



Nunavut Impact Review Board

2022 Site Visit Report

Back River Gold Mine Project

Sabina Gold & Silver Corp.

NIRB File No. 12MN036



October 2022

Full Report Title: *The 2022 Site Visit Report for the Nunavut Impact Review Board's Monitoring of the Back River Gold Mine Project (NIRB File No. 12MN036)*

Project: Back River Gold Mine Project
Project Location: Kitikmeot Region, Nunavut

NIRB File No.: 12MN036
Back River Gold Mine Project Certificate No. 007

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Site visit date: June 19, 2022

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Pictures by: NIRB Staff

Cover Photo: Marine Laydown Area

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1.0 Introduction

The Nunavut Impact Review Board (NIRB or Board) was established through Articles 10 and 12 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada (Nunavut Agreement)* and is responsible for post environmental assessment monitoring of a Project in accordance with Part 7 of Article 12 of the *Nunavut Agreement*.

In accordance with sections 12.7.1 and 12.7.2 of the *Nunavut Agreement* as well as the Project Certificate No. 007, the NIRB is responsible for the establishment of a monitoring program for the Project, which includes conducting periodic site visits. The objective of the NIRB's site visits is to determine whether, and to what extent, the land or resource use in question is being carried out within the predetermined terms and conditions of the NIRB's Project Certificate issued for the Back River Gold Mine Project (Back River or the Project), in accordance with *Nunavut Agreement*, Subsection 12.7.2(b) and as outlined in the NIRB Project Certificate.

This report provides the findings that resulted from the NIRB's site visit to the Back River Gold Mine Project site on June 19, 2022, and as such forms a part of the NIRB's monitoring program. The last on-site visit conducted by the NIRB was in August 2018.

1.1 Back River Gold Mine Project

The Back River Gold Mine Project (NIRB File No. 12MN036; the Back River Project or the Project), approximately 400 kilometres (km) southwest of the community of Cambridge Bay, 95 km southeast of the southern end of Bathurst Inlet, and 520 km northeast of Yellowknife, Northwest Territories and is owned and operated by Sabina Gold and Silver Corp. (the Proponent or Sabina). Back River consists of the proposed mobilization, construction, operation, closure, reclamation, and post-closure monitoring of a gold mine operation in the Kitikmeot region of Nunavut. There are two (2) main development areas with a winter ice road interconnecting the Goose Property and the Marine Laydown Area (MLA) at Bathurst Inlet.

