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# Comments on draft DEIS Guidelines (Rev. 0.1)

## Hackett River Project

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Sabina Silver Corporation is pleased to provide our comments and questions on the draft Environmental Impact Statement (DEIS) guidelines (Rev. 0.1). For ease in tracking, we present our comments following the order of the draft guidelines. The exception is discussion about Project Description and Cumulative Effects Assessment presented at the end of this summary. Any suggested changes to the text are presented in italics.

### Glossary

Cumulative effects. The word 'present' is misspelled in the current definition. We would also like to propose that the definition be revised to the more simplified and clear definition below:

*"The impact on the environment from the proposed Project in combination with other past, present, and reasonably foreseeable future projects or activities."*

Nitrate. This compound is also an essential, required nutrient for all aquatic (freshwater and marine) algae and plants. This should be included in the definition, as some of the effects from mine runoff involve increased algal (phytoplankton, periphyton) growth and biomass, which can lead to other potential effects.

The following definition is suggested: *"A compound containing nitrogen, which is required by plant and algal life, that can exist in the atmosphere or water, and that can potentially have harmful effects on humans and animals at high concentrations"*.

If the definition of nitrate is not revised we would ask for clarification to what is "nitrate oxide". We anticipate that it should read "nitrogen oxide".

Post-closure. We ask for clarification of the period of time considered for post closure since the definition indicates up to 30 years and NIRB's principles (page 16 ) infers a post-closure period of 20 years should be considered. Section 6.5 of the Guidelines outlines that temporal boundaries should be determined as part of the EA process and the rationale for the closure period be provided in the EIS. For this reason, we suggest removing the "considered to be up to 30 years" from the definition.

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Potentially affected community. We recommend rewording "The community or communities subject to the risks or impacts, both positive and negative, arising from a development or project" to:

*"The community or communities subject to the impacts, both positive and negative, arising from a development or project"*

Regional Study Area. There is an extra 'd' in the word 'direct'.

## **1.0 Introduction**

Page 1. last paragraph. The 'al' in 'Proposal' should be italicized.

Page 15, Section 1.4. There should be a period at the end of the paragraph.

## **3.0 Scope of the NIRB Assessment**

Page 19, Section 3.1 f) the wording from the NLCA is "...proposes to take to compensate interests..."

Page 24, Section 3.4 p) a semi-colon is needed after socio-economic factors

## **5.0 EIS Overview**

Page 26, Section 5.3 and 5.4 We would request that the 150 page count exclude: the Title Page, Executive Summary. Popular summary (in English, Inuinnaqtun, and Inuktitut), Table of Contents, Glossary, Concordance table, Consultants and organizations and References.

Page 29, Section 5.7 The translation identified is Section 5.4 and Section 5.6.2 indicates that the popular summary and glossary be provided in English, Inuinnaqtun and Inuktitut. We would request that the reference to "translation to local languages and dialects" either be removed or reworded to reflect that these translations will be made available upon request.

## **6.0 Environmental Impact Statement Content Guidelines**

Page 34, Section 6.7 e) Recommend rewording bullet to:

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*"Analysis of community support for and opposition to the Project, including identified potential impacts and benefits, with a description of how the Proponent has sought input from a broad range of socio-economic groups; and"*

Page 34, Section 6.7.1 Project Alternatives. Suggest that this section be moved to be first part of Section 6.13 since alternatives assessment is key to determining the Project components and activities that will be described under this section. Also, we would suggest the following rewording of the first two sentences of the first paragraph of this section.

*"Alternatives assessment is an important component of Project planning, design and management and shall include an analysis of the "no-go" option. The Proponent shall outline alternatives assessment completed including alternative ways of carrying out the Project, alternatives to Project components or activities...."*

Page 35, Section 6.7.2. Suggest moving this section to Section 6.15 since it is related to project scheduling and may be more appropriate to have these issues under one heading.

Page 36. Section 6.9. Suggest rephrasing first sentence to:

*"Public consultation is required to provide information to local communities and interest groups, and to enable these groups to provide questions and comments to the Proponent. In addition, public consultation will inform the following aspects of the assessment: ...(bulleted list)..."*

Page 37, Section 6.9, 1<sup>st</sup> paragraph, We would suggest removing reference to specific intervenors in the Guidelines; in this case the reference to Bathurst Road and Port Committee.

