

- (ii) *the project is of a type where the potential adverse effects are highly predictable and mitigable with known technology*

Subsection 12.4.2 (c) instructs NIRB to give greater weight to the provisions of 12.4.2 (a) in determining whether a review is required or not.

Procedural History and Background

On January 21, 2008 the Nunavut Impact Review Board (NIRB or Board) received the Hackett River Mine project proposal from Sabina Silver Corporation (Sabina). On February 5, 2008 the NIRB received correspondence from the Nunavut Water Board acknowledging Sabina's Type 'A' water license application, as well as an Application for a Land Use Permit from Indian and Northern Affairs Canada, and at this point was able to begin the Part 4 Screening process. NIRB has assigned this project proposal file number **08MN006**. A complete summary of the Project Proposal may be reviewed in **Appendix A** to this decision.

The proposed project is a mine development located in the West Kitikmeot Region. The nearest community is Bathurst Inlet, located approximately 105 km to the north of the mine site.

This application was distributed to communities and organizations of the Kitikmeot region, as well as interested Federal and Territorial Agencies and organizations. NIRB requested that interested Parties review the application and provide NIRB with comments by February 28, 2008 regarding:

- Whether the project proposal is likely to arouse significant public concern; and if so, why;
- Whether the project proposal is likely to cause significant adverse eco-systemic and socio-economic effects; and if so, why;
- Whether the project is of a type where the potential adverse effects are highly predictable and mitigable with known technology, (please provide any recommended mitigation measures); and
- Any matter of importance to the Party related to the project proposal.

By February 28, 2008, NIRB received comments from the following interested Parties (see **Appendix B - Comments and Concerns**):

- Government of Nunavut – Department of Environment
- Kitikmeot Inuit Association
- Canadian Arctic Resources Committee
- Indian and Northern Affairs Canada
- Environment Canada
- Transport Canada
- Department of Fisheries and Oceans Canada
- Natural Resources Canada

On March 17, 2008 the NIRB applied for an extension for this Screening to the Minister of Indian and Northern Affairs in accordance with 12.4.5(b) of the NLCA.

NIRB Assessment and Decision

In determining whether or not a public review is necessary, NIRB considered a number of factors, in addition to soliciting and reviewing comments received from interested parties. Upon completion of the internal technical review, NIRB determined that the size and nature of the Hackett River project indicated that, consistent with the criteria identified in 12.4.2(a) of the NLCA, i) the project has the potential to

cause significant adverse socio-economic and ecosystemic effects, and ii) there is significant public concern regarding this project. Details are expressed below.

1. The project may have significant adverse effects on the ecosystem - 12.4.2(a) (i):

The NIRB and other commenting parties have identified a number of significant adverse effects that could be associated with this project. Selections of those comments raising major issues are shown below:

Due to the scale of potential impacts to fish and fish habitat identified in this development proposal, it is DFO's opinion that there is potential for it to cause significant adverse impacts to fish and fish habitat unless appropriate mitigation is identified and implemented. (Fisheries and Oceans Canada)

The Hackett River project will include a number of major mine components. The GN believes these components could have substantial environmental and socio-economic impacts, both locally and regionally, and should be given thorough consideration by NIRB, the public, and government at the earliest opportunity. (Government of Nunavut)

The KIA believes that due to the scale of the proposed project, there is potential for significant adverse eco-systemic and socio-economic effects and the project will cause significant public concern. (Kitikmeot Inuit Association)

The components for the mine and the proposed link to the Bathurst Inlet Port and Road (BIPAR) currently under review by the NIRB have potential impacts on the calving grounds of the Bathurst Caribou herd and subsequently on the people dependent upon access to the herd and other trans boundary users of the caribou. Alternative routing for road access to a port for the mine needs further consideration if the social, harvesting and economic interests of the people in the area are to be satisfied. (Canadian Arctic Resources Committee)

2. The project will cause significant public concern – 12.4.2(a) (iii):

All eight Parties which submitted comments to NIRB on this project recommended that it go to a Review. Although we recognize that a decision regarding whether the Review would be Part 5 or Part 6, is yours alone, it may be of interest that two Parties, the Government of Nunavut (GN) and the Canadian Arctic Resources Committee (CARC), recommended that the project be sent to a Part 5 Review. The GN and CARC comments on this matter are below:

The GN recommends that NIRB issue a decision consistent with the NLCA 12.4.4 (b). Furthermore, as has been the case with other mining projects reviewed by NIRB in recent years, the GN believes that most of the environmental and socio-economic impacts will be felt within the Nunavut Settlement Area and therefore a Part 5 review is more appropriate and is recommended. (Government of Nunavut)

We recommend that the NIRB deal with this project as with BIPAR under the NLCA 12.4.4 (b) and provide a Part 5 review for this proposal. (Canadian Arctic Resources Committee)