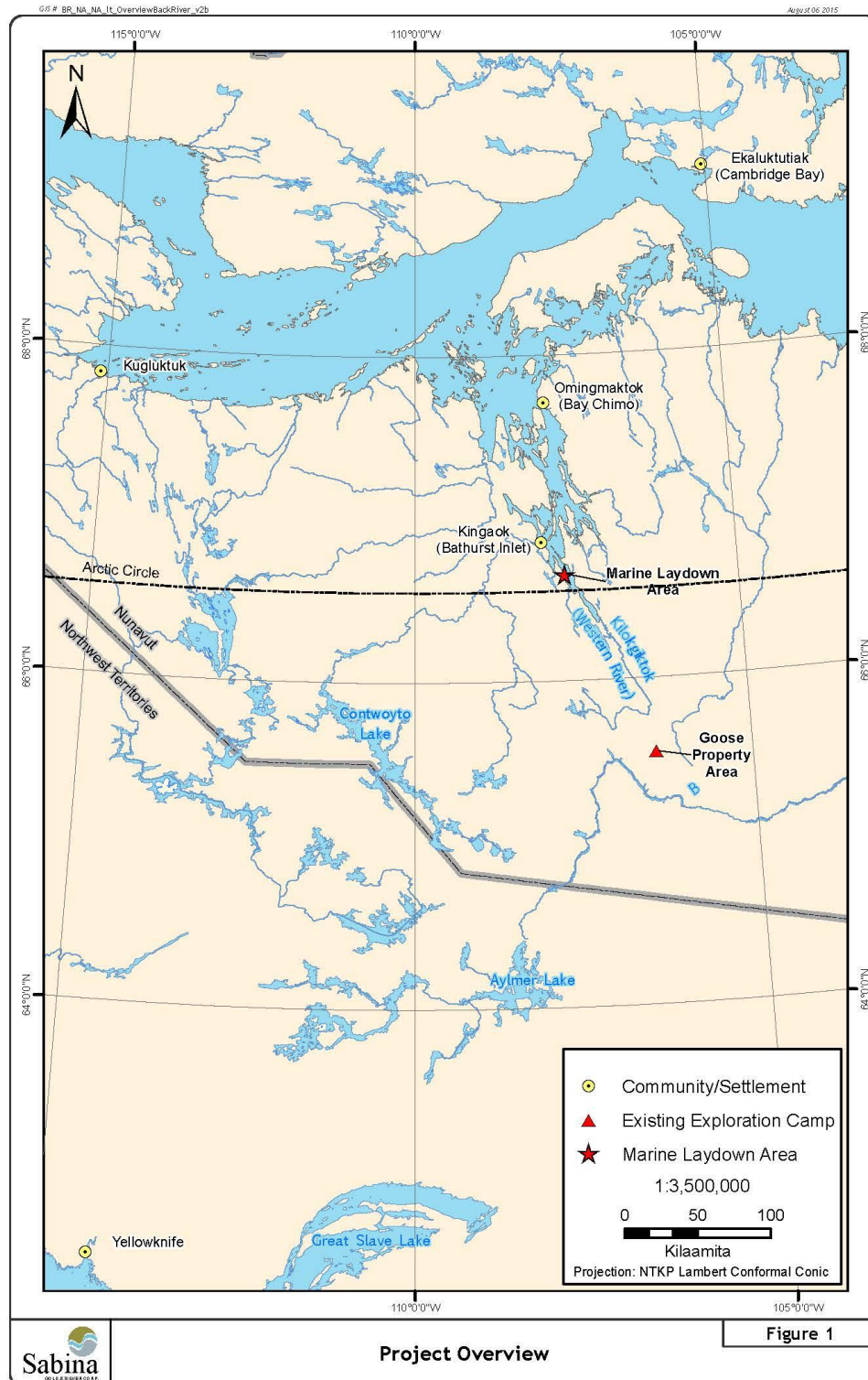


Figure 1: Project Overview Map¹

¹ Source: Sabina Gold and Silver Corp.

The Goose Property once developed will comprise of:

- An ore processing plant,
- Four (4) deposits (Umwelt, Llama, Echo, and Goose Main) to be mined through open and underground mining methods;
- An all-weather air strip;
- A camp facility; and
- Associated mining facilities.

Ore mined at the Goose Property would be hauled to ore stockpiles located at the Goose Site where the ore would be processed within an ore processing plant (mill) using conventional gravity concentration and cyanidation techniques at approximately 6,000 tonnes of ore per day. A tailings storage facility would be built south-southeast of the Goose Main open pit for tailings deposition during the first two (2) years of production, with tailings then to be directly deposited into the mined-out Umwelt open pit and then into the mined-out Goose Main open pit for the remaining of the mine life. The gold produced at the processing plant would be stored on-site and then transported off-site by aircraft.

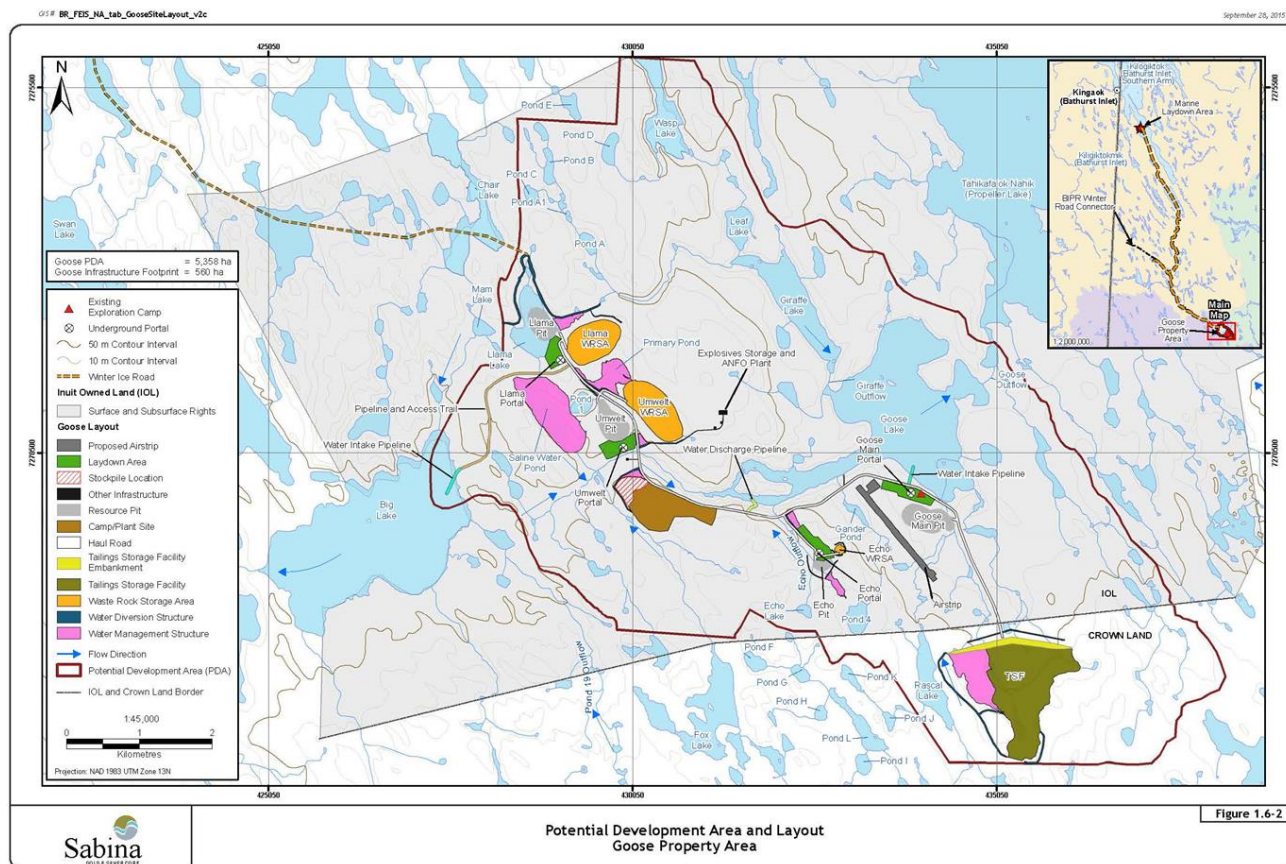


Figure 2: Potential Development of Goose Property Area²

² Source: Sabina Gold and Silver Corp.

