Results are **presented in the “2022 Pre-Construction Wildlife Monitoring Report”** (Appendix G).

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction and construction Phase. The WMMP Plan will continue to be updated as needed

## Project Certificate Condition No. 54

Category	Mitigation Measures for Birds and Species at Risk
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate potential impacts to Species at Risk.
Term or Condition (TC)	If Species at Risk or their nests and eggs are encountered during project activities or monitoring programs, the primary mitigation measure must be avoidance. The Proponent shall establish clear zones of avoidance for nest of birds, particularly for Species At Risk, based on species-specific nest setback distances outlined in the Wildlife Mitigation and Monitoring Program Plan.
Reporting Requirement	<b>Information regarding the Proponent's fulfillment of this Term and Condition shall be included in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.

## Methods:

Specific measures for the protection and monitoring of birds and bird habitat are described in the WMMPP (Version 11, December 2022), in Sections 10 through 13. During Pre-construction in 2022, incidental observations of birds and nests were recorded.

## Results:

Sabina was using the WMMPP (Version 9, September 2018) during winter, spring and summer of 2020, the updated WMMPP (Version 10, October 2019) in 2021 and 2022.

Mitigation and monitoring were effective. No wildlife incidents were reported due to Project activities **in 2022. Results are presented in the "2022 Pre-Construction Wildlife Monitoring Report" (Appendix G).**

During 2020, ground clearing was required for birds in July for construction of the airstrip. Ground clearing activities were required during the breeding season, therefore pre-clearing surveys were required. Seven transects were surveyed on July 4, 2020 prior to ground clearing activities and no nests observed. The rest of ground clearing activities occurred outside of the breeding bird sensitive period (i.e., after August 15) and no pre-clearing nest surveys were required.

No ground-clearing occurred during the bird breeding period in 2021 and no pre-clearing surveys were therefore required.

Ground clearing occurred within the breeding season for the Echo Pit pre-stripping in 2022, so pre-clearing surveys were conducted on August 8, 2022, and no nest were observed, as reported in the 2022 WMMPP Report (Appendix G). All other ground clearing activities in 2022 occurred between August 16 and December, outside of the breeding season.

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction phase. The WMPP Plan will continue to be updated as needed.

## Project Certificate Condition No. 55

Category	Mitigation and Monitoring Measures for Species at Risk
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate and monitor potential impacts to Species at Risk.
Term or Condition (TC)	The Proponent shall ensure that the mitigation and monitoring strategies developed for Species at Risk are updated as necessary to maintain consistency with any applicable status reports, recovery strategies, action plans, and management plans that may become available through the duration of the Project.
Reporting Requirement	Information regarding mitigation and monitoring strategies implemented and/or updated by the Proponent in fulfillment of this Term and Condition <b>shall be included in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	WMMPP Section 4.1 Species at Risk Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022. The 2022 Pre-Construction Wildlife Effects Monitoring Report is appended as Appendix G.

## Methods:

During 2019, the WMMPP was updated to Version 10 to include commitments made by Sabina in response to comments and suggestions made by the Kitikmeot Inuit Association (KIA). The WMMPP (Version 10, October 2019) includes a section that describes the species at risk that may occur in the Project area, their status and the mitigation and management for each species at risk (Section 4.1).

The WMMPP was again updated in December 2022 to Version 11. Updates included additions to refer to the proposed addition of the Wind Energy Centre, including mitigations and monitoring related to wind turbines, as well as to incorporate commitments in response to comments and suggestions from the KIA. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE, and was discussed at the December 2022 CTAG meeting.

During 2019, 2020, 2021, and 2022 the Pre-Construction Wildlife Effects Monitoring Report included a table of species at risk known or potentially occurring in the Project area (Appendix G). This list was updated to maintain consistency with changes in species at risk listings. Since 2019, there was a change in the status of the lesser yellowlegs, which was designated as Threatened by COSEWIC in 2020, and **territorially as Vulnerable. Territorial risk listings were updated for the 2022 WMMPP report for Harris's sparrow, least sandpiper, bowhead whale, ringed seal, and Peary caribou.**

## Results:

Not applicable.

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction and Construction Phase and ensure that the mitigation and monitoring strategies developed for Species at Risk are updated as necessary, as described in Section 4.1 of the WMPP Plan. The WMPP Plan will continue to be updated as needed.

## Project Certificate Condition No. 56

Category	Bird Mitigation Measures
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate potential impacts to birds from construction and clearing activities.
Term or Condition (TC)	<p>The Proponent shall, to the extent possible, schedule required ground-disturbance activities (e.g. clearing) to occur prior to the seasonal return of migratory birds to the project area and shall install nesting deterrents (e.g. flagging) to discourage birds from nesting in areas likely to be disturbed by construction/clearing activities. If clearing is to occur during the nesting season, a nest survey should take place to identify nests and establish appropriate setbacks to ensure nests remain undisturbed until the young have fledged or left the nest. Pre-clearing nest surveys should be conducted less than 14 days prior to land clearing activities as a consideration for the short nesting cycles of some arctic-nesting birds.</p> <p>Commentary: It is noted that the Proponent is not limited to the use of flagging as a nesting deterrent, with flagging having been provided as an <b>example ONLY</b>. It is also highlighted that the reference to “nest surveys” means non-intrusive nest surveys only</p>
Reporting Requirement	Throughout construction, information regarding scheduling issues and/or results of surveys conducted by the Proponent in fulfillment of this Term and <b>Condition shall be included in the Proponent’s annual report to the Nunavut Impact Review Board</b> . After construction, whenever clearing activities are undertaken that could lead to migratory bird nest disturbance or deterrence from migratory bird nests, information regarding scheduling issues, and/or surveys conducted by the Proponent in fulfillment of this Term and Condition <b>shall be included in the Proponent’s annual report to the Nunavut Impact Review Board</b> .
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	WMMPP Section 11.1.3 11.1.3 Mitigation and Management for Disturbance of Waterbirds Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.

## Methods:

During 2019, the WMMPP was updated to Version 10 to include commitments made by Sabina in response to comments and suggestions made by the Kitikmeot Inuit Association (KIA). The WMMPP (Version 10, October 2019) includes management to schedule ground disturbance activities outside of the nesting season and management measures should a nest be found (Section 11.1.3).

The WMMPP was again updated in December 2022 to Version 11. Updates included additions to refer to the proposed addition of the Wind Energy Centre, including mitigations and monitoring related to wind turbines, as well as to incorporate commitments in response to comments and suggestions from

---

the KIA. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE, and was discussed at the December 2022 CTAG meeting.

Results:

Clearing was conducted in 2020 for construction of new infrastructure. Clearing was planned for outside of the bird breeding season. However, some clearing was scheduled for July 2020, during the bird breeding season. As described in the WMMPP, pre-clearing surveys were conducted in this area, **but no birds' nests were found prior to clearing.**

During 2021, no ground clearing was required during the bird breeding season and therefore no pre-clearing surveys were required.

Ground clearing occurred within the breeding season for the Echo Pit pre-stripping in 2022, so pre-clearing surveys were conducted on August 8, 2022, and no nests were observed, as reported in the 2022 WMMPP Report (Appendix G). All other ground clearing activities in 2022 occurred outside of the breeding season, between August 16 and December.

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction and Construction Phase. The WMMPP Plan will continue to be updated as needed.

## Project Certificate Condition No. 57

Category	Raptor Mitigation Measures
Responsible Parties	Sabina Gold & Silver Corp., Government of Nunavut - Department of Environment
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate potential impacts to raptors from project operations.
Term or Condition (TC)	Prior to removal or deterrence of raptors, the Proponent will contact the Government of Nunavut - Department of Environment to discuss proposed mitigation options and, if required, will obtain the required permits prior to undertaking any activity that can lead to the destruction of raptor nests or the deterring of raptors from nesting sites.
Reporting Requirement	Throughout construction, information regarding mitigation measures implemented by the Proponent in fulfillment of this Term and Condition shall <b>be included in the Proponent's annual report to the Nunavut Impact Review Board</b> . After construction, whenever clearing activities are undertaken that could lead to destruction of raptor nests or raptor deterrence from nests, information regarding mitigation measures implemented by the Proponent in fulfillment of this Term and Condition shall be included in the Proponent's annual report to the Nunavut Impact Review Board.
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	WMMPP Section 10.1.3 Mitigation and Management for Disturbance of Raptors Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 10), October 2019.

## Methods:

During 2019, the WMMPP was updated to Version 10 to include commitments made by Sabina in response to comments and suggestions made by the Kitikmeot Inuit Association (KIA). The WMMPP (Version 10, October 2019) includes management to contact the GNDOE prior to discuss proposed mitigation options and, if required, will obtain the required permits prior to undertaking any activity that can lead to the destruction of raptor nests or the deterring of raptors from nesting sites (Section 10.1.3).

The WMMPP was again updated in December 2022 to Version 11. Updates included additions to refer to the proposed addition of the Wind Energy Centre, including mitigations and monitoring related to wind turbines, as well as to incorporate commitments in response to comments and suggestions from the KIA. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE, and was discussed at the December 2022 CTAG meeting.

## Results:

No deterrence or removal of raptor nests was required during pre-construction in 2018, 2019, 2020, 2021, or 2022. No raptor nests were observed.

## Trends:

Not applicable.

Next Step:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction and Construction Phase. No changes to the WMMPP are anticipated during 2023. The WMMP Plan will continue to be updated as needed.

## Project Certificate Condition No. 58

Category	Seaducks and Waterfowl Mitigation Measures
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate potential impacts to seaducks and waterfowl from shipping activities.
Term or Condition (TC)	The Proponent shall include measures within the Wildlife Mitigation and Monitoring Program Plan to ensure that, subject only to vessel safety requirements, a setback distance of at least 500 metres is maintained from colonies and moulting aggregations of seaducks and waterfowl during Project shipping transiting through Bathurst/Elu Inlet, Lambert Channel, and Eastern Lancaster Sound.
Reporting Requirement	Information regarding measures implemented shall be included in the <b>Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), Decemberr 2022. Document title: Back River Project Standard Operating Procedure: Marine Shipping Wildlife Mitigation and Monitoring. November 2022. The 2022 Pre-Construction Wildlife Effects Monitoring Report is appended as Appendix G.

Methods:
----------

Specific measures to mitigate potential impacts to seaducks and waterfowl from shipping activities are described in the WMMPP (Version 10, October 2019) in Section 13 and in the Marine Shipping SOP.

## Results:

Sabina was using the WMMPP (Version 9, September 2018) during winter, spring and summer of 2019. Beginning in November 2019, Sabina used Version 10 of the WMMPP ( October 2019) to conduct mitigation and monitoring relevant for the Pre-construction Phase.

The Marine Shipping Wildlife Mitigation and Monitoring SOP (September 2019) was delivered to the shipping company, who followed the guidance in that document, avoiding marine wildlife and bird sensitive areas. No observations of marine mammals and birds were recorded in 2019.

The Marine Shipping Wildlife Mitigation and Monitoring SOP (November 2022) was updated in 2022 to include additional information related to species potentially encountered on shipping routes and sensitive habitat in NWT.

Prior to the 2022 shipping season, Sabina provided the marine monitoring SOP (September 2019) to the shipping companies. During 2022, two vessels supplied the MLA from the east and three from the west. Between August and September, 33 surveys (18 seabird surveys and 15 marine mammal surveys) were conducted over 38 hours and reported nine sightings of seabirds and four seabird species (Appendix G).

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction phase. Shipping companies will continue to use the Marine Shipping Wildlife Mitigation and Monitoring SOP (November 2022). The WMMP Plan will continue to be updated as needed.

## Project Certificate Condition No. 59

Category	Bird Mortality Reporting
Responsible Parties	Sabina Gold & Silver Corp., Environment and Climate Change Canada
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To report bird mortalities to appropriate parties.
Term or Condition (TC)	Any incidents of bird mortalities associated with project activities are to be recorded and reported to Environment and Climate Change Canada (Canadian Wildlife Service). The Proponent shall work with the Canadian Wildlife Service to determine appropriate recording and reporting format and timing.
Reporting Requirement	Information <b>regarding these incidents shall be included in the Proponent's</b> annual report to the Nunavut Impact Review Board.
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.

Methods:
----------

Should a bird mortality occur, Sabina will alert the ECCC Canadian Wildlife Services to report the mortality.

## Results:

Mitigation and monitoring were effective. No bird mortalities were reported due to Project activities in 2022.

## Trends:

Not applicable.

## Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction and Construction Phase. The WMMP Plan will continue to be updated as needed.

## Project Certificate Condition No. 60

Category	Wildlife Mitigation Measures
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To mitigate potential impacts to wildlife from aircraft operations.
Term or Condition (TC)	<p>Subject to safety requirements, the Proponent shall ensure that project aircraft maintain sufficient cruising altitudes to avoid disturbance to migratory birds. In particular, the Proponent shall maintain appropriate altitudes in proximity to observed concentrations of migratory birds, caribou and muskoxen that may be encountered during aircraft flights to the George property and other exploration areas, as well as during the transfer of employees between project facilities.</p> <p>Commentary: The application of this term and condition is limited to planned mineral exploration which is based out of, or substantially supported by, infrastructure or operations at the Back River Project sites.</p>
Reporting Requirement	Initially, until aviation contracts have been established, the Proponent shall <b>provide details an annual basis regarding the Proponent's measures taken to fulfill this Term and Condition in the Proponent's annual report to the Nunavut Impact Review Board.</b> Once longer term arrangements with contractors have been established, the <b>proponent shall provide these details in the Proponent's annual report to the Nunavut Impact Review Board every two (2) years or whenever there is a change or addition to the contractors.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	<p>Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.</p> <p>Document title: Back River Project Standard Operating Procedure: Fixed Wing and Helicopter Operations (July 2018).</p> <p>The 2022 Pre-Construction Wildlife Effects Monitoring Report is appended as Appendix G.</p>

## Methods:

Specific measures to mitigate potential impacts to wildlife from aircraft operations are described in the WMMPP (Version 11, December 2022) and the Fixed Wing and Helicopter Operations SOP (July 2018). During Pre-construction in 2022, checks were completed prior to all aircraft landings.

## Results:

During 2022, Sabina was using the WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction Phase.

Mitigation and monitoring were effective. No caribou or other wildlife were observed during checks of the airstrips and surrounding area prior to aircraft take-off and landings.

During 2022, both fixed-wing and helicopter pilots followed guidelines set out in the WMMPP as described in the **“2022 Pre-Construction Wildlife Monitoring Report” (Appendix G)**.

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction Phase. The WMMP Plan will continue to be updated as needed.

Project Certificate Condition No. 61

Category	Aircraft Monitoring Measures
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure that project aircraft are in compliance with operational procedures, commitments, and regulatory requirements.
Term or Condition (TC)	The Proponent shall ensure that pilots are informed of minimum cruising altitude guidelines and that a daily log or record of flight paths and cruising altitudes for project aircraft is maintained to monitor adherence and to follow up on complaints.
Reporting Requirement	<b>The Proponent shall provide information in the Proponent’s annual report to the Nunavut Impact Review Board, and will make specific logs or records available to the Nunavut Impact Review Board upon request.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022.  Document title: Back River Project Standard Operating Procedure: Fixed Wing and Helicopter Operations (July 2018).

Methods:

Section 7.1.5.6 (Fixed Wing Aircraft Management) and 7.1.5.7 (Helicopter Management) of the WMMPP and the SOP describes the monitoring and management of aircrafts, including minimum cruising altitude guidelines. During 2019, the WMMPP was updated to Version 10 to include commitments made by Sabina in response to comments and suggestions made by the Kitikmeot Inuit Association (KIA).

The WMMPP was again updated in December 2022 to Version 11. Updates included additions to refer to the proposed addition of the Wind Energy Centre, including mitigations and monitoring related to wind turbines, as well as to incorporate commitments in response to comments and suggestions from the KIA. The updated WMMPP was provided to the Caribou Technical Advisory Group (CTAG), which includes the KIA and GN DOE, and was discussed at the December 2022 CTAG meeting.

During 2019, 2020, 2021, and 2022 the Fixed Wing and Helicopter Operations SOP (July 2018) was delivered to fixed wing and helicopter companies working on site.

Results:

Mitigation and monitoring were effective. No wildlife incidents were recorded.

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction Phase. The WMMP Plan will continue to be updated as needed.

4.5.12 Marine Environment (PC TC 62)

Project Certificate Condition No. 62

Category	General
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure potential impacts to the marine environment are identified and appropriately mitigated.
Term or Condition (TC)	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.
Reporting Requirement	The program plan should be submitted to the Nunavut Impact Review Board (NIRB) at least 60 days prior to the commencement of shipping, with results submitted annually thereafter or as may otherwise be required by the NIRB.
Status of Compliance	Compliant - NIRB Document ID No. 319642
Stakeholder Review	Nunavut Impact Review Board
Reference	Nunami Stantec 2023. Sabina Back River Project: Marine Laydown Area - 2022 Marine Sampling Report. March 2023 Marine Monitoring Plan (May 2018) NIRB PRI:319642 Water Management Plan (October 2017) 2022 Marine Sampling Report (April 2019).

Methods:

Sabina collected control and discharge area samples from the MLA during desalination activities in August of 2022.

Results:

**Results of Sabina’s 2022** marine sampling, including and evaluation of the comparability of the newly identified reference location, can be found in Nunami Stantec 2023.

Trends:

A new, more accessible, reference location was selected based on similarity in sediment grain size and oceanographic characteristics. There were no exceedances of the Canadian Council of Ministers of the Environment guidelines for the protection of marine aquatic life at either the Marine Laydown area or the Reference (control) location. Phytoplankton biomass (as Chlorophyll a) was slightly higher at the reference location . in water samples collected in August 2022 from the MLA and the reference stations but were within the variability observed in previous years. See Nunami Stantec 2023 for further details.

Next Steps:

Sabina will undertake additional biological sampling in 2023, as outlined in the MMP for every third monitoring year. A report on this sampling will be included with the 2023 Annual Report to the NIRB.

4.5.13 Marine Wildlife (PC TCs 63 through 65)

Project Certificate Condition No. 63

Category	Monitoring
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure protection of seals and seal lairs.
Term or Condition (TC)	The Proponent shall undertake a survey for seals and seal lairs annually prior to construction of the winter airstrip and ice road on Bathurst Inlet, and shall take every precaution to align these components to ensure that seal dens/lairs are not impacted by Project infrastructure or activities.
Reporting Requirement	<b>Survey results shall be provided on an annual basis in the Proponent’s annual report to the Nunavut Impact Review Board</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022. Document title: Back River Project Standard Operating Procedure: Seal Lair Monitoring (February 2018). The 2022 Pre-Construction Wildlife Effects Monitoring Report is appended as Appendix G.

Methods:

Specific measures to mitigate potential impacts to seals and seal lairs from construction of the winter airstrip and ice road on Bathurst Inlet are described within the WMMPP (Version 11, December 2022) and the Seal Lair Monitoring SOP (February 2018).

During Pre-construction in 2022, surveys for lairs were not required, as the winter ice road and airstrip were not constructed.

Results:

Sabina was using the WMMPP (Version 8, May 2017) during winter, spring and summer of 2018, referencing the commitments made at the 2017 Final Hearing where relevant for the Pre-construction phase. Beginning in October, 2018, Sabina used Version 9 of the WMMPP (September 2018) to conduct mitigation and monitoring relevant for the Pre-construction Phase. The WMMPP was updated again in 2022, and the updated version will be used moving forward (Version 11, December 2022).

An ice strip was not used on the sea ice in 2022 and so no surveys for seal lairs were required (Appendix G).

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction Phase. The WMMP Plan will continue to be updated as needed.

Project Certificate Condition No. 64

Category	Monitoring
Responsible Parties	Sabina Gold & Silver Corp., Fisheries and Oceans Canada, and other interested parties
Project Phase(s)	Prior to Project-Shipping
Objective	To ensure protection of marine mammals during Project shipping.
Term or Condition (TC)	The Proponent shall ensure that shipping companies contracted for the Project have in place appropriate ship-based marine mammal monitoring programs and protocols developed through consultation with Fisheries and Oceans Canada, communities, and other interested parties. Consideration should be provided for utilizing, trained observers for full-time marine wildlife monitoring with established data collection and recording protocols.
Reporting Requirement	Initially, until contracts with shippers have been established, the Proponent shall provide details on an annual basis regarding the protocols and measures implemented with contracted shipping companies in fulfillment of this <b>Term and Condition in the Proponent’s annual report to the Nunavut Impact Review Board</b> . Once longer term arrangements with shippers have been established, <b>the Proponent shall provide these details in the Proponent’s annual report to the Nunavut Impact Review Board every two (2) years or whenever there is a change or addition to the shipping companies retained by the Proponent.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	WMMPP Sections 14 and 15 Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022. Document title: Back River Project Standard Operating Procedure: Marine Shipping Wildlife Mitigation and Monitoring. November 2022. The 2022 Pre-Construction Wildlife Effects Monitoring Report is appended as Appendix G.

Methods:

Specific measures to ensure the protection of marine mammals during project shipping are described in the WMMPP (Version 11, December 2022) in Sections 14 and 15, and the Marine Shipping SOP.

Results:

Sabina was using the WMMPP (Version 9, September 2018) during winter, spring and summer of 2019. Beginning in November 2019, Sabina used the updated WMMPP (Version 10, October 2019) to conduct mitigation and monitoring relevant for the Pre-construction Phase. The WMMPP was again updated in 2023, and the updated version will be used moving forward (Version 11, December 2022).

Prior to the 2022 shipping season, Sabina provided the marine monitoring SOP (September 2019) to the shipping companies. During 2022, two vessels supplied the MLA from the east and three from the west. Between August and September, 33 surveys (18 seabird surveys and 15 marine mammal surveys) were conducted over 38 hours and reported five sightings of marine mammals and two marine mammal species: polar bear and grey seal (Appendix G).

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction and Construction Phase. No changes to the WMPP are anticipated during 2023. The WMPP Plan will continue to be updated as needed.

Project Certificate Condition No. 65

Category	Marine Shipping
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure community safety and protection of marine/wildlife habitat.
Term or Condition (TC)	The Proponent shall ensure contracted shipping companies are made aware of and required to avoid sensitive wildlife habitat and species along the shipping route and use appropriate protocols and equipment to reduce the potential for an accidental release of fuel or other deleterious substances into the marine environment. These protocols should also be communicated to local communities
Reporting Requirement	Initially, until contracts with shippers have been established, the Proponent shall provide details on an annual basis regarding the protocols and measures implemented with contracted shipping companies in fulfillment of this <b>Term and Condition in the Proponent’s annual report to the Nunavut Impact Review Board</b> . Once longer term arrangements with shippers have been established, <b>the Proponent shall provide these details in the Proponent’s annual report to the Nunavut Impact Review Board every two (2) years or whenever there is a change or addition to the shipping companies retained by the Proponent.</b>
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association, Government of Nunavut Department of Environment
Reference	WMMPP Sections 14 and 15 Document title: Back River Project Wildlife Mitigation and Monitoring Program Plan (Version 11), December 2022. Document title: Back River Project Standard Operating Procedure: Marine Shipping Wildlife Mitigation and Monitoring. November 2022.

Methods:

Specific measures to ensure the protection of marine mammals during project shipping are described in the WMMPP (Version 11, December 2022) in Sections 14 and 15 and Marine Shipping SOP. Companies were supplied with a Standard Operating Procedure which ensures companies are aware of sensitive wildlife habitats and species to avoid.

Version 10 of the WMMPP was updated in response to a request from the KIA to include contact information in case of a spill.

Specific measures regarding protocols and equipment to reduce the potential for an accidental release of fuel or other deleterious substances into the marine environment are described in Section 6.1.3 of the WMMPP (Version 11, December 2022). This section references two documents:

The Oil Pollution Management Plan (OPMP) (NIRB PRI: 319643) is a requirement of the *Canada Shipping Act* (2001) and describes the responses to oil spill scenarios at the Marine Laydown Area to minimize environmental damage and ensure worker safety. It provides instructions to guide all personnel in emergency spill response situations, defines the roles and responsibilities of management and responders and outlines the measures taken to prevent spills, the related exercise and evaluation programme, and the mechanism for regular updates to the plan.

The Shipboard Oil Pollution Emergency Plan (SOPEP) is a requirement of the International Maritime Organization (IMO) for all ships transporting fuel; it describes the equipment, training and procedures that the ship must have on board in order to manage and address any fuel spills during shipment or unloading to minimize any effects on the environment. Sabina will require that the shipping company providing fuel to the Project will have an approved SOPEP in place prior to shipping any fuel to site.

