



November 10, 2008

Ms. Stephanie Autut
Executive Director, Nunavut Impact Review Board
P.O.Box 1360
Cambridge Bay, NU X0B 0C0

Dear Ms. Autut:

**Re: NIRB SCOPING FOR HACKETT RIVER PROJECT (NIRB File 08MN06)
ADDITIONAL CLARIFICATION**

Following our letter of October 9, 2008 in which Sabina clarified several components of the Hackett River Project currently under a Part 5 review by NIRB, and building on the experience to date of scoping sessions, Sabina believes there is still opportunity to share information to improve understanding of the proposed Project. Although Sabina has experienced a delay in completing design and engineering work for the Prefeasibility study, there has been sufficient work done in several areas that allow for preliminary concepts to be presented. To facilitate scoping, and the development of EIS guidelines, we are pleased to submit the following text and figures to supplement the January 2008 Project Description. The conceptual plans and discussion presented are related to:

- 1) Mine site layout and access from BIPR
- 2) All-season Access from site to port
- 3) Port Facilities
- 4) Marine Shipping Routes
- 5) Metal Leaching and Acid Rock Drainage Potential

1. MINE FACILITIES AND ACCESS FROM BIPR

Figure 1, "Potential Site Layout, Hackett River Project (Oct 27, 2008)" presents the current proposed layout for the minesite. This layout is based on assessment of various

alternatives that considered the environmental conditions from baseline studies, Sabina's commitment to minimize impacts to the environment from the Project, and maintaining economic feasibility.

The site layout illustrates the three deposits (Main Zone, East Cleaver, and Boot Lake) and the projected open pit boundaries. In section 2.4.5.2 "Boot Lake Production Plan" of the Hackett River Project Proposal Report (Jan 2008), an underground mining system is described and in section 2.4.5 the report states that the Prefeasibility study "will also consider mining the Boot Lake deposit as a combined open pit and underground operation". It is now contemplated that initial mining in each of the three deposits, Boot Lake, Main Zone and East Cleaver, will be by open pit methods. Those parts of the deposits that cannot be economically extracted by open pitting will be mined by underground methods. Open pitting the Main Zone and Boot Lake will require the draining of Camp and Boot Lakes.

Figure 1 illustrates a proposed tailings dam and the resultant management facility over Joe Lake to the east of the deposits. This current location of the Tailings Management Facility (TMF) is the recommended option of nine alternatives considered.

Proposed access to the site from the BIPR road is also included in Figure 1 with the preferred option being the East Option No 2 (shown in Fig. 2.8-1 "Hackett River Access Road Crossing Options" in the January 2008 Project Proposal Report).

The contemplated airstrip is located along the preferred access road alignment and is the preferred option of four alternatives considered.

In addition to illustrating the preferred options that have resulted after alternatives assessment for mining, TMF, air and land access, Figure 1 also shows the principal mining facilities including:

- Waste rock storage areas
- Mine site roads
- Ammonium nitrate storage
- Emulsion plant
- Explosives magazine
- Truck shop
- Primary crusher
- Mill building

Ancillary facilities shown:

- Proposed camp site



- Bulk storage and waste storage
- Lay down areas
- Fuel farm and fuel dispensing island
- Construction camp
- Potential water transfer pipe from Banana Lake around Camp Lake to Lower Sunken Lake.
- Bat Lake potential potable water reservoir
- Potential water sources (currently undergoing alternatives assessment)
 - Hackett River during freshet
 - Darcy Basin and Lake
- Watershed boundaries

2. ALL-SEASON ACCESS FROM SITE TO PORT

(refer to the Hackett River Project Proposal Report, January 2008, Section 2.8.2)

The preferred option for port and overland access to and from the Hackett River mine is as a client of the proposed BIPR Project. The BIPR road passes 20 km to the east of the mine site. If the BIPR road is available, Sabina would construct a 23-km all-season Access road from BIPR to the mine site (sometimes referred to as the “Spur Road”) as shown on Figure 1 and Figure 2, “Potential Site Access (Oct 28, 2008)”. Potential quarry locations (Figure 1) are located along this corridor.