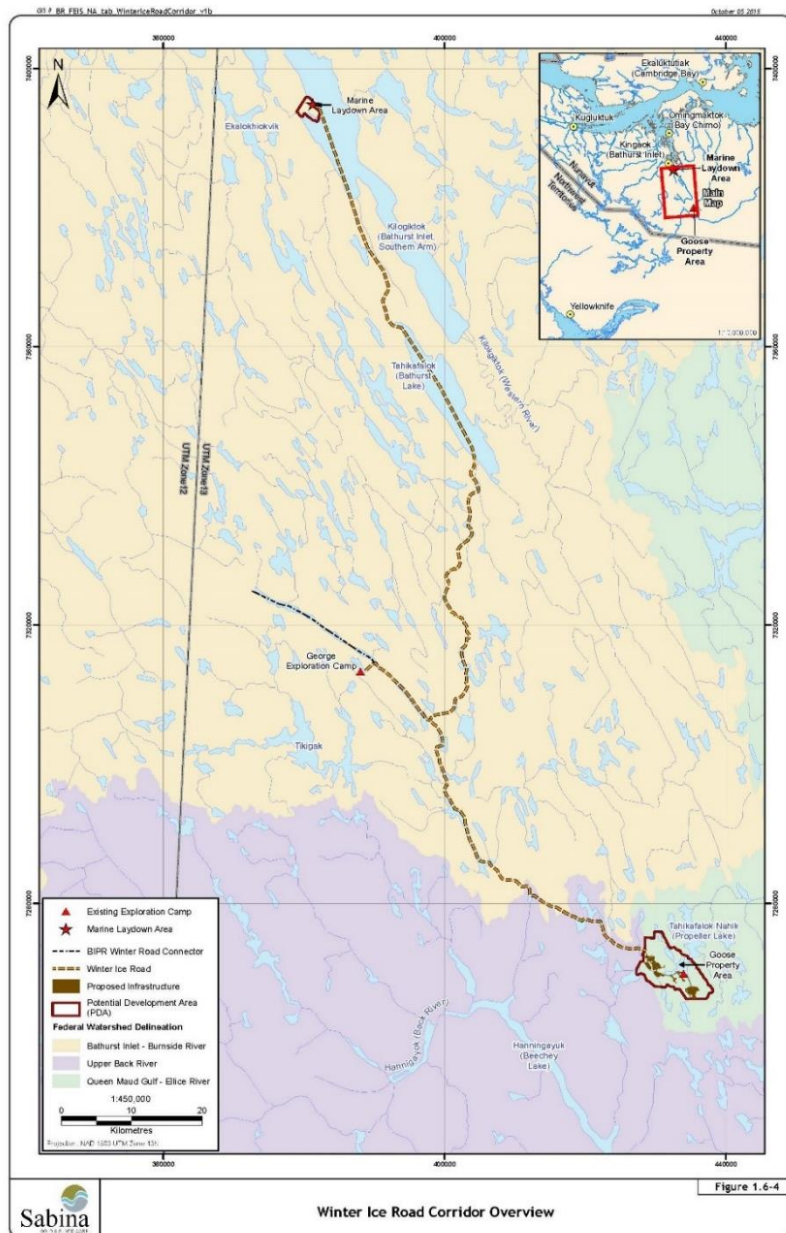


Figure 3: Winter Ice Road Corridor Between MLA and Goose Property

a diamond drilling based mineral exploration program for the George Property and the Wishbone claim of mineral leases was included within the scope of the Board’s assessment for the Back River Project. It should be noted that further advanced exploration (*i.e.*, bulk sampling and infrastructure development) was not included with the understanding such activities would require further assessment by the NIRB prior to occurring.

The NIRB Project Certificate No. 007 was issued for the Back River Gold Mine Project on December 19, 2017. On March 13, 2018, Sabina received Type “B” Water License No. 2BCBRP1819 from the Nunavut Water Board (NWB) which allowed for identified Initial Development Works to start at both the Goose

The MLA is located approximately 130 km north-northwest of the Goose Property and is the primary staging area for equipment, material, fuel, and other supplies required for the construction and operation of the Project. The MLA consists of a single barge terminal, laydown areas, a camp facility, and associated storage and maintenance facilities. The Project would be resupplied annually from southern Canada by barge during the open water season. Project materials would then be transported annually from the MLA to the Goose Property using a winter ice road from mid-January to April (Figure 3).³

The George Property is an advanced exploration camp located approximately 50 km northwest of Goose Property and currently has four (4) mineral deposits identified for potential future development. Sabina may also construct an annual spur road from the winter ice road to the George Property for transportation of supplies to the site. The continuation of a

³ Source: Sabina Gold and Silver Corp.

Property and Marine Laydown Area. On April 23, 2018, Sabina finalized the required agreements (including, but not limited to, the Inuit Impact Benefit Agreement (IIBA) and Land Tenure Agreements) with the Kitikmeot Inuit Association (KIA). These agreements allow for advancement of the Project and ensure appropriate long-term benefits are being provided to Inuit of the Kitikmeot Region. In September 2018 Sabina acquired Type “A” Water Licence No. 2AM-BRP1831 from the NWB and in 2021 applied to amend the licence for finalization of project construction. Sabina is currently continuing exploration activities as previously approved and preparing the site for construction and the 2022 shipping season as Sabina secured financing to start construction in 2022/2023.