Results:

Sightings of marine mammals from the vessel were recorded during shipping in 2022. Grey seals and polar bears were observed during shipping. Results (sightings and the shipping route) will be presented in the **“Pre-Construction Wildlife Monitoring Report”** (Appendix G).

Appropriate protocols were followed to reduce the potential for an accidental release of fuel or other deleterious substance into the marine environment, as per Section 6.1.3 of the WMMPP (Version 11). No spills occurred during shipping in 2022.

Trends:

Not applicable.

Next Steps:

Sabina will continue to utilize the updated WMMPP (Version 11, December 2022) to conduct mitigation and monitoring relevant for the Pre-construction and Construction Phase. Shipping companies will continue to use the Marine Shipping Wildlife Mitigation and Monitoring SOP (November 2022). The WMMPP Plan will continue to be updated as needed.

4.6 PERFORMANCE ON SOCIO-ECONOMIC TERMS AND CONDITIONS

4.6.1 Economic Development and Opportunities (PC TCs 66 through 70)

Project Certificate Condition No. 66

Category	Socio-Economic Monitoring and Kitikmeot Socio-Economic Monitoring Committee
Responsible Parties	Sabina Gold & Silver Corp., Kitikmeot Socio-Economic Monitoring Committee
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	Description of the general monitoring framework to be developed in consultation with the Kitikmeot Socio-Economic Monitoring Committee.
Term or Condition (TC)	The Proponent is strongly encouraged to participate in the work of the Kitikmeot Socio-Economic Monitoring Committee along with other agencies and the communities of the Kitikmeot Region, and to identify areas of mutual interest and priority for inclusion into a collaborative monitoring framework that includes socio-economic priorities related to the Project, communities, and the Kitikmeot Region as a whole.
Reporting Requirement	Information regarding the Proponent’s efforts in fulfillment of this Term and Condition shall be included in the Proponent’s annual report to the Nunavut Impact Review Board
Status of Compliance	Compliant
Stakeholder Review	KSEMC, SEMWG
Reference	2022 Socio-Economic Monitoring Report (JPCSL 2023). This document is attached in <a href="#">Appendix H</a> . Socio-Economic Monitoring Plan (Sabina 2022a; NIRB PRI: 338510)

Methods:

A Project monitoring framework is described in the Socio-Economic Monitoring Plan (i.e., Sabina 2022a) and in Section 1 (Introduction) and Section 2 (Methods) of the Socio-Economic Monitoring Report.

Results:

Sabina is actively involved in the KSEMC and regularly participates in its meetings. Unfortunately, the 2022 KSEMC meeting was unable to be organized by the Government of Nunavut but Sabina looks forward to participating in future meetings. **Sabina’s participation in the KSEMC is summarized in Section 1.2 (Socio-Economic Monitoring Requirements and Guidance) of the Socio-Economic Monitoring Report. Sabina’s use of community perspectives and TK in the monitoring program is described in Section 1.4 (Use of Community Perspectives and TK) of the report.**

Trends:

Not applicable.

Next Steps:

Sabina will **continue to engage the KSEMC, SEMWG, and community stakeholders on the Project’s monitoring program.**

## Project Certificate Condition No. 67

Category	Socio-Economic Monitoring
Responsible Parties	Sabina Gold & Silver Corp., Kitikmeot Inuit Association, Government of Nunavut, Indigenous and Northern Affairs Canada, and Kitikmeot communities
Project Phase(s)	Pre-construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	Development and establishment of a Project-specific Back River Socio-Economic Monitoring Committee to oversee the Project-specific monitoring program.
Term or Condition (TC)	The Proponent should work with other socio-economic stakeholders including the Kitikmeot Inuit Association, the Government of Nunavut, Indigenous and Northern Affairs Canada, and communities of the Kitikmeot Region, to establish a Back River Socio-Economic Monitoring Committee for the Project to develop and oversee the Back River Socio-Economic Monitoring Program. The Back River Socio-Economic Monitoring Committee should develop Terms of Reference <b>outlining each member's roles and responsibilities for</b> Project-specific socio-economic monitoring throughout the life of the Project.
Reporting Requirement	The Terms of Reference should be submitted to the Nunavut Impact Review Board within six (6) months of issuance of the Project Certificate.
Status of Compliance	Compliant
Stakeholder Review	SEMWG
Reference	2022 Socio-Economic Monitoring Report (JPCSL 2023). This document is attached in <a href="#">Appendix H</a> . Socio-Economic Monitoring Plan (Sabina 2022a; NIRB PRI: 338510)

## Methods:

A Project monitoring framework is described in the Socio-Economic Monitoring Plan (i.e. Sabina 2022a) and in Section 1 (Introduction) and Section 2 (Methods) of the Socio-Economic Monitoring Report.

## Results:

Sabina is actively involved in the SEMWG and regularly participates in its meetings. Most recently, Sabina hosted a videoconference meeting with the group in June 2022. Ongoing opportunities for SEMWG members **to review and comment on Sabina's socio-economic** submissions are also provided through the NIRB annual reporting process.

**Sabina's participation in the SEMWG is described in Section 1.2** (Socio-Economic Monitoring Requirements and Guidance) of the Socio-Economic Monitoring Report. A Terms of Reference (TOR) for the SEMWG has been developed and is included as an appendix to the Socio-Economic Monitoring Plan (i.e., Sabina 2022a).

## Trends:

Not applicable.

## Next Steps:

Sabina **will continue to engage the KSEMC, SEMWG, and community stakeholders on the Project's** monitoring program. Any updates to the TOR will be provided to NIRB through **Sabina's annual reporting** process.

Project Certificate Condition No. 68

Category	Socio-Economic Monitoring
Responsible Parties	Sabina Gold & Silver Corp., Kitikmeot Socio-Economic Monitoring Committee, Kitikmeot Inuit Association, Government of Nunavut, Indigenous and Northern Affairs Canada, and Kitikmeot communities
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	Development of the Project-specific socio-economic monitoring program and on-going monitoring of Project-related socio-economic effects.
Term or Condition (TC)	<p>The Proponent should develop a Project-specific Back River Socio-Economic Monitoring Program designed to:</p> <ul style="list-style-type: none"> <li>o Monitor for Project-induced effects, including the impacts predicted in the Final Environmental Impact Statement through indicators presented in the Back River Socio-Economic Monitoring Plan;</li> <li>o Reflect regional socio-economic concerns identified by the Kitikmeot Socio-Economic Monitoring Committee (KSEMC);</li> <li>o Work in collaboration with all other socio-economic stakeholders such as the Kitikmeot Inuit Association, the Government of Nunavut, and Indigenous and Northern Affairs Canada, and the communities of the Kitikmeot Region to develop the program; and</li> <li>o Include a process for adaptive management and mitigation to respond if unanticipated impacts are identified.</li> </ul>
Reporting Requirement	Details of the Back River Socio-Economic Monitoring Program should be submitted to the NIRB within one (1) year of issuance of the Project Certificate. The Proponent should produce annual Back River socio-economic monitoring reports throughout the life of the Project that are submitted to the Nunavut Impact Review Board and shared with the wider KSEMC.
Status of Compliance	Compliant
Stakeholder Review	KSEMC, SEMWG
Reference	2022 Socio-Economic Monitoring Report (JPCSL 2023). This document is attached in <b>Appendix H</b> . Socio-Economic Monitoring Plan (Sabina 2022a; NIRB PRI: 338510)

Methods:

A Project monitoring framework is described in the Socio-Economic Monitoring Plan (i.e., Sabina 2022a). Section 1 (Introduction) and Section 2 (Methods) of the Socio-Economic Monitoring Report also summarize **the Project’s monitoring framework**.

Results:

**Sabina’s participation in the KSEMC and SEMWG are summarized in Section 1.2 (Socio-Economic Monitoring Requirements and Guidance) of the Socio-Economic Monitoring Report, while Sabina’s use of community perspectives and TK in Project monitoring is described in Section 1.4 (Use of Community Perspectives and TK). Sabina’s process for adaptive management and mitigation is described in the Socio-Economic Monitoring Plan and in Section 11.2 (Adaptive Management) of the Socio-Economic Monitoring Report. Monitoring program results will continue to be presented in Sabina’s annual Socio-Economic Monitoring Report.**

Trends:

**Monitoring program results will continue to be presented in Sabina's annual Socio-Economic Monitoring Report.**

Next Steps:

**Sabina will continue to engage the KSEMC, SEMWG, and community stakeholders on the Project's monitoring program.**

Project Certificate Condition No. 69

Category	Socio-Economic Monitoring and Kitikmeot Socio-Economic Monitoring Committee
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	Identify risks and potential effects of temporary mine closures on the Kitikmeot Region.
Term or Condition (TC)	The Proponent should undertake an analysis of the risk of temporary mine closure, giving particular consideration to how communities in the Kitikmeot Region may be affected by temporary closure of the mine, including economic, social, and cultural effects. This analysis is required to be updated as necessary to reflect significant changes to the Project or the socio-economic conditions in the region that may increase the risks and potential effects of temporary mine closures.
Reporting Requirement	<b>This initial results of the Proponent’s analysis should be provided to the Nunavut Impact Review Board within nine (9) months of the issuance of the Project Certificate. Any updates to the analyses should be provided to the NIRB as completed by the Proponent.</b>
Status of Compliance	Compliant
Stakeholder Review	SEMWG
Reference	Temporary Mine Closure in the Kitikmeot Region: Risks and Potential Socio-Economic Effects (JPCSL 2018; NIRB PRI: 320331)

Methods:

Sabina has prepared an analysis of the risk of temporary mine closure which considers how communities in the Kitikmeot Region may be affected by temporary closure of the Project, including socio-economic effects.

Results:

Sabina **provided the report ‘Temporary Mine Closure in the Kitikmeot Region: Risks and Potential Socio-Economic Effects’ (i.e., JPCSL 2018; NIRB PRI: 320331)** to NIRB in September 2018.

Trends:

Not applicable.

Next Steps:

This analysis may be updated in the future to reflect significant changes to the Project or socio-economic conditions in the region that may increase the risks and potential effects of temporary mine closures. However, no further updates to this report are considered necessary at this time.

## Project Certificate Condition No. 70

Category	Socio-Economic Monitoring and Kitikmeot Socio-Economic Monitoring Committee (KSEMC)
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	<b>Ensuring that the Proponent's Socio-Economic</b> Management Plan addresses the risks and potential effects of temporary mine closures on the Kitikmeot Region.
Term or Condition (TC)	The Proponent is required to update its Socio-Economic Management Plan to include defined measures to address the risks and mitigate the potential effects of temporary closure.
Reporting Requirement	The required updates to the Socio-Economic Monitoring Program (and the Socio-Economic Management Plan included within the Program) should be provided to the Nunavut Impact Review Board within three (3) months of the completion of the analysis or updates to the analysis of the risk of temporary mine closure in the term and condition noted above. The Proponent shall reference the updates to its Socio-Economic Monitoring Program and associated Management Plan in the annual Back River socio-economic monitoring reports that are submitted to the Nunavut Impact Review Board and shared with the wider KSEMC throughout the life of the Project.
Status of Compliance	Compliant
Stakeholder Review	KSEMC, SEMWG
Reference	Temporary Mine Closure in the Kitikmeot Region: Risks and Potential Socio-Economic Effects (JPCSL 2018; NIRB PRI: 320331) Socio-Economic Monitoring Plan (Sabina 2022a; NIRB PRI: 338510) Community Involvement Plan (Sabina 2022b; NIRB PRI: 338509) Human Resources Plan (Sabina 2022c; NIRB PRI: 338510) Business Development Plan (Sabina 2022d; NIRB PRI: 338509)

## Methods:

**Sabina provided the report 'Temporary Mine Closure in the Kitikmeot Region: Risks and Potential Socio-Economic Effects' (i.e., JPCSL 2018; NIRB PRI: 320331) to NIRB in September 2018.**

## Results:

Sabina provided updated versions of the following management plans to NIRB in March 2022:

- o Socio-Economic Monitoring Plan
- o Community Involvement Plan
- o Human Resources Plan
- o Business Development Plan

Mitigation and management measures applicable to temporary closure are included in these plans, including measures identified in JPCSL (2018; NIRB PRI: 320331).

Trends:

Not applicable.

Next Steps:

The analysis presented in JPCSL (2018; NIRB PRI: 320331) may be updated in the future to reflect significant changes to the Project or socio-economic conditions in the region that may increase the risks and potential effects of temporary mine closures. However, no further updates to this report are considered necessary at this time.