3. Sabina's utilization of BIPR facilities as a major component of the Hackett River project presents uncertainty and complexity where project alternatives are concerned, especially since the BIPR project is before the Board at the present time. The Hackett River and BIPR projects are separate project proposals,

and Sabina's reliance upon BIPR raises questions for the Board regarding both projects. Other Parties have also acknowledged this issue, including Environment Canada and INAC, as indicated below:

This project is further complicated as the proponent has indicated the need for potential linkages to the Bathurst Inlet Port and Road project (BIPR) project currently undergoing a Part 5 (NIRB) Review. (Environment Canada)

[Of concern to INAC is] The potential for ongoing and incremental land use activities associated with metal mining and transportation, in combination with all other activities in the Hackett River project area, to result in cumulative impacts, particularly the cumulative effects on wildlife and other important eco-systemic components in and adjacent to the mining sites and along all transportation and port facilities (including the airstrip and all roads), which may include facilities under the proposed Bathurst Inlet Port and Road (BIPR) project, to be used by this proposed project. (Indian and Northern Affairs Canada)

After examining both the Project Proposal and comments received, the NIRB has determined that, pursuant to Section 12.4.4 (b), the proposal requires a public review under Part 5 or 6 of the NLCA.

Issues of Concern to NIRB

Following the Board's internal technical review of the project and consideration of the public comments, there are a number of issues which require further attention and clarification by the Proponent, which the NIRB thinks is best done through a Review process in order that the concerns of those directly impacted are better known and mitigated prior to the project proceeding. These issues, which are caught by different portions of 12.4.2, include:

- The Tailings Management Facility
- The dewatering of Camp Lake
- Works in and around water such as the construction of bridges, dams and culverts
- Impacts to caribou, especially calving grounds
- Potential impacts to surface water quality from deposition of tailings and mine effluents, and from contact water runoff from landfill sites
- Potential impacts of seepage from Camp Lake and other mining and tailing confinement sites
- Potential impacts on water quality from the use of explosives
- The potential for acid rock drainage and metal leaching
- The effects of construction, closure and post-closure activities relating to site runoff and road crossings on surface water quality
- The anticipated impacts of construction, operation, and closure activities on specific vegetation associations and geomorphological structures
- The anticipated changes in thermal status of Camp Lake as a result of the addition of tailings
- The potential for ongoing and incremental land use activities associated with metal mining and transportation to result in cumulative impacts
- Potential impacts on marine water quality
- Potential impacts to air quality
- Potential impact to migratory birds resulting from habitat loss associated with project activities
- Potential impacts to species at risk
- Disturbance to waterfowl and seabirds nesting in coastal areas along proposed shipping route
- Shoreline erosion as a result of wake effects along proposed shipping route
- Impacts resulting from accidents or malfunctions which may occur during shipping
- Potential cumulative impacts of project

- The close relationship that this project has with the Bathurst Inlet Port and Road project currently with the Board under a Part 5 Review (NIRB File No. 03UN114)

RECOMMENDATION TO THE MINISTER

Therefore, after completing a review of all the information received, it is the NIRB's recommendation that the project proposal requires review under Part 5 or 6 in accordance with 12.4.4 (b) of the NLCA.

The NIRB looks forward to your decision and once we have it, will act quickly to address the next steps in our review of the Hackett River Project. The NIRB will follow any advice you may have respecting the comments in this letter.

Yours truly,



Lucassie Arragutainaq
Acting Chairperson

cc: Stephanie Autut, Executive Director - NIRB
Dionne Filiatrault, Executive Director - NWB
Joe Otokiak, President - KIA

APPENDIX A

Project Summary

Executive Summary

Sabina Silver Corporation (Sabina) has prepared a Project Proposal and permit applications for the development of the Hackett River Project (the “Project”). The Project is located in the West Kitikmeot Region of Nunavut about 75 km south of the southern portion of Bathurst Inlet. The mineral potential of the Project has been explored since the 1960’s and recent work by Sabina has found three economical deposits of zinc, silver, copper, lead and gold.

Project Description

The proposed Project includes the development of two open pits (Main Zone deposit and East Cleaver deposit) and one underground mine (Boot Lake deposit). Ore would be mined and trucked to a conventional grinding and flotation plant on site to produce zinc, copper, and lead concentrates. Waste material from the mine would be placed on the land in certain areas and tailings would be deposited under water in a nearby impoundment. The mine and mineral processing plant would operate for about 14 years and employ a total of 225 to 350 people. Only about half of the employees would be on site at any one time because of the fly in/fly out rotational schedule.