2.0 2022 Site Visit

The NIRB site visit was conducted on June 19, 2022, by Guillaume Daoust and Kelli Gillard, NIRB Monitoring Officers for the Back River Gold Mine Project (the Monitoring Officers). The site visit was also conducted jointly with the Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) Resource Management Officer, Jonathan Mesher. All three (3) were tested for COVID-19 in Yellowknife prior to going to the Back River site as per the mine protocol.

On Sunday, June 19, 2022, NIRB staff flew from Yellowknife to the Back River site via an aircraft charter. The Monitoring Officer was greeted and toured by Mr. Merle Keefe, Manager, Environmental Permitting. NIRB and CIRNAC staff were able to visit both components of the Back River Project and the George Exploration Property. The Site Visit started with Goose Property in the morning, next the George exploration site and finishing with the MLA. During the tour, the Monitoring Officers discussed observations directly with Mr. Keefe.

The NIRB’s assessment of the site focused on general site conditions and observations related to compliance with the NIRB Project Certificate No. 007 (2017) and included visual observation of the following features either by vehicle or on foot.

3.0 General Observations

The following sections briefly describe the major facilities visited during the tour. Where applicable, the Monitoring Officers noted compliance with specific terms and conditions of the Project Certificate.

3.1 Goose Property

The Goose Lake Camp consists of office buildings, sleeping accommodations, washroom (dry), kitchen, medical facility, core tent, maintenance facilities, storage facilities, laydown areas, and other associated infrastructure. Sabina started major earth works near the Umwelt portal for the future Goose Complex which should be transported during the next winter season on the ice road. The Monitoring Officers were pleased with the orderliness of the site and care and attention made to ensure there was minimal impact to the environment.

3.1.1 Camp and Accommodations



Photo 1: Goose Lake Camp



Photo 2: Goose Lake Weather Haven Accommodations

3.1.2 Water Intake

The water intake for the camp comes from the Goose Lake (Photo 3). Mr. Keefe advised the Monitoring Officers and CIRNAC that Sabina's intake of water is under the total permitted. NIRB and CIRNAC staff observed that the structure used to keep the waterline open in the winter was submerged; however, it was to be removed in the coming days as the ice had melted off Goose Lake. Sabina Staff confirmed that the water intake was covered by a screen.



Photo 3: Water Intake into Goose Lake



Photo 4: Water Line to Goose Camp

3.1.3 Drilling Laydown Area

The drilling laydown area for Sabina's contractor is located south of the exploration camp (Photo 5). It is composed of a maintenance shop and storage buildings. Next to the drilling laydown was the past exploration site and future Goose Pit which Sabina had conducted trenching in 2018 (Photo 6). All the explorations were decommissioned, and the area remains erosion control. NIRB and CIRNAC staff noted some damage to the tundra (Photo 7) next to the exploration site from runoff. The sump within the footprint of the proposed Goose Main Pit has signs of erosion where down slope there is ponded water and vegetation appeared discoloured.



Photo 5: Drilling Laydown Area on Goose Main Pit



Photo 6: Future Pit with Sump and Erosion Control



Photo 7: Discolored Tundra Downslope of Sump

3.1.4 Waste Management

Within the Goose camp, waste is segregated as shown on Photo 8 with combustible and non-hazardous waste sent to the incinerator (Photo 9), and clean wood and cardboard to the burn box (Photo 10). Outside

the incinerator, other waste segregation containers were placed for non-combustible waste (Photo 11). Currently the ash from the incinerator is stored (Photo 12) and will be tested when Sabina has its permanent landfill where it will be disposed if it meets criteria.

Some non-combustible waste is stored in this area and moved via the winter road to the Marine Laydown Area to be shipped off site. Some non-hazardous materials are to be disposed of within the Goose Pit Waste Rock Pile; however, as mining has not yet started, Sabina had the temporary landfill beside to the incinerator at camp where materials would be stored temporarily before being moved to the Goose Lake Quarry until mining starts. During the site visit, NIRB and CIRNAC staff observed that some of the waste material in the incinerator temporary landfill was food and fuel containers. CIRNAC advised the Proponent and Sabina committed to remediating the situation as soon as possible as this did not follow the *Back River Project Landfill and Waste Management Plan* and may be a wildlife attractant.



Photo 8: Waste Segregation at Goose Camp



Photo 9: Incinerator at Goose Camp



Photo 10: Burn Box at Goose Camp



Photo 11: Non-combustible Waste Segregation



Photo 12: Stockage of Ash and Other Non-combustible Waste



Photo 13: Temporary Landfill Next to the Incinerator

3.1.2 Fuel and Hazardous Material Storage

Overall, the bulk diesel fuel and hazardous materials were well managed at Goose Camp. Bulk diesel fuel was contained in double walled tanks within a containment (Photo 14). Some ponding was observed as there had been rains in the days prior to the site visit. Should the water become an issue (*i.e.*, will not dry up or continue to build up throughout the summer) it will be tested prior to pumping and release. Heating fuel was also contained to prevent spills at the accommodation's buildings (Photo 15) with Sabina heating some facilities with used oil (Photo 16).