Page 38. Section 6.10. 2<sup>nd</sup> paragraph, last sentence. This does not seem to be strongly related to TK. Instead, the concept of community-based monitoring programs may be better applied to section 6.17.9 (in particular: 6.17.9.4.3 and 6.17.9.4.4).

Page 42, Section 6.13.1.3 b) recommend removing "all aspects of the" so bullet is *"Describe tailings composition, including..."*

Page 45, Section 6.13.1.7 a) The route(s) of the all-weather road access would be for the Hackett River Project and will be determined based on a balance of economics, environmental conditions and traditional knowledge. With this is the understanding that mining is a temporary use of the land and any closure and reclamation plans would include the all-weather road. Unless the Government of Nunavut, KIA or INAC express a serious interest in taking control of the road route after the life of mine, we have no intention of incorporating needs of other developers and Nunavummiut into the alignment of the access road to ensure its permanence. If there are opportunities for shared infrastructure with other developers/proponents in the area, we would entertain

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sharing infrastructure in an effort to minimize environmental impacts under negotiated agreements.

Page 50, Section 6.14, c) Based on discussions at the workshop and initial review comments, there seemed to be a need to identify what TK influenced design. Suggest rewording bullet to *"An explanation of how public consultation and Traditional Knowledge has influenced the design of the Project."*

Page 50, Section 6.14. The approach to project design incorporating the listed components are an important contribution to determining the Project Components and activities. We would suggest moving this section to Section 6.13 Detailed Project Description.

Page 57. Section 6.16.2.7c. We do not intend to sacrifice birds for metal body burdens. We can address this by desktop studies. Metal body burdens will be collected for fish, vegetation, and small mammals. We suggest that the reference to contaminant loadings be removed, or the wording changed so that there is not an expectation to sacrifice birds.

Page 59. Section 6.16.3. We recommend changing the title of this section (and subsequent sections) to Human Environment or Socio-Community Environment, if the areas of archaeology, TK, and land use are to be covered under this heading.

Page 60, Section 6.16.3. 1<sup>st</sup> paragraph. We recommend rephrasing the first sentence from "...provide a rationale for the selection of communities and relevant studies for which baseline data..." to:

*"...provide a rationale for the selection of communities and reference studies for which baseline data..."* This would clarify the direction provided on Page 52 identifying the use of existing data and literature.

Page 60. Section 6.16.3. 2<sup>nd</sup> paragraph. We suggest removing the list of indicators which "might" be included. The reference to the Draft WKRLUP indicators should suffice, and nothing is gained by including this hypothetical list.

Page 64, Section 6.17.2, 1<sup>st</sup> paragraph. The first sentence suggests an open ended list of individuals and communities to be "fully consulted" without a clear indication of what "fully consulted" means. We suggest revising the first sentence to:

*"The Proponent shall provide opportunities for the concerned communities, as well as other individuals and organizations, to provide their views in defining impact significance."*

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Page 64-65, Section 6.17.2. 2<sup>nd</sup> paragraph. This section is related to "significance of impacts" including a consideration of the dynamic change of ecosystems. We would suggest keeping the first sentence and the last two. The middle sentences are statements that may not be appropriate for a guideline document and include references to "disasters" and "unexpected" events which cannot be anticipated. We suggest revising to paragraph to:

*The dynamic change of ecosystems and their components must be considered in determining impact significance. The Proponent shall therefore further evaluate the significance of potential impacts in light of data on the dynamism and the current "state of health" of the ecosystems and their components and societies and their predictable evolution in light of global climate change. Consistent with the ecosystem approach required above, the Proponent shall strive to highlight the interactions within and between ecosystem components in an effort to increase understanding of the dynamism of the ecosystems in question and the nature and severity of the predicted impacts.*

Page 66, Section 6.17.5.1 a) Recommend rewording to be *"The permeability of mine rock"*.