The concentrate produced at the Project would be trucked to a port located at Bathurst Inlet using the proposed Bathurst Inlet Port and Road (BIPR). A 23 km all-weather access road would be constructed to connect the mine with the proposed BIPR road, and approximately 80 km of the northern portion of the BIPR road would be used to haul concentrate to the port and consumables back to the mine site. From the port, the concentrate would be shipped to overseas markets by using the shipping route to the east.

The Project would also include a camp, mineral processing plant, storage areas, maintenance and mechanical repair warehouses, fuel tanks, tailings impoundment, waste rock piles, airstrip, and local site roads. Sabina would also construct a concentrate storage and loading facility at the port site. Most of these facilities would be removed at the end of the mine life. Roads, the airstrip, the tailings impoundment and waste rock piles cannot be removed and would be returned to the land use agreed to at that time. This is determined with regulators and relevant communities.

Sabina is developing a mine plan that uses scientific information, public input and traditional knowledge. Location of the access road, the tailings impoundment, waste rock piles, mineral processing plant and camp will be finalized based on this input. Sabina is committed to construct, operate, close and reclaim the mine site in such a way that meets regulatory requirements, minimizes environmental and social impacts and provides opportunities for economic and social development in Nunavut.

Executive Summary

A summary of the proposed Project is provided in the table below.

	Open Pit Mining	Underground Mining
Location	Main Zone (East and West) and East Cleaver Zone.	Boot Lake Zone and Main Zone and East Cleaver Zone below the pit.
Mining Method	Conventional truck and shovel.	Sub-level open stoping with backfill and/or sub-level caving.
Mine Life		13.6 years
Production Rate (Ore)		10,000 t/d
Production Rate (Waste)		33,400 t/d LOM average
Millfeed Source	60%	40%
Mill Processing Rate		10,000 t/d
Mill Processing Method		Standard grinding and flotation circuits
Products		Copper, Lead, Zinc concentrate
Transportation and Logistics	A 105 km all-season road construction to Bathurst Inlet Port (23 km mine site to BIPR route connection and 82 km to Bathurst Inlet Port along BIPR road). Concentrate haul will be operated by Sabina. Backhaul supplies and fuel to the mine site.	
Infrastructure and Site	Port Facilities at Bathurst Inlet – Loading/unloading facilities, fuel storage, consumables storage and concentrate storage facilities. Mine Site – Airstrip, power generation, mill and maintenance shop, camp, tailings management facility, waste rock piles, limited fuel, concentrate and consumables storage.	
Markets and Smelter	Mainly European and North American Smelters. Potential East Asian Market for Copper and Lead Concentrate.	

Public Consultation

Public participation is one of the five guiding principles that the Nunavut Impact Review Board (NIRB) uses to fulfill its mandate. Public participation is therefore fundamental to NIRB's environmental assessment process and to the project life cycle.

Sabina has initiated a phased consultation and public participation program. The initial phase, which is presented in this report, focuses on the period prior to the submission of the Project Proposal. Subsequent phases to fulfill consultation and participation needs across the project life (environmental assessment and review; construction; operations, closure and decommissioning) will be developed as the project proceeds.

The key objective of Sabina's consultation program is to ensure that all potentially-affected and interested groups are offered the opportunity to learn about, question, and comment on the development plans of the proposed Project.

Traditional Knowledge

The Hackett River Project lies in the traditional territory of the Copper Inuit of the West Kitikmeot. There are two major regional traditional knowledge projects in existence that cover this area, the Naonaiyaotit Traditional Knowledge Project (NTKP) and the Tuktu Nogak Project (TNP). These projects belong to the Inuit, as represented by the KIA (Kitikmeot Inuit Association).

There are two phases planned for the assessment of traditional knowledge for the Hackett River Project. The first phase is a compilation report of the existing traditional knowledge, from the NTKP, Tuktuk Nogak and other sources. The second phase will be the application and integration of this knowledge with that collected by biologists and scientists within the environmental assessment.

At the time of writing this report, Phase 1 of the planned program is being conducted without utilizing the NTKP and TNP databases. Sabina has requested permission to the KIA to access the databases several times in 2007, but has not been granted access. Hence, Phase 1 of the program will likely consist of obtaining information from personnel interviews, and utilizing any other traditional knowledge that is publically available.

Description of the Existing Environment

Comprehensive baseline environmental studies were conducted in the Project area in 2007, and are planned to continue in 2008. The following components were monitored as part of the 2007 environmental baseline studies:

- Meteorology and Permafrost;
- Hydrology;
- Freshwater Water Quality, Sediment Quality and Aquatic Biology;
- Freshwater Fish and Fish Habitat;
- Marine Water Quality, Sediment Quality and Aquatic Biology;
- Marine Fish Habitat;
- Wildlife, including Caribou, Muskox, Birds, Waterfowl, Raptors, Dens, Small Mammals;
- Mapping, Vegetation and Soils;
- Archaeology;
- Minesite Drainage Chemistry;
- Public Consultation;
- Traditional Knowledge;
- Socio-Economic; and
- Land Use.