Photo 14: Tankfarm and Berm



Photo 15: Tankfarm at Goose Camp Refueling Area with Spill Kit



Photo 16: Heating Fuel Tank and Berm



Photo 17: Oil Heater Supplied by Used Oil

3.1.3 Laydown and Storage Areas

Laydown and storage areas at the Goose Lake Camp were tidy. Sabina had placed bagged old exploration materials on top of empty fuel barrels so that they could be located and removed during the ice road season to allow back hauling and these bags disposed of at appropriate locations. Staff observed that the bags were stored on top of a pond which had a visible sheen indicating potential hydrocarbon contamination (Photo 18). CIRNAC advised the Proponent to collect samples of the water and address any issues that the testing noted.



Photo 18: Bagged Waste Piled on Top of Empty Drums

3.1.5 Goose Lake Quarry

The Goose Lake quarry located west of the Camp at the middle of the road connecting to the future Goose Camp (Photo 19). Some non-hazardous waste is piled in the quarry until the permanent landfill located at the Waste Rock Storage Area is operational.

Sabina showed Monitoring Officers an area being monitored monitoring next to the road (Photo 20) and Sabina said it was watching the area to ensure that the tundra recovered and would undertake active remediation as necessary (Photo 21). On the connecting road to Goose camp, all culverts were well managed, and no water management was noted by the Monitoring Officers (Photo 22) and the road appeared well-managed. Sabina observed that it would be replacing two (2) of its bridges in this summer (Photos 23 and 24).



Photo 19: Temporary Landfill Quarry with Metal Waste and Concrete



Photo 20: Damaged Tundra on the Road between Goose Camp and the Air Strip



Photo 21: Culvert on the Road Towards the New Goose Camp Pad



Photo 22: Bridges to be Replaced in 2022



Photo 23: Rascal Creek, to be Rerouted in 2022

3.1.4 Future Goose Camp

Sabina is preparing the pad for its new camp located northwest of its existing Exploration Camp. Currently at the entrance a maintenance shop is established along with a Laydown Area and Wash Area (Photo 24). Additionally in this area, the Monitoring Officers observed active construction (Photo 25) which mostly consisted of earth work and construction of a tank at the future Tankfarm (Photo 26). During the visit, Sabina stated that it is planning to move accommodations from the MLA to here during the next ice road season.

Sabina has also constructed a portal at the Umwelt deposit (Photo 27) and underground development is occurring.



Photo 24: Wash Area with Berm and a Maintenance Shop in the Background



Photo 25: Crusher for Construction Material



Photo 26: New Tankfarm and Ongoing Groundwork for the New Goose Camp



Photo 27: Portal for Umwelt Deposit

3.1.6 Environmental Monitoring

On site, the Monitoring Officers had the opportunity to observed different environmental monitoring stations. As part of the Project Certificate, Sabina maintains a hydrology monitoring station (Photo 28) to measure the water level of Goose Lake. Staff were able to confirm the presence of weather-related monitoring stations (Photo 29) as part of the Term and Condition #8. To ensure the drilled rock does not have the potential of acid generation, Mr. Keefe showed NIRB and CIRNAC staff the acid rock test barrel station (Photo 30) where the rock is stored in barrels without lid and water is collected and tested. If the rock presents a risk for metal leaching the Proponent is expected to prevent drainage of that materials to the environment as part of the Term and Condition #23.



Photo 28: Hydrology Monitoring Station Near Goose Lake



Photo 29: Weather Station at Goose Camp



Photo 30: On Site Acid Rock Testing Station at Goose Camp

3.2 Marine Laydown Area

The Marine Laydown Area (MLA) is located approximately 130 km north-northwest of the Goose Property and is the primary laydown area for equipment, material, fuel, and other supplies required for the construction and operation of the Project where materials arrive during the Open Water season. The MLA consists of a single grounded terminal barge, laydown areas, a camp facility, and associated storage and maintenance facilities. Once the winter ice road is operational, the equipment and fuel stored at the MLA is moved to the Goose camp.

3.2.1 MLA Camp

Overall, the camp appears to be well organized and clean (Photo 31). The MLA Landing off Bathurst Inlet is expected to be modified in the summer of 2022 (Photo 32) and be built out to about where the person is standing.

The Monitoring Officers observed the incinerator with waste segregation on its side (Photo 33). To supply the Camp with water, Sabina pumps water directly from the inlet (Photo 34) and run it through a desalination process (Photo 35) which is tested on a regular basis and results are posted at Camp as they are received.

The coffee area in Photos 36 and 37 is part of the new camp trailers at the MLA. The coat and boot area are open and meetings are hosted here in the morning with all Sabina safety materials are available and memorabilia on display.



Photo 31: MLA New Accommodations and Weatherhaven Camp



Photo 32: Barge Landing to be Extended in 2022



Photo 33: Incinerator with Waste Segregation



Photo 34: Waterline to the Desalination Facility (Red and Black Pipeline) Beside Temporary Dock



Photo 35: Water Desalination Facility Background and Floating Dock Foreground



Photo 36: Coffee Area at MLA Camp



Photo 37: Safety Materials at MLA Coffee Area

3.2.2 Bulk Fuel Storage

Sabina constructed a permanent Bulk Fuel Tank Facility within the Quarry Area (Photo 38) where all fuel will be moved to shortly. The previously proposed area was in a downslope area but during construction Sabina decided moved the tankfarm to an upslope location where the tank would be in a better location for protection of the environment and maintenance of the facility. The tankfarm was well maintained and while it currently has ponding water is contained and will be pumped out shortly (Photo 39).

CIRNAC requested water be sampled in one (1) spot near the new tank to ensure that the water was being properly handled as there was a sheen on the water. CIRNAC was going to follow up to discuss further steps once the sample was analyzed (Photo 40).