Page 70, Section 6.17.5.9, 2<sup>nd</sup> paragraph. The reference to "all proposed routes" infers an unlimited spatial boundary to marine shipping and we would suggest removing "over all proposed shipping routes" or reword to

*"...assess the potential impacts of the marine shipping, within marine inland waters in the Nunavut Settlement Area, to wildlife..."*

We acknowledge that the EA must include all the related components and activities to ensure an appropriate assessment is completed. However, as the Project moves into the regulatory phase, Sabina will be seeking contractors and suppliers to provide goods and services - most notably marine shipping, air transportation and explosives management. We suggest that the Guidelines reflect that, in assessing potential for marine shipping, air transportation, and explosives management, the EA should take into account regulatory processes and requirements applicable to those activities. For example, with respect to marine shipping, the EA should consider the role of Transport Canada in regulating shipping and the applicable standards for safety and pollution prevention for marine transportation systems.

Page 79, Section 6.17.7, 1<sup>st</sup> paragraph. Recommend removing this paragraph as the issue and examples presented are addressed in the requirement in the following paragraph.

Page 80. Section 6.17.8. 1<sup>st</sup> paragraph. Could we please have clarification on the expectations to fit CEA into 'regional planning initiatives'? Could we please have specific examples if there are any? If this refers to a regional land use plan, our understanding is that there is not a finalized plan, and we would need guidance on how our information may be used. Also, is this really relevant to a proponent? The DEIS will

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be a public document, and any governmental or other agencies could use the information as they see fit.

Page 83, Section 6.17.9.1, 3<sup>rd</sup> paragraph. This paragraph is referring to negotiated agreements between the communities and Sabina. There are negotiated agreements, permits and licences (e.g. IIBA section 6.17.9.4.5 and DPA section 6.17.9.4.6) identified in the Guidelines that may include mitigation planning, implementation and monitoring and this paragraph is suggesting another negotiated agreement is required. This paragraph implies a requirement to negotiate agreements. We do not understand that NIRB may set the negotiation of such agreements as a term or condition. We suggest the paragraph be revised to:

*"Moreover, the EIS shall discuss the measures to engage the potentially affected communities that would permit them to participate fully in the planning, execution and evaluation of mitigation measures"*

Page 84, Section 6.17.9.2 The bullet list contains "emergency response" twice and we would request to either remove one, or if they refer to different plans clarify the difference. Also, this paragraph and bullet list starts with the reference to the requirement to present management plans, however, the bullet list includes "plans" (e.g. spill contingency plans). We would ask for clarification if the Guidelines are requesting a presentation of the approach to develop these plans (i.e. the plan to come up with the plan) or does the plan need to be included in the EIS.

Page 90, 6.17.9.4.1, 1<sup>st</sup> paragraph. This paragraph is referring to environmental management and the section is titled "Human Resources" under management of impacts on socio-economic environment. We suggest removing the paragraph or moving to section 6.17.9.3.

Page 92, Section 6.17.9.4.7 This section is referring to pollution prevention and the section is titled "Human Resources" under management of impacts on socio-economic environment. We suggest removing the paragraph or moving to section 6.17.9.3.

Page 94, 4<sup>th</sup> paragraph. There is reference to a database maintained by the Department of Sustainable Development. We would ask what Government of Nunavut Department(s) maintain monitoring datasets in order that we strive to collect data consistent with their needs.

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## **Project Description**

The Hackett River Project represents one of the largest undeveloped silver deposits of its type in the world and is located in one of the world's most appealing mining jurisdictions. Nunavut is eager to create infrastructure and economic sustainability through the responsible development of mineral projects in the region. The Project is currently in the pre-feasibility phase and given the current economic environment it is important that this work be realistic in light of changing capital and operating costs and optimization of project economics.

It is also clear that the Hackett River Project will need to utilize a road and port. Currently there are two options - either use the Bathurst Inlet Port and Road (BIPR) facilities or build facilities specifically for the Hackett River Project. Sabina is encouraged by the Inuit and local involvement in the BIPR Project and the development of infrastructure in the Kitikmeot. Our preference for overland access is via the proposed BIPR Project as one of its clients under a negotiated agreement. The challenge with the Hackett River Project being linked to another Project is the uncertainty of the BIPR schedule and the risk that BIPR may not be available to meet the needs of the Hackett River Project.