## 4.6.2 Employment (PC TCs 71 through 72)

## Project Certificate Condition No. 71

Category	Staff Schedule
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Operations, Temporary Closure/Care and Maintenance
Objective	To produce accurate labour market information regarding available Project employment and skill requirements for the Project to support economic and employment forecasting.
Term or Condition (TC)	To the extent the sharing of such information is consistent with and not limited by any Inuit Impact Benefit Agreement with the Kitikmeot Inuit Association, and in consultation with the Government of Nunavut during preparation, the Proponent should submit detailed staff schedule information, consisting of at least the following items: a. Title of positions required by department and division; b. Quantity of positions available by Project phase and year; c. Transferable skills, both certified and uncertified which may be required for, or gained during, employment within each position; and d. The National Occupational Classification code for each individual position.
Reporting Requirement	The Staff Schedule should be submitted to the Nunavut Impact Review Board at least 60 days prior to pre-construction and construction, six (6) months prior to the commencement of operations, if the Proponent identifies significant deviations from the labour force requirements in the FEIS and FEIS Addendum, or as may be required by the Nunavut Impact Review Board.
Status of Compliance	Compliant
Stakeholder Review	Not applicable
Reference	Not applicable

## Methods:

Sabina will prepare staff schedule information for NIRB, as appropriate.

## Results:

Sabina shall submit a staff schedule for the construction period in the 2022 Back River Socio Economic Monitoring Report submitted to NIRB. Sabina shall also submit a similar staff schedule for the operations period at the appropriate time.

## Trends:

Not applicable.

## Next Steps:

Updated information will be submitted to NIRB as appropriate.

## Project Certificate Condition No. 72

Category	Registration of Trades Workers
Responsible Parties	Sabina Gold & Silver Corp., Government of Nunavut
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure that the Government of Nunavut has accurate information to assist in its role as overseer of the apprenticeship program in Nunavut and in providing access to training initiatives and programs.
Term or Condition (TC)	The Proponent is encouraged to identify and register all trades occupations, journeypersons, and apprentices working with the Project, as well as to provide the Government of Nunavut with information regarding the number of registered apprentices and journeypersons from other jurisdictions employed at the Project.
Reporting Requirement	<b>Information regarding the Proponent's efforts in fulfillment of this Term and Condition shall be included in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	GN
Reference	Not applicable

## Methods:

Sabina continues to work towards the establishment of a Back River Apprenticeship training program which it aims to implement following a Commercial Production decision at the Project.

Sabina shall provide information regarding the current number of registered apprentices and journeypersons in the 2022 Back River Project Socio-Economic Monitoring Report submitted to NIRB.

Sabina continues to engage the Government of Nunavut through the SEMWG and KSEMC to discuss the Socio-Economic Monitoring Program for the Back River Project. Sabina engaged the Government of Nunavut, Department of Family Services to discuss apprenticeship programing in June 2022 via email and through a teleconference meeting on June 21, 2022. The Department of Family Services kindly provided Sabina with a **“Career Development Information Sharing Document”** which outlined apprenticeship eligibility requirements, regional territorial government contacts, as well as other training program information. Sabina would like to thank the Government of Nunavut for sharing this information.

**Additionally, Sabina's Director, Human Resources maintains regular contact with the Department of Family Services, Supervisor of Apprenticeship, Trade, and Occupations Certification about changes to Sabina's trades workforce planning.**

## Results:

Not applicable.

## Trends:

Not applicable.

Next Steps:

Sabina anticipates collecting information regarding trades occupations, journeypersons, initiatives, and apprenticeships after a Project production decision has been made. Relevant information will be reported **on in Sabina's** NIRB Annual Report following this decision.

4.6.3 Education and Training (PC TCs 73 through 76)

Project Certificate Condition No. 73

Category	Training Opportunities
Responsible Parties	Sabina Gold & Silver Corp., Government of Nunavut, Training Organizations
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	Ensuring that the local, regional, and territorial training opportunities associated with the Project maximize opportunities for the regional workforce to obtain transferable skills and certifications.
Term or Condition (TC)	The Proponent is encouraged to work with training organizations and/or government departments offering mine-related or other training to ensure that Project-specific training programs can yield additional opportunities for residents and employees to gain meaningful and transferable skills and certifications.
Reporting Requirement	The Proponent should summarize the results of these efforts 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.
Status of Compliance	Compliant
Stakeholder Review	KSEMC, SEMWG
Reference	2022 Socio-Economic Monitoring Report (JPCSL 2023). This document is attached in <a href="#">Appendix H</a> .

Methods:

Sabina continues to have conversations with relevant parties and anticipates additional engagement with relevant training organizations and/or government departments on this topic after Project production begins. This may help yield additional opportunities for residents and employees to gain meaningful and transferable skills and certifications.

Results:

Sabina has participated in recent training-related discussions through various forums including:

- Kitikmeot Workforce Strategy Working Group hosted by the Kitikmeot Corporation (3 meetings held in 2022; 1 meeting held in 2021).
- **KIA’s Kitikmeot Stakeholders Working Group** (2 meetings held in 2022; 2 meetings held in 2020).
- **NWT & Nunavut Chamber of Mines’ Mining Education Working Group (4 meetings held in 2020)**.
- Sabina engaged the Government of Nunavut, Department of Family Services to discuss apprenticeship programming in June 2022 via email and through a teleconference meeting on **June 21, 2022. The Department of Family Services provided Sabina with a ‘Career Development Information Sharing Document’ which outlined apprenticeship eligibility requirements, regional territorial government contacts, as well as other training program information.**
- **Additionally, Sabina’s Director, Human Resources maintains regular contact with the Department of Family Services, Supervisor of Apprenticeship, Trade, and Occupations Certification about changes to Sabina’s trades workforce planning.**

Additional work in this area will be described in future Socio-Economic Monitoring Reports. Specific types of training programs offered by Sabina are discussed in Section 7.1.1 (Hours of Training Completed) and Section 7.1.2 (Inuit Apprenticeships) of the Socio-Economic Monitoring Report.

Trends:

Not applicable.

Next Steps:

Sabina anticipates additional engagement with relevant training organizations and/or government departments on this topic will occur after Project production begins.

Project Certificate Condition No. 74

Category	Transferable Skills and Certifications
Responsible Parties	Sabina Gold & Silver Corp. , Government of Nunavut, Training Organizations
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	Ensuring that the Project maximizes opportunities for the regional workforce to obtain transferable skills and certifications.
Term or Condition (TC)	The Proponent shall 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.
Reporting Requirement	The initial listing should be provided to the Nunavut Impact Review Board within six (6) months of the Project Certificate being issued. 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.
Status of Compliance	Compliant
Stakeholder Review	KSEMC, SEMWG
Reference	2022 Socio-Economic Monitoring Report (JPCSL 2023). This document is attached in <a href="#">Appendix H</a> .

Methods:

Sabina will continue to maintain a listing of formal certificates and licences that may be acquired via on-site training or training during Project employment.

Results:

An initial listing was provided by Sabina to NIRB in November 2018 (NIRB PRI: 320914). An updated listing has now been included in Appendix F of the Socio-Economic Monitoring Report.

Trends:

Not applicable.

Next Steps:

Updates to this list will be included in future Socio-Economic Monitoring Reports, as appropriate.

## Project Certificate Condition No. 75

Category	Educational Opportunities
Responsible Parties	Sabina Gold & Silver Corp., Government of Nunavut, Kitikmeot Socio-Economic Monitoring Committee
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	Ensuring that the local, regional and territorial educational opportunities maximize the opportunities for Project employment.
Term or Condition (TC)	The Proponent is encouraged to work with the Back River Socio-Economic Monitoring Committee and with the Kitikmeot Socio-Economic Monitoring Committee (KSEMC) to review and monitor education utilization rate trends for Project employees throughout the Project to identify whether or not the <b>Project's</b> employees are accessing educational opportunities available to them in the Kitikmeot Region and/or any Northwest Territories communities.
Reporting Requirement	The summary of this information should be included in the annual Back River socio-economic monitoring reports submitted to the Nunavut Impact Review Board and shared with the wider KSEMC throughout the life of the Project.
Status of Compliance	Compliant
Stakeholder Review	KSEMC, SEMWG
Reference	2022 Socio-Economic Monitoring Report (JPCSL 2023). This document is attached in <a href="#">Appendix H</a> . Socio-Economic Monitoring Plan (Sabina 2022a; NIRB PRI: 338510)

## Methods:

Data on this topic have been sourced from a 2022 Inuit Personnel Survey, which was conducted at Project sites in November and December 2022. Results are summarized below and are also **provided in Sabina's** 2022 Socio-Economic Monitoring Report submitted to NIRB. Draft copies of the survey were available for the SEMWG and KSEMC to review beginning in **March 2022 (see Appendix B of Sabina's (2022a) Socio-Economic Monitoring Plan; NIRB PRI: 338510)**. Most recently, the SEMWG was engaged on this topic during a June 2022 videoconference and several suggestions were provided on the survey. The SEMWG and KSEMC will continue to be engaged on this topic as appropriate.

## Results:

Survey results applicable to this Term & Condition are presented in the table below. Overall, these data reveal several insights, including low educational attainment rates by some Inuit personnel (e.g. 38%\* completed a high school diploma or equivalent, and only 2% completed a university certificate or diploma). These data also reveal Inuit personnel have accessed educational opportunities in both the Kitikmeot Region and Northwest Territories communities. However, some opportunities have been accessed in southern locations (e.g. Alberta or Ontario), or in the Qikiqtaaluk Region. Finally, a number of **'unknown'** responses were recorded in the survey, which suggests additional respondent guidance or modifications to the survey's structure may be required in the future.

Utilization of Local, Regional, and Territorial Educational Opportunities (2022 Inuit Personnel Survey Results)		
Educational Program	Number of Respondents	Percentage of Respondents
<i>I completed a high school diploma or equivalent (n=47)</i>		
Yes	9	19.1%*
No	30	63.8%
Unknown	8	17.0%
Yes, in the Kitikmeot Region	3	6.4%
Yes, in the Kivalliq Region or Qikiqtaaluk Region	0	0.0%
Yes, in the Northwest Territories	1	2.1%
Yes, elsewhere	2	4.3%
<i>I completed an apprenticeship or trades certificate or diploma (n=47)</i>		
Yes	9	19.1%
No	28	59.6%
Unknown	10	21.3%
Yes, in the Kitikmeot Region	3	6.4%
Yes, in the Kivalliq Region or Qikiqtaaluk Region	1	2.1%
Yes, in the Northwest Territories	1	2.1%
Yes, elsewhere	4	8.5%
<i>I completed a college or other non-university certificate or diploma (n=47)</i>		
Yes	5	10.6%
No	31	66.0%
Unknown	11	23.4%
Yes, in the Kitikmeot Region	2	4.3%
Yes, in the Kivalliq Region or Qikiqtaaluk Region	1	2.1%
Yes, in the Northwest Territories	0	0.0%
Yes, elsewhere	0	0.0%
<i>I completed a university certificate or diploma (n=47)</i>		
Yes	1	2.1%
No	34	72.3%
Unknown	12	25.5%
Yes, in the Kitikmeot Region	0	0.0%
Yes, in the Kivalliq Region or Qikiqtaaluk Region	0	0.0%
Yes, in the Northwest Territories	0	0.0%
Yes, elsewhere	0	0.0%

Source: Sabina

Notes: One respondent completed apprenticeship training in two different regions of Nunavut. Several respondents did not provide details regarding the location of their educational attainment, so it is unclear how many respondents completed their education in the Kitikmeot Region as opposed to elsewhere.

\*While only nine respondents (i.e. 19.1%) indicated they had completed high school, an additional nine indicated they had completed an apprenticeship, trades, college, or university certificate or diploma. As such, these additional respondents were assumed to have also completed high school, bringing the percentage of respondents with a high school diploma up to 38.3%.

Trends:

Trends may be reported on once data from additional future surveys become available.

Next Steps:

Sabina welcomes feedback from the KSEMC and SEMWG on the survey results. Sabina anticipates completing Inuit Personnel Surveys every 2-3 years. Relevant stakeholders will be engaged in the planning and conduct of these surveys.