Results from the 2007 baseline studies are currently being written as a series of baseline reports.

In this report, the existing physical, biological, and socio-economic environments relevant to the proposed Project are described. Site-specific information along with literature and available historical sources were used to describe the existing environment. Species of concern that could interact with the project are also identified. The report also includes a description of potential Valuable Ecosystem Components (VECs) and Valuable Socio-Economic Components (VSECs) that could be used for the preparation of a draft Environmental Impact Statement (draft EIS).

Identification of Potential Environmental Effects and Proposed Mitigation

Potential effects on the physical, biological, and socio-economic environments were identified based on the proposed Project development. Potential effects and proposed mitigation were described for the following environmental components:

- Physical Environment: Air Quality, Noise, Ground Stability and Permafrost, Groundwater, Hydrology and Limnology, Freshwater Water Quality, Freshwater Sediment Quality, Climate Conditions, Unique or Fragile Landscapes, Soil Quality;
- Biological Environment: Vegetation, Terrestrial Wildlife, Migratory Songbirds and Shorebirds, Raptors, Waterfowl, Freshwater Aquatic Organisms, Freshwater Fish and Habitat;
- Marine Environment: Air Quality, Noise, Marine Water Quality, Marine Sediment Quality, Marine Aquatic Organisms, Marine Fish and Habitat, Marine Wildlife, Marine Birds and Waterfowl;
- Socio-Economic Environment: Archaeology, Land and Resource Use, Socio-Economic (including Employment and Training).

Proposed mitigation measures to either avoid or minimize the potential effects are described for each environmental component.

The potential for transboundary effects are also described in this report. There are several animal species that potentially migrate through the Project area as well as areas outside of Nunavut, including grizzly bears, migratory birds, and caribou. There are also marine mammals that can occur along the shipping route and migrate to areas outside of the Nunavut portions of the Canadian high Arctic.

Potential cumulative effects are also described in this report. As requested in NIRB's Part 2 Screening Form, a discussion of how the potential effects of this Project interact with the potential effects of relevant past, present, and reasonably foreseeable projects in a regional context is included.

It should be noted that all potential effects discussed in this report, including potential transboundary effects and potential cumulative effects, are conservative in that only potential effects are identified, not residual effects. A detailed environmental assessment that includes the nature and significance of residual effects (those effects remaining after mitigation measures are considered) will be conducted as part of a draft EIS.

Environmental Plans

As part of protecting the environment and minimizing environmental effects from the Project to the extent possible, many environmental plans will be developed both before and during the operation of the mine. Many plans will be required before various permits and authorizations will be granted, while others will help Sabina to educate and train employees, and provide feedback on how its operations are influencing the physical, biological, and socio-economic

environments. At this early phase of the Project, only a few environmental plans are discussed in this report, including:

- An overall Environmental Management Plan
- An Environmental Awareness Program
- An overall Environmental Monitoring Program, of which there would be many specific monitoring programs for various environmental components; and
- A general Closure and Reclamation Plan.

These plans, among others, will be more fully developed for inclusion in a draft EIS in the future.

APPENDIX B

Comments and Concerns



Fisheries and Oceans
Canada

Eastern Arctic Area
P.O. Box 358
Iqaluit, NU
X0A 0H0

Pêches et Océans
Canada

Secteur de l'Arctique de l'est
Boîte postale 358
Iqaluit, NU
X0A 0H0

Your file Votre référence

08MN006

Our file Notre référence

NU-08-0001

February 28, 2008

Ms. Leslie Payette
Manager of Environmental Administration
Nunavut Impact Review Board
P.O. Box 2379
Cambridge Bay, Nunavut
X0E 0C0

lpayette@nirb.ca

Dear Ms. Payette:

Subject: Sabina Silver Corporation's Hackett River Mine Project Proposal

Fisheries and Oceans Canada (DFO) acknowledges receipt of the Nunavut Impact Review Board's (NIRB) letter of February 7, 2008.

Currently, DFO has not received an authorization application from Sabina Silver Corporation (Sabina) for any works and undertaking affecting fish habitat. DFO, however, has reviewed Sabina's Hackett River Mine Project Proposal Report and notes that the proponent has identified that the following works and undertakings have the potential to result in the harmful alteration, disruption or destruction of fish habitat:

- the development of the Tailings Management Facility;
- the dewatering of Camp Lake; and
- works in and around water such as the construction of dams, bridges and culverts.

In addition, Sabina has also identified that the tailings containment and management facility, dependent on design, may require an amendment to Schedule 2 of the *Metal Mining Effluent Regulations*.

Based on the project proposal, Sabina has identified that they will be seeking DFO's authorization for certain components of this development. DFO will therefore likely have jurisdictional responsibility in relation to the proposed development.