Photo 38: MLA New Tankfarm



Photo 39: Containment at the Tankfarm



Photo 40: Water Sampling at area near MLA Tankfarm

3.2.3 Roads

Permanent roads had been constructed around the MLA, including two (2) trails to access the Explosives Magazine and Ammonium Nitrate Storage (Photo 41). The road is still present, but the facilities were removed.

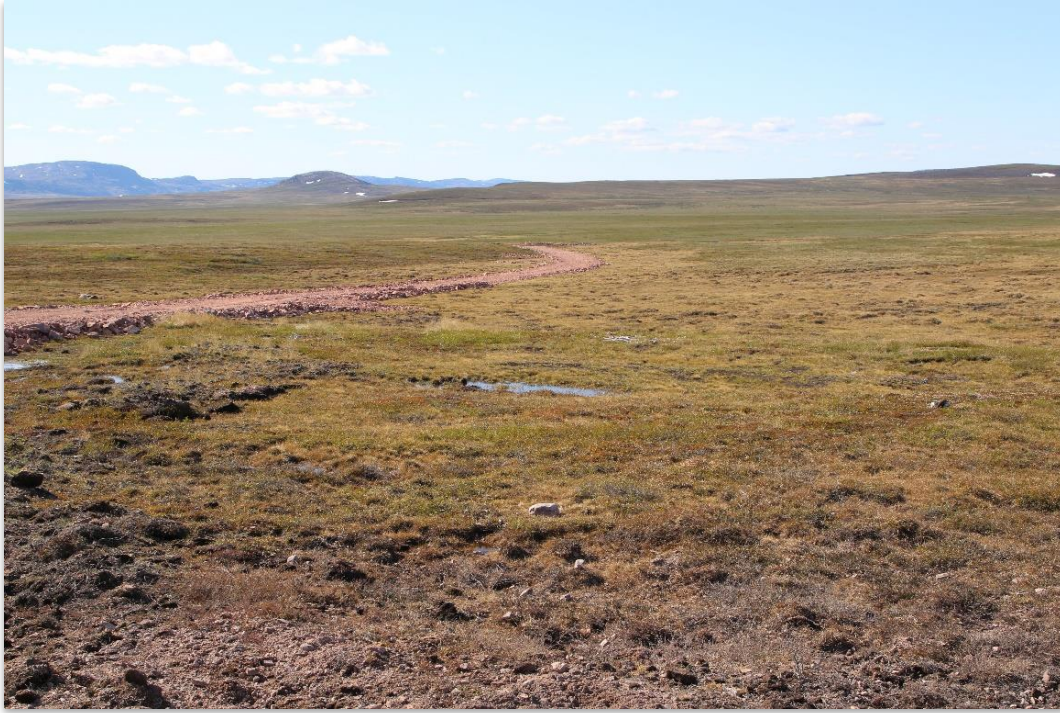


Photo 41: Road to Previous Explosive Storage Area

3.2.4 Laydown Areas

Laydown Pads, a Freight Storage Pad, and the Shoreline Pad for the receipt of sealift barges were constructed. During the site visit the Monitoring Officers noted the Laydowns are well organized and clean (Photo 42 & 43). The Spill Containment materials were located in seacans beside the Barge Landing Area in Photo 42.

NIRB and CIRNAC staff also noted the trailers for the future Goose Camp were stored at the MLA (Photo 44) and waiting to be transported on the Winter Ice Road. All oil and/or fuel containers were contained in berms (Photo 45). The area is large enough to contain materials from both the 2021 and 2022 shipping season.



Photo 42: Laydown Area and Spill Containment Seacans Beside the Port



Photo 43: Laydown Area Up Slope from to the Port



Photo 44: Laydown Area New Goose Camp to be Moved on the Ice Road



Photo 45: Fuel and/Oil Stored in Insta-berm Adjacent to Camp

3.2.6 Other

NIRB Staff viewed the wildlife log binder (Photo 46) by Sabina and other appropriate project licenses and other procedures (Photo 47) in the office area and around MLA. To date no wildlife incidences were noted.

Date	Location	Species/Stratum from Camp	Number	Sex	Age	Comments (if at all, incl. photo)	Name
April 15	Boothurst Lake	Boothurst Lake	100+	♂	17+	migrating to old Boothurst Lk	Colin Fraser
April 27	Boothurst Lake	Boothurst Lake	50+	♂	17+	migrating to Boothurst Lk	Colin Fraser
April 28	Boothurst Lake	Boothurst Lake	10	♂	17+	looking for sheep at camp	Colin Fraser
April 30	Boothurst Lake	Boothurst Lake	40	♂	17+	looking for sheep at camp	Colin Fraser
May 1	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 2	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 3	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 4	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 5	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 6	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 7	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 8	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 9	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 10	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 11	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 12	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 13	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 14	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 15	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 16	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 17	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 18	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 19	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 20	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 21	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 22	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 23	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 24	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 25	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 26	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 27	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 28	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 29	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
May 30	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
May 31	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
June 1	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
June 2	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
June 3	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
June 4	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
June 5	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
June 6	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
June 7	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
June 8	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser
June 9	Boothurst Lake	Boothurst Lake	1	♂	17+	looking for sheep at camp	Colin Fraser
June 10	Boothurst Lake	Boothurst Lake	12	♂	17+	looking for sheep at camp	Colin Fraser

Photo 46: Wildlife Log Binder



Photo 47: Board at MLA with Procedures and Documentations

NIRB staff also observed that signs (Photos 48 & 49) and many materials were translated both at Goose and the MLA.