Project Certificate Condition No. 76

Category	Inuktitut/Inuinnaqtun Training
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	Monitoring training measures being taken to reduce language barriers to Inuit employment on-site.
Term or Condition (TC)	The Proponent is encouraged to provide the following information regarding any second language courses offered on-site: a. Description of courses offered (to include general outline); b. Timing and frequency of courses offered; c. The number of individuals (and percentage of workforce), including Inuit and non-Inuit, taking part in each course, including completion rates; and d. Any noted outcomes or lessons learned from the courses offered.
Reporting Requirement	A summary of this information should be included in the annual Back River socio-economic monitoring reports submitted to the Nunavut Impact Review Board and shared with the wider KSEMC throughout the life of the Project.
Status of Compliance	Compliant
Stakeholder Review	KSEMC, SEMWG
Reference	2022 Socio-Economic Monitoring Report (JPCSL 2023). This document is attached in <a href="#">Appendix H</a> . Human Resources Plan (Sabina 2022c; NIRB PRI: 338510)

Methods:

Sabina will provide support for employees interested in improving their English, Inuinnaqtun, or Inuktitut skills. **Sabina’s second language training program is detailed further in Appendix A** of the Human Resources Plan (Sabina 2022c).

Results:

As outlined in the Second Language Training Plan, Sabina is committed to offering training courses based on demand/upon request. To date, Sabina has not seen a demand for these course offerings, and none have been requested by employees.

Sabina has taken other measures to reduce the potential for language barriers to Inuit employment on site (i.e. the objective of Term & Condition No. 76), should they exist. For example, **Sabina’s Community Liaison Officer (CLO)** conducted extended Project site visits multiple times in 2022 (i.e. one to two weeks at a time) and was available to offer interpretation/translation support that may have been required. To date, the CLO has not been asked to provide this support while at Project sites.

**Sabina has also developed an internal translated ‘Glossary of Terms’ that has been circulated to ensure** appropriate site signage is posted in English and Inuinnaqtun/Inuktitut to reduce language barriers should they exist. The Company has also noted to all staff at Project sites that if translation of a document or interpretation is required it will be provided by Sabina.

Trends:

Not applicable.

Next Steps:

Additional updates on this topic will be provided in future Socio-Economic Monitoring Reports.

4.6.4 Population Demographics (PC TC 77)

Project Certificate Condition No. 77

Category	Monitoring Demographic Changes
Responsible Parties	Sabina Gold & Silver Corp., Kitikmeot Socio-Economic Monitoring Committee
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	Monitoring demographic changes affecting the Kitikmeot communities and the <b>territory as a whole is important to understand and evaluate the Proponent’s</b> predictions with regards to population demographics and whether any trends are identified which may be correlated with the Project.
Term or Condition (TC)	Provided the collection and sharing of such information is consistent with and not limited by any Inuit Impact and Benefit Agreement with the Kitikmeot Inuit Association, the Proponent should provide Project-specific data concerning employee community of residence and number of employees that relocated from the year prior (where available, to and from, for Cambridge Bay, Kugluktuk, Taloyoak, Gjoa Haven, and Kugaaruk). The details of this process will be captured in the terms of reference for the Project specific Back River Socio-Economic Monitoring Committee.
Reporting Requirement	Summaries of this information 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.
Status of Compliance	Compliant
Stakeholder Review	KSEMC, SEMWG
Reference	2022 Socio-Economic Monitoring Report (JPCSL 2023). This document is attached in <b>Appendix H</b> .

Methods:

This topic is addressed in Section 3.1.2 (Number of Project Personnel) and Section 3.1.3 (Employee Relocations) of the Socio-Economic Monitoring Report.

Note, Sabina considers the Socio-Economic Monitoring Plan and/or annual Socio-Economic Monitoring Report to be a more appropriate location for the details of this process to be captured.

Results:

Data on the number of Project personnel (i.e. employees and contractors) by origin and ethnicity help **reveal the composition of the Project’s current labour force**. In 2022, a total of 713 personnel worked on the Project, 80 of which were Inuit (or 17.4% by hours worked). 72 Inuit personnel originated from within the Kitikmeot Region, while 8 originated from outside of Nunavut. All non-Inuit personnel originated from outside of Nunavut (633).

The table below presents the total number of individuals who worked on the Project in 2022 rather than being a point-in-time count. The employment numbers presented below also reflect the limited scope of construction activities that occurred in 2022.

Number of Project Personnel by Origin and Ethnicity				
Origin		2022		
		Inuit	Non-Inuit	Total
Nunavut	Cambridge Bay	24	0	24
	Gjoa Haven	21	0	21
	Kugaaruk	5	0	5
	Kugluktuk	17	0	17
	Taloyoak	5	0	5
	Other	0	0	0
Other Canadian Provinces and Territories	Alberta	2	216	218
	British Columbia	0	167	167
	Manitoba	0	42	42
	New Brunswick	0	22	22
	Nfld. and Labrador	0	35	35
	Northwest Territories	6	22	28
	Nova Scotia	0	43	43
	Ontario	0	56	56
	Prince Edward Island	0	0	0
	Quebec	0	1	1
	Saskatchewan	0	27	27
Yukon	0	1	1	
International	International	0	1	1
Unknown	Unknown	0	0	0
Total		80	633	713

Source: Sabina

Data on employee relocations provide insight into potential demographic changes that may be occurring as a result of the Project. 2022 was the first year these data were collected by Sabina. In 2022, one Inuit employee relocated from Gjoa Haven to Yellowknife, and one Inuit employee relocated from Yellowknife to Taloyoak. Zero non-Inuit employees relocated into or out of Nunavut.

#### Trends:

The total number of Project personnel declined between 2018 and 2020, but then increased by 456 individuals from 2020 to 2022 to reach a high of 713 individuals. The number of Inuit personnel declined from 49 in 2019 to 13 in 2021, but then rose to a high of 80 individuals in 2022. The Project continues to source most Inuit personnel from within the Kitikmeot Region and all non-Inuit personnel from outside of Nunavut.

Given the small number of employee relocations in 2022, no meaningful analysis can be made at this time. Data on employee relocations will continue to be tracked in future reports.

#### Next Steps:

Sabina will continue to monitor this topic and engage the KSEMC and SEMWG **on the Project's monitoring program.**

4.6.5 Traditional Activity and Knowledge (PC TCs 78 through 80)

Project Certificate Condition No. 78

Category	Incorporation of IQ and TK
Responsible Parties	Sabina Gold & Silver Corp., Kitikmeot Inuit Association, and Kitikmeot Socio-Economic Monitoring Committee
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure monitoring efforts are informed by and reflect Inuit Qaujimaningit and local community knowledge.
Term or Condition (TC)	The Proponent is strongly encouraged to ensure that the development of all Project monitoring plans and associated reporting and updates are undertaken with active engagement of Kitikmeot communities, land users, and harvesters. The Proponent should work with the Kitikmeot Inuit Association and the Kitikmeot Socio-Economic Monitoring Committee to report on the collection and integration of Inuit Qaujimaningit and Traditional Knowledge through its monitoring programs for the Project.
Reporting Requirement	To the extent the sharing of such information is consistent with, and not limited by, any confidentiality or other agreements with the Kitikmeot Inuit Association, <b>summaries addressing the Proponent’s fulfillment of this Term and Condition</b> should be included in the annual Back River socio-economic monitoring reports submitted to the Nunavut Impact Review Board.
Status of Compliance	Compliant
Stakeholder Review	KIA, KSEMC, SEMWG
Reference	Socio-Economic Monitoring Plan (Sabina 2022a; NIRB PRI: 338510)

Methods:

Sabina has developed the document *Guidance for Incorporating Community Perspectives and Traditional Knowledge in the Back River Project’s Monitoring Programs*. This document is presented in the Socio-Economic Monitoring Plan (Sabina 2022a).

Results:

Sabina has developed the document *Guidance for Incorporating Community Perspectives and Traditional Knowledge in the Back River Project’s Monitoring Programs*. It reviews relevant definitions, potential sources of community perspectives and TK, and reporting and integration considerations for the Project. Where appropriate, **Sabina’s** monitoring reports and/or NIRB Annual Reports may summarize:

- o Relevant community engagement and TK activities undertaken during the previous year.
- o How community perspectives and TK informed the design and content of the monitoring program.
- o How community perspectives and TK informed the results of the monitoring program (including feedback provided).
- o Any noted discrepancies between TK and scientific knowledge.
- o Responses to key concerns identified through community engagement and TK.
- o How community perspectives and TK informed adaptive management for the Project

Monitoring results specific to Project VECs/VSECs are provided through their respective monitoring **programs and/or Sabina's Annual Report to NIRB**. Community perspectives and TK began to be incorporated into two monitoring reports in 2020: the Socio-Economic Monitoring Report and the Wildlife Mitigation and Monitoring Program Report. In its 2022 Annual Report to NIRB, Sabina also began including a summary of community feedback received on the Project from the past year, **example comments, and Sabina's responses to key issues raised** (see Section 2.2).

Trends:

Not applicable.

Next Steps:

Community perspectives on the Project will continue to be tracked by Sabina to inform the content, results, **and management actions associated with Sabina's monitoring program**. Feedback from relevant stakeholders on this topic is always welcome.

Project Certificate Condition No. 79

Category	Inuit Environmental Advisory Committee
Responsible Parties	Sabina Gold & Silver Corp., Kitikmeot Inuit Association
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	Establishing and reporting on the Inuit Environmental Advisory Committee as a mechanism to incorporate community input (including Inuit Qaujimaningit and Traditional Knowledge) into monitoring plans, programs, and mitigation measures.
Term or Condition (TC)	The Proponent shall establish an Inuit Environmental Advisory Committee. To the extent the sharing of such information is consistent with and not limited by any Inuit Impact Benefit Agreement with the Kitikmeot Inuit Association, once established, the Proponent shall provide the Nunavut Impact Review Board with the following information about the Committee: a. Number of members and home communities; b. Selection process; c. Description of work to be undertaken; and d. Outcome of any work undertaken.
Reporting Requirement	<b>Information regarding the Proponent’s efforts in fulfillment of this Term and Condition shall be included in the Proponent’s annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	KIA
Reference	Back River Project Inuit Impact and Benefit Agreement (IIBA)(KIA and Sabina 2018)

Methods:

Per the Back River Project IIBA (KIA and Sabina 2018), Schedule 7.1 Section 2, the IIBA Implementation Committee will establish an Inuit Environmental Advisory Committee (IEAC).

Results:

The IIBA Implementation Committee was established in December 2022 and has begun the work required to establish the IEAC as outlined in the IIBA (KIA and Sabina 2018)

Trends:

Not applicable.

Next Steps:

Sabina and KIA will establish an Inuit Environmental Advisory Committee within 120 days of a production decision. Committee information will be submitted to NIRB once available.

## Project Certificate Condition No. 80

Category	Wildlife Harvesting
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To assess the potential impacts of winter ice road usage on caribou harvesting.
Term or Condition (TC)	If the results from monitoring reveal extensive public use of the winter ice road, or a trend of increasing use of the winter ice road for harvesting, the Proponent shall conduct a harvest study in nearby communities of wildlife harvested from the areas surrounding the winter ice road.
Reporting Requirement	<b>Information regarding the Proponent's efforts in fulfillment of this Term and Condition shall be included in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	KSEMC, SEMWG
Reference	2022 Socio-Economic Monitoring Report (JPCSL 2023). This document is attached in <a href="#">Appendix H</a> .

Methods:
----------

Section 10.1.4 (Number of Times Public Use of the Project's Winter Ice Road Reported) in the annual Socio-Economic Monitoring Report includes monitoring data on this topic. Results are assessed on an annual basis.

## Results:

2019 was the first year the Winter Ice Road (WIR) became operational (operating from April to May) and was accessed once by a non-Inuit expeditioner travelling through the area. In 2020, the WIR was not constructed due to COVID-19 precautions and the temporary closure of all Project sites from late March to early July. Due to a Project fatality and the lack of operational necessity during the 2021-2022 season, the WIR was not constructed. Construction planning for the 2022-2023 WIR began in late 2022; however, the WIR is not expected to open for use again until 2023. As such, no instances of public use of the WIR were recorded in 2022.

## Trends:

Trends may be reported on once additional data become available.

## Next Steps:

Sabina will continue monitoring and reporting on this topic through the NIRB Annual Report process.