Due to the scale of potential impacts to fish and fish habitat identified in this development proposal, it is DFO's opinion that there is potential for it to cause significant adverse impacts to fish and fish habitat unless appropriate mitigation is identified and implemented. Therefore, DFO recommends that the Hackett River Mine Project be reviewed under Article 12, Part 5 or Part 6, of the Nunavut Land Claims Agreement (NLCA). DFO will also be able participate as an intervener and offer expertise to NIRB in areas related to fish and fish habitat in their review of the development proposal.

Should NIRB determine that a review under Article 12 is required, DFO recommends that scoping of the project and environmental assessment be conducted in advance of the referral to the Ministers with jurisdictional responsibility. The information garnered through this scoping exercise will assist in informing and coordinating the Ministerial decisions that must be made under both the NLCA Article 12 process and the *Canadian Environmental Assessment Act* on the track of review that will be undertaken for the environmental assessments.

DFO looks forward to working with NIRB on environmental assessment of the Hackett River Mine Project. Should you have questions or comments, please contact Julian Lim at (867) 979-8016 or by email at julian.lim@dfo-mpo.gc.ca.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'B. Ross', with a stylized flourish at the end.

Beverley Ross
Manager, Environmental Assessment for Major Projects
Fisheries and Oceans Canada – Central and Arctic Region

copy: Keith Pelley - Fisheries and Oceans Canada
Julian Lim – Fisheries and Oceans Canada
Tania Gordanier - Fisheries and Oceans Canada



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Kavamaliqiyikkut

Ministère de l'Exécutif et des Affaires Intergouvernementales

Department of Executive & Intergovernmental Affairs

February 20, 2008

Leslie Payette
Manager, Environmental Administration
Nunavut Impact Review Board

via Email to: lpayette@nirb.nunavut.ca

RE: NIRB FILE # 08MN006 – HACKETT RIVER MINE PROJECT

Dear Ms. Payette:

As requested by NIRB on February 7, 2008, the Government of Nunavut (GN) has considered the project proposal for a base and precious metal mine at Hackett River, submitted for NIRB screening by Sabina Silver Corp., and has the following comments and recommendations.

The Hackett River project will include a number of major mine components. The GN believes these components could have substantial environmental and socio-economic impacts, both locally and regionally, and should be given thorough consideration by NIRB, the public, and government at the earliest opportunity.

The GN recommends that NIRB issue a decision consistent with the NLCA 12.4.4 (b). Furthermore, as has been the case with other mining projects reviewed by NIRB in recent years, the GN believes that most of the environmental and socio-economic impacts will be felt within the Nunavut Settlement Area and therefore a Part 5 review is more appropriate and is recommended.

We thank NIRB for giving us the opportunity to review and provide comments on this screening and we look forward to receiving further information on this project from NIRB. Please contact our Avatilirniq Coordinator, Josh Gladstone at (867) 975-6026 or jgladstone@gov.nu.ca if you have any questions or comments.

Qujannamiik,

Original signed by

Paul Suvega
Assistant Deputy Minister
Executive and Intergovernmental Affairs

c.c. David Omilgoitok, Deputy Minister, Executive and Intergovernmental Affairs
Simon Awa, Deputy Minister, Environment
Rosemary Keenainak, Deputy Minister, Economic Development



Kitikmeot Inuit Association

Kitikmeot Inuit Katuyikatigit

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February 25, 2008

Leslie Payette
Manager of Environmental Administration
Nunavut Impact Review Board
Cambridge Bay, NU

By e-mail: lpayette@nirb.ca

Dear Ms. Payette

**Re: Sabina Silver Corporation –Hackett River Project Proposal- NIRB Part 4
Screening**

The Kitikmeot Inuit Association (KIA) would like to thank the Nunavut Impact Review Board for the opportunity to provide comment on the Hackett River Project Proposal.

Based on preliminary review of the Hackett River Project Proposal Report, the KIA believes that due to the scale of the proposed project, there is potential for significant adverse eco-systemic and socio-economic effects and the project will cause significant public concern. The KIA believes a review under 12.4.4 b of the *Nunavut Land Claims Agreement* is required for the proposed project to proceed.

Please contact us if you have any questions.

Sincerely,

Kevin Tweedle
Lands and Water Technician
Kitikmeot Inuit Association
Mail: P.O. Box 360,
Kugluktuk, Nunavut, X0B 0E0
Phone: (867) 982-3310
Fax: (867) 982-3311



Canadian Arctic Resources Committee

A voice for citizens on the Canadian North for more than 30 years.