Sabina also continues to have COVID-19 measures in place and has materials up for people to follow and/or use if there is a breakout (Photo 50).



Photo 48: Signs at Goose Camp



Photo 49: Sign at MLA

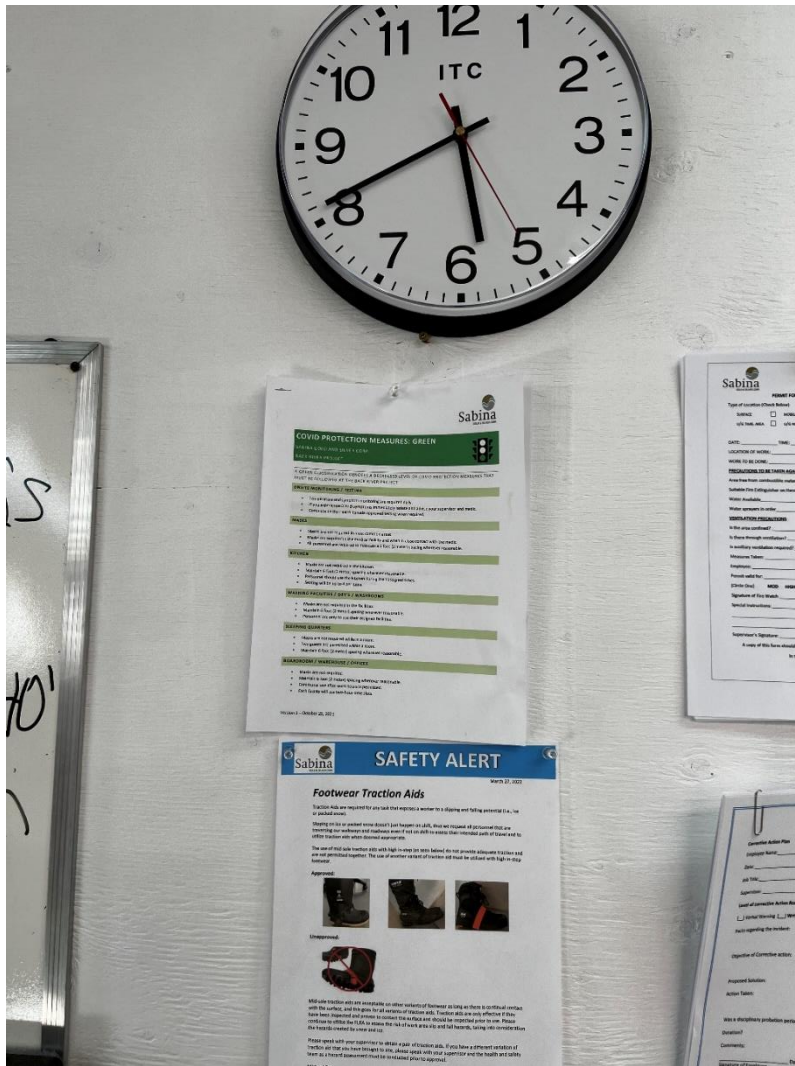


Photo 50: COVID-19 and Safety Notices MLA

3.3 George Lake Property

The George Lake Property is an advanced exploration camp located approximately 50 km northwest of Goose Property, and currently has four (4) mineral deposits identified for potential future development. During the NIRB and CIRNAC site visit Sabina had just started to reopen the camp and make it functional for further explorations in the area. During the visit, Sabina was bringing fuel barrels by plane and stored them into a berm in the George Exploration Camp (Photo 51).



Photo 51: George Lake Exploration Camp

Overall, the George Exploration Camp is well maintained with proper containment of fuels and hazardous materials (Photo 52 & 53). The storage area away from main camp needs some maintenance but will be addressed as the Camp reopens.



Photo 52: Tankfarm with Berm



Photo 53: Hazardous Materials Contained in a Berm and Clean Up to Happen Soon

4.0 Findings and Summary

During the site visit, the Monitoring Officers observed that facilities in operation at the Goose Property, Marine Laydown Area, 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 made not of some issues that were noted at the Back River Project. The following is a summary of Action Items CIRNAC submitted to Sabina (and the Nunavut Water Board) and Sabina's action plan and/or resolution of the issues.

CIRNAC Action Item	Sabina's Response
Goose Camp – Issued July 7, 2022	Filed August 2, 2022
Road leading to water intake appears to have signs of erosion	Sabina submitted photos of work completed on the access road
Temporary Waste Storage Facility – not following the Back River Project Landfill and Waste Management Plan	Sabina submitted photos of clean-up work completed on this area
Drill waste sump in trenching area shows signs of erosion down gradient and apparent impact to tundra	Sabina submitted photos of work to address the sumps clean up and new berming
Historical Waste Pile – historical waste pile sitting in ponding water and there appeared to be a visible sheen	Sabina has cleaned up the ponded water after removing the waste and a complete inventory of this pile will be completed in 2022 so that appropriate management can occur. In an update on September 20, 2022, Sabina reported that it had been backhauling the historic waste and managed the materials as per the Project's approved Waste Management Plan.
Hazardous materials outside of containment	All materials have been moved to appropriate facilities
Marine Laydown Area – Issued August 8, 2022	Filed September 12, 2022
Hazardous Materials outside of containment	Committed to putting materials ready for back haul into appropriate secondary containment and in the future construct facilities to store this type of material
Appearance of vehicle washing within 31 metres of ponding water and appearance of visible sheen on water	Committed to washing vehicles only in lined contained washbays to capture and manage wash water.
Ensuring fuel tanks have drip trays	A drip tray was installed under the fuel drum noted.
George Camp – Issued August 8, 2022	Filed August 2, 2022
Pop-up berms to be maintained now that the exploration camp becoming active and some staining and leaking was observed at the different pop-ups	Reviewing options to relocate materials to another containment facility in 2023 and have covered pop-up berms after removal of contaminated materials.