4.6.6 Non-Traditional Land Use and Resource Use (PC TC 81)

Project Certificate Condition No. 81

Category	Non-traditional Activity and Resource Use
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Construction, Operations, and Post-Closure
Objective	To assess and monitor potential Project effects on non-traditional activity and knowledge.
Term or Condition (TC)	The Proponent is encouraged 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.
Reporting Requirement	Information regarding the consultations and monitoring undertaken by the Proponent in fulfillment of this Term and Condition should initially be provided <b>within two (2) years of Project construction in the Proponent’s annual report</b> 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.
Status of Compliance	Compliant
Stakeholder Review	Not applicable
Reference	NIRB Annual Report 2022 Socio-Economic Monitoring Report (JPCSL 2023). This document is attached in <a href="#">Appendix H</a> . Socio-Economic Monitoring Plan (Sabina 2022a; NIRB PRI: 338510)

Methods:

Sabina has developed an *Outfitting/Guiding Business Consultation Protocol*. This document is presented in Appendix D of the Socio-Economic Monitoring Plan (Sabina 2022a).

Results:

Sabina issued a biennial informational letter on April 12, 2022 (see Appendix C of the 2022 Socio-Economic Monitoring Report) to all companies in possession of a pending, current, or recent Outfitter Licence from the Government of Nunavut, whose community of operation includes either Cambridge Bay or Kugluktuk. Hunters and Trappers Organizations (HTOs) in Cambridge Bay, Kugluktuk, Bathurst Inlet, and Bay Chimo also received copies of this letter. One response was received to this letter (i.e. from Bathurst Inlet Lodge) and a follow-up meeting with Sabina was organized in May 2022 whereby mutual updates were provided and two requests for logistical support were made of Sabina.

Trends:

Not applicable.

Next Steps:

Sabina will continue to issue biennial informational letters consistent with the *Outfitting/Guiding Business Consultation Protocol*.

## 4.6.7 Heritage Resources (PC TC 82)

## Project Certificate Condition No. 82

Category	Assessment of Archaeological and Heritage Resources
Responsible Parties	Sabina Gold & Silver Corp., Government of Nunavut - Department of Culture and Heritage
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To assess and monitor potential project effects to archaeological and heritage resources.
Term or Condition (TC)	In any year in which changes to the project footprint are expected to occur or an archaeological permit will be requested, the Proponent will provide the Government of Nunavut - Department of Culture and Heritage (GN-CH) with a series of maps and tables indicating the current status of all archaeological sites within the Project Development Area. Tables provided should include textual descriptions of map contents, and the Proponent shall consult with the GN-CH to establish the contents of the maps and tables to be submitted within its annual status reports.
Reporting Requirement	To be submitted for each year in which changes to the project footprint are expected to occur or an archaeological permit will be requested. Specific reporting requirements will be as agreed to by the Government of Nunavut - Department of Culture and Heritage.
Status of Compliance	Compliant
Stakeholder Review	The 2020 Archaeology Site Status Report was issued to the Government of Nunavut - Department of Culture and Heritage on November 10, 2020.
Reference	Golder (Golder Associates Ltd.). 2020. Back River Project, Nunavut - 2020 Archaeology Site Status Report. Doc 20147042-070-RPT-Rev0

## Methods:

**Sabina's proposed development work was reviewed to determine where previously recorded sites might be impacted and to see what areas might need pre-impact assessment.** Where there were previously recorded sites in proximity (<100m) to project developments, the sites were revisited to determine their status and to gather data to formulate recommendations for site avoidance and/or mitigation.

In 2021 updated infrastructure plans were provided for all proposed developments within the Goose Property Area (GPA). The objective of the investigation was to provide archaeological survey coverage for all of the finalized Project footprints in the GPA.

Pedestrian surveys were undertaken within proposed project development areas. Any identified heritage sites were recorded. Site forms were completed for both revisited sites and for newly identified sites. Detailed maps of the affected sites were produced and recovered archaeological materials were brought back for analysis and cataloguing to facilitate interpretation of the sites.

Excel tables and pdf maps are maintained that list the status of all archaeological sites within the affected Projects areas. These tables and maps were updated with new status information on the revisited sites and with the newly identified sites. The tables and maps form the core of the Annual Site Status Report issued to the Government of Nunavut.

**Results:**

In 2020 the archaeological program was conducted under Nunavut Archaeologist Permit 2020-05A. To optimize and upgrade the current WIR route, several quarry sources are being sought out along the length of the WIR route. Eight previously recorded sites (LkNj-1, MaNj-5, MaNj-6, MbNj-15, McNj-19, McNj-21, McNk-1, and MdNk-23) along the WIR route were revisited as they were within 50 to 100 m of proposed quarry source locations. All of these sites, with the exception of McNk-1, were found to be intact and undisturbed. Additional artifacts and/or features were observed at MaNj-6, MbNj-15, and McNj-19. Seven of these sites may potentially be impacted by quarry sources and should be mitigated if they cannot be avoided. The information provided in the territorial database for McNk-1 indicates that there were problems with the original coordinates submitted for this site and that it might actually be another site located further south. A survey of the provided location did not reveal any evidence of a site and no further concerns are identified with the provided location of McNk-1. While conducting archaeological assessments of proposed quarry sources for the WIR, three new sites were observed. These include one campsite (LINj-2), one fox trap (MbNj-26) and one lithic workshop site (McNj-51) consisting of three scatters and thought to be Pre-Dorset in age. These sites are within or adjacent to proposed quarry sources and it is recommended that if they cannot be avoided then they should be mitigated. In the MLA, sites MdNI-18 and 21 were successfully mitigated and no further work is recommended for these prior to Project development.

In 2021 the archaeological program was conducted under Nunavut Archaeologist Permit 2021-27A. The GPA footprint has been finalized and archaeology surveys were conducted for areas not surveyed in previous years. One previously recorded site (LjNh-5) in the GPA was revisited as it was within a proposed ore stockpile area. The site had previously been mitigated in 2017 and was found to be intact and undisturbed, although Project construction had occurred within 10 m of the site. Additional artifacts (n=4) were recovered from the surface at LjNh-5 that are consistent with the previous recoveries at the site and the overall site interpretation remains the same. No further work is recommended at this site. No additional sites were observed or revisited during the 2021 archaeology surveys. No additional archaeology was recommended for any of the Project footprints.

**Trends:**

No notable trends.

**Next Steps:**

Sabina will continue to utilize the Back River Project Cultural and Heritage Resources Plan.

## 4.6.8 Health and Wellbeing (PC TCs 83 through 85)

## Project Certificate Condition No. 83

Category	Employee Housing
Responsible Parties	Sabina Gold & Silver Corp., Government of Nunavut, Nunavut Housing Corporation
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To assess and monitor the extent to which the Project enhances employee access to a range of housing options.
Term or Condition (TC)	The Proponent is strongly encouraged to communicate and collaborate with the Government of Nunavut and the Nunavut Housing Corporation on potential housing initiatives with a view to enhancing employee access to a range of housing options, including homeownership. Initiatives may include, but are not limited to, the provision of financial literacy, financial planning, and personal budgeting training.
Reporting Requirement	Provided the sharing of such information is consistent with and not limited by the terms and conditions of any applicable Inuit Impact Benefit Agreement with the Kitikmeot Inuit Association, these efforts should be reported to the Nunavut Impact Review Board within the annual Back River Socio-Economic Monitoring Report.
Status of Compliance	Compliant
Stakeholder Review	Government of Nunavut, Nunavut Housing Corporation
Reference	2022 Socio-Economic Monitoring Report (JPCSL 2023). This document is attached in <a href="#">Appendix H</a> . Human Resources Plan (Sabina 2022c)

## Methods:

As described in the Human Resources Plan (Sabina 2022c), Sabina will provide financial management orientation to employees who request it (based on demand). **Sabina's Employee and Family Assistance Program (EFAP)** also offers free and confidential financial guidance on several topics (e.g. debt management, bankruptcy, retirement).

## Results:

No related training programs have been requested by staff to-date. **However, Sabina's EFAP remains available to access and the Company is investigating the development of a specific Inuit Employee Support Program, which may involve financial literacy and related training programming.**

## Trends:

Not applicable.

## Next Steps:

Updates on this topic will be provided in future Socio-Economic Monitoring Reports. Other housing-related initiatives may also be described in future reports.

## Project Certificate Condition No. 84

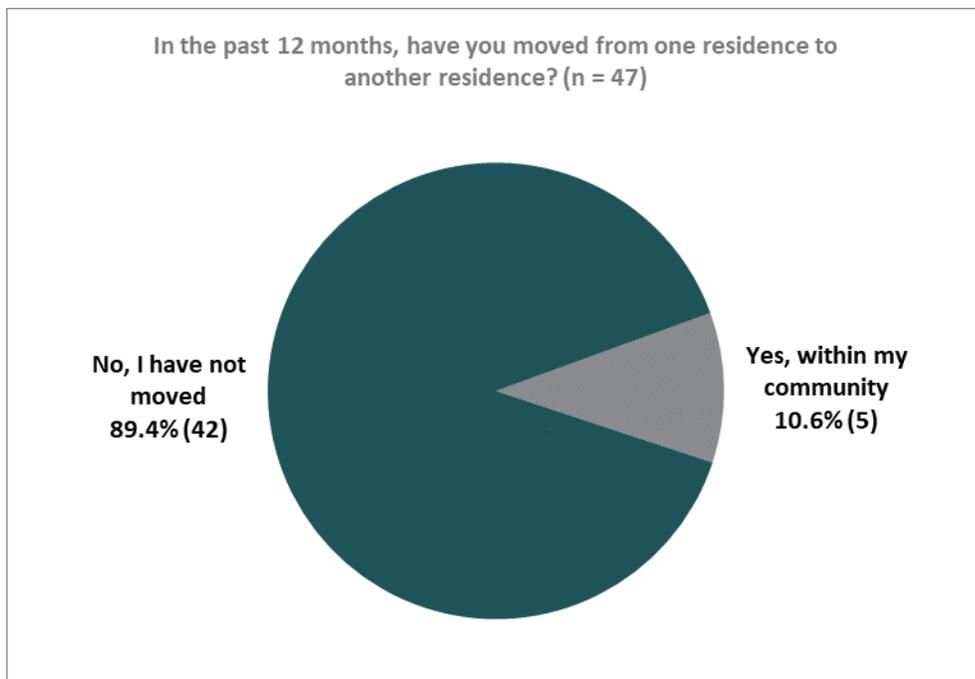
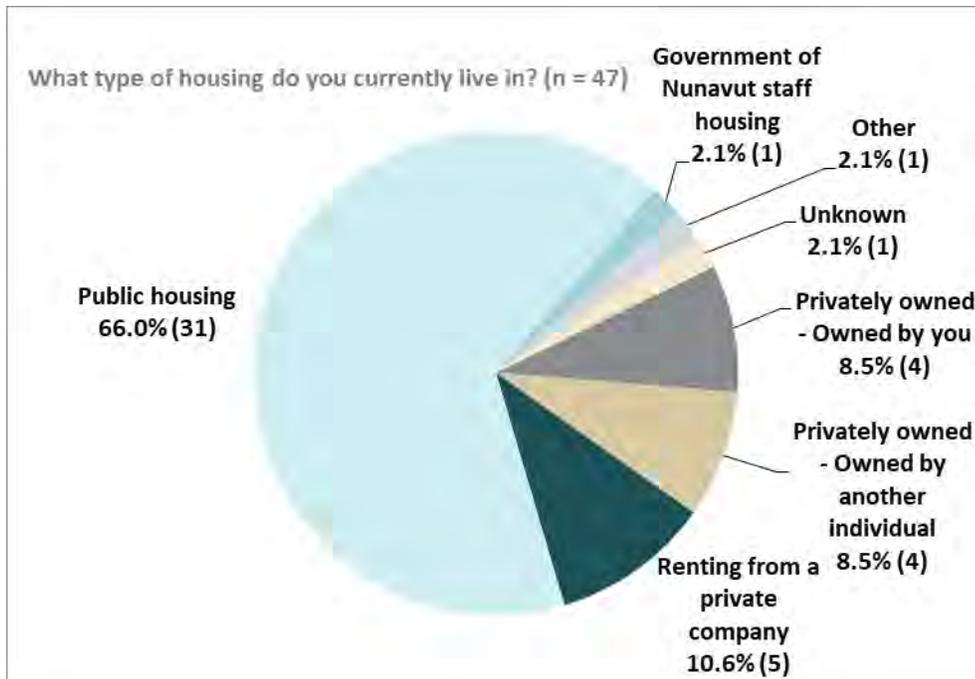
Category	Employee Housing
Responsible Parties	Sabina Gold & Silver Corp., Government of Nunavut, Nunavut Housing Corporation, Kitikmeot Socio-Economic Monitoring Committee
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To assess and monitor the potential for Project-induced effects on regional access to housing.
Term or Condition (TC)	The Proponent is strongly encouraged to work with the Kitikmeot Socio-Economic Monitoring Committee (KSEMC), the Nunavut Housing Corporation, and the GN to design and implement a voluntary housing survey to be offered to its Nunavummiut employees.
Reporting Requirement	The frequency and content of the survey should be determined by the collaborating parties, but content may include changes to address, housing status (i.e., public/social, privately owned/rented, government, etc.) and migration intentions of Project employees. Non-confidential results of the survey should be reported to the GN and other members of the KSEMC and summary information of these results should be reported to the Nunavut Impact Review Board within the annual Back River Socio-Economic Monitoring Report.
Status of Compliance	Compliant
Stakeholder Review	KSEMC, SEMWG
Reference	2022 Socio-Economic Monitoring Report (JPCSL 2023). This document is attached in <a href="#">Appendix H</a> . Socio-Economic Monitoring Plan (Sabina 2022a; NIRB PRI: 338510)