In the absence of BIPR, Sabina would construct its own all-season road from Bathurst Inlet to the mine site (the “Sabina Road”). Two alternative routes under consideration are shown in Figure 2, “Potential Site Access (Oct 28, 2008)”. It is anticipated that a Sabina Road alignment will be a more direct route from the Inlet to the mine site, and will take into consideration economic and environmental factors (e.g. minimizing water crossings). Preliminary evaluation indicates that the northern alignment of the Sabina Road could mimic the northern 40 to 65 kilometers of the currently proposed BIPR road alignment, but veer from the BIPR concept to become a shorter and more direct route to the mine site. The approximate road lengths presented in Figure 2 are:

- Proposed BIPR Road plus the Hackett Project Access Road (Spur Road): 110 km.
- Potential Sabina Road Access Option 1: 99 km. , and
- Potential Sabina Road Access Option 2: 98 km.

It should be noted that Sabina is not intending to extend the road south of the mine site.

3. PORT FACILITIES

(refer to the Hackett River Project Proposal Report, January 2008, Section 2.9)

The preferred option for port facilities to serve the proposed Hackett River Project is as a client of the proposed BIPR Project. Inbound annual supplies of general cargo and fuel and outbound metal concentrates will be shipped through the proposed BIPR port located in Bathurst Inlet approximately 80 km north east of the proposed Hackett River Mine.

Sabina would use the proposed BIPR port facilities and infrastructure, should it be available, although the currently proposed BIPR port would not adequately address Sabina's needs as the BIPR design does not include concentrate receiving, storage or ship-loading facilities. Contingent on a BIPR Operator/Sabina business agreement, these concentrate handling facilities would be constructed and operated by Sabina. Additional storage space may be provided for goods that will eventually be back-hauled to the mine.

For comparison purposes, the following table summarizes the BIPR components with the infrastructure that would need to be constructed and operated by Sabina. Included in the table is a summary of those components of the port that Sabina would construct should BIPR be unavailable. In a Sabina port the components are very similar to the BIPR Project, however, the size of the facilities would be smaller to reflect the change in cargo, fuel and staff needs.

Table 1: Comparison of Port Facilities for Option 1 (BIPR plus Sabina) and Option 2 (Sabina only)

	Option 1: Proposed BIPR Port plus Sabina facilities	Option 2: Proposed Sabina Port (in absence of BIPR)
	Proposed BIPR Components (from DEIS, December 2007; Sept 07 Feasibility Study)	
Fuel	<ul style="list-style-type: none"> ○ 220M litres per year ○ fuel unloading facilities, terminal pipelines, tank farm and fuel dispensing systems 	<ul style="list-style-type: none"> ○ 60M litres per year ○ fuel unloading facilities, terminal pipelines, tank farm and fuel dispensing systems

Inbound cargo	<ul style="list-style-type: none"> o up to 1,563,957 tonnes over 20 yrs (Table 3.5-1, Vol. II, Appendix A-3, Jan 2008) depending on resupply needs of operating mines and Nu communities o General cargo short-term and long-term lay down areas o General cargo handling mobile equipment including cranes, fork lifts and reach trucks 	<ul style="list-style-type: none"> o 100,000 tonnes per year including ammonium nitrate, mining reagents and grinding media. o General cargo short-term and long-term lay down areas o Storage for explosive detonators, mining reagents and hazardous materials o General cargo handling mobile equipment including cranes, fork lifts and reach trucks
Camp	<ul style="list-style-type: none"> o 200 <ul style="list-style-type: none"> - 51 to work at the port - remaining space for transportation o administration office o maintenance truck shop o desalinization plant o site roads o waste management and disposal systems o site run-off water collection and treatment systems o sewage treatment plant 	<ul style="list-style-type: none"> o approx. 14 to work at the port o there are 23 truck drivers but they are to be housed at the Mine o administration office o small maintenance shop and office o desalinization plant o site roads o waste management and disposal systems o site run-off water collection and treatment systems o sewage treatment plant
Trucking	<ul style="list-style-type: none"> o January to April (120 days) o Approx. 6764 loads/yr, or 60 truck round trips per day for 4 months 	<ul style="list-style-type: none"> o January to December (364 days) o 9 to 10 trailer units making approx. 40 truck round trips per day
Shipping	<ul style="list-style-type: none"> o Dock o Berth for unloading 50,000t ice-strengthened general cargo and fuel ships o Mid July to mid October, 8 ships per season (19 one way trips) 	<ul style="list-style-type: none"> o Dock o Berth for unloading 50,000t ice-strengthened general cargo and fuel ships o Mid July to mid October, 8 to 10 ships per season
Airstrip	<ul style="list-style-type: none"> o 1,200 m airstrip 	<ul style="list-style-type: none"> o to be determined as part of pre feasibility
Power plant	<ul style="list-style-type: none"> o 4 Diesel generator sets 	<ul style="list-style-type: none"> o to be determined as part of pre feasibility
	Components to be built by Sabina to add to BIPR Port Infrastructure	
Concentrate Storage	<ul style="list-style-type: none"> o concentrate truck receiving, unloading and washing facilities o concentrate receiving facilities, hoppers and conveyors o concentrate storage facility for 450,000 tonnes o concentrate reclaiming, conveying and transfer towers o concentrate ship loading system o concentrate dust control systems 	<ul style="list-style-type: none"> o concentrate truck receiving, unloading and washing facilities o concentrate receiving facilities, hoppers and conveyors o concentrate storage facility for 450,000 tonnes o concentrate reclaiming, conveying and transfer towers o concentrate ship loading system o concentrate dust control systems