For these reasons, EIS Guidelines need to be flexible enough to allow environmental assessment to occur under one scenario and not two. The following suggested text changes for the draft EIS Guidelines are presented in effort to allow that flexibility, ensure NIRB's mandate and EA requirements are met, and allow an EIS document to be developed that is easy to follow for the reader.

Page 20, Section 3.3. Suggest revising the title and first paragraph to:

### *Section 3.3 Scope of the Hackett River Project*

*NIRB's Public Scoping process began in April 2008 and continued through to the conclusion of NIRB's Public Scoping process on November 14, 2008. During the scoping period, NIRB solicited and received oral and written comments from individual members of the public, Government and representatives of various groups and organizations.*

*Based on the submissions to NIRB and review, the following is a description of the physical works and activities that constitute the Hackett River Project. These components and/or activities have the potential to cause significant adverse effects on the ecosystem, wildlife, or Inuit harvesting activities and are therefore also included within the scope of the Project.*

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*NIRB acknowledges that the following list of components and/or activities is based on information provided in the Project Description submitted Jan 2008 and the findings of the Public Scoping session. It should not be considered the complete list of components and/or activities as on-going design and feasibility, traditional knowledge and scientific studies, and alternatives assessment, in conjunction with public consultation, may affect Project components and activities. The Proponent shall present a detailed Project Description and the associated components and activities as outlined in Section 6.13.*

With respect to the bullet list, we would provide the following comments and clarifications:

- It is our understanding that BIPR is proposing barge loading facilities; presumably this is included under "loading and unloading of ocean going vessels"
- It is unclear what is referred to as "wastes" under bullets a) ii), d) and f)
- Components under bullet h) i) should include concentrate storage
- We would clarify that the road transportation includes 9-10 tractor trailer units each making four 40 tonne trips per day.

Page 24, Section 4.0 Project Definition. Suggest revising the title and text to be:

#### *Section 4.0 Project Summary*

*The Proponent shall compile a summary outlining the project infrastructure and ancillary facilities, and associated activities and undertakings that are to be considered in the environmental review of the Project. This summary shall also clearly demonstrate to the reader what changes to the Project components and activities, if any, have been made since the 2008 submission and Public scoping session. This will assist NIRB in meeting its requirements under Section 1.4 of the Guidelines. The Proponent shall present a detailed Project Description and the associated components and activities as outlined in Section 6.13.*

Page 39, Section 6.13. Based on comments presented in this submission, the headings in this section would be revised to:

- 6.13 Detailed Project Proposal Description
  - 6.13.1 Alternatives Assessment
  - 6.13.2 Project Design
  - 6.13.3 Project Components and Activities



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followed by

#### 6.14 Project Schedule

##### 6.14.1 Project impediments

##### 6.14.2 Future Development

### **Cumulative Effects Assessment**

We acknowledge that without an approved land use plan for the region, NIRB and other intervenors turn to the environmental assessment process to complete planning tools (such as CEA) to assist with decision-making. There is a suggestion that the cumulative effects assessment includes consideration of infrastructure beyond the needs of the Project and assessment of how infrastructure will affect the economic feasibility of other mineral resources in the West Kitikmeot. We acknowledge that cumulative effects assessment including the "foreseeable future" projects will be an important component of the environmental assessment. However, we are not intending to include a consideration of infrastructure outside the needs of the current project. We will leave those detailed economic and environmental considerations to the feasibility studies of those other developments.

Associated with this is the definition of "foreseeable future". We are encouraged that the definition of "reasonably foreseeable future" has been clarified to include projects that are currently under regulatory review and have a project description submitted to a government department or agency. Sabina would also clarify that at the time we complete the EA for the Hackett River Project, we will also consider how "active" these applications are being pursued by the Proponent to determine the inclusion in the cumulative effects assessment. We will provide rationale for these decisions in the EIS.

The final clarification we would request is what is included in CEA. The definition provides clarity that it is impacts to the environment from development activities. However, throughout the EIS Guidelines, there are references that cumulative effects may also incorporate consideration of impacts from the environment to the Project - most notably climate change. In particular, page 82, paragraph 2. Current industry standard in completing CEA is to include the impacts to the environment from human activity and Sabina will complete our assessment with this understanding. Impacts from the environment to the Project are currently under its own heading (Section 6.17.4) and will be presented as such.