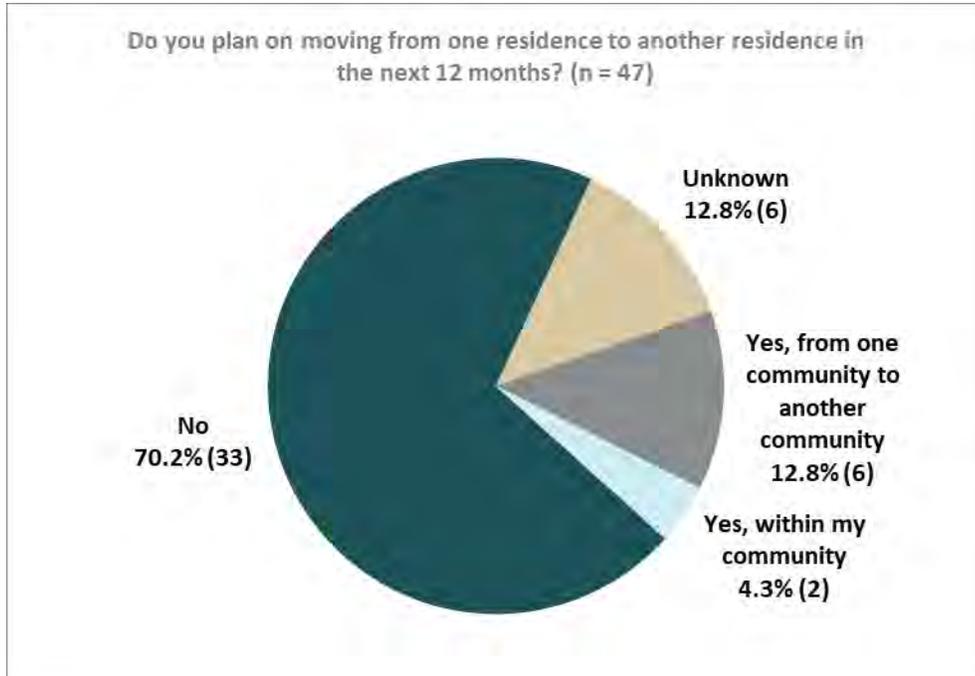
## Methods:

Data on this topic have been sourced from a 2022 Inuit Personnel Survey, which was conducted at Project sites in November and December 2022. Results are summarized below and are also provided in Sabina's 2022 Socio-Economic Monitoring Report submitted to NIRB. Draft copies of the survey were available for the SEMWG and KSEMC to review beginning in March 2022 (see Appendix B of Sabina's (2022a) Socio-Economic Monitoring Plan; NIRB PRI: 338510). The Government of Nunavut is a member of both groups and coordinates the involvement of the Nunavut Housing Corporation as appropriate. Most recently, the SEMWG was engaged on this topic during a June 2022 videoconference and several suggestions were provided on the survey. The SEMWG and KSEMC will continue to be engaged on this topic as appropriate.

## Results:

Survey results applicable to this Term & Condition are presented in the figures below. Overall, these data reveal several insights, including a high percentage of respondents living in public housing (66%) and a much lower percentage of respondents living in privately owned residences (17%). A small percentage of respondents had changed their residence in the past 12 months (11%), but all these individuals had moved within their existing community. Some respondents indicated they planned to move residences in the next 12 months, with 13% saying they planned to move to a new community. Of this 13%, half (3 respondents) indicated they planned to move from within the Kitikmeot Region to outside the Kitikmeot Region. Reasons cited for wanting to move to another community included a lower cost of living, to obtain schooling for a child, to be closer to a child, and to simply 'move away from home for a bit'.





Trends:

Trends may be reported on once data from additional future surveys become available.

Next Steps:

Sabina welcomes feedback from the KSEMC and SEMWG on the survey results. Sabina anticipates completing Inuit Personnel Surveys every 2-3 years. Relevant stakeholders will be engaged in the planning and conduct of these surveys.

## Project Certificate Condition No. 85

Category	Cross-cultural Awareness
Responsible Parties	Sabina Gold & Silver Corp. , Kitikmeot Inuit Association
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To support the elimination of cultural barriers and promote recognition for Inuit Qaujimajatuqangit to establish a healthy workplace for all Project employees.
Term or Condition (TC)	<p>The Proponent is encouraged to work with the Kitikmeot Inuit Association to establish cross-cultural training initiatives which promote respect and consideration for the importance of Inuit Qaujimajatuqangit to the Inuit identity and to make this training available to Project employees and on-site sub-contractors. The Proponent should actively monitor the implementation of these initiatives, including the following items:</p> <ul style="list-style-type: none"> <li>a. Descriptions of the goals of each program offered;</li> <li>b. Language of instruction;</li> <li>c. Schedules and location(s) of when each program was offered;</li> <li>d. Uptake by employees and/or family members where relevant, noting Inuit and non-Inuit participation rates; and</li> <li>e. Completion rates for enrolled participants, noting Inuit and non-Inuit participation rates.</li> </ul>
Reporting Requirement	Summaries of all cross-cultural training initiatives should be provided in the annual Back River Socio-Economic Monitoring Report.
Status of Compliance	Compliant
Stakeholder Review	Kitikmeot Inuit Association
Reference	2022 Socio-Economic Monitoring Report (JPCSL 2023). This document is attached in <a href="#">Appendix H</a> . Human Resources Plan (Sabina 2022c)

## Methods:

As described in the Human Resources Plan (Sabina 2022c), Sabina provides cultural awareness training for all mine employees and long-term contractors. The goal of this program is to promote respect and consideration for the importance of Inuit Qaujimajatuqangit (IQ) to the Inuit identity. It is primarily focused to provide non-Inuit employees with opportunities to better understand Inuit culture and communities, and is aimed at enhancing positive interaction between Inuit and non-Inuit in the workplace. The training is currently provided in five main sections: Overview, Nunavut and the Kitikmeot Region, Inuit culture, **Sabina's community engagement program, and intercultural effectiveness**. Sabina is also in the process of developing an updated version of this training in video format.

Results:

In 2022, a total of 21 cross-cultural training sessions were delivered either **in-person at Sabina's Goose Camp/MLA or remotely by the Company's Senior Indigenous Affairs Coordinator**. This training was conducted in English and had 182 participants, 30 of whom were Inuit. The training program was shared with KIA in November 2021 and their feedback was incorporated into revised training materials. A draft outline of a new training program/video (mentioned above) was also shared with KIA for comment in November 2022. Sabina will continue to engage KIA on cross-cultural training initiatives at the Project.

In addition to the above, Sabina honoured the National Day for Truth and Reconciliation on September 30, 2022, with a recorded presentation and the purchase of orange t-shirts for Company staff (designed by Kugluktuk artist April Pigalak). This event discussed the purpose of the National Day for Truth and **Reconciliation, the history and impacts of residential schools in Canada, and the mining industry's role in addressing these issues.**

Trends:

Sabina continues to offer cross-cultural training at the Project. Additional updates on this topic will be provided in future Socio-Economic Monitoring Reports.

Next Steps:

Sabina intends to continue offering cross-cultural training in 2023.

4.6.9 Human Health and Safety (PC TCs 86 through 88)

Project Certificate Condition No. 86

Category	Airborne Actinolite Fibres
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure worker health and safety.
Term or Condition (TC)	If potential health risks due to airborne actinolite fibres are identified, the Proponent shall enact measures to mitigate human exposure, notify the Territorial occupational health authority, and update relevant management plans.
Reporting Requirement	If required, updated information regarding mitigation measures/management plans should be provided to the Nunavut Impact Review Board at least 60 days prior to the commencement of construction, and subsequent modifications to <b>these plans should be identified and included in the Proponent's annual report</b> to the Nunavut Impact Review Board.
Status of Compliance	Compliant
Stakeholder Review	Health Canada, Nunavut Impact Review Board
Reference	FEIS Technical Comment No. F-HC-TC-4

Methods:

If airborne actinolite fibres are identified, Sabina will enact measures to mitigate human exposure, notify the Territorial occupational health authority, and update relevant management plans.

Results:

Not applicable.

Trends:

Not applicable.

Next Steps:

Sabina will continue ongoing monitoring.

Project Certificate Condition No. 87

Category	Site Orientation
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure worker health and safety.
Term or Condition (TC)	The Proponent shall have in place a comprehensive site orientation plan for all employees. Further, the Proponent shall ensure all worker site- orientation, training presentations, and materials are updated regularly and reflect any amendments to management plans
Reporting Requirement	The updated site orientation plan should be provided to the Nunavut Impact Review Board at least 60 days prior to the commencement of construction and subsequent modifications to this plan should be identified and included in the <b>Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Nunavut Impact Review Board
Reference	Not applicable

Methods:
----------

Sabina has a comprehensive site orientation program is in place for all site personnel. The orientation process includes:

- o General site orientation on arrival for personnel new to site
- o Project induction presentation
- o Review of general site Standard Operating Procedures (such as waste management practices/sorting, wildlife interactions, airstrip/road rules)
- o A job-site orientation where personnel are introduced to their work areas and equipment and may be asked to review additional work-specific documents (such as SOPs, manuals or plans), given additional training identified necessary by their supervisor and/or undergo an assessment of qualifications (e.g., equipment operational competency evaluations). This may include WHIMS, equipment operation checkoff, and review of work-specific guidance and/or training

Results:

All orientation, training and certification materials are regularly reviewed and updated on an as-needed basis. Records of orientation, training and certification are maintained and re-current training is conducted as needed.

Trends:

Not applicable.

Next Steps:

Sabina will continue to ensure a Comprehensive Site Orientation Program is in place for all employees.

## Project Certificate Condition No. 88

Category	Winter Ice Road Operations
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure worker health and safety.
Term or Condition (TC)	The Proponent shall include, within its relevant management plans, consideration for worker safety during winter ice road operations, particularly during periods of adverse weather conditions. The Proponent shall ensure that updates are made to its safety procedures throughout the life of the Project consistent with best management practices for similar ice road projects.
Reporting Requirement	Updated sections of the relevant management plans should be provided to the Nunavut Impact Review Board at least 60 days prior to the commencement of construction and subsequent modifications to these plans should be identified <b>and included in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Nunavut Impact Review Board
Reference	Road Management Plan (2021)..

Methods
---------

Sabina includes, within its project design, relevant management plans and SOPs, consideration for worker safety during winter ice road operations, particularly during periods of adverse weather conditions.

Sabina's Back River Project Road Management Plan (RMP) includes consideration of safety considerations for the construction and use of the WIR during adverse weather conditions. To further improve worker safety during winter ice road operations, particularly during periods of adverse weather conditions, Sabina has requested and received approval for the establishment of emergency shelters along the WIR in it's modification application to the NIRB.

## Results:

Not applicable.

## Trends:

Not applicable.

## Next Steps:

Sabina is currently establishing emergency shelter camps along the WIR. Sabina will ensure that updates are made to its safety procedures throughout the life of the Project consistent with best management practices for similar ice road projects. Updated plans will be provided to the NIRB.