4. MARINE SHIPPING ROUTES

The port will be serviced by ocean-going ice-strengthened “Type B” vessels capable of handling up to 50,000 Dead Weight tonnes (DWT) of bulk, general cargoes or fuel. The shipping season will extend from late July to mid-October, a period of about one hundred days.

Figure 3, "Potential Shipping Routes (Oct 27, 2008)" illustrates the options for shipping from the port facilities in Bathurst Inlet. Most concentrate shipments will be to the east to smelters in Europe or North America. It is proposed to transship concentrate to a terminal in Greenland where it will be transferred to non-ice class vessels for the final stage of its journey to smelters. Ships transporting the remaining concentrate will use the western route shown in the illustration and pass through the Bering Strait to markets in Asia and North America. Prior to completion of the port facilities during construction a possible route for barging supplies via Hay River and the MacKenzie River to the Bathurst Inlet may be required and is illustrated in Figure 3.

5. METAL LEACHING AND ACID ROCK DRAINAGE

An important issue for many mineral development properties is the exposure of geologic material to air and/or water and the resultant change to water quality in the area. The general term for this issue is “metal leaching and acid rock drainage” (ML-ARD). The Hackett River Project is also considering the potential of ML-ARD as part of the Project development and planning stages.

The overall objective of the ML-ARD program is to assess the potential for acid rock drainage and metal leaching due to water-rock interactions within the open pit and underground workings and/or any surface stored materials.

Prediction of Project drainage chemistry often involves suites of analytical testwork, involving one-time “static” tests and long-term “kinetic” tests. It also incorporates information from other on-going work associated with the Project. A phased approach is needed to develop and refine predictions throughout mine planning, development and operation.

The focus of the 2007 ML-ARD program (Phase 1) was completion of approximately 600 static test analyses across a suite of geologic units found in the three deposits. The focus of the 2008 program (Phase 2) is to develop an ARD model that may be used to assist with mine planning and waste management alternatives. This model is still being developed and includes information from additional drilling, sampling and static testing that occurred in 2008 in conjunction with an improved understanding of the project geology from on-going exploration work. The secondary objective of the 2008 program is to determine leach rates for the waste material to link with water management plans

to develop water quality predictions. This has involved the establishment of 10 laboratory-based kinetic cells and 6 field-based barrels which are being monitored.

Sabina acknowledges that the clarification and information presented in this letter further refines information presented in the Project Proposal submitted January 2008. To facilitate discussions for the November 21, 2008 Workshop hosted by NIRB to develop EIS Guidelines, Sabina would offer to host an Open House session on Thursday November 20, from 7 to 9pm to allow workshop participants to clarify the proposed Project and its components and activities. This would leave the Friday workshop to focus on environmental assessment needs for the Project and the associated wording of the Guidelines. Of course, any clarification needed or questions prior to the session or the open house can be conducted by telephone or email. Please contact Elizabeth Sherlock or myself at your earliest convenience to coordinate this sharing of further information.

With best regards,

Don Parker
Hackett River Project Manager

cc Tony Walsh