CIRNAC Action Item	Sabina's Response
	The one liner that was leaking was repaired and spilled materials placed in empty drum for backhaul for disposal at accredited waste management facility in Yellowknife or is stored awaiting next steps.
The Garage had pooling water with a visible sheen and hazardous materials stored inside	Garage floor is lined so Sabina will review options to remediate soil at either Goose or MLA landfarm or send to an accredited waste management facility in Yellowknife Inner Garage roof has been repaired and roof is not leaking and any ponding was likely caused by condensation build-up.
Potential leaking of major drill rig #1486	Due to drill shack being covered by tarp which has blown off, the tundra appeared brown. Drill rig was inspected for issues and determined not to be leaking.
Request for inspection log for petroleum storage and containment facilities, fuel tank, and connectors	Clarified water licence for the George Camp and verified checks were completed in 2022 on fuel stored and the secondary containment. Further, fuel levels were comparable to 2019 levels.

The Monitoring Officers have no additional items of note at this time and will continue to monitor the project and looks forward to receiving updated plans and materials as the Project transitions into Construction.

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Title: Technical Advisor II
Date: October 4, 2022
Signature:



Reviewed by: Kelli Gillard PAg
Title: Manager, Project Monitoring
Date: October 4, 2022
Signature:



Appendix I JUNE 2022 SITE VISIT OBSERVATIONS FOR SELECT TERMS AND CONDITIONS FOR THE BACK RIVER PROJECT

T&C No.	Topic	Site Observation
Ecosystemic		
Air Quality		
1	Air Quality Monitoring and Management Plan	-Observed the dust monitoring stations -Noted vegetation surveys were taking place
4	Incineration Management Plan	-discussed that testing was occurring
8	Weather Monitoring and Adaptive Management	-Observed the meteorological station
Terrestrial Environment		
14	Waste Management Plan	-Observed some issues related to the plan and CIRNAC requested action be taken
16	Aggregate Sources	-Observed one (1) quarry and it is being converted to a temporary landfill
Hydrology and Hydrogeology		
22	Site Water Monitoring and Management Plan	-Observed some of the spring freshet and discussed site contact water and CIRNAC requested action on 2 items.
Freshwater Aquatic Environment		
23	Setbacks	-Observed proper placement of quarry visited
24	Watercourses	-Observed all Project infrastructure viewed allowed movement of fish in fish bearing streams and rivers.
26	Fish Passage	-Discussed the rerouting of Rascal Stream East near the airstrip in 2022 and progress will be observed at the next summer site visit.
29	Water Crossings	-Discussed that water crossings would be upgraded in 2022 as the project starts construction. Changes will be observed in the next site visit.
30	Monitoring Program for Culverts	-Observed all culverts were open and free of debris
Vegetation		
33	Invasive Species	-Discussed the inspections that occur on equipment and/or materials prior to barging to site and vegetation programs at site.
Terrestrial Wildlife and Wildlife Habitat		
37	Wildlife Mitigation and Monitoring Program	-Observed Wildlife Log at the Marine Laydown Area
38	Wildlife Monitoring	-Discussed caribou collar data and information is primarily received through the NWT.
Terrestrial Wildlife and Wildlife Habitat Cont.		
40	Caribou Monitoring	-Discussed caribou collar data and information is primarily received through the NWT.
45	Wildlife Mitigation Measures	-Observed roads and areas under construction allow safe passage of caribou and other terrestrial wildlife

T&C No.	Topic	Site Observation
48	Wildlife Mitigation Measures	-Observed some empty food containers not properly rinsed and stored properly which could be a wildlife attractant. CIRNAC requested that action be taken.
Marine Environment		
62	General	-Observed records of monitoring water intake from Inlet and these appeared to be collected, tested, and posted on a regular basis.
Socio-Economic Terms and Conditions		
Economic Development Opportunities		
69	Socio-Economic Monitoring and Kitikmeot Socio-Economic Monitoring Committee	-Discussed some of the impacts due to COVID 19 and that many Kitikmeot personnel are returning to site and/or are being hired and brought to site.
Education and Training		
76	Inuktitut/Inuinnaqtun Training	-Discussed that as Nunavummiut are returning to site more of these programs would be offered. -Observed translation on signs at both Goose and the Marine Laydown Area.
Health and Well-being		
85	Cross-cultural Awareness	-Discussed how programs are being developed or offered now that COVID-19 is becoming more normal.
Other Terms and Conditions		
Accidents and Malfunctions		
89	Spills	-Observed spill kits at refueling stations at all sites and the Spill Equipment Seacans at the Marine Laydown Area
92	Marine Shipping	-Discussed that training happens prior to each year prior to refueling.
94	Fuel Transportation	-discussed and observed Sabina's practices.

NOTES: *PC = NIRB Project Certificate No. 007 (December 19, 2017)