4.7 PERFORMANCE ON OTHER TERMS AND CONDITIONS

4.7.1 Accidents and Malfunctions (PC TCs 89 through 94)

Project Certificate Condition No. 89

Category	Spills
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-shipping, Construction, Operations, Temporary Closure/Care and Maintenance
Objective	To protect marine wildlife, migratory birds, and the marine environment.
Term or Condition (TC)	The Proponent shall include within its Wildlife Mitigation and Monitoring Program Plan measures for preventing fuel spills into the marine environment and mitigating potential effects of an accidental spill on polar bears, seals, other marine wildlife, and migratory birds. Measures should include: a. Placement of spill prevention and response equipment as necessary to initiate wildlife protection measures along shipping routes and on-site; b. Ensuring spill response contacts for Sabina and government agencies are current; c. Providing a list of community organizations that would be contacted to inform traditional land users of shipping activity in the area, any spills and actions to ensure public safety and plans for clean-up.
Reporting Requirement	The mitigation plan should be provided to the Nunavut Impact Review Board prior to the commencement of Project-related shipping, and updates provided with annual reporting.
Status of Compliance	Compliant
Stakeholder Review	Transport Canada, Government of Nunavut, Nunavut Impact Review Board
Reference	Wildlife Mitigation and Monitoring Program Plan (Version 11) Oil Pollution Emergency Plan (2022). This document is attached in Appendix I. Spill Contingency Plan (2017).

Methods:

Sabina provided the NIRB with a submission on September 5, 2018 in fulfillment of Project Certificate T&C No.89. In summary, the WMMPP summarizes measures Sabina employs for managing fuels and other hazardous materials on land, at the MLA and during marine shipping **which are detailed further in Sabina’s** five management plans used for fuels, hazardous substances and managing spills and refers the reader to the applicable plan.

For a spill occurring at the MLA related to bulk fuel offload, the WMMPP refers the reader to the Oil Pollution Prevention Plan & Oil Pollution Emergency Plan (OPEP). The OPEP was last updated in 2022 to reflect 2022 bulk fuel offload activities and has been submitted to Transport Canada, and is herein provided to the NIRB as **Appendix I** of this report.

The OPEP/OPPP includes measures to prevent harm to wildlife should a spill occur at the MLA, including:

1. Measures to prevent spills occurring,
2. Default measures used to reduce the chance of a spill spreading, such as the use of fuel spill booms during fueling,
3. Modeling to predict the direction of spread of small or large spills under known wind and current conditions,
4. A description of environmentally sensitive features including known locations of marine birds, marine mammals, and marine fish in the area which could be affected by a spill,
5. A response management system should a spill occur, and Spill Response Procedures , that includes:
  - a. Responsibilities, coordination, reporting, management, treatment and disposal instructions,
  - b. Locations of wildlife habitat where mitigation should be focused,
  - c. Deterrence of wildlife from a spill, and
  - d. Cleaning of any oiled wildlife.

Spills unrelated to **bulk fuel offloads are addressed under Sabina's Spill Contingency Plan (SCP)**. This plan ensures that impacts to the surrounding environment and wildlife are minimized.

#### Results:

Due to the comparative rarity of bulk fuel spills in recent decades, technical expertise in the areas of wildlife rescue and rehabilitation has become concentrated in a small handful of companies in North America who specialize in wildlife spill response. These companies provide technical specialists and equipment and are prepared to mobilize to any site in North America to lead wildlife response activities. In 2022, Sabina reached out to one of these companies to confirm their ability, availability, and willingness to lead a wildlife spill response at the Back River Project, should it ever become necessary. These capabilities have now been confirmed and background provided on logistical constraints and available equipment and facilities.

Any wildlife-related spill response activities such as hazing or live animal retrieval will be undertaken under the guidance of a technical specialist from one of these companies, and/or as required by the Canadian Wildlife Service (for migratory birds) or Fisheries and Oceans Canada (for marine mammals) and the Nunavut DOE Wildlife Management Division

#### Trends:

Not applicable.

#### Next Steps:

**Sabina's OPEP is reviewed and updated prior to each year's bulk fuel offload** to reflect offload conditions and procedures. This plan is submitted to Transport Canada to review, per the requirements of the Canada Shipping Act. Any updates to this plan will be provided to the NIRB with annual reporting. Sabina also regularly reviews and updates the Back River Project Spill Contingency Plan and will provide any updates to the NIRB with the annual reporting.

Project Certificate Condition No. 90

Category	Spills
Responsible Parties	Sabina Gold & Silver Corp. , Transport Canada
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure accurate and adequate spill response and emergency preparedness.
Term or Condition (TC)	The Proponent shall maintain an Oil Pollution Emergency Plan (OPEP) with a list of authorised personnel, staff training, and the required Northwest Territories-Nunavut spill report document.
Reporting Requirement	The OPEP should be provided to the Nunavut Impact Review Board prior to the commencement of Project-related shipping, and updates provided with annual reporting.
Status of Compliance	Compliant
Stakeholder Review	Transport Canada
Reference	Oil Pollution Prevention Plan & Oil Pollution Emergency Plan (2023). This document is attached in Appendix I.

Methods:

The Back River Project Oil Pollution Prevention Plan & Oil Pollution Emergency Plan (OPEP) was updated to reflect the 2022 fuel offload conditions and the planned offload procedure and potential response scenarios. A final version of the OPEP (February 2023) which included a list of training participants was provided to Transport Canada, as required by the Shipping Act, and is provided as Appendix I of this report. The OPEP includes a list of authorised personnel, staff training, and the required Northwest Territories-Nunavut spill report document.

Results:

Not applicable.

Trends:

Not applicable.

Next Steps:

As required by the Canada Shipping Act, this plan is reviewed and updated annually in years of intended fuel offload to reflect the specific vessels being used, the bulk fuel handling facilities (i.e. the configuration of the MLA bulk fuel storage and offloading facilities and vessel access), and the specific procedures to be employed given the vessel(s) and facility configuration. The OPEP reflects the current configuration of the MLA bulk fuel handling facility and addresses related PC TC's (i.e. 89, 90, 91, and 92). Prior to next bulk fuel offload, this plan will be reviewed and updated based on the vessels contracted, and would described the MLA facilities in place at the time of that offload (which may or may not include the MLA Shoreline Pad extension **described in Sabina's modification package**, as this may not yet have been constructed). Per the Canada Shipping Act, this plan is always provided to Transport Canada for review within 6 months of plan revision. Sabina will continue to provide updates of the OPEP to the NIRB with the annual report.

## Project Certificate Condition No. 91

Category	Marine Shipping
Responsible Parties	Sabina Gold & Silver Corp., Transport Canada
Project Phase(s)	Pre-shipping, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure protection of the marine environment.
Term or Condition (TC)	The Proponent shall contract only certified vessels to carry cargo for the Project, and will ensure shippers are aware of the requirements of the Shipping Management Plan, the Risk Management and Emergency Response Plan, and the Oil Pollution Emergency Plan.
Reporting Requirement	Monitoring plans should be provided to the Nunavut Impact Review Board prior to the commencement of Project-related shipping, with any subsequent <b>amendments or new plans being identified and provided in the Proponent's</b> annual report to the Nunavut Impact Review Board.
Status of Compliance	Compliant
Stakeholder Review	Transport Canada
Reference	Shipping Management Plan (2018) NIRB PRI: 319686  Oil Pollution Prevention Plan & Oil Pollution Emergency Plan (2023). This document is attached in <b>Appendix I</b> .  Risk Management and Emergency Response Plan (2018) NIRB PRI: 319645

## Methods:

Sabina provided the NIRB with a submission on September 3, 2018 that included a Back River Project Shipping Management Plan, Risk Management and Emergency Response Plan, and the Oil Pollution Emergency Plan in fulfillment of Project Certificate T&C No.91. The Back River Project Oil Pollution Prevention Plan & Oil Pollution Emergency Plan (OPEP) is routinely updated in each year of bulk fuel transfer and was most recently updated to reflect 2022 fuel offload activities and planned 2023 activities and was submitted to Transport Canada. A copy of this update is included in **Appendix I** of this report. These plans are also provided to the shippers to ensure they are aware of their respective requirements.

## Results:

Not applicable.

## Trends:

Not applicable.

## Next Steps:

Any subsequent updates or new plans will be provided in Sabina's **annual report to the NIRB**.

Project Certificate Condition No. 92

Category	Marine Shipping
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-shipping, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure protection of the Marine Environment.
Term or Condition (TC)	<p>The Proponent shall ensure that the necessary spill response equipment and training to employees, contractors, and local community members is available prior to commencing Project shipping.</p> <p><b>Commentary: The reference to “local community members” means members of the public who may reside seasonally in or near the communities of Kingaok (Bathurst Inlet) and Omingmaktok (Bay Chimo).</b></p>
Reporting Requirement	An inventory of spill equipment and listing of training undertaken shall be provided to the Nunavut Impact Review Board prior to the receipt of the first project-related shipment. Subsequently, results of annual inspections shall be <b>included in the Proponent’s annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Nunavut Impact Review Board
Reference	Oil Pollution Prevention Plan & Oil Pollution Emergency Plan (2023). This document is attached in Appendix I.

Methods:

The Back River Project Oil Pollution Prevention Plan & Oil Pollution Emergency Plan (OPEP) was last updated to reflect 2022 bulk fuel offload conditions. This updated OPEP has been submitted to Transport Canada and is provided as Appendix I of this report. The OPEP includes a list spill response equipment and training to conducted and training participants.

Results:

An inventory of spill equipment and listing of training undertaken and is provided in the OPEP.

Trends:

Not applicable.

Next Steps:

Each year, prior to a bulk fuel offload, Sabina reviews and revises the OPEP for submission to Transport Canada per the requirements of the Canada Shipping Act. Any necessary updates to spill response equipment and training are included at that time.

## Project Certificate Condition No. 93

Category	Navigation Charts
Responsible Parties	Sabina Gold & Silver Corp., Fisheries and Oceans Canada - Canadian Hydrographic Services
Project Phase(s)	Post-construction
Objective	To mitigate potential ship groundings.
Term or Condition (TC)	The Proponent shall submit a post-construction depiction of the Marine Laydown Area and surrounding shoreline, including any new bathymetry aspects.
Reporting Requirement	This information shall be provided to Fisheries and Oceans Canada - Canadian Hydrographic Services following construction and when the information is provided to Fisheries and Oceans Canada the Proponent shall advise the Nunavut Impact Review Board that the required information has been submitted.
Status of Compliance	Compliant
Stakeholder Review	Fisheries and Oceans Canada - Canadian Hydrographic Services, Nunavut Impact Review Board
Reference	Not applicable

## Methods:

Sabina confirms no in-water construction occurred in the marine environment at the Marine Laydown Area in 2022.

## Results:

Not applicable.

## Trends:

Not applicable.

## Next Steps:

If in-water construction occurs in the marine environment at the Marine Laydown Area, Sabina will provide a post-construction depiction, including any new bathymetry aspects, to DFO - Canadian Hydrographic Services following construction. When the information is provided to DFO, Sabina will advise the NIRB that the required information has been submitted.

Project Certificate Condition No. 94

Category	Fuel Transportation
Responsible Parties	Sabina Gold & Silver Corp.
Project Phase(s)	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure
Objective	To ensure protection of the environment.
Term or Condition (TC)	The Proponent shall ensure fuel trucks meet industry design standards and receive regularly scheduled maintenance of fuel lines, nozzles and dust caps.
Reporting Requirement	A summary of the results of the applicable maintenance schedules and a summary of <b>inspections shall be included in the Proponent's annual report to the Nunavut Impact Review Board.</b>
Status of Compliance	Compliant
Stakeholder Review	Nunavut Impact Review Board
Reference	Not applicable

Methods:

Sabina ensures all fuel trucks meet industry design standards and receive regularly scheduled maintenance of fuel lines, nozzles, and dust caps. Fuel trucks are not mobilized to the Back River Project without a thorough mechanical investigation, as well as review of the **equipment's documentation by the Project's mechanics.**

Results:

The below table summarizes the maintenance and inspections completed on Sabina's fuel trucks in 2022.

FT-01:

Date	Hours	Task
20-Apr-22	12694	Repair fuel pump hose
6-Jul-22	13299	Replace strainer seals
13-Jul-22	13435	Replace fuel dispensing pump
1-Aug-22	0	Replace hour meter
31-Aug-22	629	1000H PM service
3-Oct-22	1292	Replace slack adjuster
13-Nov-22	1936	500H PM service

FT-02:

Date	Hours	Task
20-Apr-22	3296	Replace transmission cooler lines
14-Jun-22	3548	500H PM service
29-Jun-22	3634	Replace wheel seals, center axle input seal, cab mount
10-Oct-22	3788	Repair headlights, replace door hinges, repair fuel leak at PTO
30-Nov-22	4107	500H PM service

Trends:

Not applicable.

Next Steps:

Maintenance schedules and a summary of inspections **will continue to be provided in Sabina's** annual report to the Nunavut Impact Review Board.