February 28, 2008

Ms. Leslie Payette
Manager Environmental Administration
Nunavut Impact Review Board
P.O. Box 1360, Cambridge Bay, Nunavut, X0B 0C0

Via e-mail to lpayette@nirb.nunavut.ca

Dear Ms. Payette,

RE: NIRB FILE # 08MN006 – HACKETT RIVER MINE PROJECT

With reference to NIRB request of February 7, 2008 the Canadian Arctic Resources Committee (CARC) has reviewed the information provided to date as submitted by Sabina Silver Corp for a mine development at Hackett River.

The components for the mine and the proposed link to the Bathurst Inlet Port and Road (BIPAR) currently under review by the NIRB have potential impacts on the calving grounds of the Bathurst Caribou herd and subsequently on the people dependent upon access to the herd and other trans boundary users of the caribou. Alternative routing for road access to a port for the mine needs further consideration if the social, harvesting and economic interests of the people in the area are to be satisfied.

We recommend that the NIRB deal with this project as with BIPAR under the NLCA 12.4.4 (b) and provide a Part 5 review for this proposal.

In closing thank you for the opportunity to respond to this screening at this point in the process.

Yours truly,

David Gladders, Executive Director

Ottawa Office: 488 Gladstone Avenue
(613)-759-4284

www.carc.org

Yellowknife Office: 5003 48 Street
(867)-873-4715

CARC Mailing Address: Box 371 Station A, Ottawa, Ontario, Canada, K1N 8V4



Indian and Northern
Affairs Canada

Affaires indiennes
et du Nord Canada

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

Your file - Votre référence
08MN006
Our file - Notre référence
IQA-N 5510-5-11 UNC

February 28, 2008

Leslie Payette
Manager of Environment
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, NU, X0B 0C0

Via electronic mail to: lpayette@nirb.nunavut.ca

Re: Part 4 Screening for Sabina Silver Corporation's Hackett River Mine Project Proposal.

Dear Ms. Payette,

Indian and Northern Affairs Canada (INAC) would like to thank Nunavut Impact Review Board (NIRB) for their letter of February 7, 2008, providing INAC with the opportunity to comment on the Nunavut Land Claims Agreement (NLCA) Article 12 Part 4 screening of the proposed Sabina Silver Corporation Hackett River Mine Project. In respect of this project, INAC's jurisdictional responsibilities include Ministerial responsibilities for approval of the water license and administration of Crown land.

Accordingly, INAC has assessed the proposal and supporting applications to determine whether the proposed project is likely to cause significant adverse eco-systemic and socioeconomic effects on Northerners, or arouse significant public concern (as per NLCA Article 12 Part 4).

Given the nature of the proposed Hackett River Project, a base metal mining project with an estimated production capacity of 10,000t/d for 14 years, along with related mining and transportation infrastructure, INAC believes that the proposed project has the potential to cause significant adverse eco-systemic and socioeconomic effects on Northerners and thus may arouse significant public concern. INAC's examination of the project proposal has found that the following areas merit further and more detailed assessment:

- the potential impacts of dewatering Camp Lake;
- the potential impacts to surface water quality from the deposition of tailings and mine effluents into the Camp, Boot and Cleaver basins (including lakes and streams), Hackett and Mara rivers, and other receiving environments;
- the potential impacts of seepage from Camp Lake and other mining and tailing confinement sites, during operations and after closure, as a result of shallow seepage (through or under the proposed dams), and deep groundwater movement (through taliks), on the Camp, Boot and Cleaver basins (including lakes and streams) and the Hackett and Mara rivers, and other receiving environments;
- the potential for impacts on water quality from the use of explosives;
- the potential for acid rock drainage (ARD) and metal leaching (ML), including the potential for ARD and ML to occur on the exposed open pits surfaces, temporary and permanent ore stockpile, and road construction materials;
- the potential impacts on surface water quality from contact water runoff from landfill sites;
- the effect of construction, operation, closure and post-closure activities relating to site runoff and road crossings on surface water quality;
- the anticipated impacts of construction, operation, and closure activities on specific vegetation associations and geomorphological structures (e.g., esker complex);
- the anticipated changes in the thermal status of Camp Lake (and other adjacent lakes and streams in the Camp, Boot and Cleaver basins) as a result of the addition of tailings, and the subsequent impact on frozen ground, taliks, and planned containment structures; and
- the potential for ongoing and incremental land use activities associated with metal mining and transportation, in combination with all other activities in the Hackett River project area, to result in cumulative impacts, particularly the cumulative effects on wildlife and other important eco-systemic components in and adjacent to the mining sites and along all transportation (including the airstrip and all roads) and port facilities, which may include facilities under the proposed Bathurst Inlet Port and Road (BIPR) project, to be used by this proposed project .

In addition to the above areas of concern, INAC believes that detailed assessments of the impact of the proposed project on the following eco-systemic components are also important:

- eskers and other unique or fragile landscapes;
- terrestrial species and their habitats; and
- traditional land use.

