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

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

Via email: lpayette@nirb.ca

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Nunavut Impact Review Board
P.O. Box 1360
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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.

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