Also, cumulative effects assessment is conducted on residual effects only and the suggestions provided below will help clarify the methodology involved in typical environmental assessments.

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Page 59. Section 6.16.2.9 - It is recommended that the cumulative effects assessment be presented under one heading. It is recommended that the text under this heading be moved to a new section, titled "Cumulative Effects Assessment" after the Residual Effects section.

Page 80. Section 6.17.8. Cumulative Effects Assessment. It is recommended that this section be moved and renumbered Section 6.19, so that it comes after the residual effects section. Cumulative effects assessment is conducted on residual effects only, and moving this section will help clarify the methodology involved in typical environmental assessments.

Page 81, 4<sup>th</sup> paragraph. We request clarification to the reference to "larger transportation corridor" (or see our proposed revisions below).

Page 82. 2<sup>nd</sup>. The topics that are listed to be included in the cumulative effects assessment include an assortment of project activities as well as environmental receptors/components. We would suggest removing the paragraph completely.

Based on the comments raised, and assuming all the cumulative effects assessment requirements are placed under one section, the following text is suggested:

*Section 6.19 Cumulative Effects Assessment*

*The Proponent shall provide a brief overview of the theory and practice of Cumulative Effects Assessment (CEA) especially as it applies to the ecosystem model of evaluating environmental impacts, and shall justify the methodology adopted in relation to the design of the Project, its management, and the proposed approach to impact assessment. The Proponent shall demonstrate how project-specific CEA either fits into the approved regional land use plan, if available, or supports land use planning decisions.*

*A regional approach to CEA allows for assessment of the project impacts in relations to other activities in the region, taking into account the scale at which projects area likely to have a significant impact, and offers a more proactive approach that accounts for environmental values and considers projects in reference to objectives of environmental quality (NIRB 1997).*

*The Proponent shall determine which other human activities have affected or are likely to affect the same VECs, VSECs, or ecosystems as the Project. The Proponent shall then predict the impacts of the Project in combination with those of the other past, present, and reasonably foreseeable future developments, using the most appropriate methodology on a case-by-case basis that is capable of incorporating all of the relevant impacts. Effective CEA requires the application of a strategic approach, one specifically designed to identify and predict the likelihood and significance of potential cumulative effects (Baxter et al 2001). The Proponent shall also consider then, that while project*

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*impacts themselves may be determined to be insignificant, the potential for the cumulative effects of such impacts must still be evaluated.*

*The CEA shall consider the cumulative effects of other existing projects or activities (including mines and exploration activities) and reasonably foreseeable future developments as defined in these Guidelines.*

*The term "reasonably foreseeable future development" is defined to mean: projects or activities that are currently under regulatory review or those that will be submitted for regulatory review in the near future, as determined by the existence of a project description in the possession of a government department or agency subject to the consideration as to whether the regulatory review of the project or activity is actively being pursued by the Proponent. This is subject to a consideration as to whether the regulatory review of the project or activity is actively being pursued by the proponent of that project or activity. Furthermore, the definition of "reasonably foreseeable" necessarily includes a requirement for the reasonable projection of development to more advanced activities for those projects which have been permitted to proceed. Nevertheless, where less precise information about a possible development exists, the Proponent shall refer to it and shall offer its opinion on whether it might need to be taken into account at a later date (i.e. The EIS may consider, as a factor in the cumulative effects assessment, the potential for an additional mine development within the Project RSA during the lifetime of the Hackett River Project).*

*In considering reasonably foreseeable future developments, the Proponent shall also evaluate the cumulative impacts of the Project should it provide for or contribute to the overall use of transportation corridors (both overland and marine, as with the proposed Sabina built port and road alternative).*

*The Proponent shall give due consideration to trans-boundary impacts, including the effects of the Project outside Nunavut and the interactions between the effects of the Project and the effects of projects located outside Nunavut. Trans-boundary effects, related to cumulative effects associated with the Project should be clearly defined and justified.*

*The Proponent shall describe and justify all assumptions, models, information limitations and associated levels of uncertainty. It shall also explain its approach to handling the uncertainty associated with CEA.*