Accordingly, INAC is of the view that the proposal warrants a Part 5 or Part 6 review under NLCA, Section 12.4.4 (b). Should the NIRB recommend further

review of the Hackett River project is required, the Responsible Ministers will be looking to the Board for advice on the proposed scope of any subsequent review given its potential linkages to the proposed Bathurst Inlet Port and Road project. This information will assist the Ministers in their respective decision-making roles.

INAC looks forward working with NIRB and the proponent throughout the environmental assessment of this project. Should you have any questions, please do not hesitate to contact Ataur Rahman, Environmental Scientist, at (867) 975-4554 by phone or at rahmana@inac-ainc.gc.ca by email.

Sincerely,

Original signed by

Robyn Abernethy-Gillis
Manager of the Environment Division



February 28, 2008

NRCan File #NT-046

Leslie Payette
Manager, Environmental Administration
Nunavut Impact Review Board
Cambridge Bay, Nunavut

By email: lpayette@nirb.ca

Subject: NRCan's Comments on the Part 4 Screening of Sabina Silver Corporation's proposed Hackett River Mine Project

Dear Ms. Payette,

Thank you for your letter of February 7, 2008, requesting comments from parties on the Nunavut Impact Review Board's (NIRB) Part 4 Screening under the Nunavut Land Claims Agreement (NLCA) of Sabina Silver Corporation's proposed Hackett River Mine Project. Natural Resources Canada (NRCan) has reviewed aspects of the submitted documents and has determined that it is likely a regulatory authority for this proposed project through the issuance of a licence(s) for the manufacture and/or storage of explosives (par. 7(1)(a) of the *Explosives Act*) to allow the proposal to be carried out.

Previous mining projects in Nunavut have been subjected to Part 5 Reviews under the NLCA. Given the nature of this proposal, a base metal mine with an estimated production capacity of 10,000t/d along with related infrastructure and a proposed tailings impoundment area, NRCan believes that the proposal warrants a review under Part 5 or Part 6 (12.4.4 (b)) of the NLCA.

If NIRB determines that a review under Article 12 of the NLCA is required, NRCan recommends that scoping of this project and of the assessment be conducted prior to referral to Ministers with jurisdictional responsibility. This will assist in informing the subsequent Ministerial decisions on environmental assessment matters.



Natural Resources
Canada

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As has been done in previous projects, we look forward to working with the NIRB and other federal departments in fulfilling our environmental assessment obligations in an effective and efficient manner.

If you have any questions concerning our comments, or if I may be of further assistance, please call me at (613) 995-3153.

Sincerely,

Andrew McAllister

Senior Environmental Assessment Officer
Science and Policy Integration
Natural Resources Canada

cc: Rob Johnstone, Minerals and Metals Sector, NRCan



Transport Canada Transports Canada

Environmental Affairs - Programs
P.O. Box 8550
3rd Floor, 344 Edmonton Street
Winnipeg, Manitoba
R3C 0P6

February 28, 2008

Your File: 08MN006
Our File: 7184-70-1-HACR

Ms. Leslie Payette
Manager, Environmental Administration
Nunavut Impact Review Board
P.O. Box 2379
Cambridge Bay, NU X0E 0C0

By email: lpayette@nirb.ca

Dear Ms. Payette:

Subject: Hackett River Mine Project NIRB Part 4 Notice of Screening

Transport Canada (TC) Environmental Affairs would like to thank the Nunavut Impact Review Board (NIRB) for the opportunity to participate in the Part 4 Screening process for the Hackett River Mine Project Proposal located within the Kitikmeot Region of Nunavut.

The Hackett River Project description and supporting documents have been reviewed at cursory level taking into consideration our departments mandate. Several works identified in the project description may pose interference to safe navigation and possibly require Formal Approval under the *Navigable Waters Protection Act*. Transport Canada may be able to provide expertise on other project components and activities associated with this proposal as they relate to our overall responsibilities.

The Hackett River Project Proposal is a large-scale mine development that includes works and physical activities that could have the potential to cause adverse environmental impacts. We are of the opinion that the scale and nature of the Hackett River Mine Project Proposal is similar to that of other base metal and precious mining project developments that have undergone NIRB reviews. TC is of the view that this project warrants a review under Article 12.4.4 (b), Part 5 or Part 6, of the Nunavut Land Claims Agreement. That said, TC recommends that scoping of the project and environmental assessment occur prior to the referral to the Ministers with Jurisdictional Responsibility. Implementing, this scoping exercise would aid in acquiring essential information beneficial to informing all interested parties prior to Ministerial decisions that must be taken for this environmental assessment.

Transport Canada looks forward to working with the NIRB on the environmental review of the Hackett River Mine Project. If you have any questions or concerns with respect to these comments, I can be contacted via email at morrejp@tc.gc.ca or by telephone at 204-983-5857.

Sincerely,

Jim P. Morrell
Environmental Officer

Cc. Doug Soloway, TC – Superintendent of Environment Assessment Program



Environment Canada
Environnement Canada

Environment Canada
Prairie and Northern Region
#301-5204 50th Ave.
Yellowknife, NT X1A 1E2

February 28th, 2008

Leslie Payette
Manager, Environmental Administration
Nunavut Impact Review Board
P.O. Box 1360
Cambridge Bay, NU X0B 0C0

Our file: 4703 001 002
Your File: NIRB 06MN082

Via email: lpayette@nirb.ca

Re: Notice of Part 4 Screening for Sabina Silver Corporation's Hackett River Mine Project Proposal

Thank you for the opportunity to provide input into the Nunavut Impact Review Board's (NIRB) Part 4 screening decision for the Sabina Silver Corporation's Hackett River Mine Project. The following specialist advice has been provided pursuant to Environment Canada's mandated responsibilities for the enforcement of the *Canadian Environmental Protection Act*, Section 36(3) of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*.

After reviewing the project proposal and supporting documents, Environment Canada (EC) is of the opinion that the proposed project may cause significant adverse effects on the ecosystem and wildlife habitat. This advice is based on the scale of the proposed project and the anticipated environmental impacts that may occur if this project proceeds. As outlined in the project proposal, the Hackett River Mine Project includes:

- the construction, operation and decommissioning of a polymetallic mine that includes two open pits and one underground mine;
- the construction, operation and decommissioning of a 3 km all-season spur road connecting the mine site to the proposed BIPR road;
- construction of a mine site airstrip, 2000 m in length;
- construction, operation and decommissioning of a permanent camp for up to 300 people, including an estimated 5ML of fuel storage in the fuel tank farm;
- dewatering of Camp Lake (Main Zone deposit);
- deposition of tailings underwater within a fish-bearing lake; and
- construction, operation and decommissioning of a dam for tailings impoundment.

This project is further complicated as the proponent has indicated the need for potential linkages to the Bathurst Inlet Port and Road project (BIPR) project currently undergoing a Part 5 (NIRB) Review. Linkages include:

- Utilization of the northern portion of the road infrastructure; and
- Utilization of proposed port and facilities at Bathurst Inlet.

EC is of the opinion that there is potential for this project to cause significant adverse environmental impacts. Potentially impacted ecosystem components include, but may not be limited to:

- Surface freshwater as result of the deposit of tailings into a lake, nutrient input from blasting and sewage treatment, suspended sediment as a result of construction activities, and accidents and malfunctions;
- Marine water quality as a result of the potential for accidents and malfunctions along the proposed shipping route;
- Air quality as a result of the operation of the incinerator, mine site activities and the hauling of ore concentrate along the road;
- Migratory birds as a result of habitat loss and disturbances at the proposed site facilities, roads, airstrip, dock facilities and shipping routes; and
- Species at risk as a result of habitat loss and disturbance at proposed site facilities, roads, airstrip, dock facilities and shipping routes.

EC would like to stress the need for the environmental assessment to consider the potential environmental impacts resulting from the proposed shipping route. The proposed shipping route will pass Migratory Bird Sanctuaries, National Wildlife Areas and key terrestrial habitat sites and marine terrestrial sites. Potentially significant adverse environmental impacts resulting from the proposed shipping activities include, but may not be limited to:

- Disturbance to waterfowl and seabirds nesting in coast areas along the proposed routes as a result of wake effects;
- Shoreline erosion as a result of wake effects and related water quality and habitat disturbance impacts;
- Changes to ice regimes as a result of ice breaker supported shipping, which may impact migratory routes of species; and
- Impacts resulting from accidents or malfunctions which may occur during shipping, including spills of ore concentrate and fuel.

Due to the potentially significant adverse impacts to these ecosystem components resulting from the project, including the marine shipping components, it is EC's opinion that a review under Section 12.4.4(b) of the NLCA would be appropriate.

In addition, EC recommends that should NIRB decide that a Part 5 or 6 review is deemed necessary that the scoping process take place prior to referral to the Ministers with jurisdictional responsibility. Providing scoping information prior to the Ministerial decisions made under the NLCA Article 12 and the *Canadian Environmental Assessment Act* will not only provide further information to the Ministers but would aid in coordinating the decisions needed for the environmental review process.

Should you have any further questions please contact me at (867) 669-4772 or via email at savanna.levenson@ec.gc.ca.

Yours truly,

Savanna Levenson

Environmental Assessment Specialist
Environmental Protection Operations

c.c: Carey Ogilvie, Head EA North, Environment Canada
Mike Fournier, Coordinator EA North, Environment Canada
Anne Wilson, Water Pollution Specialist, Environment Canada